

Mapping the intellectual landscape of buying behaviour research: A bibliometric analysis of trends, networks, and emerging themes

Shriya Naik ^{1*}, Sahil Jitendra Deshmukh², and Punit Moris Ekka³

^{1 2 3} Jagdish Sheth School of Management (JAGSoM), India

Emails: sahiljdeshmukh@gmail.com²; punitekka2016@gmail.com³

*Correspondence: shriyanaik2110@gmail.com

Abstract

This study provides a comprehensive bibliometric overview of the academic literature on buying behaviour, examining publication growth, citation patterns, collaborative networks, and thematic evolution to map the intellectual structure of this research domain. Bibliometric analysis was conducted using data retrieved from the Scopus database spanning 1975 to 2025. The search was confined to the keyword "buying behaviour" in titles, abstracts, and keywords, with eco-friendly marketing studies excluded to maintain conceptual focus. VOSviewer software was employed to perform citation analysis, co-authorship mapping at the author, country, and institutional levels, and keyword co-occurrence analysis. The analysis reveals a significant and sustained growth in scholarly publications on buying behaviour. The United States and the United Kingdom emerge as leading contributors to international research collaboration. Keyword co-occurrence analysis identifies six distinct thematic clusters: consumer attitude and marketing influence; social context and risk-driven behaviour; pathological impulse control and compulsive buying; neurobiological and physiological foundations of addiction; psychological comorbidities and clinical manifestations; and technological and experimental methodology. Central constructs across the literature include compulsive buying, impulsivity, behavioural addiction, and materialism. The findings offer actionable insights for marketers, retailers, and policymakers. Understanding the psychological and behavioural drivers of purchasing enables organisations to develop targeted, responsible marketing strategies. Policymakers may use these insights to design consumer protection frameworks addressing compulsive and addictive buying patterns. This study advances the literature by presenting the first dedicated bibliometric synthesis of buying behaviour research as a standalone domain, distinct from the broader consumer behaviour literature. By mapping collaborative networks, citation impact, and thematic clusters, it establishes a structured reference point for scholars and practitioners seeking to understand the field's evolution and future directions.

Keywords: Buying Behaviour, Bibliometric Analysis, Consumer Psychology, Compulsive Buying, Impulsivity, Behavioural Addiction, Vosviewer, Keyword Co-Occurrence, Scopus

JEL Classification: M31, D91, D12

Copyright: © 2026 by the authors. Licensee IJBM IEISS, New Zealand. This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\) license](https://creativecommons.org/licenses/by/4.0/).

1. Background of the Study

Consumer buying behaviour occupies a central position in marketing scholarship and consumer research, encompassing the complex psychological, social, and economic processes through which individuals identify, evaluate, and acquire products and services (Qazzafi, 2020). As markets become increasingly competitive and consumer preferences grow more nuanced, developing a robust understanding of what drives purchasing decisions has become a strategic imperative for organisations across industries (Griskevicius & Kenrick, 2013). The relevance of this field, however, extends well beyond the boundaries of marketing. Buying behaviour intersects with psychology, behavioural economics, public health, neuroscience, and the social sciences, each contributing theoretical and empirical insights into how individuals respond to internal motivations and external stimuli when making consumption choices (Ramya & Ali, 2016; Rosenfield, 1992; Solomon, 1994). Over the past few decades, the scope of buying behaviour research has expanded considerably. Scholars have moved beyond traditional frameworks of rational decision-making to examine a broader spectrum of purchasing phenomena, including compulsive buying, impulsivity, behavioural addiction, materialism, and the psychological underpinnings of consumer attitudes (Rook & Fisher, 1995; Belk, 2001; Lejoyeux & Weinstein, 2010; Kardefelt-Winther et al., 2017; Ajzen, 2018; Baumeister, 2002). This shift reflects a growing recognition that purchasing behaviour is rarely a purely rational process; it is often shaped by emotional states, cognitive biases, social influences, and deep-seated behavioural tendencies. The integration of clinical and neuropsychological perspectives has further enriched the field, offering more nuanced explanations for patterns of excessive and dysregulated consumption. Alongside this conceptual broadening, the volume of academic publications on buying behaviour has grown substantially, producing a diverse and expansive body of literature that spans multiple disciplines, methodologies, and geographic contexts (Mihaela, 2015). While this growth reflects the field's vitality, it also presents a challenge: without a structured mapping of the literature, it becomes difficult for researchers and practitioners to identify the most influential contributions, trace the evolution of key ideas, or locate productive directions for future inquiry. Traditional narrative reviews are insufficient for this purpose, particularly given the scale and interdisciplinary nature of the existing research base.

Bibliometric analysis offers a rigorous and systematic response to this challenge. By applying quantitative techniques to large bodies of scholarly output, bibliometric methods enable researchers to identify publication trends, map collaborative networks, assess citation impact, and uncover the thematic clusters that structure a research domain (Donthu et al., 2021; Zupic & Čater, 2015). This approach has been increasingly adopted across business and social science disciplines to provide evidence-based overviews of how fields have developed over time and where they are headed (Aria & Cuccurullo, 2017). Despite the centrality of buying behaviour to both academic and applied discourse, no dedicated bibliometric study has systematically mapped its intellectual structure as a standalone domain, distinct from the broader consumer behaviour literature. Existing



reviews tend to be either narrative in nature or focused on narrow sub-themes such as impulsive purchasing or online buying. This gap motivates the present study, which applies bibliometric analysis to a comprehensive dataset of buying behaviour publications extracted from the Scopus database, spanning five decades from 1975 to 2025. Eco-friendly marketing was deliberately excluded from the dataset, as it constitutes a conceptually distinct sub-domain grounded in sustainability theory and green consumption research, and its inclusion would have introduced significant heterogeneity into the analysis. By mapping the growth of the field, identifying its most influential contributors, and revealing its underlying thematic architecture, this study aims to offer a structured and evidence-based account of how buying behaviour research has evolved, and to provide a foundation for future scholarly and practical inquiry in this area.

