

A BIBLIOMETRIC ANALYSIS OF THE LOYALTY PROGRAMS AND BRAND LOYALTY LITERATURE

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ABSTRACT

This study systematically examines the intellectual structure, thematic evolution, and research patterns of the loyalty programs and brand loyalty literature through bibliometric analysis. A dataset of 305 publications retrieved from the Web of Science database was analyzed using citation analysis, co-authorship analysis, keyword co-occurrence analysis, thematic mapping, and trending topics analysis via the Bibliometrix R package. The findings indicate a generally increasing trend in the literature throughout the 2010–2026 period, despite periodic fluctuations. The keyword co-occurrence analysis shows that the literature is organized around four research streams anchored by "loyalty programs" and "customer loyalty": program design-oriented, customer relationship-oriented, attitudinal-relational, and service quality-oriented approaches. The thematic map suggests that brand loyalty and loyalty programs have not yet been extensively integrated within a unified theoretical framework. The trending topics analysis suggests that the field has evolved from traditional reward-based and behavioral structures toward customer experience, customer engagement, and digital commerce. The study contributes a comprehensive bibliometric analysis that highlights the need for integrative theoretical models and offers a research agenda for future studies.

Keywords: loyalty programs, brand loyalty, bibliometric analysis, customer loyalty, Web of Science

INTRODUCTION

In today's competitive markets, sustainable growth depends largely on a firm's ability to retain its existing customer base. Increasing competition and the rapid proliferation of alternative brands strengthen consumers' tendency to switch brands, making customer loyalty a strategic priority for businesses (Uncles et al., 2003). Research has shown that a 5% increase in customer retention rates can improve business profits by 25% to 95%, positioning customer loyalty not merely as a marketing cost element but as a direct determinant of business performance (Reichheld, 1996). Loyal customers exhibit greater resistance to competing offers, demonstrate lower price sensitivity, and amplify brand messages through positive word-of-mouth communication, effectively becoming voluntary brand ambassadors (Uncles et al., 2003).

As firms recognized this potential, loyalty programs became an indispensable component of modern marketing. The evolution from traditional point-and-reward systems to digital personalization has transformed loyalty programs from economic incentive tools into a strategic dimension of the customer-brand relationship (Dorotic et al., 2012; Chen et al., 2021). In parallel, brand loyalty has retained its position as one of the most foundational concepts in consumer behavior and brand management literature (Aaker, 1991).

Despite this, bibliometric studies examining loyalty programs and brand loyalty jointly remain limited. While Moretta Tartaglione et al. (2019) and Fetscherin and Heinrich (2015) have addressed each concept separately, a comprehensive analysis integrating both fields from a unified perspective has not been conducted. This gap is theoretically significant: loyalty programs are increasingly recognized not only as behavioral retention tools but as mechanisms that shape brand perceptions and long-term attitudinal commitment (Chen et al., 2021; Yi and Jeon, 2003). Understanding how these two streams relate, overlap, and diverge in the literature is therefore essential for building more integrative theoretical frameworks. This study aims to fill that gap by providing a systematic bibliometric analysis of publications addressing both loyalty programs and brand loyalty. Bibliometric analysis is particularly

suited to this purpose, given its strengths in processing large volumes of data objectively, minimizing researcher bias, and systematically mapping the intellectual structure of a field (Donthu et al., 2021). The study is organized into four main sections: literature review, methodology, findings, and conclusion.

LITERATURE REVIEW

Loyalty Programs

Loyalty programs are widely regarded as one of the most tangible applications of customer relationship management. These programs are designed to retain existing customers, stimulate repeat purchase behavior, and build long-term customer relationships through discounts, rewards, and exclusive benefits (Dorotic et al., 2012). Chen, Mandler and Meyer-Waarden (2021) define loyalty programs not merely as systems offering economic incentives, but as integrated structures that also provide intangible values such as personalized service, status, and exclusive access alongside tangible rewards.

The modern transformation of loyalty programs began with American Airlines' AAdvantage program in 1981, subsequently spreading across aviation, retail, hospitality, and financial services (Chen et al., 2021). Kim (2009) categorizes loyalty programs into monetary reward-based and preferential treatment-based types. The digital transformation has enabled mobile applications, data analytics, and gamification elements to make loyalty programs more flexible and interaction-driven (Kim et al., 2015).

Brand Loyalty

Brand loyalty is a multi-layered construct at the intersection of behavioral and attitudinal dimensions. Although brand loyalty is one of the most extensively studied concepts in consumer behavior and brand management literature, a full academic consensus on its definition has not been reached. Early studies defined loyalty primarily through repeat purchase behavior; Jacoby and Chestnut (1978) critiqued this approach for ignoring habit and situational factors, drawing attention to the importance of the attitudinal dimension.

