

Behaviour of Muslim Consumer Towards Halal Food Products: A Review and Bibliometric Analysis

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ABSTRACT

Purpose: This study reviews factors affecting Muslim consumer behavior towards halal food products, using bibliometric analysis to identify key research trends and influential works in the field. **Methodology:** A bibliometric analysis was conducted on 613 peer-reviewed articles from the Scopus database (2015-2024), using VOSviewer to visualize co-citation, keyword clusters, and research themes. **Findings:** The analysis reveals that religious beliefs, halal certification trust, and perceived product quality are key drivers of halal food purchasing behavior. Interest in halal products is growing globally, appealing to both Muslim and non-Muslim consumers due to perceived ethical and safety standards. The study identifies top contributors, influential journals, and leading countries in halal food research. **Research Implications:** Insights suggest further exploration into halal certification for alternative proteins, sustainability, and comparative studies across diverse regions. The findings are useful for researchers and businesses targeting the global halal market. **Originality/Value:** This study provides a comprehensive bibliometric review of halal consumer behavior, highlighting trends and research gaps. It is essential for those seeking to understand the evolving dynamics of the halal food sector.

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1. Introduction

The global halal food market has gained significant momentum, driven by the growing demand from Muslim consumers who prioritize religious compliance in their consumption patterns. Halal, meaning permissible in Arabic, extends beyond dietary laws to encompass a broader ethical and quality framework, influencing the purchasing behaviour of consumers worldwide. The rising interest in halal products is not limited to Muslim-majority countries; non-Muslim consumers are also drawn to the ethical and safety standards associated with halal certification, reflecting the expanding scope of this market segment Septiani, A., et al., (2023) [1]. As halal products become more mainstream, understanding the factors that influence consumer behaviour is critical for businesses seeking to penetrate and expand within this market.

Recent studies have highlighted several key determinants of halal food purchasing behaviours, including religiosity, halal awareness, and trust in certification. For instance, young consumers in Indonesia are particularly influenced by both religious commitment and brand trust when selecting halal products, indicating a blend of traditional and modern considerations Arifin et al., (2022) [2]. Moreover, the presence of halal certification logos plays a crucial role in building consumer trust, particularly in diverse markets where religious adherence varies Ridwan, M., & Pratomo, L. A. (2023) [3].

In the current landscape, bibliometric analysis serves as an essential tool in mapping the research trends and identifying the key contributors and themes within the study of Muslim consumer behaviour towards halal products. Such analyses provide valuable insights for researchers and practitioners by highlighting the intellectual structure of the field and guiding future research directions Wiyono, S. N., Deliana, et al., (2022) [4]. This paper aims to offer a comprehensive bibliometric review of the existing literature, identifying influential works, emerging research clusters, and gaps that could shape the next wave of studies in halal consumer behaviour.

2. Literature Review

The buying behaviour of Muslim consumers towards halal food is deeply influenced by religious beliefs, trust in halal certification, and the perceived quality and safety of products. Religious commitment plays a crucial role in shaping purchasing decisions, as adherence to Islamic dietary laws significantly impacts food choices. In Indonesia, for example, religiosity is closely tied to consumer intention to purchase halal products, with the integration of halalness and product safety being pivotal Wiyono, S. N., Deliana, et al., (2022) [4]. Similarly, in Bangladesh, non-Muslim consumers are also drawn to halal products due to their association with hygiene and food safety, indicating that the halal concept is gaining broader appeal beyond religious boundaries Jyote, A. K., & Kundu, D. (2020) [6]. Consumer attitudes towards halal food are also influenced by branding and marketing strategies. The trust in halal labels, particularly in countries with non-Islamic traditions, plays a significant role. For instance, in Indonesia, consumers show negative perceptions towards halal-labelled products if they originate from non-Islamic countries, highlighting the interplay between cultural trust and religious adherence Maison et al., (2018) [7]. Additionally, halal food endorsements can stir controversy among non-Muslim consumers, who may harbour animosity towards such labels, leading to resistance in purchasing these products Schlegelmilch et al., (2016) [9]. Moreover, the quality of halal food, particularly in the meat sector, remains a significant concern for Muslim consumers. Issues such as the authenticity of halal claims and proper slaughtering methods are critical in determining purchasing behaviour Nakysinsige et al., (2012) [8]. As halal products become increasingly mainstream, the industry faces challenges in maintaining trust and meeting consumer expectations, especially with the rise of alternative protein products that require innovative halal certification processes Attwood et al., (2023) [5]. In conclusion, the buying behaviour of Muslim consumers towards halal food products is shaped by a combination of religious beliefs, trust in certification, marketing influence, and concerns over food quality and safety. These factors are critical for businesses aiming to penetrate and thrive in the halal market, which continues to expand globally.