This study is guided by three interconnected objectives that collectively address the intellectual structure, contributory landscape, and thematic evolution of buying behaviour research. The first objective is to analyse the longitudinal growth of scholarly publications on buying behaviour and examine citation trends to assess the field's academic trajectory and impact over time. Building on this, the second objective seeks to identify and evaluate the major contributors to buying behaviour research, encompassing the most cited authors, high-impact journals, leading academic institutions, and countries with prominent research output through co-authorship and collaboration network analysis. Finally, the third objective aims to uncover the thematic structure and evolving research frontiers within the buying behaviour literature by applying keyword co-occurrence analysis and bibliometric network mapping, thereby illuminating the dominant conceptual clusters and emerging interdisciplinary directions in the field.

2. Methodology

This study adopts a bibliometric approach to systematically examine the intellectual structure and development of buying behaviour research. Bibliometric analysis is a well-established quantitative method in library and information sciences that enables researchers to produce evidence-based insights by systematically organising and examining large bodies of published scholarly work (Donthu et al., 2021; Zupic & Čater, 2015; Aria & Cuccurullo, 2017). Pritchard (1969), one of the earliest scholars to formalise the concept, defined bibliometrics as the application of statistical and mathematical techniques to written communication, with the purpose of understanding the structure and growth of scientific fields. The method draws on information embedded in published records, including journal titles, author names, institutional affiliations, abstracts, keywords, and cited references, to measure citation frequency, assess thematic relevance, and map the geographical distribution of research activity (Kumar et al., 2023).

The data for this study were retrieved from the Scopus database, one of the most comprehensive and widely used sources for academic bibliographic data in the social sciences (Mongeon & Paul-Hus, 2016). The search was conducted using the keyword "buying behaviour" applied across article titles, abstracts, and keywords, covering publications from 1975 to 2025. To preserve

conceptual focus and avoid overlap with the theoretically distinct domain of sustainability research, studies related to eco-friendly marketing were excluded at the data retrieval stage using the Boolean "AND NOT" operator. This exclusion ensured that the resulting dataset captured research specifically concerned with general buying behaviour, without conflating it with the specialised literature on green consumption and sustainable marketing. The decision to use "buying behaviour" as the sole search term was deliberate and methodologically considered. Broader terms such as "consumer behaviour" and "purchase decision-making," while widely used in the literature, encompass a far wider range of constructs, including attitudes, perceptions, and post-purchase evaluation, that fall outside the primary focus of this study. Their inclusion would have substantially expanded the dataset and introduced conceptual heterogeneity that could obscure the specific patterns this analysis seeks to identify. By limiting the search to "buying behaviour," the study maintains analytical precision and ensures that the findings are directly relevant to purchasing actions and decision-making processes. The trade-off, namely the potential exclusion of studies employing alternative terminology, was considered acceptable given the priority placed on conceptual clarity and internal consistency.

The final dataset, comprising bibliographic records including titles, authors, affiliations, abstracts, keywords, and references, was downloaded from Scopus for further processing. The data were then analysed using VOSviewer software, a widely adopted tool for bibliometric mapping that facilitates the visualisation of citation networks, co-authorship patterns, and keyword co-occurrence structures (Van Eck & Waltman, 2010). Co-authorship analysis was conducted at three levels, namely individual authors, countries, and institutions, to map collaborative relationships and identify the key nodes within the global research network. Keyword co-occurrence analysis was applied at multiple minimum frequency thresholds to examine the thematic structure of the field at varying levels of granularity and to identify the dominant conceptual clusters shaping buying behaviour research over time.

3. Results and Discussion

This section evaluates the scholarly impact and citation performance of the buying behaviour literature by examining publication output, highly cited works, and the thematic connections between influential studies and the broader research landscape. Together, these indicators provide a structured account of how the field has developed and which contributions have most significantly shaped its direction. Table 1 presents the fifteen most cited publications retrieved from the Scopus dataset. A notable feature of the list is its interdisciplinary composition. The most cited study, authored by Gaugler et al. (2016), is a report on Alzheimer's disease facts and figures, which has accumulated 2,229 citations.



