

From seduction to deception: A bibliometric perspective on the evolution of deceptive advertising



K. L. Sangeetha^a ✉ | Maria Pynadath^{ab} | Amiya Bhaumik^b

^aDepartment of Commerce, Rajagiri College of Social Sciences (Autonomous), Kochi, Kerala, India.

^bLincoln University College, Petaling Jaya, Malaysia.

Abstract Deceptive advertising, characterized by the dissemination of misinformation to consumers, poses significant challenges to consumer welfare and market integrity. This study tries to explore the academic landscape surrounding deceptive advertising over the past three decades through a systematic bibliometric analysis. Leveraging data from Elsevier's Scopus database, this study maps the trajectory of deceptive advertising literature from 1993 to 2023, identifying key publication trends, influential authors, journals, institutions and countries. It also delves into the realm of deceptive advertising, analyzing author-generated keywords and the dynamic landscape of emerging research trends within this domain. Through quantitative analysis and visualization using VOSviewer, the paper investigates the evolution of scholarly interest in deceptive advertising, prominent publications and thematic clusters. Findings reveal distinct phases in research activity, from nascent interest to heightened scrutiny, reflecting the dynamic nature of deceptive advertising practices. Notable publications and authors are highlighted, along with the global distribution of research contributions and collaborative networks. Emerging research themes, including ethical considerations, technological solutions and regulatory challenges, underscore the interdisciplinary nature of deceptive advertising research. Our findings reveal a significant growth in scholarly interest, reflecting the escalating concern over deceptive practices in advertising and their implications for consumers, businesses, and regulatory frameworks. The analysis uncovers the multidisciplinary nature of the research, with contributions spanning marketing, law, psychology and information technology, indicating the complex and multifaceted approach required to address deceptive advertising effectively. This study not only provides a comprehensive overview of literature but also lays the groundwork for future research aimed at developing innovative strategies to combat deceptive practices and protect consumer rights.

Keywords: deceptive advertising, publication trends, marketing ethics, regulatory frameworks, technological solutions

1. Introduction

"The real cost of deception in advertising is not just the misled consumer, but the degradation of trust in the marketplace."

-Seth Godin, author and marketing expert.

In the capitalist economy and its assorted adaptations, advertising serves a critical function by delivering significant product information to consumers, enabling them to make informed decisions among various options. To the extent that it performs this role, advertising functions properly; to the extent that it does not, it is malfunctioning. A prime instance of such malfunction is deceptive advertising, which misleads consumers by providing misinformation instead of factual information. The pervasive nature of deceptive advertising and its evolving tactics in the digital era have garnered substantial academic interest, prompting a rigorous examination of its implications, mechanisms and regulatory responses. With the proliferation of digital marketing channels, the complexity and scope of deceptive advertising strategies have evolved, prompting researchers to explore various dimensions of this issue. Deceptive marketing involves false or misleading sales activities and information aimed at luring, coercing, seducing, persuading or enticing both potential and existing consumers to patronize a trader, seller or manufacturer of a product (Cawley et al., 2013). Deception occurs when an ad leaves the consumer with a belief or impression (which is factually incorrect or potentially misleading) that is significantly different from what a reasonably informed consumer would expect (Gardner, 1975).

Deceit unfolds when a seller falsely markets a low-quality product as high-quality, leading to a purchase by the buyer. The Volkswagen Company promoted vehicles that use clean diesel, only to be later proven to have cheated on emission tests for years. The company was sued by the Federal Trade Commission (FTC) for deceptive advertising (Torhoermanlaw, 2022). The likelihood that the buyer is exposed to the seller's claims about the product quality through advertising grows as the seller



increases their advertising spending (Piccolo et al., 2015). This potential risk is widely acknowledged by antitrust and competition policy authorities globally. When firms engage in deceptive advertising, it is likely that the civil law principle, which asserts consumers' 'right to know' what they are buying, will be breached. Consequently, misleading advertising is typically subject to sanctions under regulations specific to each country aimed at safeguarding consumers and promoting fair competition.

In the current competitive business landscape, becoming a market leader requires companies to invest millions of dollars in promotion (Iqbal & Siddiqui, 2019). Advertisers aim to attract valuable customers by shaping their perceptions, knowledge and purchasing habits. Nearly all assertions capable of being articulated through words can also be represented through visual means. Conversely, this principle does not hold in reverse; visual imagery has the unique ability to relay messages to consumers in ways that textual language simply cannot match. This distinct advantage of visual communication has led photography and television to dramatically alter the landscape of advertising (Demaine, 2012). These media provided businesses with the opportunity to promote their products through visual presentation, moving away from the reliance on complex verbal explanations or simplistic drawings. Catering to the universal paradigm shift from language to visual imagery in advertising, policy makers have become increasingly cautious about the potential market distortions caused by deceptive practices, as these distortions can lead to unfair competition. Prevention is crucial because it not only harms consumers but also impacts honest businesses, undermines the effectiveness of advertising and tarnishes the overall public perception of marketing (Mann & Gurol, 1978).

This study employs bibliometric analysis to systematically review the literature on deceptive advertising over the last three decades, aiming to map the academic landscape and identify key research trends, influential publications and gaps in the existing body of knowledge. A bibliometric analysis of deceptive advertising serves as a systematic method to quantitatively review and synthesize the extensive body of research in this area, offering insights into its intellectual structure, evolution and future directions. Accordingly, this study embarks on a comprehensive bibliometric analysis of the literature on deceptive advertising, aiming to address the following research questions:

- R1: How has deceptive advertising literature evolved over time, and what are the most frequently cited articles?
- R2: What trends characterize the number of publications per year in deceptive advertising research, and what factors influence these trends?
- R3: Who are the prominent authors in deceptive advertising research, and which are the most influential journals, institutions and countries contributing to this field?
- R4: What are the most frequent keywords and thematic clusters in deceptive advertising literature?
- R5: What are the emerging research trends in the field of deceptive advertising?

2. Theoretical Background

The practice of incorporating deceit in marketing dates back to the earliest forms of structured trading among humans. This paradigm of guile in advertising ethics surfaced during the production era of the late 1900s, coinciding with the rise of advertising. From physical storefronts to online platforms and from classic newspaper ads to the intricacies of social media promotion, deceptive advertising has evolved over time due to regulatory measures (Kotler, 2010). Legislators have formulated a comprehensive framework of laws and regulations pertaining to this form of advertising. Deceptive advertising has been outlawed in many nations, reflecting a global effort to protect consumers from false or misleading marketing practices. Companies engaged in deceptive advertising prioritize their market share and profits over the interests of their customers (Reichheld, 1996).

In an age marked by influential marketing tactics and competitive consumer landscapes, false advertising has evolved into a nuanced issue straddling legal and ethical boundaries. Dubious assertions are ubiquitous in the retail domain. A flyer at a gym guarantees rapid weight loss with a new workout program. A brochure in a clinic claims that a skincare product is clinically proven to reduce signs of aging. A billboard advertises a car's unmatched fuel efficiency compared with all other models in its class. A commercial social media platform asserts that a new app can improve mental health in just a few weeks. How can consumers discern the accuracy of these claims? Undoubtedly, the employment of deceit in advertising rose to prominence as the foremost issue in every critical sector.

Olson and Dover defined a deceptive ad as "one that creates a false or incorrect belief about the product" (1978). It has also been defined as "message distortion resulting from deliberate falsification or omission of information by a communicator with the intent of stimulating in another, or others, a belief that the communicator himself or herself does not believe" (Knapp & Comadena, 2006). Deception unfolds when an advertisement leaves an impression or belief that diverges from what a reasonably informed individual would anticipate, and this belief or impression either lacks factual accuracy or could be misleading (Gardner, 1975). Nevertheless, Hyman (1990) suggested that all consumers, regardless of their reasoning capabilities, ought to be safeguarded, thereby being included in any definition of advertising deception. Hyman's comprehensive approach further encompasses all decision-makers who could be harmed through the assimilation of deceptive content. The academic literature predominantly explores deception from two perspectives: one focused on marketers, and the

other focused on consumers. Each perspective offers unique insights into the dynamics of deception in commercial contexts, shedding light on the strategies, motivations, and impacts involved. In contrast to earlier definitions that focus on economic decline, Aditya's definition restores consumer autonomy by acknowledging a possible long-term consequence of deception, specifically, its psychosocial undesirability. This definition takes into account the viewpoint of the most crucial stakeholder in advertising delivery—the audience or potential consumer (Aditya, 2001). The combination of Hyman's (1990) consumer-focused perspective and Aditya's (2001) society-centered approach offers a more effective standard for pinpointing deceptive claims in advertising (Shabbir & Thwaites, 2007)

Deceptive advertising remains a significant concern in both traditional and digital marketing landscapes. Despite rigorous standards, enhanced regulatory measures and more sophisticated consumer awareness, deceptive practices continue to evolve with technological advancements and the shifting dynamics of consumer behavior. By meticulously examining the volume, trends and networks within the relevant scholarly literature, this study aims to uncover the multifaceted dimensions of deceptive advertising practices, their impact on consumer behavior and the regulatory responses they have elicited. This study charts the intellectual contours of deceptive advertising research, offering a bird's-eye view of the field's development over time.