Dick and Basu (1994), in their integrative framework, explain customer loyalty through the strength of the relationship between an individual's relative attitude toward a brand and their repeat purchase behavior, defining the combination of strong attitude and high repeat patronage as 'true loyalty'. Oliver (1999) conceptualized loyalty as a multiphase process progressing through cognitive, affective, conative, and action stages. Aaker (1991) positioned brand loyalty as a core component of brand equity, providing firms with concrete benefits including reduced marketing costs, price flexibility, and competitive advantage.

Loyalty Programs and Brand Loyalty

The relationship between the two constructs is complex and multi-layered. Chen et al. (2021) frame this relationship through status-based (strengthening emotional loyalty through privilege and prestige perception), inertia-based (sustaining behavioral loyalty through switching costs created by accumulated rewards), and relationship-based (building trust through personalized communication) mechanisms. Yi and Jeon (2003) demonstrated that the effect of loyalty programs on brand loyalty varies with the customer's level of program involvement, emphasizing the need to distinguish conceptually between program loyalty and brand loyalty. This finding shows that loyalty programs alone do not guarantee brand loyalty; program design, perceived value, and customer fit are the determining factors (Dorotic et al., 2012).

METHODOLOGY

Bibliometric Analysis

This study employs bibliometric analysis to map the intellectual structure of the loyalty programs and brand loyalty literature. Bibliometric analysis is a quantitative research method that enables the systematic examination of large volumes of academic publication data using mathematical and statistical techniques (Donthu et al., 2021). Unlike traditional narrative reviews, bibliometric analysis minimizes researcher selection bias and produces an objective map of a field's intellectual landscape (Zupic & Čater, 2015). This method systematically reveals key research themes, most influential works, and the temporal

evolution of a field through techniques such as citation analysis, co-authorship analysis, keyword co-occurrence analysis, thematic mapping, and trending topics analysis (Aria & Cuccurullo, 2017).

Data Collection and Search Strategy

The Web of Science database was selected as the data source, given its comprehensive coverage of internationally recognized, peer-reviewed journals (Donthu et al., 2021). Data collection was conducted in April 2026. The search query was constructed using the topic search operator (TS=) across two conceptual blocks: (1) loyalty program terms ("loyalty program*", "loyalty programme*", "reward program*", "loyalty scheme*", "loyalty card*", "membership program*", "points program*") and (2) brand/customer loyalty terms ("brand loyalty", "brand commitment", "brand attachment", "brand engagement", "brand equity", "brand trust", "customer loyalty", "consumer loyalty"). The search was restricted to 2010–2026, English-language articles only, and the following WoS subject categories: Business, Management, Hospitality Leisure Sport Tourism, Economics, Business Finance, Psychology Applied, and Psychology Social. After applying these filters, 305 publications were included in the analysis.

Data Analysis

Analyses were conducted using the Bibliometrix R package and its Biblioshiny interface, covering citation analysis, co-authorship analysis, keyword co-occurrence analysis, thematic mapping, and trending topics analysis (Aria & Cuccurullo, 2017). Only author-assigned keywords (Author's Keywords) were used in all word-based analyses. To enhance reliability, spelling variants and British–American differences were standardized through a thesaurus file. The Louvain clustering algorithm was applied in the keyword co-occurrence analysis, with the 50 most frequent keywords displayed. The data selection process is summarized in the PRISMA flow diagram in Figure 1.