Table 1. Top 15 Most Cited Articles (Author's Own Processing)

Year	Cited by	Author full names	Title	Source title
2016	2229	Gaugler, Joseph E. ; James, Bryan D.; Johnson, Tricia ; Scholz, Ken ; Weuve, Jennifer L.	2016 Alzheimer's disease facts and figures	Alzheimer's and Dementia
2020	2042	Wang, Cuiyan ; Pan, Riyu ; Wan, Xiaoyang ; Tan, Yilin ; Xu, Linkang ; McIntyre, Roger S. ; Choo, Faith Nadine ; Tran, Bach Xuan; Ho, Chun Man Roger ; Sharma, Vijay Kumar ; Ho, Su Hui Cyrus	A longitudinal study on the mental health of general population during the COVID-19 epidemic in China	Brain, Behavior, and Immunity
2010	1710	Griskevicius, Vladas ; Tybur, Joshua M.; van den Bergh, Bram	Going Green to Be Seen: Status, Reputation, and Conspicuous Conservation	Journal of Personality and Social Psychology
2010	1229	Weintraub, Daniel A; Koester, Juergen ; Potenza, Marc Nicholas ; Siderowf, Andrew D. ; Stacy, Mark A. ; Voon, Valerie ; Whetteckey, Jacqueline ; Wunderlich, Glen R. ; Lang, Anthony E.	Impulse control disorders in Parkinson disease: A cross-sectional study of 3090 patients	Archives of Neurology
2005	835	Ahearne, Michael J. ; Bhattacharya, C. B. ; Gruen, Thomas W.	Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing	Journal of Applied Psychology
2004	763	Lerner, Jennifer S. ; Small, Deborah A. ; Loewenstein, George F.	Heart strings and purse strings: Carryover	Psychological Science

			effects of emotions on economic decisions	
2006	600	Brandstätter, Eduard ; Gigerenzer, Gerd ; Hertwig, Ralph	The priority heuristic: Making choices without trade-offs	Psychological Review
2006	592	Weintraub, Daniel A. ; Siderowf, Andrew D. ; Potenza, Marc Nicholas ; Goveas, Joseph S. ; Morales, Knashawn Hodge ; Duda, John Eric ; Moberg, Paul J. ; Stern, Matthew B.	Association of dopamine agonist use with impulse control disorders in Parkinson disease	Archives of Neurology
1994	573	McElroy, Susan L.; Keck, Paul E.; Pope, Harrison Graham ; Smith, Joshua M.R. ; Strakowski, Stephen M.	Compulsive buying: A report of 20 cases	Journal of Clinical Psychiatry
2020	556	Taylor, Steven ; Landry, Caeleigh A. ; Paluszek, Michelle M. ; Fergus, Thomas A. ; McKay, Dean R.R. ; Asmundson, Gordon J.G.	COVID stress syndrome: Concept, structure, and correlates	Depression and Anxiety
2011	523	Cavanagh, James F.; Wiecki, Thomas V. ; Cohen, Michael X. ;Figuroa, Christina M.; Samanta, Johan E.S. ; Sherman, Scott J; Frank, Michael Joshua	Subthalamic nucleus stimulation reverses mediofrontal influence over decision threshold	Nature Neuroscience
2009	417	Weintraub, Daniel A.); Hoops, Staci; Shea, Judy Ann; Lyons, Kelly E.; Pahwa, Rajesh ; Driver-Dunckley, Erika D. ; Adler, Charles H; Potenza, Marc Nicholas ; Miyasaki, Janis M. ; Siderowf, Andrew D.; Duda, John Eric ; Hurtig, Howard I. ;	Validation of the questionnaire for impulsive-compulsive disorders in Parkinson's disease	Movement Disorders



Colcher, Amy ; Horn, Stacy S.;
Stern, Matthew B. ; Voon,
Valerie

- | | | | | |
|------|-----|---|---|-------------------------------------|
| 2007 | 387 | Anderson-Bill, Eileen Smith ;
Winett, Richard A. Wojcik, Janet
R. | Self-regulation, self-
efficacy, outcome
expectations, and
social support: Social
cognitive theory and
nutrition behavior | Annals of
Behavioral
Medicine |
| 2005 | 370 | Dittmar, Helga | Compulsive buying - A
growing concern? An
examination of gender,
age, and endorsement
of materialistic values
as predictors | British Journal
of Psychology |
| 2010 | 347 | Rubin, G. James ; Potts, Henry
W.W. ; Michie, Susan F. | The impact of
communications about
swine flu (influenza A
H1N1v) on public
responses to the
outbreak: Results from
36 national telephone
surveys in the UK | Health
Technology
Assessment |

This is followed by Wang et al. (2020), a longitudinal investigation into the mental health of the general population during the COVID-19 epidemic in China, with 2,042 citations. While these publications do not address buying behaviour in a conventional marketing sense, their presence in the dataset is consistent with the interdisciplinary nature of the field. Buying behaviour research has increasingly drawn on clinical psychology, neuroscience, and public health to explain phenomena such as compulsive purchasing, impulsive decision-making, and consumption under conditions of stress or crisis. The appearance of studies from these adjacent domains reflects the breadth of the conceptual terrain that the keyword "buying behaviour" traverses in the academic