3. Materials and Methods

The data for this study were obtained from Elsevier's Scopus database, a widely recognized abstract and citation database renowned for its extensive collection of publications from reputable journals and research scholars (Van Eck & Waltman, 2014). Although databases such as PubMed and Web of Science (WoS) are accessible for bibliometric analysis, PubMed focuses primarily on life sciences and biomedical research, rendering it less compatible with multidisciplinary research initiatives (AlRyalat et al., 2019). Considering the scope of the study, Scopus and WoS offer comprehensive coverage across multiple disciplines. We chose Scopus among the available databases because it strikes a superior balance in terms of user interface usability, comprehensiveness and data cleanliness (Mariani & Borghi, 2019).

Bibliometric data were gathered from the Scopus database via the keyword "Deceptive Advertising." While the search primarily targeted articles using "Deceptive Advertising" as the keyword, it also included those mentioning related terms such as "Misleading Advertising," "False Advertising" and "Fake Advertising". We utilized the "*" operator in conjunction with the term "advertis" during the search in Scopus to encompass all similar words, such as advertisements, advertising, and advertising. Initially, the search query was TITLE-ABS-KEY ("deceptive advertis*" OR "misleading advertis*" OR "False advertis*" OR "fake advertis*"). This resulted in 671 documents. To focus on studies from the last three decades, the search was restricted to publications published between 1993 and 2023, resulting in 555 documents. A refined search query was subsequently performed via the same keywords: TITLE-ABS-KEY ("deceptive advertis*" OR "misleading advertis*" OR "False advertis*" OR "fake advertis*") AND PUBYEAR > 1992 AND PUBYEAR < 2024). We further refined our search query, TITLE-ABS-KEY ("deceptive advertis*" OR "misleading advertis*" OR "False advertis*" OR "fake advertis*") AND PUBYEAR > 1992 AND PUBYEAR < 2024 AND (EXCLUDE (DOCTYPE, "er") OR EXCLUDE (DOCTYPE, "Undefined") OR EXCLUDE (DOCTYPE, "bk") OR EXCLUDE (DOCTYPE, "le") OR EXCLUDE (DOCTYPE, "DOCTYPE", "no") OR EXCLUDE (DOCTYPE, "no") to include only journal articles, book chapters, conference papers, reviews and short surveys, thereby excluding documents such as notes, letters, books, editorials and similar items. This filter resulted in the exclusion of 19 studies. Consequently, 536 articles remained in our search results. The citation information, bibliographic details, abstracts, keywords and references of these 536 articles were subsequently downloaded from Scopus in a comma-separated values (.csv) file format for subsequent analysis. Figure 1 illustrates the final search results obtained from Scopus.

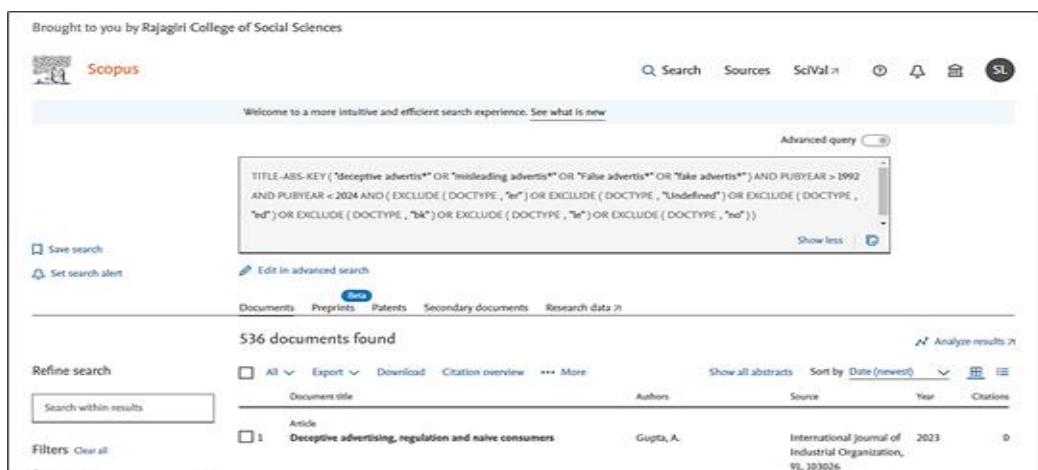


Figure 1 Search results for bibliometric data from Scopus.



The final publication collection was exported into the bibliography for data processing and data visualization, utilizing the widely used bibliographic tool VOSviewer. VOSviewer is a freely available Java tool specifically designed for analyzing and visualizing citation networks in scientific literature (Pham-Duc & Nguyen, 2022).

4. Results

4.1. Citation analysis

This section addresses the following results: summary of general results; number of publications per year; most cited documents; most influential authors; most influential journals; and most influential institutions and most influential countries.

4.1.1. General results

The study examined a total of 372 articles sourced from 74 distinct journals. These articles were contributed by 159 individuals affiliated with 71 different countries and a total of 5,739 cited references, highlighting the depth and breadth of scholarly engagement in this field. These findings provide valuable insights into the global scope of deceptive advertising research, emphasizing its importance and the extensive network of researchers and institutions contributing to advancements in understanding within this domain.

4.1.2. Number of publications per year

The trend of deceptive advertising research from 1993--2023 highlights an evolving scholarly interest across four distinct phases, starting with fluctuating low-level activity in the 1990s to a more pronounced engagement in the early 2000s, reflecting growing concerns around consumer protection and ethics. The number of publications steadily increased, peaking in 2015, driven by greater scrutiny over advertising practices amid technological progress, consumer activism and regulatory efforts. From 2016 to 2023, the research field reached a phase of stability, indicating a mature scholarly focus on dissecting deceptive advertising's intricate psychological, regulatory and market impact aspects. However, considering the volume of publications received to date, it can be well conjectured that the future years will witness a greater influx of publications than seen in prior years.

The trend analysis of publications on deceptive advertising research from 1993--2023 reveals an overall increasing trend with some fluctuations. There was a gradual rise in publications until approximately 2015, followed by periods of fluctuation in subsequent years (see Figure 2). The factors influencing these trends likely include advancements in technology, increased consumer awareness, changes in regulatory frameworks and shifts in academic interest and funding. Spikes and dips in publication numbers may be linked to specific events, such as scandals or regulatory interventions, whereas the consistent growth in publications from the mid-2010s onward reflects heightened attention to deceptive advertising's impact in digital marketing channels. The relatively lower number of publications in earlier years suggests a nascent interest in deceptive advertising research, gradually gaining momentum over time as scholars recognize its significance in the marketing landscape.