3. Results and Discussion

This study employs a bibliometric analysis approach to explore the research landscape on the buying behaviours of Muslim consumers towards halal food products. The bibliometric methodology provides a quantitative assessment of research trends, key contributors, and emerging themes within the field.

3.1. Data Collection

The primary data was sourced from the Web of Science, recognized for its comprehensive coverage of high-quality peer-reviewed literature. A search was conducted using keywords such as “halal food,” “Muslim consumer behaviours,” “halal certification,” and “halal marketing.” The initial search resulted in 4,705 documents, which were further refined by excluding non-peer-reviewed sources, resulting in 613 relevant articles.

3.2. Data Analysis

The selected documents were analysed using VOSviewer, a software tool designed for constructing and visualizing bibliometric networks. Co-citation analysis, keyword clustering, and authorship networks were utilized to identify significant research areas and trends. Co-occurrence analysis of keywords was conducted to uncover thematic clusters within the literature.

3.3. Focus Areas

The analysis focused on publications from 2015 to 2024, a period marked by increased scholarly attention on halal consumer behaviour. Key research clusters identified include religious adherence, halal certification, marketing strategies, and consumer behaviour dynamics.

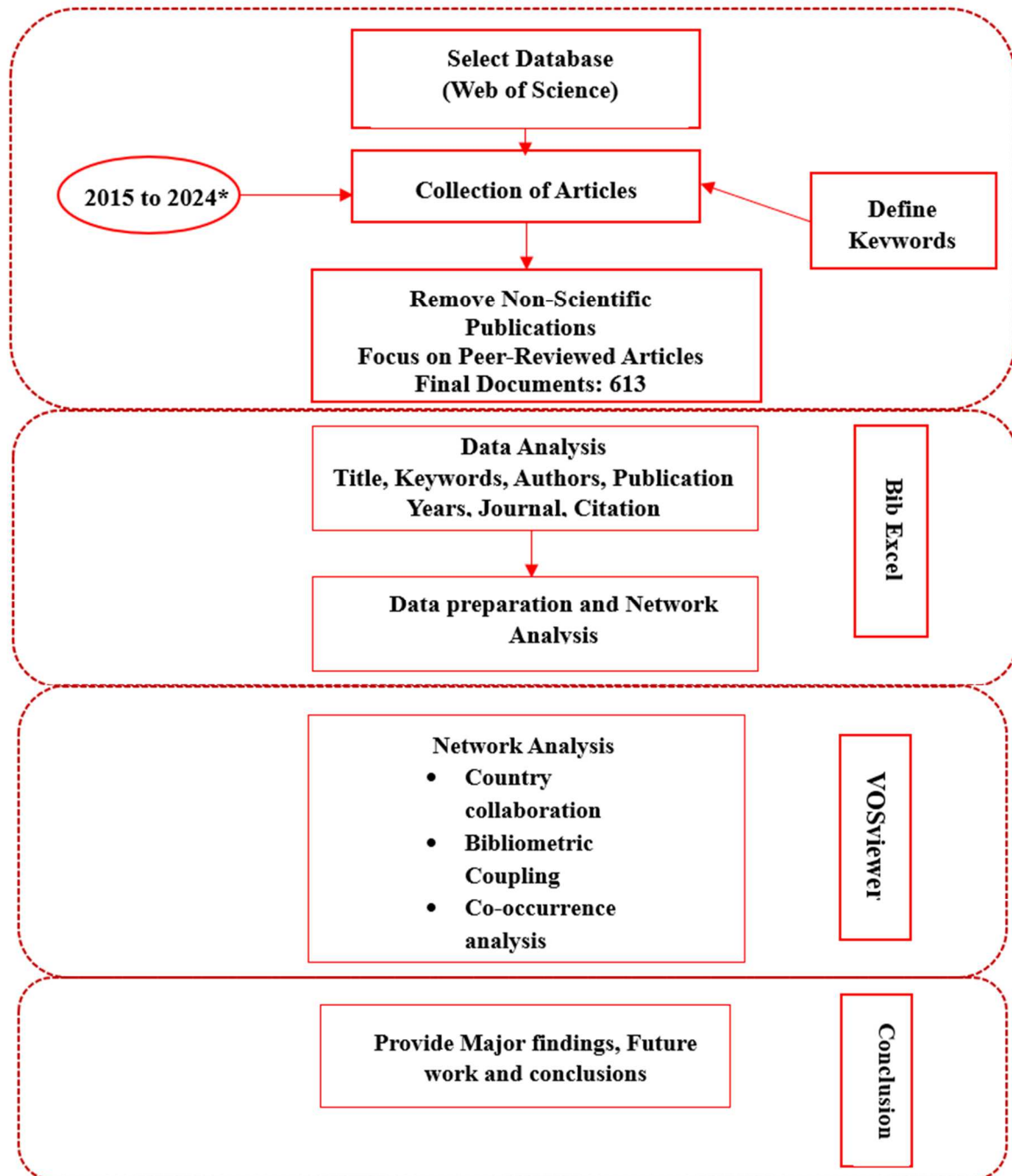


Figure 1. Flowchart for the study

Source: Data was extracted from web of science, represent data taken up to August 2024