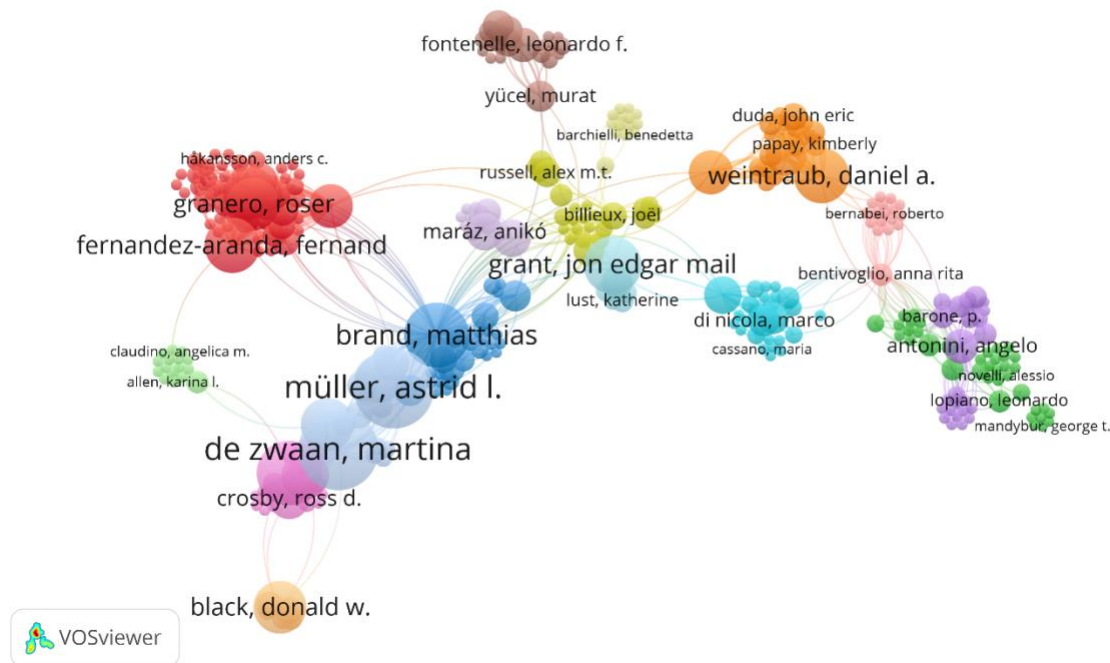
literature. Among publications more directly relevant to the field, the work of McElroy et al. (1994) on compulsive buying as a clinical condition (573 citations), Dittmar (2005) on materialistic values and compulsive buying (370 citations), and Lerner et al. (2004) on the carryover effects of emotion on economic decisions (763 citations) stand out as foundational contributions. Studies by Weintraub and colleagues on impulse control disorders in Parkinson's disease (2006, 2009, 2010) are also prominently represented, reflecting the neuropsychological research stream that has come to occupy a significant space within the broader buying behaviour literature. It is important to interpret citation counts with an awareness of temporal context. Older publications naturally accumulate higher total citations due to their longer presence in the academic record (Lozano, Larivière, & Gingras, 2012). More recent studies, such as those addressing COVID-19 and its behavioural consequences, may exhibit higher annual citation rates despite lower cumulative totals. Both dimensions of citation impact, namely total accumulation and annual rate, are therefore relevant when assessing the relative influence of a publication. The thematic alignment between the most cited publications and the keyword clusters identified in the VOSviewer analysis further underscores the coherence of the dataset. Clinical and neurological studies on conditions such as Alzheimer's disease and Parkinson's disease correspond with the clusters addressing neurobiological mechanisms of addiction (Cluster 4) and pathological impulse control behaviours (Cluster 3). Research on mental health and behavioural responses during the COVID-19 pandemic aligns with the cluster concerned with social context and risk-driven behaviour (Cluster 2). Studies examining emotional and cognitive dimensions of decision-making are reflected in the clusters associated with consumer attitudes and behavioural addiction (Clusters 1 and 5). This alignment confirms that the most influential publications in the dataset are not isolated contributions but are deeply integrated into the thematic architecture of buying behaviour research, reinforcing the field's inherently interdisciplinary character.

3.1 Author and Collaboration Study

A co-authorship network analysis was conducted to map the patterns of scholarly collaboration and examine the structural relationships among researchers contributing to buying behaviour literature (Kumar, 2015; Newman, 2001; Katz & Martin, 1997). The VOSviewer network visualisation identifies 346 authors organised into 16 distinct clusters, each reflecting a community of researchers connected by shared collaborative ties. Within the network map, the size of each node represents the volume of collaborative publications associated with a given author, while the thickness of the connecting links denotes the strength and frequency of collaboration between pairs of researchers (see Figure 1). Several authors emerge as prominent nodes within the network, indicating both high publication output and strong collaborative engagement. Grant, Jon E., Brand, Matthias, Müller, Astrid L., and Weintraub, Daniel A. are among the most visible contributors, with their larger node sizes reflecting their central role in driving research activity within this domain. The clustering of these authors around shared themes, particularly compulsive buying,

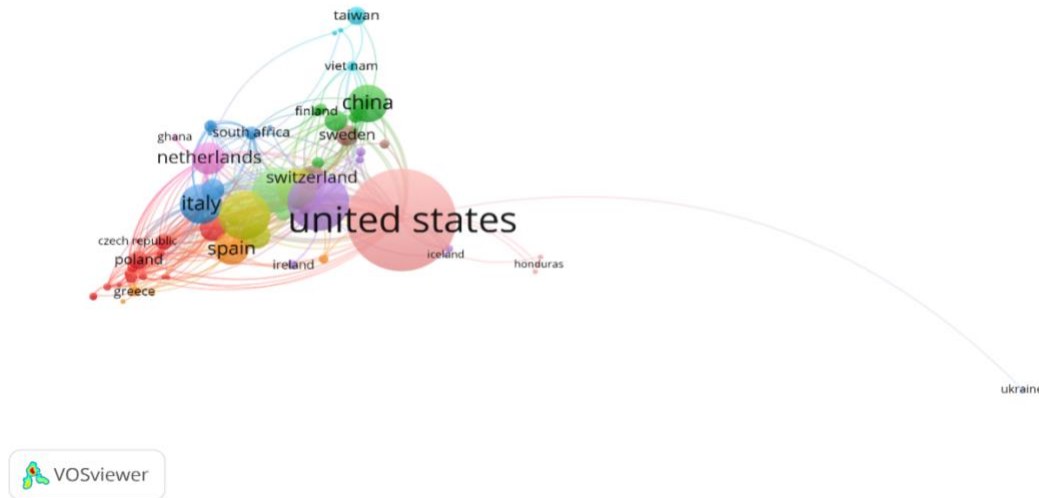
impulse control, and behavioural addiction, suggests the existence of well-established research communities that have sustained productive collaboration over time.