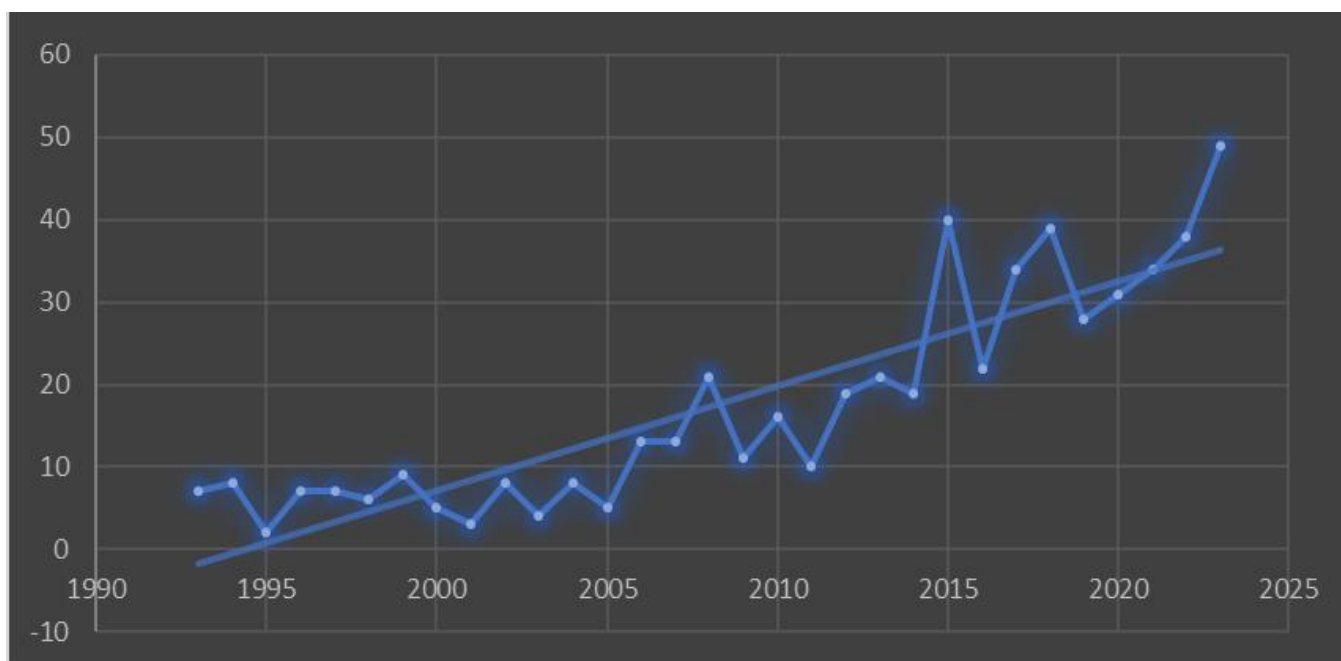


Figure 2 Trend analysis (1993--2023) of publications in the deceptive advertising literature.

The growth rate analysis of publications on deceptive advertising research from 1993–2023 reveals varying trends over the years. The data show significant fluctuations in growth rates, with some years experiencing substantial increases and others showing decreases. For example, 1996, 2002, 2004 and 2006 stand out with remarkable growth rates of 250.00%, 166.67%, 100.00% and 225.00%, respectively (see Figure 3), indicating periods of heightened scholarly interest in deceptive advertising research. Conversely, years such as 1995, 2000, 2003 and 2005 exhibited sharp declines, with growth rates of -75.00%, -44.44%, -50.00% and -50.00%, respectively, suggesting potential downturns in research activity or other influencing factors. Overall, while the growth rates fluctuate significantly from year to year, the analysis underscores the dynamic nature of deceptive advertising research and the diverse factors impacting its trajectory over time.



Figure 3 Growth Rate of Publications in Deceptive Advertising Literature from 1993—2023.

4.1.3. Most-cited documents

This section presents the top 10 most-cited documents in the field of deceptive advertising (see Table 1). These articles are ranked in descending order on the basis of the number of citations received. Among all the articles in the dataset, only a small proportion (approximately 2%) have garnered 100 citations or more. The most cited document, "*The defensive consumer: Advertising deception, defensive processing and distrust*," authored by Darke and Ritchie (2007), stands out with 358 citations. This article explores the phenomenon of advertising deception and its impact on consumer behavior, particularly focusing on defensive processing mechanisms and the development of consumer distrust in response to deceptive advertising practices. Following closely is "*What is disinformation?*" by Fallis (2015), which has received 199 citations. This article delves into the concept of disinformation, shedding light on its nature, manifestations and implications in various contexts, including advertising. Overall, the highly cited documents represent seminal contributions to the field of deceptive advertising, providing valuable insights into its various dimensions, impacts and implications for consumers, marketers and policymakers alike.

4.1.4. Most influential authors

This section presents the most influential authors in the domain of deceptive advertising. The authors' influence is assessed on the basis of the number of articles they have contributed related to deceptive advertising, along with the citations received for each of their works. In terms of total citations received, the most influential authors in the field are Darke, Ritchie and Fallis, with 415, 411 and 234 citations, respectively (see Table 2). Additionally, Cole and Denburg trail closely, with 199 citations each, further highlighting their impact on the field. When the average number of citations per document is evaluated, Ritchie emerges as the most influential author, with an impressive average of 205.5 citations per document. Bechara follows closely, with an average number of citations per document of 154, indicating the significant impact of their single-authored work in the field. Furthermore, Darke, Fallis, Cole and Denburg also demonstrate substantial influence on the basis of their average number of citations per document, with values ranging from 99.5–138.33 (see Table 3). Overall, the contributions of these influential authors have significantly advanced the understanding of deceptive advertising, as evidenced by both their total citations received and average citations per document metric.

Table 1 Most cited documents in the deceptive marketing literature.

Rank	Document Title	Citation
1	The defensive consumer: Advertising deception, defensive processing, and distrust (Darke & Ritchie, 2007)	358
2	What is disinformation? (Fallis, 2015)	199
3	Misleading Consumers with Green Advertising? An Affect–Reason–Involvement Account of Greenwashing Effects in Environmental Advertising (Schmuck et al., 2018)	184
4	The orbitofrontal cortex, real-world decision making, and normal aging (Denburg et al., 2007)	154
5	However, are tourists satisfied? Importance-performance analysis of the whale shark tourism industry on Isla Holbox, Mexico (Ziegler et al., 2012)	148
6	The Challenges Native Advertising Poses: Exploring Potential Federal Trade Commission Responses and Identifying Research Needs (Campbell & Grimm, 2019)	108
7	Setting quality expectations when entering a market: What should the promise be? (Kopalle & Lehmann, 2006)	103
8	Sustainable tourism: Ethical alternative or marketing ploy? (Lansing & De Vries, 2007)	101
9	Consumer ethics: A cross-cultural study of the ethical beliefs of Turkish and American consumers (Rawwas et al., 2005)	94
10	Bioplastics: A boon or bane? (Nandakumar et al., 2021)	78

Table 2 Most influential authors (in terms of total citations received).

Rank	Author	Number	Citation
1	Darke, P.R.	3	415
2	Ritchie, R.J.B.	2	411
3	Fallis, D.	2	234
4	Cole, C.A.	2	199
5	Denburg, N.L.	2	199
6	Bechara, A.	1	154
7	Kopalle, P.K.	3	132
8	Lehmann, D.R.	2	114
9	Rawwas, M.Y.A.	2	95
10	Lachenmeier, D.W.	2	80

Table 3 Most influential authors (in terms of average citations per document).

Rank	Author	Number	Citation	Average citation per document
1	Ritchie, R.J.B.	2	411	205.5
2	Bechara, A.	1	154	154
3	Darke, P.R.	3	415	138.33
4	Fallis, D.	2	234	117
5	Cole, C.A.	2	199	99.5
6	Denburg, N.L.	2	199	99.5
7	Lehmann, D.R.	2	114	57
8	Ashworth, L.	1	53	53
9	Rawwas, M.Y.A.	2	95	47.5
10	Asp, E.	1	45	45

4.1.5. Most influential journals

Exploring the most influential journals in the realm of deceptive advertising offers crucial understanding of the academic terrain and the dissemination of research in this area. The *Journal of Marketing Research* stands out as the most cited journal, having accumulated 454 citations through four articles, indicating its significant influence in the field (see Table 4). On the heels, the *Journal of Business Ethics* addresses deceptive advertising, with 11 articles garnering 409 citations in total. Furthermore, the *Journal of Advertising* holds the third position in total citations, amassing 344 citations through five articles. This underscores the importance of research dedicated to advertising practices and their effects on consumer behavior and the welfare of society.

In terms of the average number of citations received per article, the *Journal of Marketing Research* has emerged as the most influential journal, with an impressive average of 113.50 citations per article (see Table 5). The journal of advertising

closely follows, with an average number of citations of 68.80 per article. This indicates the substantial impact and recognition of these journals within the field of deceptive advertising research.

Table 4 Most influential journals (in terms of total citations received).