4. Bibliometric analysis

The study presents a detailed bibliometric analysis of research in the domain of halal consumer behaviour. This analysis is aimed at identifying key research trends, prominent authors, and

influential publications, along with a network analysis that uncovers the research clusters within this field.

4.1 Data Collection

The analysis was conducted using the Scopus database, focusing on peer-reviewed articles published from 2015 to 2023. The search employed keywords like “halal food,” “Muslim consumer behaviour,” “halal certification,” and “halal marketing,” resulting in a dataset of 613 relevant articles after filtering for quality

4.2 Publication Trends

Research output surged from 2017, peaking in 2020 with 71 publications, reflecting rising global interest in halal markets and consumer behaviour.

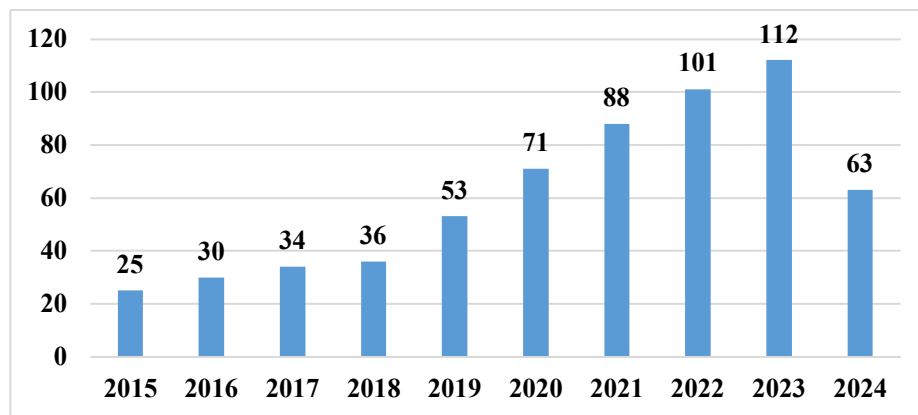


Figure 2. Number of publications

Source: Data was extracted from web of science.

Figure 2 illustrates the trend in publications related to halal products in Malaysia from 2005 to 2021. The graph shows a significant rise in research outputs, especially from 2015 onwards, indicating increased academic interest. The peak in 2020 with 34 publications reflects the growing focus on halal industry research. The slight decline in 2021, with 24 publications, is likely due to the economic impact of the COVID-19 pandemic (Laila et al., 2021). This trend highlights the evolving research landscape and Malaysia's sustained leadership in halal market research.