Figure 1. Co-authorship network visualisation using VOSviewer (16 clusters)



Turning to the country-level collaboration network, the analysis reveals a highly interconnected global research structure encompassing 81 countries organised into 12 clusters, with 412 collaboration links and a total link strength of 756 (see Figure 2). The United States is the dominant contributor to the network, recording the highest total link strength of 194, which positions it as the primary hub of international research collaboration in this field. The United Kingdom follows with a total link strength of 136, consolidating its role as a leading centre for buying behaviour scholarship. The density of cross-national ties within the network reflects the growing recognition that buying behaviour is a globally relevant phenomenon whose determinants, whether psychological, economic, or cultural, benefit from comparative and internationally collaborative investigation. Such partnerships also serve broader functions, fostering scientific exchange, supporting workforce development, and satisfying the cross-border funding requirements that increasingly incentivise international research cooperation (Wagner & Leydesdorff, 2005).

Figure 2. Co-authorship Countries network visualization using VOSviewer (12 Clusters)



At the institutional level, the co-authorship network encompasses 552 individual organisations arranged into 30 clusters, with a total link strength of 3,552 (see Figure 3). The scale and density of this network reflect the extent to which buying behaviour research is sustained by a wide range of academic, clinical, and research institutions working in concert. Several organisations emerge as dominant hubs, characterised by large node sizes and high levels of connectivity. The Department of Psychosomatic Medicine stands out as a primary focal point, alongside internationally prominent institutions including Harvard Medical School, the University of Toronto, University College London, and the UCSF School of Medicine. The prominence of clinical and medical institutions within this network is consistent with the field's strong engagement with psychological and neurological research streams. These institutional hubs play a critical role in bridging theoretical academic inquiry and applied clinical or social research, ensuring that advances in the understanding of buying behaviour are translated across disciplinary boundaries.

3.3 Cluster Analysis and Interpretation

The clusters in the network visualisation are distinguished using different colours (red, blue, green, yellow, purple and cyan). For clarity and accessibility, each cluster is also explicitly describing in the text, ensuring that the interpretation of results does not rely solely on colour distinctions.

3.3.1 Cluster 1 (Red): Consumer Attitude and Marketing Influence

This cluster represents the core of traditional and applied buying behaviour research focuses on the sociodemographic drivers (particularly adolescents) and the impact of marketing stimuli (advertising) on consumer choices. These keywords are grouped together because they reflect both internal and external factors affecting market transactions. The presence of “food industry” and “health behaviour” highlights a focus on nutrition-related purchasing decisions, while “pandemics” indicates growing research interest in how global crises influence consumer attitudes. This cluster establishes the baseline for understanding how advertising and industrial practices shape the fundamental attitudes of consumers in various socio-economic environments. This indicates that while traditional marketing perspectives remain central, the field is increasingly expanding to incorporate broader environmental and societal influences on consumer behaviour.

3.3.2 Cluster 2 (Blue): Social Context and Risk-Driven Behaviour

This cluster identifies buying behaviour within the context of public health and social risk management. The grouping of these keywords suggests that "buying behaviour" in this context pertains to the acquisition and use of health-related products as a response to perceived risks and public health crises. It broadens the scope of the field by demonstrating that buying behaviour is a critical variable in health interventions and social epidemiology. This reflects the growing importance of buying behaviour in public health and risk management contexts, suggesting that future research may increasingly focus on consumer responses to global crises and health-related uncertainties.

3.3.3 Cluster 3 (Green): Pathological Impulse Control and Compulsive Buying

This cluster focuses on the clinical and pathological manifestations of buying behavior, specifically identifying it as an impulse control disorder. Keywords like "gambling" and "kleptomania" are linked with "compulsive buying" because they share similar neuropsychological pathways and clinical treatments. This cluster contributes to a deeper understanding of the "dark side" of consumer behaviour, distinguishing between voluntary consumption and pathological addiction. This highlights a significant shift toward understanding buying behaviour as a behavioural disorder, indicating a deeper integration of clinical psychology into consumer research.

3.3.4 Cluster 4 (Yellow): Neurobiological and Physiological Foundations of Addiction

This theme explores the neurobiological mechanisms and physiological triggers that underpin addictive buying behaviours. The terms are grouped to highlight the physiological "drive" (craving and stress) and the subsequent biological responses that characterize shopping addiction as a specialized form of behavioural addiction. It provides a biological framework for the field, explaining why certain buying behaviours become habitual and difficult to terminate. This suggests that future research may increasingly explore the neurological and physiological mechanisms underlying consumer decision-making and addictive purchasing patterns.