Rank	Source	Articles	Citations
1	Journal of Marketing Research	4	454
2	Journal of Business Ethics	11	409
3	Journal of Advertising	5	344
4	Journal of Public Policy and Marketing	7	257
5	Marketing Science	4	153
6	International Journal of Drug Policy	2	75
7	Journal of Marketing Communications	3	74
8	Journal of Product and Brand Management	3	74
9	RAND Journal of Economics	2	66
10	Journal of Business Research	3	57

Table 5 Most influential journals (in terms of average citations per document).

Rank	Source	Articles	Citations	Average citation per article
1	Journal of Marketing Research	4	454	113.5
2	Journal of Advertising	5	344	68.8
3	Alcoholism Clinical and Experimental Research	1	49	49
4	Applied Cognitive Psychology	1	45	45
5	British Journal of Sports Medicine	1	42	42
6	American Journal of Public Health	1	39	39
7	Marketing Science	4	153	38.25
8	International Journal of Drug Policy	2	75	37.5
9	Journal of Business Ethics	11	407	37
10	Journal of Public Policy and Marketing	7	257	36.71

4.1.6. Most influential institutions

First, the University of British Columbia stands out as the top institution in terms of total citations received, with 363 citations spanning four documents. Closely trailing are Western University and the UBC Sauder School of Business, both hailing from Canada, each racking up 360 citations (see Table 6). Analysis of the most influential institutions in terms of average citations per document in the field of deceptive advertising research reveals that Western University and the UBC Sauder School of Business, both from Canada, share the top spot, with impressive average citations of 180.00 per document across two publications (see Table 7), indicating the high impact and relevance of their research contributions. Florida State University is a close contender, securing the third spot, with an average citation of 179.50 per document across two publications, suggesting significant scholarly impact in the field of deceptive advertising.

Table 6 Most influential institutions (in terms of total citations received).

Rank	Institutions	Country	Documents	Citation
1	The University of British Columbia	Canada	4	363
2	Western University	Canada	2	360
3	UBC Sauder School of Business	Canada	2	360
4	Florida State University	USA	2	359
5	The University of Arizona	USA	3	293
6	University of Iowa	USA	4	244
7	Universität Wien	Austria	2	205
8	University of Iowa Carver College of Medicine	USA	2	199
9	University of Illinois Urbana-Champaign	USA	6	192
10	University of Southern California	USA	3	183

Table 7 Most influential institutions (in terms of average citations per document).

Rank	Institutions	Country	Documents	Citation	Average citation per document
1	Western University	2	360	180	1
2	UBC Sauder School of Business	2	360	180	2
3	Florida State University	2	359	179.5	3
4	Universität Wien	2	205	102.5	4
5	University of Iowa Carver College of Medicine	2	199	99.5	5
6	The University of Arizona	3	293	97.67	6
7	The University of British Columbia	4	363	90.75	7
8	University of Iowa	4	244	61	8
9	University of Southern California	3	183	61	9
10	Public Health Law and Policy	1	59	59	10

4.1.7. Most influential countries

In terms of total citations received, the United States dominates the ranking with a substantial lead, collecting 3,726 citations across 183 documents (see Table 8). Canada ranks second with 30 documents and 840 citations, indicating a notable contribution to the field despite its smaller volume of research output compared with the United States (see Figure 4). With respect to the average citations per document, Austria takes the lead with the highest average, achieving an exceptional average of 102.5 citations across two publications. Notably, Canada ranks third in this respect (see Table 9), indicating a high level of citation impact per document despite a larger volume of research output than Austria does.

Table 8 Most influential countries (in terms of total citations received).

Rank	Country	Documents	Citation
1	United States	183	3726
2	Canada	30	840
3	United Kingdom	26	239
4	Germany	17	213
5	Austria	2	205
6	India	42	199
7	China	34	184
8	Spain	24	161
9	France	12	159
10	Italy	18	147

Table 9 Most influential countries (in terms of average citations per document).

Rank	Country	Documents	Citation	Average citation per document
1	Austria	2	205	102.5
2	Nepal	1	40	40
3	Canada	30	840	28
4	Turkey	5	109	21.8
5	United States	183	3726	20.36
6	Bangladesh	2	40	20
7	Israel	2	32	16
8	Saudi Arabia	4	55	13.75
9	France	12	159	13.25
10	Germany	17	213	12.53

4.2. Cocitation analysis - Most frequently cited authors

Analyzing cocitations in the deceptive advertising literature reveals prominent authors in the field. Fractional counting was employed in cocitation analysis, which entailed identifying cited authors as the unit of analysis. Out of the 536 articles examined, a total of 21,732 authors were identified from their cited references. To ensure a comprehensive analysis, the set was narrowed down to authors with at least 10 citations, encompassing a total of 154 articles. The most frequently cited authors, as evident from the analysis, are Darke, P.R. with 38 citations (see Figure 5) and a total link strength of 36.5; Boush, D.M. with 29 citations and a total link strength of 27; Petty, R.E. with 28 citations and a total link strength of 26.15; Friestad, M. with 27 citations and a total link strength of 25.95; and Wright, P. with 27 citations and a total link strength of 25.81. These authors represent the cornerstone of scholarly discourse on deceptive advertising, demonstrating their substantial impact and influence on the field.

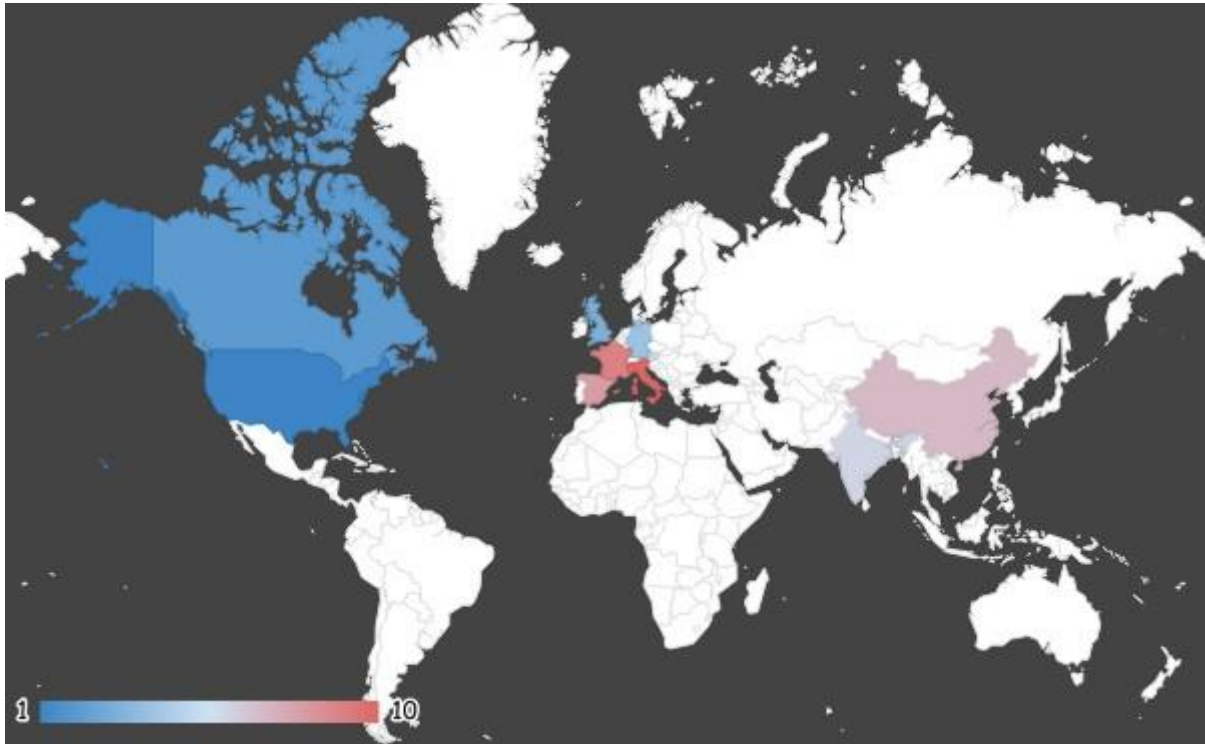


Figure 4 World map of the rankings of the most influential countries in terms of total citations received.