4.3 Influential Journals

The below table ranks the top 10 journals by citations, publications, and citations per article, highlighting Foods, Food Quality and Preference, and Journal of Islamic Marketing as key platforms.

Table 1. Analysis of Ranking on top 12 leading Journals

Sl.No.	Source	TCN	TPN	C/P	Cite Score	SNIP	SJR	H	Q
1.	Foods	864	95	9.09	7.4	1.231	0.87	97	Q1
2.	Food quality and preference	432	30	14.40	10.4	1.544	1.126	152	Q1
3.	Journal of dairy science	825	30	27.50	7.9	1.403	1.219	229	Q1
4.	Journal of Islamic marketing	386	26	14.85	8.4	1.836	0.788	55	Q2
5.	Cogent business & management	36	15	2.40	4.4	1.153	0.567	44	Q2

6.	British food journal	386	12	32.17	6.9	1.044	0.795	102	Q1
7.	Food research international	365	11	33.18	12.5	1.653	1.495	212	Q1
8.	Frontiers in sustainable food systems	62	10	6.20	5.6	1.171	0.859	54	Q1
9.	Meat science	146	9	16.22	13.0	1.677	1.367	195	Q1
10.	Innovative marketing	27	8	3.38	2.5	0.523	0.271	20	Q3

Source: Data was extracted from web of science.

Table 1 ranks the top 12 journals by citations, total publications, and citations per article, underscoring their influence in Halal consumer behaviour research. Notably, Foods and Food Quality and Preference emerged as the most influential journals, both in terms of total citations and impact per publication. The Journal of Islamic Marketing, while categorized in Q2, is a specialized platform crucial for niche research in the Halal market. This analysis highlights the significant role of high-impact journals in shaping research directions and contributing to the scholarly discourse on Halal consumer behaviour.

4.4 Leading Countries in Halal Research

Table 2 lists the leading countries contributing to research on Muslim consumer behaviour towards Halal food products. The United States leads with the highest number of publications (90) and citations (1,400), followed closely by England and Italy. Malaysia and Indonesia also feature prominently, reflecting their significant Muslim populations and the critical role these countries play in Halal market research. The geographical distribution of research outputs indicates a balanced contribution from both Western and Muslim-majority countries, highlighting the global relevance of Halal consumer behaviour research.

Table 2. Leading Country

Country	Publication	Citation
USA	90	1400
England	77	1665
Italy	58	905
India	37	917
Malaysia	37	563
Brazil	33	823
Indonesia	33	277
Denmark	29	623
Spain	28	373
Australia	26	403

Source: Data was extracted from web of science.

4.5 Influential Author

Table 3 identifies the most influential authors in Halal food consumer behaviour research based on total citations and publications. Matthew B. McSweeney and Davide Giacalone are recognized as key contributors, with substantial research outputs and high citation counts. Their work has

significantly shaped the understanding of consumer behaviours in Halal markets, providing foundational knowledge and guiding future research directions.

Table 3. Influential Author

Authors	TC	TP
Mcsweeney, Matthew B.	55	10
Giacalone, Davide	150	9
Moss, Rachael	42	9
Gorman, Mackenzie	42	8
Prinyawiwatkul, Witoon	112	7
Seo, Han-Seok	55	7

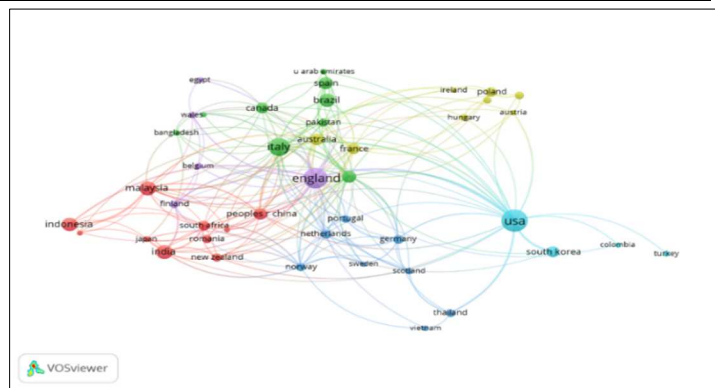


Figure 3. Country collaboration

Source: Data was extracted from web of science.