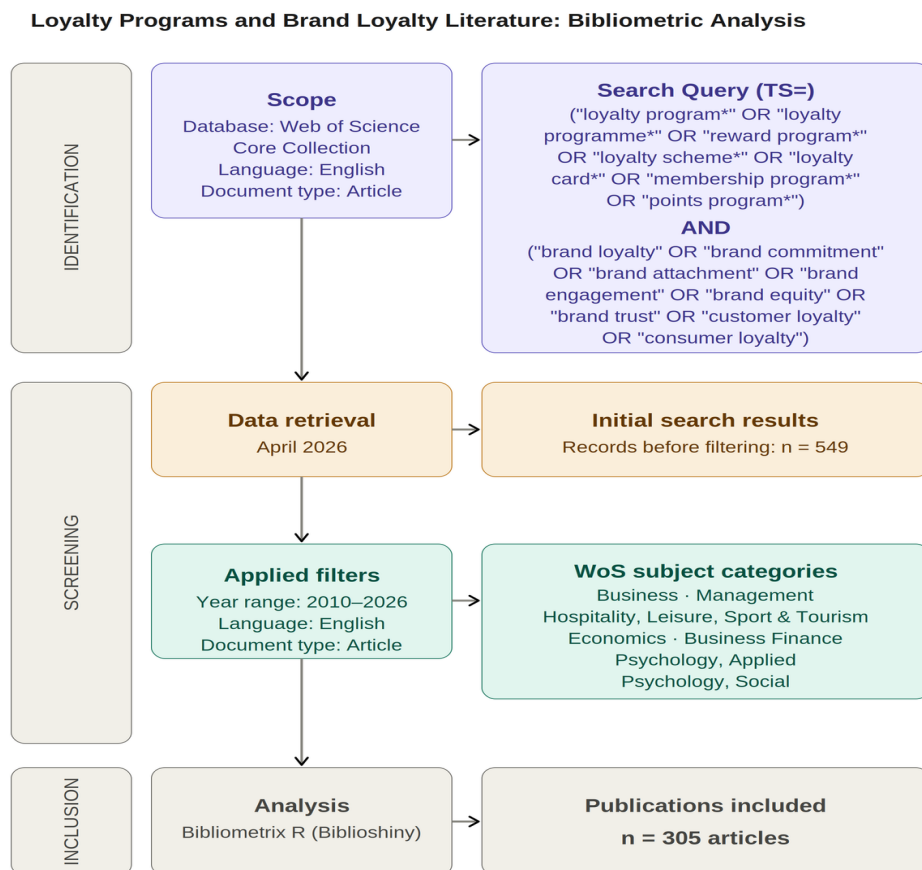


Figure 1. Data Selection Process for Bibliometric Analysis (PRISMA Flow Diagram)

FINDINGS

Annual Distribution of Publications

The annual distribution of the 305 publications constituting the loyalty programs and brand loyalty literature reveals a generally increasing trend with periodic fluctuations over the 2010–2026 period (Figure 2).

During the 2010–2013 period, publication counts remained at relatively low levels within a narrow range, suggesting that the field was still in its developmental stage and research was conducted within a narrower scope. In 2014 and 2015, publication counts followed a relatively stable trajectory, with a marked increase observed in 2016. Between 2017 and 2019, publication counts followed a fluctuating pattern. In 2020, a pronounced increase was again observed. In contrast, 2021 saw a temporary decline. The rebound in publication counts in 2022 and 2023 suggests that the field has retained its academic relevance in the post-pandemic period. Particularly in 2023, output reached the highest level of the analysis period, alongside 2016. This pattern may be associated with the increasing conceptualization of loyalty programs not merely as reward mechanisms but as components of customer experience, personalization, and value creation processes, though bibliometric analysis alone cannot confirm causal explanations for observed trends. The relative decline observed in 2024, 2025, and the still-incomplete year 2026 should be considered in light of the fact that not all studies may yet be indexed in the database.