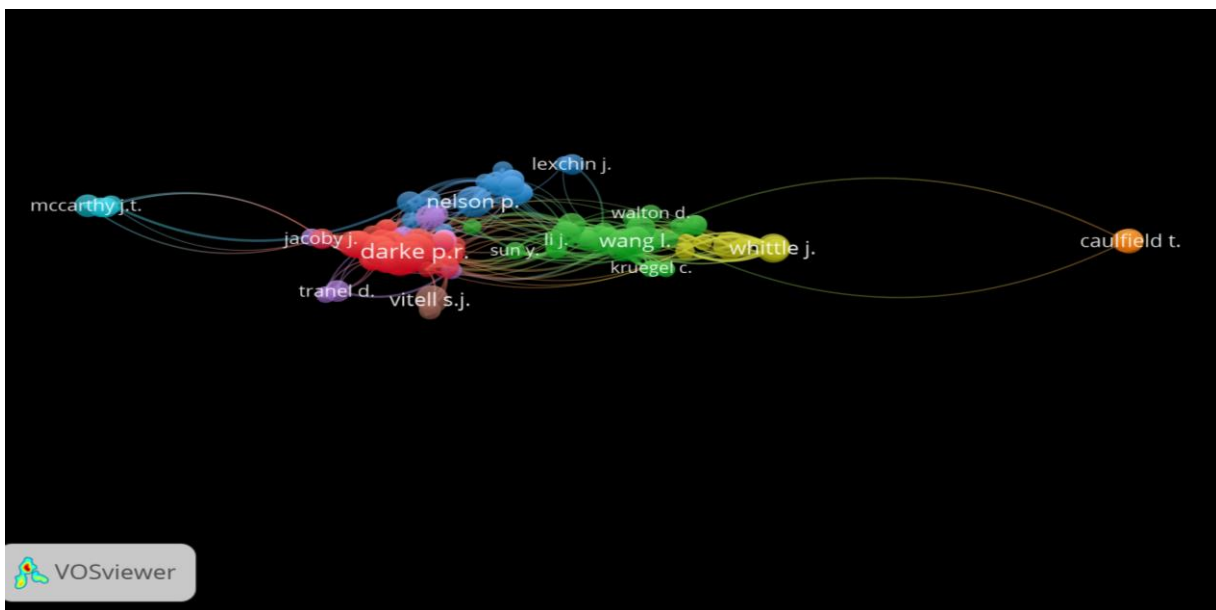


Figure 5 Network of cocited authors.

4.3. Keyword analysis

This co-occurrence analysis of author keywords in deceptive advertising reveals distinct thematic clusters that encapsulate various aspects of the phenomenon. The first cluster, indicated in red (see Figure 6), encompasses a wide range of themes, including regulatory frameworks (such as laws and legislation), technological solutions (such as deep learning and machine learning) for detecting deceptive practices and consumer-related concepts such as trust and consumption behavior. It also delves into specific industries (such as e-commerce and health), alongside methods for quality control and detection of false advertising. In contrast, cluster 2 highlighted in green shifts the focus to regulatory aspects of advertising, particularly in the pharmaceutical industry, discussing drug approval, legislation and government regulation while also exploring legal and ethical considerations surrounding advertising practices, including forgery and fraud. The third cluster, marked in blue, delves into issues pertaining to health, emphasizing the impact of deceptive advertising on consumer health, particularly with respect to aspects such as obesity, smoking and dietary supplements. Furthermore, it also examines survey methodologies and clinical

problems associated with synthetic preservatives and misleading advertisements. Additionally, Chadha et al. (2015) proposed a trust estimation system for wireless networks, which could be adapted for detecting deceptive practices in online advertising. Furthermore, Abtahi et al. (2017) developed an intelligent system for fraud detection in financial markets, demonstrating the application of advanced technologies in identifying deceptive transactions. Moreover, the study by Priya and Suganthi (2019) on trust-based multipath routing for black hole attacks highlights the importance of trust mechanisms in preventing deceptive practices in network communications. These studies collectively underscore the growing recognition of technological solutions as essential tools in the fight against deceptive marketing practices.

5.3. Impact of deceptive marketing on consumer behavior

However, another trend gaining momentum is the analysis of how deceptive marketing shapes consumer behavior. Researchers are investigating the effects of misleading advertising on consumer perceptions, attitudes and purchase intentions. Recent studies have extensively explored the profound effects of deceptive marketing on consumer behavior, shedding light on various aspects of this complex phenomenon. Studies such as those by Sun & Li (2023) and Wilson (2022) have investigated the cognitive processes underlying consumer responses to deceptive claims, revealing the intricate mechanisms through which consumers interpret and react to misleading advertisements. Additionally, research by Alshurideh et al. (2017) and Haque et al. (2017) has investigated the factors influencing consumers' acceptance of ethical advertising, elucidating the role of cultural and religious perspectives in shaping consumer attitudes toward deceptive marketing practices. Furthermore, insights from studies such as those conducted by Kircanski et al. (2018) and Schmuck et al. (2018) highlight the emotional and psychological impacts of deceptive advertising on consumer decision-making, underscoring the need for regulatory interventions and ethical advertising standards to protect consumers from misleading marketing tactics. These diverse lines of inquiry collectively contribute to a deeper understanding of the intricate interplay between deceptive marketing strategies and consumer behavior, emphasizing the importance of fostering transparency and integrity in advertising practices to promote consumer welfare and trust in the marketplace.

5.4. Global regulatory landscape

Inquiries into deceptive marketing are increasingly taking a global perspective on regulation and its repercussions for advertising tactics (Serota, 2019). Scholars are examining differences in regulatory frameworks across countries and regions, as well as the effectiveness of regulatory enforcement mechanisms in combating deceptive advertising. This trend reflects a growing recognition of the need for international cooperation and coordination to address deceptive marketing practices in an interconnected world. There is growing recognition of the intersection between marketing research and public policy in addressing deceptive marketing practices.

Various studies have contributed to understanding the global regulatory landscape surrounding deceptive advertising. For example, the research by Schmuck et al. (2018) delves into the effects of greenwashing in environmental advertising, shedding light on regulatory challenges in ensuring truthful environmental claims. Similarly, Sun and Li (2023) examine the effects of misleading online advertisements on Chinese consumers' purchase intentions, highlighting regulatory gaps in online advertising platforms. Additionally, the study by Haque et al. (2017) explores consumers' perceptions of ethical advertising in Malaysia, underscoring the role of cultural and religious factors in shaping regulatory responses to deceptive marketing practices.

Further insights into the global regulatory landscape can be gleaned from studies such as those by Garcia-Nieto et al. (2021), which explore the opinions of professionals on socially responsible advertising for health products and the need for regulatory oversight. Additionally, the research by Hati and Latip (2023) provides insights into the ethical challenges of payday lending advertisements in Indonesia and the USA, highlighting the importance of regulatory interventions to protect consumers from deceptive financial practices. Moreover, the study by Ogbogu et al. (2018) highlights the involvement of Canadian physicians in promoting unproven stem cell interventions, emphasizing the need for regulatory oversight in healthcare advertising. These diverse lines of inquiry collectively underscore the importance of robust regulatory frameworks and effective enforcement mechanisms in combating deceptive marketing practices and safeguarding consumer welfare on a global scale.

5.5. Intersection of marketing and public policy

The intersection of marketing and public policy represents a crucial area of inquiry in the realm of deceptive marketing literature. Scholars have delved into the multifaceted relationship between marketing practices and regulatory frameworks, highlighting the intricate dynamics between industry strategies and governmental oversight (Darke & Ritchie, 2019; Campbell & Grimm, 2019; Kopalle & Lehmann, 2006). Studies have examined the challenges posed by deceptive advertising to regulatory agencies, emphasizing the need for effective responses to protect consumers and maintain market integrity (Hastak & Mazis, 2019; Glaeser & Ujhelyi, 2019). Furthermore, research has explored the role of public policy in addressing emerging issues such as native advertising and misinformation, underscoring the importance of regulatory measures in preserving consumer trust and well-being (Prendergast & Liu, 2019; Rhodes & Wilson, 2009). Moreover, investigations into the legal and ethical

dimensions of deceptive marketing have shed light on implications for public policy formulation and enforcement (Davis, 1994; Wileset al., 2010). By analyzing the impact of deceptive advertising on consumer perceptions and behavior, researchers have provided valuable insights for policymakers seeking to enact regulations that safeguard the interests of both businesses and consumers (Shanahan & Hopkins, 2007; Piccolo et al., 2017). Overall, the intersection of marketing and public policy serves as a focal point for addressing the complex challenges posed by deceptive marketing practices, highlighting the importance of collaboration between academia, industry and government in shaping effective regulatory responses (Gao, 2008).