3.3.5 Cluster 5 (Purple): Psychological Comorbidities and Clinical Manifestations

This cluster identifies the comorbidity between buying behaviour and other psychological conditions. These keywords are grouped to show how social anxieties and clinical health conditions correlate with specific behavioural patterns, potentially serving as coping mechanisms or manifestations of underlying disorders. It emphasizes the interdisciplinary link between clinical psychiatry and behavioural economics. This reinforces the interdisciplinary nature of the field, emphasizing the need for integrating psychological and behavioural frameworks in understanding consumer actions.

3.3.6 Cluster 6 (Cyan): Technological and Experimental Methodology

This cluster reflects the methodological and technological advancement of behavioral research. The terms represent experimental tools and techniques used to measure cognitive responses and psychological adaptation, highlighting the shift toward empirical, data-driven approaches such as neuromarketing and experimental psychology. This demonstrates a shift toward advanced methodological approaches, indicating that future research will likely rely more on experimental and data-driven techniques to analyse consumer behaviour. The overall keyword co-occurrence network shows how different topics are connected within the field. Some keywords appear more frequently and are more strongly connected with other keywords. Words like "article" and "adolescent" appear in the centre of the network and are larger in size. This means they're often used in research and are very strongly linked with many other topics. In VOS viewer, larger nodes (circles) represent keywords that appear more frequently and have stronger connections with other keywords. Because of this, these keywords act like key areas in the research field, meaning many studies are related to them.

3.4 Keyword Co-Occurrence Analysis at Different Frequency Thresholds

The keyword co-occurrence analysis was conducted using VOSviewer software (Guleria & Kaur, 2021). Different minimum occurrence thresholds (1, 5, 10, 15, 20, 30, and 50) were applied to examine the structure of the research field at varying levels of keyword frequency (see Figure 5). The analysis complements the cluster-based interpretation by highlighting the relative importance of frequently occurring terms across the identified thematic groups. While the cluster analysis



4. Conclusion, Implications, Limitations, and Future Research Directions

This study set out to provide a systematic and evidence-based account of the intellectual development of buying behaviour research by applying bibliometric analysis to a comprehensive dataset of publications retrieved from the Scopus database, spanning five decades from 1975 to 2025. In doing so, it addressed three interconnected objectives: mapping the longitudinal growth of the field, identifying its most influential contributors, and revealing the thematic architecture that structures the literature. The analysis confirms that buying behaviour has attracted sustained and growing scholarly attention over the study period, with publication output increasing markedly in recent decades. This trajectory reflects both the field's commercial relevance and its expanding engagement with broader social and psychological questions about human consumption. The co-authorship network analysis identified the United States and the United Kingdom as the dominant hubs of international research collaboration, while institutions spanning clinical medicine, psychology, and marketing were found to play a central role in sustaining the field's interdisciplinary research communities. Perhaps the most significant finding to emerge from the keyword co-occurrence analysis is the identification of six distinct thematic clusters, which together reveal a field that has evolved well beyond its marketing origins. Themes related to compulsive buying, behavioural addiction, neurobiological mechanisms, and psychological comorbidities now occupy prominent positions within the literature alongside more traditional concerns with consumer attitudes and decision-making. This evolution signals a fundamental reconceptualisation of buying behaviour, one that increasingly treats consumption not merely as an economic act but as a psychologically and clinically significant form of human behaviour. Taken together, these findings offer a structured and empirically grounded foundation for scholars and practitioners seeking to navigate the buying behaviour literature, identify productive areas for future inquiry, and develop more nuanced and evidence-based approaches to understanding how and why people buy. As the field continues to expand and diversify, periodic bibliometric reassessments of this kind will remain an essential tool for maintaining collective orientation within an increasingly complex and interdisciplinary research landscape.

5.1 Theoretical Implications

This study makes several contributions to the theoretical understanding of buying behaviour as an evolving academic discipline. At the most fundamental level, the bibliometric mapping conducted using VOSviewer provides the first structured, evidence-based account of the intellectual architecture of buying behaviour research as a standalone domain. The identification of six distinct thematic clusters reveals that the field is not a homogeneous body of knowledge but rather a richly differentiated landscape in which multiple research traditions converge, each with its own conceptual foundations, methodological approaches, and disciplinary origins. This structural mapping advances theoretical understanding by making explicit the relationships and boundaries between the major streams of inquiry that collectively constitute buying behaviour scholarship.

A particularly significant theoretical contribution lies in the evidence this study provides for the field's transition from a predominantly marketing-oriented discipline to a genuinely interdisciplinary one. Earlier buying behaviour research was largely anchored in consumer psychology and marketing theory, focusing on attitudes, decision-making heuristics, and the influence of external stimuli on purchasing choices. The present analysis demonstrates that this foundation has been substantially extended through the integration of clinical psychology, neuroscience, and public health. The prominence of clusters related to compulsive buying, behavioural addiction, and neurobiological mechanisms signals that consumer behaviour is increasingly understood through the lens of psychological vulnerability and neurological process rather than purely rational economic reasoning. This transition reflects a broader shift in the social sciences from siloed, discipline-specific inquiry towards more integrated interdisciplinary frameworks capable of capturing the full complexity of human behaviour (Kahneman, 2011).