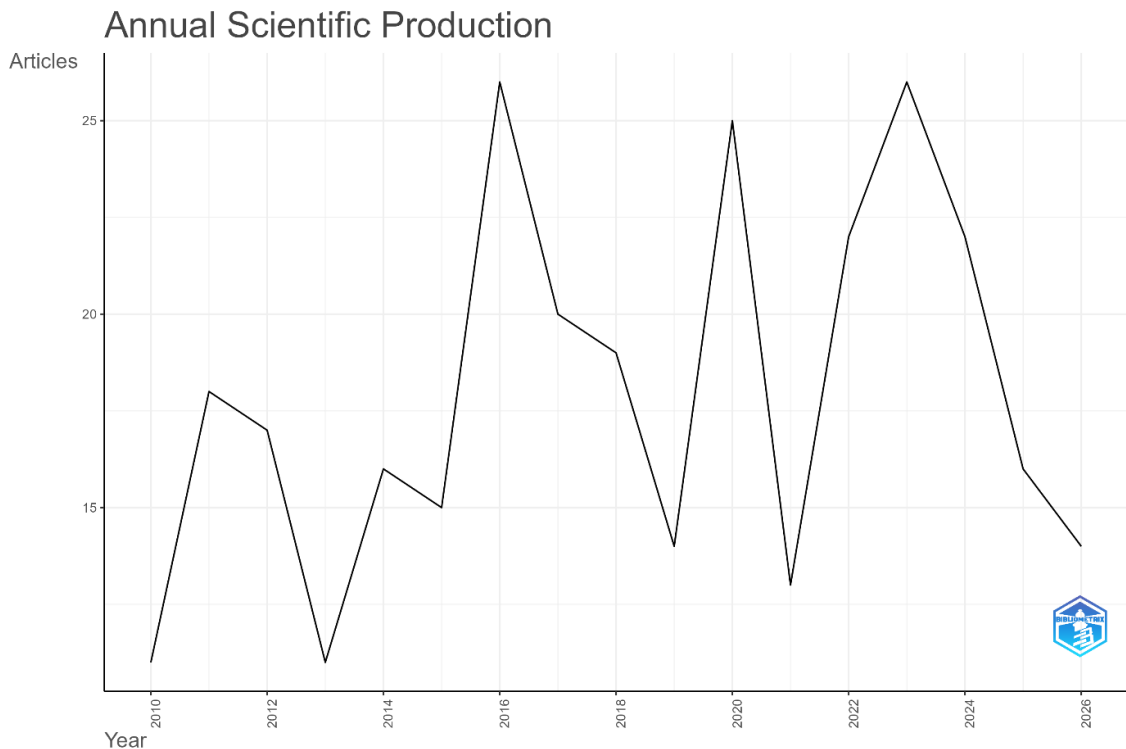


Figure 2. Annual Distribution of Publications

Most Cited Studies

When examining the most cited studies in the loyalty programs and brand loyalty literature, research that has shaped the field's development and become reference points in academic literature stands out (Figure 3). The most cited study is Kandampully et al.'s (2015) article published in the *International Journal of Contemporary Hospitality Management* with 355 citations. This is followed by Schmitt et al.'s (2011) article in the *Journal of Marketing* with 270 citations and Hwang et al.'s (2020) study in the *Journal of Business Research* with 229 citations. Evanschitzky et al.'s (2012) article in the *Journal of the Academy of Marketing Science* received 198 citations, and Alfarraj et al.'s (2021) study received 150 citations.

The high citation counts of these works indicate an influential academic core in loyalty programs research. In particular, Kandampully et al.'s (2015) study addressing customer experience and brand relationships stands out as the field's primary reference point. The fact that more recent studies by Hwang et al. (2020) and Alfarraj et al. (2021) have also achieved high citation counts suggests that the field retains its academic currency and that new research rapidly gains impact in the literature.

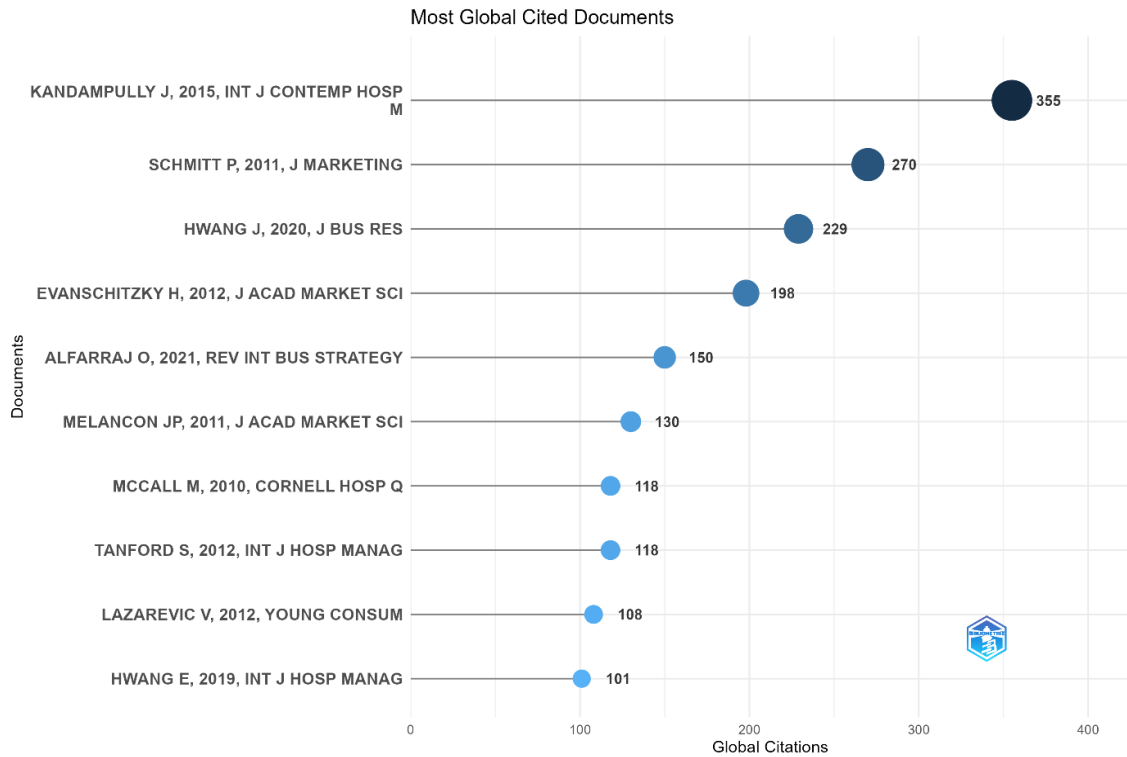


Figure 3. Most Cited Studies

Most Productive Authors, Journals, and Countries

This section analyzes the leading authors, journals, and countries in the loyalty programs and brand loyalty literature. The findings reveal which actors and publication platforms have shaped the field.