Figure 3 showcases global collaboration patterns in halal food consumer behaviours research, emphasizing strong international networks. England, with a total link strength (TLS) of 78 and 1,665 citations, leads in collaboration, followed by the USA (TLS 46, 1,400 citations) and Denmark (TLS 40, 623 citations). The significant cross-border partnerships among these nations underscore their central roles in advancing halal consumer research. Additionally, countries like Malaysia and Italy show notable contributions, reflecting the global relevance of this field. The extensive international cooperation enriches research by incorporating diverse perspectives, contributing to a comprehensive understanding of halal markets.

Table 4 analyses the collaborative networks of countries contributing to halal food consumer behaviours research. England, with a total link strength (TLS) of 78 and 1,665 citations, stands out as the most influential collaborator, followed by the USA (TLS 46, 1,400 citations) and Denmark (TLS 40, 623 citations). These results highlight the strong research partnerships between these nations, driving the global discourse in this field. Additionally, countries like Italy, Malaysia, and China demonstrate significant contributions, reflecting a balanced mix of Western and Muslim-majority nations involved in halal consumer behaviours research. This collaboration emphasizes the interdisciplinary and cross-regional nature of the research, underscoring the necessity of global cooperation to explore various cultural perspectives and consumer dynamics.

The insights from such collaborations are critical for advancing knowledge and informing industry practices in the expanding global halal market.

Table 4. Country Collaboration

Country collaboration	TLS	TC	TD
England	78	1665	77
USA	46	1400	90
Denmark	40	623	29
Italy	39	905	58
Malaysia	31	563	37
Peoples r china	26	472	26
France	24	502	22
South Africa	24	639	17
Australia	23	403	26
Norway	23	823	13
India	22	917	37
Country collaboration	TLS	TC	TD
England	78	1665	77
USA	46	1400	90
Denmark	40	623	29
Italy	39	905	58
Malaysia	31	563	37
Peoples r china	26	472	26
France	24	502	22
South Africa	24	639	17
Australia	23	403	26
Norway	23	823	13
India	22	917	37

Source: Data was extracted from web of science

4.6 Bibliographic coupling

Figure 4 demonstrates the bibliometric coupling network, revealing significant relationships among key publications in halal food consumer behaviours research. The connections indicate how different studies cite similar references, reflecting thematic similarities and research overlap within the domain. Strong clusters emerge around topics such as consumer perception, halal certification, and market dynamics, illustrating the concentration of academic interest in these areas. The map highlights influential works that serve as foundational references, creating a structured knowledge base for researchers. These connections provide valuable insights into the development and consolidation of research themes, guiding future studies toward gaps or underexplored topics.