The frequent co-occurrence of keywords such as compulsive buying, impulsivity, and behavioural addiction across multiple clusters also carries important theoretical implications for models of consumer decision-making. Their centrality in the network suggests that purchasing behaviour cannot be adequately explained by rational choice models alone. Instead, the literature increasingly supports theoretical perspectives that foreground the role of self-regulation, emotional processing, and habitual behavioural patterns in shaping consumption (Baumeister, 2002; Rook & Fisher, 1995). These findings provide empirical grounding for theoretical frameworks that treat buying behaviour as a continuum stretching from deliberate, goal-directed purchasing to compulsive and clinically significant consumption, and they underscore the need for future theoretical work to account for this full range. Scholars are therefore encouraged to move beyond isolated disciplinary perspectives and develop integrative frameworks that bring together insights from marketing, behavioural economics, clinical psychology, and neuroscience to more holistically explain how and why people buy.

5.1.1 Practical and Managerial Implications

The findings of this study carry meaningful implications for marketing practitioners, retail strategists, brand managers, and policymakers who seek a deeper and more evidence-based understanding of consumer purchasing behaviour. For marketing and retail professionals, the prominence of compulsive buying, impulsivity, and materialism as central themes in the literature serves as a reminder that consumer purchasing decisions are frequently shaped by psychological and emotional factors rather than deliberate rational evaluation. Organisations that recognise and respond to these behavioural drivers are better positioned to design marketing strategies that genuinely align with consumers' motivations and decision-making processes. This understanding can inform the development of more targeted and contextually relevant campaigns, more effective product positioning, and retail environments designed to engage consumers in ways that reflect their actual behavioural tendencies. At the same time, a nuanced appreciation of impulsive and

compulsive purchasing patterns creates an opportunity for organisations to distinguish themselves through responsible marketing practices, building long-term customer relationships grounded in trust and consumer well-being rather than the exploitation of psychological vulnerabilities.

Brand managers and retailers can draw on these insights to personalise the consumer experience more effectively. Understanding the psychological conditions under which consumers are most susceptible to impulse-driven purchasing, including situational stressors, emotional states, and social influences, can guide decisions about promotional timing, communication tone, and the design of loyalty and engagement programmes. Organisations that integrate behavioural insights into their customer relationship strategies are likely to achieve more sustainable competitive advantages than those relying solely on price or product differentiation. The policy implications of the study are equally important. The growing intersection of buying behaviour research with clinical psychology and neuroscience highlights the extent to which excessive and compulsive consumption constitutes not merely a commercial phenomenon but a public health concern. Policymakers and consumer protection agencies can draw on the thematic patterns identified in this study to design regulatory frameworks and awareness initiatives that address the psychological dimensions of compulsive and addictive buying. This may include guidelines governing high-pressure promotional tactics, restrictions on manipulative advertising techniques, and public education programmes aimed at fostering more conscious and balanced consumption habits. These interventions would contribute to a marketplace in which commercial objectives and consumer well-being are treated as complementary rather than competing priorities.

The findings of this bibliometric analysis offer valuable insights for marketing managers, retailers, and brand managers seeking to better understand consumer purchasing patterns. The prominence of themes such as compulsive buying, impulsivity, and materialism suggests that consumer purchasing behaviour is strongly influenced by psychological and behavioural factors. By recognizing these influences, organizations can design marketing strategies that align with consumers' motivations, preferences, and decision-making processes. A deeper understanding of these behavioural tendencies can help firms develop targeted marketing campaigns, improve product positioning, and enhance customer engagement in competitive markets. Furthermore, the results highlight the importance of considering consumer decision-making processes when developing marketing and retail strategies. Retailers and brand managers can use these insights to create more personalized consumer experiences, improve communication strategies, and strengthen long-term customer relationships. Understanding impulsive and compulsive purchasing tendencies may also help organizations develop responsible marketing practices that encourage balanced consumption while maintaining customer satisfaction and loyalty.

Finally, the study provides useful implications for consumer researchers and policymakers by identifying key research themes and behavioural patterns in buying behaviour literature. Policymakers and consumer protection agencies can use these insights to design guidelines and



awareness programs that address issues related to behavioural addiction and excessive consumption. At the same time, researchers can build upon these findings to further explore psychological and behavioural determinants of purchasing behaviour, contributing to the development of more informed and responsible consumer research and marketing practices. The bibliometric findings, particularly the prominence of compulsive buying, impulsivity, and behavioural addiction, have important implications for responsible marketing and consumer protection. The increasing focus on these themes suggests that consumer behaviour is not always rational and may be influenced by psychological vulnerabilities. Therefore, organizations should adopt ethical marketing practices that avoid exploiting impulsive tendencies, such as excessive promotional pressure or manipulative advertising techniques.

From a policy perspective, the growing intersection of buying behaviour with clinical and psychological research highlights the need for stronger regulatory frameworks and consumer awareness initiatives. Policymakers and consumer protection agencies can use these insights to design interventions that promote responsible consumption, regulate misleading marketing practices, and address issues related to compulsive and addictive buying behaviour. These findings underscore the importance of balancing business objectives with consumer well-being in an increasingly complex marketplace.