When examining the most productive authors, the field is found to concentrate around certain researchers (Figure 4). The most prolific author is Tanford with 16 publications, followed by Raab with 9 and Berezan with 6. Gupta and Kim each have 5 publications, while Baloglu, McCall, and Melnyk each have 4. Ikeda and Krishen also appear in the top ten with 3 publications each. Tanford's markedly higher output compared to other authors indicates that this researcher occupies a central position in the field.

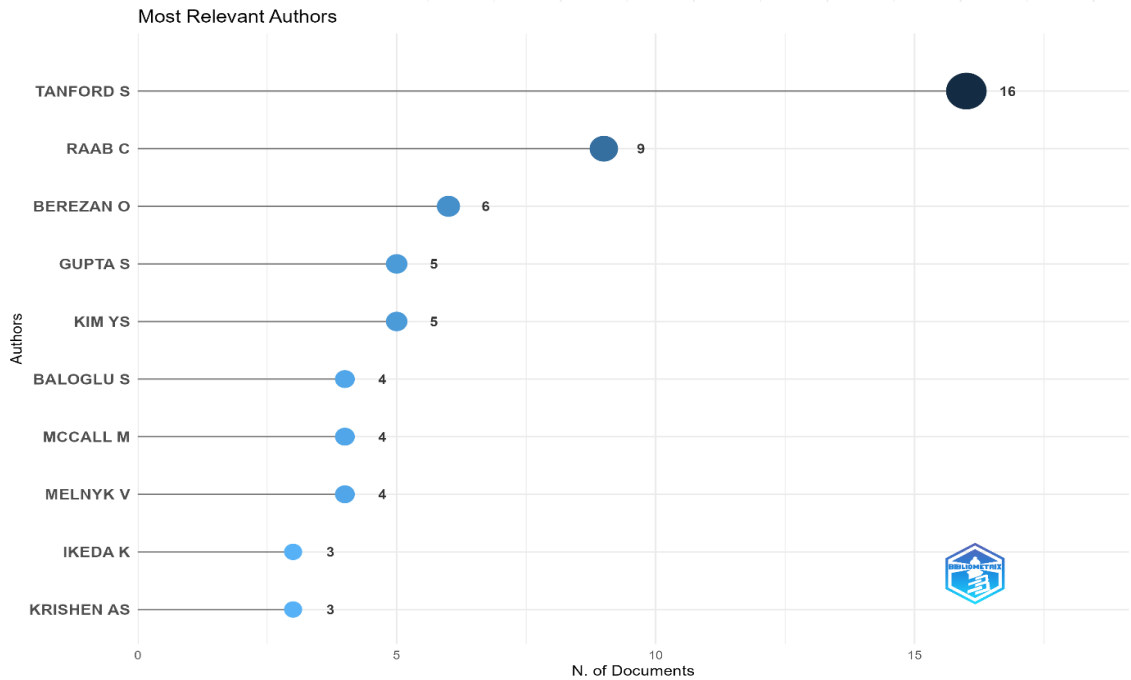


Figure 4. Most Productive Authors

When examining the most productive journals in the field, research is found to concentrate in specific academic journals (Figure 5). The Journal of Retailing and Consumer Services leads with 22 articles, followed by the International Journal of Hospitality Management with 14 and the Journal of Business Research with 10. Cornell Hospitality Quarterly and the International Journal of Contemporary Hospitality Management each appear with 9 publications, while the European Journal of Marketing, International Journal of Retail and Distribution Management, and Journal of Services Marketing each contribute 8 publications. The Journal of Hospitality and Tourism Research and Service Industries Journal each appear with 6 publications. The fact that more than half of the most productive journals are hospitality, retail, and service sector-focused publications indicates that research in this area is predominantly conducted within the service sector axis of the marketing literature.