6. Discussion

Citation analysis was employed to investigate the first three research questions of the study. With a notable total of 358 citations, the document "The defensive consumer: Advertising deception, defensive processing and distrust," penned by Darke & Ritchie (2007), emerges as the most cited work, followed closely by "What is disinformation?" by Fallis (2015), which has received 199 citations. Additionally, "Misleading Consumers with Green Advertising? An affect–reasoning–involvement account of greenwashing effects in environmental advertising," by Schmuck et al. (2018), which has accumulated 184 citations. The remaining articles in the list also address critical aspects of deceptive advertising, such as the cognitive processes underlying consumer responses ("The orbitofrontal cortex, real-world decision making, and normal aging"), regulatory challenges ("The Challenges Native Advertising Poses: Exploring Potential Federal Trade Commission Responses and Identifying Research Needs") and ethical considerations ("Consumer ethics: A cross-cultural study of the ethical beliefs of Turkish and American consumers"). These heavily cited papers are foundational to the study of deceptive advertising, offering crucial perspectives on its different aspects, effects and significance for consumers, marketers and regulatory authorities.

The trend in the number of publications related to deceptive advertising from 1993–2023 exhibits four intriguing phases. At the outset, from 1993–1999, the number of publications fluctuated between 2 and 9, indicating a relatively low level of scholarly interest or research activity in deceptive advertising. Nonetheless, commencing with the period 2000–2010, there was a noticeable increase in publications starting in the early 2000s, with peaks in 2008, 2009 and 2012 (Kimmel 2013). This growth phase suggests an escalating recognition of the importance of deceptive advertising as a research topic, possibly driven by emerging concerns about consumer protection and ethical business practices. The number of publications continued to rise steadily, reaching significant peaks in 2015. This rapid advancement phase reflects increased awareness and scrutiny of deceptive advertising practices, fuelled by advancements in media and technology, as well as heightened consumer activism and regulatory interventions. Over the span of 2016–2023, despite the consistently high number of publications, it appears to have reached stability compared with earlier years. This suggests a more mature stage of research, with scholars delving deeper into specific aspects of deceptive advertising, such as its psychological mechanisms, regulatory frameworks and impacts on consumer behavior and market dynamics.

Darke, Ritchie and Fallis have made significant contributions to the scholarly discourse on deceptive advertising, as evidenced by the substantial number of citations their works have received. An analysis of the most influential authors also suggests that Ritchie's contributions to deceptive advertising literature consistently attract attention and recognition from scholars and researchers. These authors have steadily produced high-quality research that garners attention within the scholarly community. Their contributions act as cornerstones in the discipline, influencing debates, theoretical developments and the trajectory of future studies (Darke & Ritchie, 2007).

Journals such as the *Journal of Marketing Research*, the *Journal of Business Ethics* and the *Journal of Advertising* play pivotal roles in advancing theoretical insights, empirical evidence and ethical considerations related to deceptive advertising practices. The findings underscore the importance of academic journals as key platforms for disseminating research on deceptive advertising and shaping scholarly discourse in this domain. Furthermore, the distribution of citations across various journals reflects the interdisciplinary nature of deceptive advertising research, spanning disciplines such as marketing, ethics, public policy and economics (Shabbir & Thwaites, 2007). This interdisciplinary approach is essential for comprehensively understanding the complexities and ramifications of deceptive advertising tactics in contemporary society.

Comparing the most influential institutions in terms of the number of citations received and average citations per document, there is a distinction between the rankings of institutions on the basis of total citations received and average citations per document. In terms of total citations received, the University of British Columbia (UBC) secured the top position, with 363 citations across four documents. However, when the average number of citations per document is considered, UBC ranks lower at the seventh position, with an average of 90.75 citations per document. This suggests that while UBC has produced highly cited documents, the average impact per document is relatively lower than that of other institutions. On the other hand, Western University and the UBC Sauder School of Business, both from Canada, share the top position in terms of average citations per document, with 180.00 citations each. This implies that although these institutions have contributed fewer documents than UBC have, their publications have reaped higher average citations, indicating the high impact and influence of individual research outputs. Furthermore, the distribution of citations across various institutions highlights the global reach and collaborative nature of deceptive marketing research, with contributions from institutions in Canada, the United States and Austria. This international collaboration fosters diverse perspectives and interdisciplinary approaches to addressing the challenges posed by deceptive marketing practices.



Developed nations such as the United States, Canada, the United Kingdom, Germany and Austria dominate the rankings in terms of both total citations received and average citations per document. These countries have well-established research infrastructures, significant funding and advanced academic institutions, enabling them to produce high-quality research with substantial scholarly impact. Nonetheless, developing nations such as India, China, Bangladesh and Nepal also contribute to deceptive advertising research, albeit to a lesser extent in terms of citation impact. While these countries present a greater volume of research output, their average number of citations per document tends to be lower than that of developed nations. This could be attributed to various factors, such as limited research funding, less-established academic institutions and challenges in accessing global academic networks and publishing platforms (Zhao & Huang, 2020).

The cocitation analysis of the most frequently cited authors in deceptive advertising literature highlights the significant contributions of Darke, Boush, Petty, Friestad and Wright, underscoring their pivotal roles in shaping scholarly discourse on this subject. Their extensive citation counts and high link strengths affirm their enduring impact and influence within the field, solidifying their status as key figures in deceptive advertising research (Darke & Ritchie, 2007).

To address the fourth research question, a co-occurrence analysis of author keywords was conducted, revealing distinct thematic clusters covering regulatory frameworks, technological solutions, consumer behavior, health impacts and economic implications. These clusters provide a comprehensive overview of the multifaceted nature of deceptive advertising research, highlighting its diverse dimensions and areas of focus (Held & Germelmann, 2018).

The last research question of the study was explored through an examination of key research themes in deceptive advertising literature. These include topics such as 'Ethical Considerations and Consumer Protection', 'Technological Solutions for Detection and Prevention', 'Impact of Deceptive Marketing on Consumer Behavior', 'Global Regulatory Landscape' and 'Intersection of Marketing and Public Policy'. Each of these themes has been elaborated upon in the section discussing emerging trends in deceptive advertising literature.

7. Academic and managerial implications

This study contributes significantly to the academic understanding of deceptive advertising in several key ways. First, it provides a comprehensive overview of the scholarly landscape surrounding deceptive advertising, mapping out key research trends, influential publications and emerging themes. By identifying the most eminent authors and institutions in this domain, the study sheds light on the individuals and organizations driving scholarly discourse and innovation. Additionally, the examination of global trends in research output and citation impact offers insights into patterns of collaboration and influence among different countries and regions. Moreover, through thematic analysis, the study uncovers emerging research themes in deceptive advertising, ranging from ethical considerations and consumer protection to technological solutions and regulatory frameworks. These findings provide a roadmap for future research directions and interdisciplinary collaborations, advancing our understanding of deceptive advertising and its implications for society.

The analysis offers valuable insights with significant managerial implications for various stakeholders involved in deceptive advertising. First, it provides guidance for policymakers and regulatory bodies by synthesizing empirical evidence and theoretical insights, informing the development of effective regulatory frameworks and enforcement strategies to protect consumers and ensure fair competition. Moreover, the study enhances consumer awareness about deceptive advertising tactics and their consequences, empowering consumers to make more informed decisions and advocate for transparent marketing practices. Furthermore, businesses can benefit from the research findings by implementing responsible marketing practices that prioritize the importance of consumer well-being and trust, thereby establishing enduring connections with their clientele. Additionally, the study underscores the importance of technological solutions for detecting and preventing deceptive advertising, suggesting opportunities for innovation in data analytics, artificial intelligence and machine learning to safeguard brand reputation. Overall, these actionable insights contribute to a deeper understanding of deceptive advertising and its implications for society, guiding stakeholders toward ethical and responsible marketing practices.