5.2 Limitations and Directions for Future Research

While this study offers a comprehensive bibliometric overview of the buying behaviour literature, several limitations should be acknowledged when interpreting its findings, and these simultaneously point towards productive directions for future research. The most substantive limitation concerns the exclusive reliance on the Scopus database as the source of bibliographic data. Although Scopus is among the most comprehensive academic databases available, it does not index all scholarly journals, and a number of relevant publications may therefore have been excluded from the analysis. Future studies would benefit from triangulating across multiple databases, including Web of Science, Google Scholar, and PsycINFO, to construct a more complete and representative dataset. Such an approach would also reduce the risk of systematic bias introduced by the coverage priorities of any single indexing platform. A related limitation is the restriction of the search to English-language publications. Buying behaviour is a globally relevant phenomenon, and a substantial body of research conducted in other languages, particularly in rapidly growing consumer markets across Asia, Latin America, and the Middle East, may not be adequately represented in the current dataset. Future bibliometric work should seek to incorporate non-English publications to ensure that the intellectual map of the field reflects the full diversity of global scholarship rather than the output of Anglophone academic communities alone. The study's exclusive use of the keyword "buying behaviour" as the search term, while methodologically justified for reasons of conceptual precision, inevitably means that studies employing related terminology, such as "purchase intention," "consumer decision-making," or

"shopping behaviour," may not have been captured. Future research could adopt a broader and more inclusive search strategy, using a combination of synonymous and related terms, to ensure more comprehensive coverage of the field. Complementing VOSviewer with alternative bibliometric tools such as Bibliometrix or CiteSpace would also allow for cross-validation of findings and a richer range of analytical perspectives. Finally, the study's bibliometric approach, while powerful for mapping structural and thematic patterns across large bodies of literature, is inherently descriptive and does not establish causal relationships between the variables under examination. Future research might therefore combine bibliometric mapping with systematic review or meta-analytic techniques to move beyond structural description towards a more explanatory account of how key theoretical constructs within the field have developed and interacted over time. Longitudinal analyses that track the emergence and decline of specific thematic clusters would also contribute to a more dynamic understanding of how the intellectual priorities of buying behaviour research evolve in response to broader societal, technological, and economic change.

Note

All authors contributed to the study and approved the final manuscript.

References

- Ajzen, I. (2018). Consumer attitudes and behavior. In *Handbook of consumer psychology* (pp. 529–552). Routledge.
- Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, *11*(4), 959–975.
- Baumeister, R. F. (2002). Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior. *Journal of consumer Research*, *28*(4), 670–676.
- Belk, R. W. (2001). Materialism and you. *Journal of Research for Consumers*, *1*(1), 291–297.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285–296.
- Griskevicius, V., & Kenrick, D. T. (2013). Fundamental motives: How evolutionary needs influence consumer behavior. *Journal of Consumer Psychology*, *23*(3), 372–386.
- Guleria, D., & Kaur, G. (2021). Bibliometric analysis of ecopreneurship using vosviewer and rstudio Bibliometrix, 1989–2019. *Library Hi Tech*, *39*(4), 1001–1024.
- Kahneman, D. (2011). *Fast and slow thinking*. Allen Lane and Penguin Books.

- Kardefelt-Winther, D., Heeren, A., Schimmenti, A., Van Rooij, A., Maurage, P., Carras, M., ... & Billieux, J. (2017). How can we conceptualize behavioural addiction without pathologizing common behaviours?. *Addiction*, *112*(10), 1709–1715.
- Katz, J. S., & Martin, B. R. (1997). What is research collaboration?. *Research Policy*, *26*(1), 1–18.
- Kumar, M., George, R. J., & PS, A. (2023). Bibliometric analysis for medical research. *Indian Journal of Psychological Medicine*, *45*(3), 277–282.
- Kumar, S. (2015). Co-authorship networks: A review of the literature. *Aslib Journal of Information Management*, *67*(1), 55–73.
- Lejoyeux, M., & Weinstein, A. (2010). Compulsive buying. *The American Journal of Drug and Alcohol Abuse*, *36*(5), 248–253.
- Lozano, G. A., Larivière, V., & Gingras, Y. (2012). The weakening relationship between the impact factor and papers' citations in the digital age. *Journal of the American Society for Information Science and Technology*, *63*(11), 2140–2145.
- Mihaela, O. O. E. (2015). The influence of the integrated marketing communication on the consumer buying behaviour. *Procedia Economics and Finance*, *23*, 1446–1450.
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, *106*(1), 213–228.
- Newman, M. E. (2001). The structure of scientific collaboration networks. *Proceedings of the National Academy of Sciences*, *98*(2), 404–409.
- Qazzafi, S. (2020). Factor affecting consumer buying behavior: A conceptual study. *International Journal for Scientific Research & Development*, *8*(2), 1205–1208.
- Ramya, N. A. S. A. M., & Ali, S. M. (2016). Factors affecting consumer buying behavior. *International Journal of Applied Research*, *2*(10), 76–80.
- Ridgway, N. M., Kukar-Kinney, M., & Monroe, K. B. (2008). An expanded conceptualization and a new measure of compulsive buying. *Journal of Consumer Research*, *35*(4), 622–639.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, *22*(3), 305–313.
- Rosenfield, P. L. (1992). The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences. *Social Science & Medicine*, *35*(11), 1343–1357.
- Solomon, M. R. (1994). *Consumer behavior: Buying, having, and being*. Prentice Hall.
- Van Eck, N., & Waltman, L. (2010). Software survey: vosviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538.



- Wagner, C. S., & Leydesdorff, L. (2005). Network structure, self-organization, and the growth of international collaboration in science. *Research Policy*, 34(10), 1608–1618.
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472.