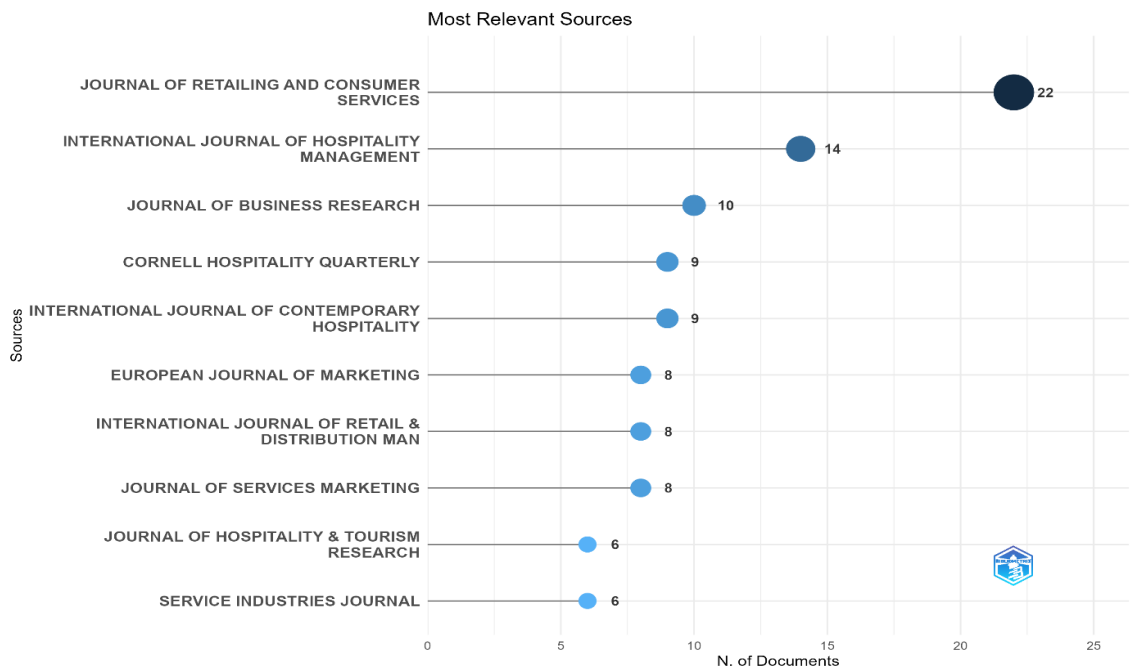


Figure 5. Most Productive Journals

The distribution of scientific output by country is presented in Table 1. The USA leads with 86 publications, followed by China (31), Australia and India (22 each), UK (14), South Korea (13), Canada (9), Japan and Spain (8 each), and France (7). The USA's leading position may be linked to the country's role as the birthplace of modern loyalty programs (Chen et al., 2021). The prominence of China, India, and South Korea indicates that Asia-based research has achieved a considerable share. Turkey's representation with only two publications suggests a relatively limited visibility of Turkey-based research within the WoS-indexed English-language literature. This result reflects only English-language output and does not capture Turkish-language academic production.

Table 1. Top 10 Countries by Scientific Output

Country	Publications
USA	86
China	31
Australia	22
India	22
UK	14
South Korea	13
Canada	9
Japan	8
Spain	8
France	7

Co-Authorship Analysis

A co-authorship analysis was conducted to examine collaborative relationships among authors (Figure 6). An average of 2.87 authors per document was observed, and only 30 of the 305 publications are single-authored, indicating that collaborative authorship is the dominant pattern in the literature.

Tanford occupies a central position, forming strong collaborative ties with Raab, Berezan, Krishen, Kim, Baloglu, and Montgomery. This cluster represents the most prolific and densely connected research group in the literature. The Meyer-Waarden–Bruwer cluster, the Bijmolt-centered cluster, and the Ikeda–Numata cluster also stand out as notable collaborative groups.

The presence of multiple clusters represented by different colors in the network indicates that several independent research groups operate in the literature. The limited connectivity between some clusters suggests that the flow of knowledge across groups remains relatively constrained. This fragmented structure indicates that fostering broader international and interdisciplinary collaborations could contribute to the integrated development of the field.

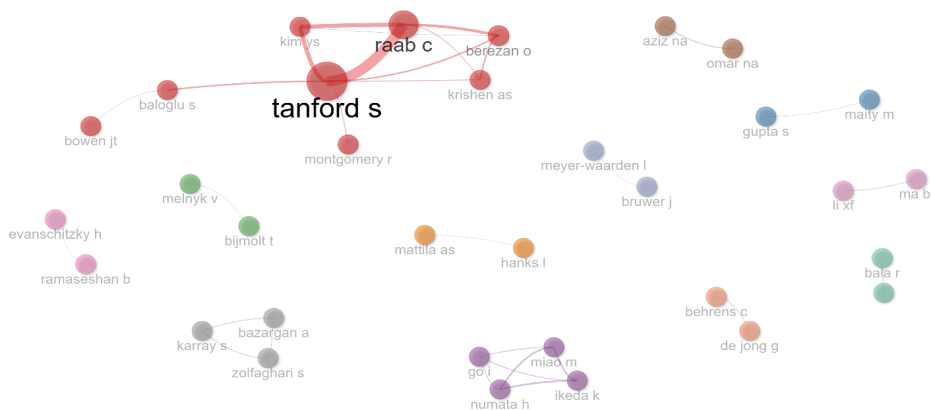


Figure 6. Co-Authorship Network

Keyword Co-Occurrence Analysis

"Loyalty programs" and "customer loyalty" occupy the center of the co-occurrence network (Figure 7). The strong direct connection between these two concepts suggests that the vast majority of studies address them together, preserving the conceptual coherence of the field.