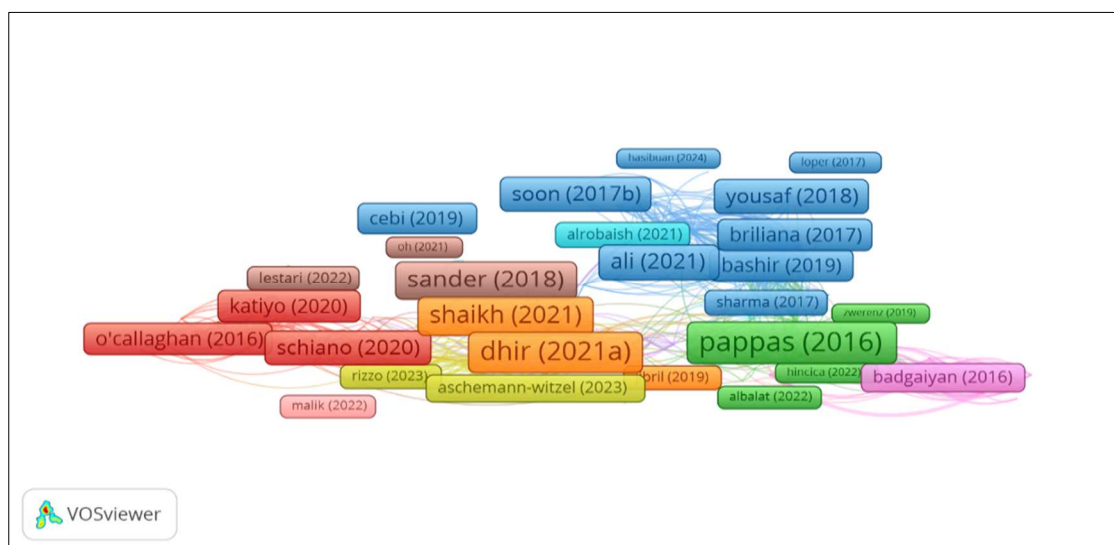


Figure 4. Bibliographic Coupling

Source: Data was extracted from web of science

4.7 Co-occurrence analysis

Figure 5 presents a co-occurrence analysis of the most frequently appearing keywords in halal food consumer behaviours research. The analysis identifies key themes such as "consumer perception," "consumer behaviours," and "sustainability" as central concepts, indicating their significant role in shaping research within this domain. The clustering of these keywords highlights interconnected research areas, revealing a strong focus on understanding consumer attitudes, decision-making factors, and market sustainability in the halal food sector. Other prominent keywords like "halal food," "sensory analysis," and "consumer acceptance" suggest a multidimensional approach, integrating aspects of culture, product quality, and market dynamics. This co-occurrence map helps to pinpoint dominant research trends and emerging topics, offering a roadmap for future studies in this rapidly growing field.

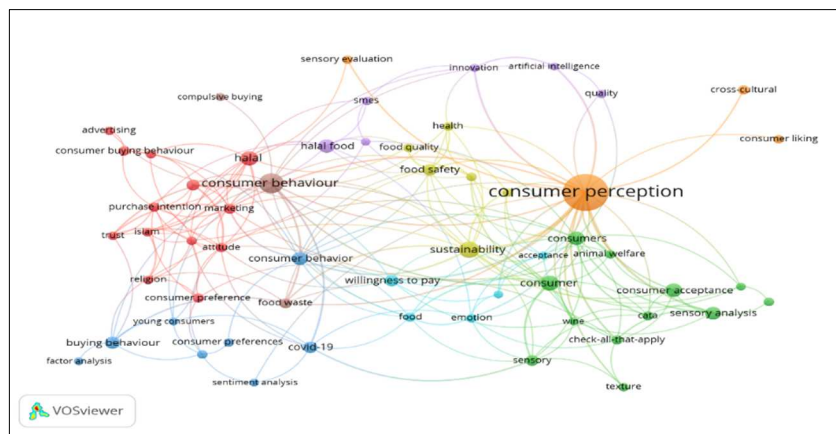


Figure 5. Co-occurrence analysis

Source: Data was extracted from web of science

Table 5. Co-occurrence analysis

Keywords	Occurrence	TLS
Consumer perception	112	56
Consumer behavior	33	26
Sustainability	23	26
Consumer	19	17
Halal	17	15
Consumer acceptance	16	7
Consumers	16	17
Halal food	15	9
Consumer behavior	14	12
Sensory analysis	14	12

Source: Data was extracted from web of science

Table 5 presents the results of a keyword co-occurrence analysis, identifying the most frequently used terms in halal food consumer behaviours research. The keywords “consumer perception” (occurrence: 112, TLS: 56), “consumer behaviours” (occurrence: 33, TLS: 26), and “sustainability” (occurrence: 23, TLS: 26) emerge as the dominant themes, reflecting the focus of researchers on

understanding consumer attitudes, purchasing decisions, and sustainable practices in the halal food market. The presence of terms like “halal,” “consumer acceptance,” and “sensory analysis” further emphasizes the multidimensional nature of this research field, integrating cultural, quality, and market acceptance perspectives.

This analysis highlights the core areas driving current research and provides direction for future studies by identifying critical topics and underexplored gaps within the field of halal consumer behaviours. The prominence of these keywords illustrates the consistent interest in how consumers perceive and interact with halal products, underscoring the importance of these themes in scholarly discourse.