8. Limitations and Future Research Opportunities

While this study provides valuable insights into the evolution and current state of deceptive advertising research, several limitations warrant consideration. First, the reliance on a single database, namely, Scopus, for data collection and analysis may introduce bias and limit the comprehensiveness of the findings. Future studies could benefit from incorporating multiple databases, such as Google Scholar, to ensure more comprehensive coverage of relevant literature and minimize the risk of overlooking important papers. Additionally, this study focuses primarily on quantitative bibliometric analysis and may overlook qualitative aspects of the literature, such as the contextualization of citation structures and the underlying motivations behind citation patterns. The incorporation of qualitative methods such as content analysis or interviews with researchers could provide a deeper understanding of the nuances and implications of deceptive advertising research.

Furthermore, as deceptive advertising tactics continue to evolve with advancements in technology and media, there is a need for ongoing monitoring and analysis of emerging trends and regulatory responses. Future studies could adopt longitudinal approaches to track changes in deceptive advertising practices over time and assess the effectiveness of regulatory

interventions and industry initiatives in combating deceptive marketing tactics. Overall, this study lays the groundwork for future research endeavors in deceptive advertising by highlighting key areas for improvement and suggesting avenues for further exploration. By addressing these limitations, researchers can contribute to a more comprehensive understanding of deceptive advertising and its implications for consumers, businesses and society at large.

Acknowledgment

The authors are grateful for the guidance received from our mentors and support from colleagues who provided insightful discussions and feedback while developing this paper.

Ethical Considerations

The authors confirm that the research adheres to the ethical standards of the relevant institutional and national guidelines.

Conflict of Interest

The authors declare that they have no conflicts of interest.

Funding

This research was funded by Rajagiri College of Social Sciences (Autonomous).

References

- Abtahi, A.-R., Elahi, F., & Yousefi-Zenouz, R. (2017). An intelligent system for fraud detection in coin futures market's transactions of Iran mercantile exchange based on Bayesian network. *Journal of Information Technology Management*, 9(1), 1-20. Retrieved from https://jitm.ut.ac.ir/article_60680_26aa06de30a6257fb58215616a88d6ba.pdf1
- Aditya, Ram. (2001). The psychology of deception in marketing: A conceptual framework for research and practice. *Psychology and Marketing*, 18, 735 - 761. <https://doi.org/10.1002/mar.1028>
- Alryalat S. A. S., Malkawi L. W., & Momani S. M. (2019). Comparing bibliometric analysis using pubmed, scopus, and web of science databases. *Journal of Visualized Experiments*(152), e58494, doi:10.3791/58494 (2019).
- Campbell, C., & Grimm, P. E. (2019). The Challenges Native Advertising Poses: Exploring Potential Federal Trade Commission Responses and Identifying Research Needs. *Journal of Public Policy & Marketing*, 38(1), 110-123. <https://doi.org/10.1177/0743915618818576>
- Campbell, M. C., Mohr, G. S., & Verlegh, P. W. J. (2013). Can disclosures lead consumers to resist covert persuasion? The important roles of disclosure timing and type of response. *Journal of Consumer Psychology*, 23(4), 483-495. <https://doi.org/10.1016/j.jcps.2012.10.012>
- Cawley, J., Avery, R. J., & Eisenberg, M. (2013). The Effect of Deceptive Advertising on Consumption of the Advertised Good and its Substitutes: The Case of Over-the-Counter Weight Loss Products. *IZA Discussion Paper No. 7247*. SSRN. <http://dx.doi.org/10.2139/ssrn.2234269>
- Chadha, R., Ghosh, A., Poylisher, A., & Serban, C. (2015). TREND: Trust estimation system for wireless networks via multipronged detection. In *Proceedings - IEEE Military Communications Conference MILCOM*, 2015-December (pp. 13-18). Tampa, FL, USA. doi:10.1109/MILCOM.2015.7357411, <https://ieeexplore.ieee.org/document/7357411>
- Darke, P. R., & Ritchie, R. J. B. (2007). The defensive consumer: Advertising deception, defensive processing, and distrust. *Journal of Marketing Research*, 44(1), 114-127. <https://doi.org/10.1509/jmkr.44.1.114>
- Davis J. J. (1994). Ethics in Advertising Decision making: Implications for Reducing the Incidence of Deceptive Advertising. *The Journal of Consumer Affairs*, 28(2), 380-402. 10.1111/j.1745-6606.1994.tb00858.x, <https://doi.org/10.1111/j.1745-6606.1994.tb00858.x>
- Demaine, L. J. (2012). Seeing Is Deceiving: The Tacit Deregulation of Deceptive Advertising. *Arizona Law Review*, 54(3), 719-764. https://heinonline.org/HOL/Page?public=true&handle=hein.journals/arz54&div=30&start_page=719&collection=journals&set_as_cursor=3&men_tab=srchr results
- Denburg, N. L., Cole, C. A., Hernandez, M., Yamada, T. H., Tranel, D., Bechara, A., & Wallace, R. B. (2007). The orbitofrontal cortex, real-world decision making, and normal aging. *Annals of the New York Academy of Sciences*, 1121(1), 480-498. Crossref. PubMed. <https://doi.org/10.1196/annals.1401.031>
- Fallis, D. (2015). What Is Disinformation? *Library Trends* 63(3), 401-426. <https://doi.org/10.1353/lib.2015.0014>
- Gao, Z. (2008). Controlling Deceptive Advertising in China: An Overview. *Journal of Public Policy & Marketing*, 27(2), 165-177. <https://doi.org/10.1509/jppm.27.2.165>
- García-Nieto, M. T., González-Vallés, J. E., & Viñarás-Abad, M. (2021). Social Responsibility and Misleading Advertising of Health Products on the Radio: The Opinion of the Professionals. *International Journal of Environmental Research and Public Health*, 18(13), 6912. <https://doi.org/10.3390/ijerph18136912>
- Gardner, D.M. (1975). Deception in Advertising: A Conceptual Approach. *Journal of Marketing*, 39, 40 - 46. <https://doi.org/10.2307/1250801>
- Glaeser, E. L., & Ujhelyi, G. (2010). Regulating misinformation. *Journal of Public Economics*, 94(3-4), 247-257. <https://doi.org/10.1016/j.jpubeco.2010.01.001>
- Haque, A., Neha, A., Ahmed, F., & Kabir, S.M. (2017). Customers' perception toward ethical advertisements: The mediating role of religiosity from the Malaysian perspective. *Advanced Science Letters*, 23(9), 8547-8553. <https://doi.org/10.1166/asl.2017.9926>
- Hastak, M., & Mazis, M. B. (2011). Deception by Implication: A Typology of Truthful but Misleading Advertising and Labeling Claims. *Journal of Public Policy & Marketing*, 30(2), 157-167. <https://doi.org/10.1509/jppm.30.2.157>
- Hati, S.R.H. and Latip, H.A. (2023), "Behind the curtain of payday lending: revealing consumer insights and ethical challenges in Indonesia and the USA using web-scraping methods", *International Journal of Ethics and Systems*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJOES-03-2023-0060>
- Held, J. & Germelmann, C. (2018) . Deception in consumer behavior research: A literature review on objective and perceived deception. *Projectics* 21(3), 119-145. <https://doi.org/10.3917/proj.021.0119>