Four clusters emerge clearly from the network. The first cluster, organized around "loyalty programs", includes "reward programs", "loyalty schemes", "store loyalty", "program loyalty", and "retail", representing a research stream focused on the structural and sectoral characteristics of loyalty programs in a retail context. The second and largest cluster, organized around "customer loyalty", includes "customer satisfaction", "customer trust", "customer engagement", "customer experience", "customer retention", and "customer relationship management", reflecting research that examines loyalty programs within a customer relationship management and customer experience framework. The third cluster, addressing the attitudinal and relational dimensions of loyalty, comprises "loyalty", "commitment", "switching costs", "brand loyalty", "brand equity", and "behavioral loyalty". The fourth and relatively smaller cluster, consisting of "relationship marketing", "service quality", and "customer behavior", represents studies examining loyalty programs from a service sector perspective.

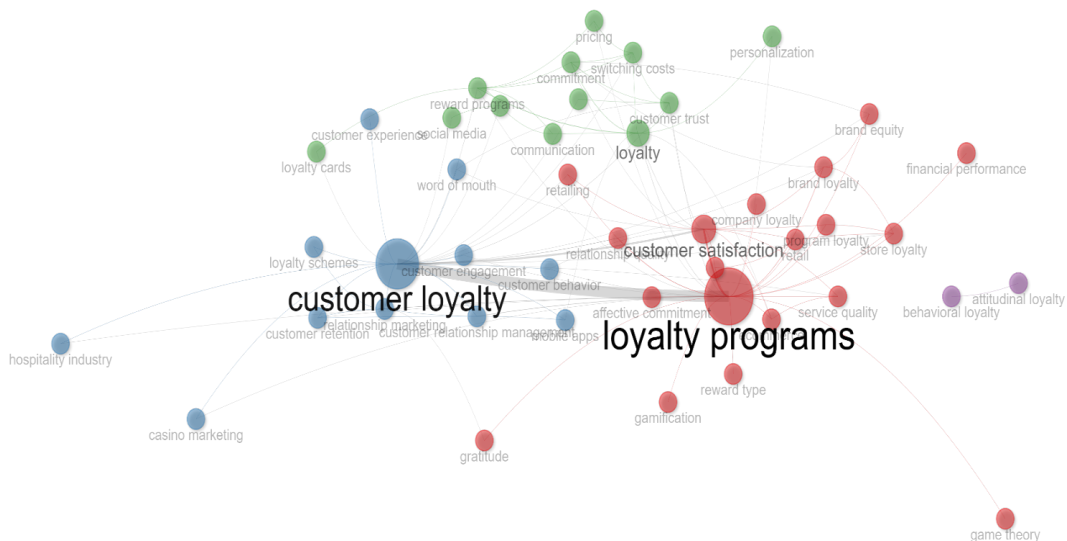


Figure 7. Keyword Co-Occurrence Network

Thematic Map Analysis

A thematic map analysis was conducted to identify the developmental level and degree of importance of the main research themes in the loyalty programs and brand loyalty literature (Figure 8). In this analysis, each theme is positioned in one of four quadrants according to its centrality and density values. Themes with high centrality represent concepts that form strong connections with the broader literature, while themes with high density represent mature, internally developed research areas.

"Loyalty programs", "customer loyalty", and "customer relationship management" emerge as the dominant basic themes. Their relatively lower density values indicate that these concepts remain open to deeper, more systematic investigation, suggesting that they continue to be the central research focus of the field. The second cluster in the basic themes quadrant, comprising "customer satisfaction", "customer trust", and "customer engagement", represents a research stream examining loyalty programs through the emotional and interactive dimensions of customer relationships.

The niche themes quadrant contains a cluster of "store loyalty", "program loyalty", and "retail", representing a mature but narrowly focused research area in the retail context. Notably, "brand loyalty" and "brand equity" — the central focus of this study — are positioned at the boundary between niche and emerging themes. This finding suggests that studies addressing brand loyalty and loyalty programs have

not yet been extensively integrated within a unified theoretical framework in the academic literature. The relative emptiness of the motor themes quadrant suggests that the field has not yet formed a high-density, high-centrality established research core.