4.8 Cited Document analysis

Table 6 lists the top 15 highly cited documents in halal food consumer behaviours research, highlighting significant contributions to this field. The most cited document, Schiano (2020), with 84 citations, explores consumer perception of sustainability in dairy and plant-based alternatives. Other highly cited works, such as Fonseca (2016) (70 citations) and Judacewski (2019) (70 citations), delve into sensory characterization and consumer perceptions. The presence of diverse topics ranging from sensory analysis to sustainability and consumer decision-making reflects the multifaceted approach scholars take in studying halal consumer behaviours. These highly influential studies provide foundational insights and shape the direction of future research in the halal food sector, emphasizing key areas like product perception, quality, and cultural dynamics.

Table 6. Top 15 highly cited documents

Sl No.	Author	Title	Journal	TC	References
1	Schiano (2020)	Consumer perception of the sustainability of dairy products and plant-based dairy alternatives	Journal of dairy science	84	[10]
2	Fonseca (2016)	Novel and successful free comments method for sensory characterization of chocolate ice cream: a comparative study between pivot profile and comment analysis	Journal of dairy science	70	[11]
3	Judacewski (2019)	Perceptions of brazilian consumers regarding white mould surface-ripened cheese using free word association	International journal of dairy technology	70	[12]
4	Giacalone (2019)	Common roasting defects in coffee: aroma composition, sensory characterization and consumer perception	Food quality and preference	67	[13]
5	Jo (2018)	Sensory and chemical properties of gouda cheese	Journal of dairy science	57	[14]
6	Costa (2017)	Consumer perception, health information, and instrumental parameters of cupuassu	Journal of dairy science	38	[15]
7	Machado alencar (2019)	Sensory profile and check-all-that-apply (cata) as tools for evaluating and characterizing syrah wines aged with oak chips	Food research international	37	[16]
8	Haas (2021)	Consumer perception of food quality and safety in western balkan countries: evidence from albania and Kosovo	Foods	33	[17]
9	Esmerino (2015)	Survival analysis: a consumer-friendly method to estimate the optimum sucrose level in probiotic petit Suisse	Journal of dairy science	32	[18]

10	Zhang (2020a)	Comparison of a central location test versus a home usage test for consumer perception of ready-to-mix protein beverages	Journal of dairy science	27	[19]
11	Cais-sokolinska (2021)	Consumer-perception, nutritional, and functional studies of a yogurt with restructured elderberry juice	Journal of dairy science	27	[20]
12	Chirilli (2022)	Consumers' awareness, behavior and expectations for food packaging environmental sustainability: influence of socio-demographic characteristics	Foods	25	[21]
13	Merlino (2020a)	Milk packaging innovation: consumer perception and willingness to pay	Aims agriculture and food	22	[22]
14	Wagner (2019)	A design analysis for eco-fashion style using sensory evaluation tools: consumer perceptions of product appearance	Journal of retailing and consumer services	20	[23]
15	Liu (2023)	Consumer perception of the challenges facing livestock production and meat consumption	Meat science	20	[24]

Source: Data was extracted from web of science

5. Conclusion

This bibliometric analysis reveals a growing academic interest in halal consumer behaviour, particularly in the context of increasing demand for halal food products worldwide. The study identifies key research trends, including the role of religious adherence, trust in halal certification, and marketing strategies in shaping consumer decisions. It also highlights the expanding influence of halal markets beyond Muslim-majority countries, as both Muslim and non-Muslim consumers show growing interest in halal products due to their perceived ethical and safety standards. The significant rise in research publications from 2015 to 2023 reflects the heightened scholarly focus on understanding the complexities of halal consumer behaviour, with contributions from countries like Malaysia, Indonesia, and the USA leading the research efforts.

However, the study is limited to the Scopus database, potentially missing out on relevant research indexed in other sources like Web of Science and Google Scholar. Additionally, it focuses on a relatively narrow timeframe, from 2015 to 2023, possibly excluding earlier foundational studies in this domain. Future research should expand to include a wider range of databases and explore emerging themes such as the halal certification of alternative proteins and the role of sustainability in halal consumer choices. Comparative studies across different regions, including non-Muslim countries, could provide deeper insights into the global halal market and consumer behaviour patterns.

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