- Hyman, M. R. (1990). Deception in Advertising: A Proposed Complex of Definitions for Researchers, Lawyers, and Regulators. *International Journal of Advertising*, 9(3), 259–270. <https://doi.org/10.1080/02650487.1990.11107153>
- Iqbal, S., & Siddiqui, D. A. (2019). The impact of deceptive advertising on customer loyalty: A case of Telecommunication industry in Karachi, Pakistan. Karachi University Business School. *MPRA Paper No. 93038*. Retrieved from <https://mpra.ub.uni-muenchen.de/93038/>
- Kircanski, K., Notthoff, N., DeLiema, M., Samanez-Larkin, G. R., Shadel, D., Mottola, G., Carstensen, L. L., & Gotlib, I. H. (2018). Emotional arousal may increase susceptibility to fraud in older and younger adults. *Psychology and Aging*, 33(2), 325–337. <https://psycnet.apa.org/doi/10.1037/pag0000228>
- Kopalle, P. K., & Lehmann, D. R. (2006). Setting quality expectations when entering a market: What should the promise be? *Marketing Science*, 25(1), 8–24. <https://doi.org/10.1287/mksc.1050.0122>
- Kotler, P., & Armstrong, G. (2010). *Principles of Marketing* (14th ed.). Pearson.
- Lansing, P., & De Vries, P. D. (2007). Sustainable Tourism: Ethical Alternative or Marketing Ploy? *Journal of Business Ethics*, 72, 77–85. <https://doi.org/10.1007/s10551-006-9157-7>
- Alshurideh M., B. Al Kurdi, A. Abu Hussien & H. Alshaar (2017) Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market, *Journal of Marketing Communications*, 23:5, 513-532, <https://doi.org/10.1080/13527266.2017.1322126>
- Mainardes, E. W., Coutinho, A. R. S., & Alves, H. M. B. (2023). The influence of the ethics of E-retailers on online customer experience and customer satisfaction. *Journal of Retailing and Consumer Services*, 70, 103171. <https://doi.org/10.1016/j.jretconser.2022.103171>
- Mandal, P. C. (2022) Socially Responsible Target Marketing and Marketing Communications: Concerns and Initiatives. *International Journal of Social Ecology and Sustainable Development (IJSESD)*, 13(1), 1-16. <http://doi.org/10.4018/IJSESD.293247>
- Mann, R. A., & Gurol, M. (1978). Objective approach to detecting and correcting deceptive advertising. *Notre Dame Law Review*, 54, 73. <https://scholarship.law.nd.edu/ndlr/vol54/iss1/3>
- Mariani, M., & Borghi, M. (2019). Industry 4.0: A bibliometric review of its managerial intellectual structure and potential evolution in the service industries. *Technological Forecasting and Social Change*, 149, 119752. <https://doi.org/10.1016/j.techfore.2019.119752>.
- Kimmel, A. J. (2013). *Deceptive advertising: Behavioral study and regulatory practice*. Routledge.
- Knapp, L. M., & Comadena, M. E. (2006). Telling It like It is not: A Review of Theory and Research on Deceptive Communications. *Human Communication Research*, 5(3), 270-285. <https://doi.org/10.1111/j.1468-2958.1979.tb00640.x>
- Nandakumar, A., Chuah, J.-A., & Sudesh, K. (2021). Bioplastics: A boon or bane? *Renewable and Sustainable Energy Reviews*, 147, 111237. <https://doi.org/10.1016/j.rser.2021.111237>.
- Ogbogu, U., Du, J., & Koukio, Y. (2018). The involvement of Canadian physicians in promoting and providing unproven and unapproved stem cell interventions. *BMC Medical Ethics*, 19(1), 32. <https://doi.org/10.1186/s12910-018-0273-6>
- Olson, J. C., & Dover, P. A. (1978). Cognitive effects of deceptive advertising. *Journal of Marketing Research*, 15(1), 29–38. <https://doi.org/10.2307/3150398>
- Pham-Duc, B., Tran, T., Trinh, T. P. T., Nguyen, T. T., Nguyen, N. T., & Le, H. T. T. (2022). A spike in the scientific output on social sciences in Vietnam for recent three years: Evidence from bibliometric analysis in Scopus database (2000–2019). *Journal of Information Science*, 48(5), 623–639. <https://doi.org/10.1177/0165551520977447>
- Piccolo, S., Tedeschi, P., & Ursino, G. (2017). Deceptive Advertising with Rational Buyers. *Management Science*. <https://doi.org/10.1287/mnsc.2016.2665>
- Piccolo, Salvatore; Tedeschi, Piero; Ursino, Giovanni (2015) : Deceptive Advertising with Rational Buyers, *Working Paper*, No. 25, Università Cattolica del Sacro Cuore, Department of Economics and Finance, (DISCE), Milano, <https://www.econstor.eu/handle/10419/170622>
- Prendergast, G., Liu, P. and Poon, D.T.Y. (2009), "A Hong Kong study of advertising credibility", *Journal of Consumer Marketing*, Vol. 26 No. 5, pp. 320-329. <https://doi.org/10.1108/07363760910976574>
- Priya, S., & Suganthi, S. (2019). A trust based multipath routing for black hole attacks with group search optimization routing. *International Journal of Recent Technology and Engineering*, 8(3), 3407–3415. <https://doi.org/10.35940/ijrte.C5040.098319>
- Rathee, P., Sehrawat, R., Rathee, P., Khatkar, A., Akkol, E. K., Khatkar, S., Redhu, N., Türkcanoğlu, G., & Sobarzo-Sánchez, E. (2023). Polyphenols: Natural preservatives with promising applications in food, cosmetics and pharma industries; Problems and toxicity associated with synthetic preservatives; Impact of misleading advertisements; Recent trends in preservation and legislation. *Materials*, 16(13), 4793. <https://doi.org/10.3390/ma16134793>
- Rawwas, M. Y. A., Swaidan, Z., & Oyman, M. (2005). Consumer Ethics: A Cross-Cultural Study Of The Ethical Beliefs Of Turkish And American Consumers. *Faculty Publications*, 2964. Retrieved from <https://scholarworks.uni.edu/facpub/2964>
- Rhodes, A., & Wilson, C. M. (2018). False advertising. *RAND Journal of Economics*, 49(2), 348-369. doi: 10.1111/1756-2171.12228, <https://doi.org/10.1111/1756-2171.12228>
- Reichheld, F. (1996). *The Loyalty Effect: The Hidden Force Behind Growth, Profits and Lasting Value*. Boston: Harvard Business School Press.
- Schmuck, D., Matthes, J., & Naderer, B. (2018). Misleading Consumers with Green Advertising? An Affect–Reason–Involvement Account of Greenwashing Effects in Environmental Advertising. *Journal of Advertising*, 47(2), 127–145. <https://doi.org/10.1080/00913367.2018.1452652>
- Serota, K.B. (2019). Deceptive Marketing Outcomes: A Model for Marketing Communications. In: Docan-Morgan, T. (eds) *The Palgrave Handbook of Deceptive Communication*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-96334-1_42
- Shabbir, H., & Thwaites, D. (2007). The use of humor to mask deceptive advertising: It is no laughing matter. *Journal of Advertising*, 36(2), 75–85. <https://doi.org/10.2753/JOA0091-3367360205>
- Shanahan, K. J., & Hopkins, C. D. (2007). Truths, Half-Truths, and Deception: Perceived Social Responsibility and Intent to Donate for a Nonprofit Using Implicature, Truth, and Duplicity in Print Advertising. *Journal of Advertising*, 36(2), 33-48. <https://doi.org/10.2753/JOA0091-3367360202>
- Sun, Y. and Li, Y. (2023), "Effects of misleading online advertisements on the purchase intention of mature Chinese consumers for dietary supplements", *British Food Journal*, Vol. 125 No. 11, pp. 4062-4091. <https://doi.org/10.1108/BFJ-01-2023-0029>
- Torhoermanlaw (2022). Deceptive Advertising: Definition, Types, and Examples. <https://www.torhoermanlaw.com/false-or-misleading-marketing/> (Accessed: 30/03/2024).
- Van Eck, N. J., & Waltman, L. (2014). CitNetExplorer: A new software tool for analyzing and visualizing citation networks. *Journal of Informetrics*, 8(4), 802-823. <https://doi.org/10.1016/j.joi.2014.07.006>

- Wiles, M. A., Jain, S. P., Mishra, S., & Lindsey, C. (2010). Stock market response to regulatory reports of deceptive advertising: The moderating effect of omission bias and firm reputation. *Marketing Science*, 29(5), 828-845. <https://doi.org/10.1287/mksc.1100.0562>
- Wilson, A.E., Darke, P.R., & Sengupta, J. (2022). Winning the Battle but Losing the War: Ironic Effects of Training Consumers to Detect Deceptive Advertising Tactics. *Journal of Business Ethics*, 181, 997–1013. <https://doi.org/10.1007/s10551-021-04937-7>
- Zhao, L., & Huang, X. (2020). Challenges and opportunities in the academic publishing system for developing countries. *Scientometrics*, 125(2), 1145-1162.
- Ziegler, J., Dearden, P., & Rollins, R. (2012). However, are tourists satisfied? Importance-performance analysis of the whale shark tourism industry in Isla Holbox, Mexico. *Tourism Management*, 33(3), 692-701. <https://doi.org/10.1016/j.tourman.2011.08.004>.