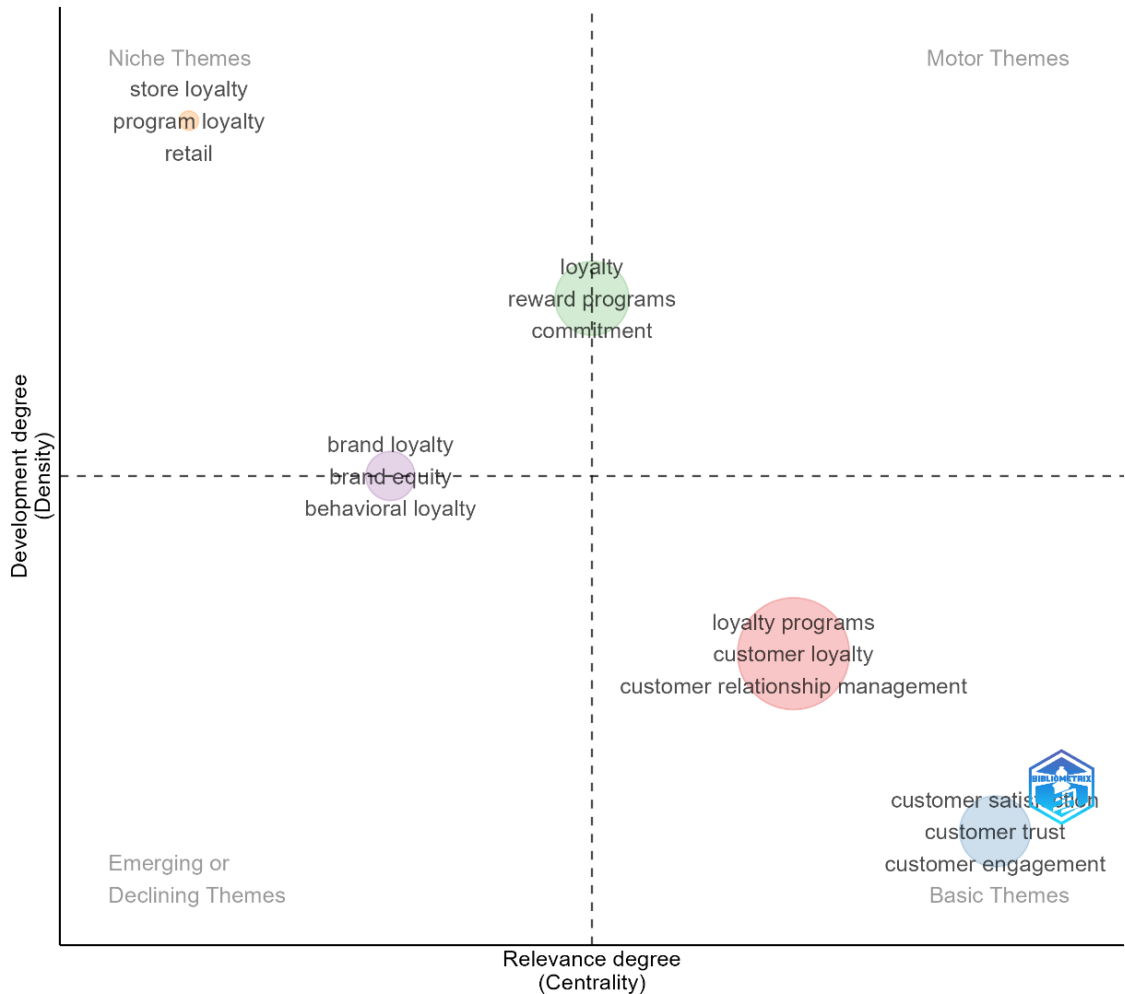


Figure 8. Thematic Map

Trending Topics Analysis

A trending topics analysis was conducted to examine how prominent research topics in the literature have evolved over time (Figure 9). This analysis enables observation of the field's thematic evolution by identifying which concepts have concentrated in which periods.

In the early period (2014–2015), concepts such as 'switching costs', 'customer behavior', 'commitment', 'loyalty schemes', 'customer relationship management', and 'reward programs' were prominent, representing a phase in which the conceptual foundations of loyalty programs were built on behavioral, economic, and relationship management bases. In 2016–2017, the research focus shifted toward 'customer retention', 'service quality', 'relationship marketing', 'store loyalty', 'customer satisfaction', 'brand equity', and 'customer loyalty', reflecting an era in which loyalty programs began to be examined not only as economic incentive tools but also as instruments that create value through service quality and strengthen the customer-brand relationship.

In 2018–2019, the prominence of 'loyalty' and 'loyalty programs' suggests a renewed focus on the core concepts of loyalty and program design. Post-2020, the emergence of 'customer engagement', 'customer trust', 'brand loyalty', 'program loyalty', 'customer experience', and 'ecommerce' as central themes suggests that digitalization, customer-brand interaction, and experience-oriented approaches may have gained increasing prominence in the literature. In particular, the growing visibility of 'ecommerce' and

'customer experience' after 2022 suggests that loyalty programs are increasingly being examined in the context of online commerce and digital customer experience. Taken as a whole, the trending topics analysis indicates a general shift in the field from a traditional behavioral and reward-based structure toward a framework centered on digital experience and customer engagement, though causal interpretations of these patterns remain beyond the scope of bibliometric analysis.

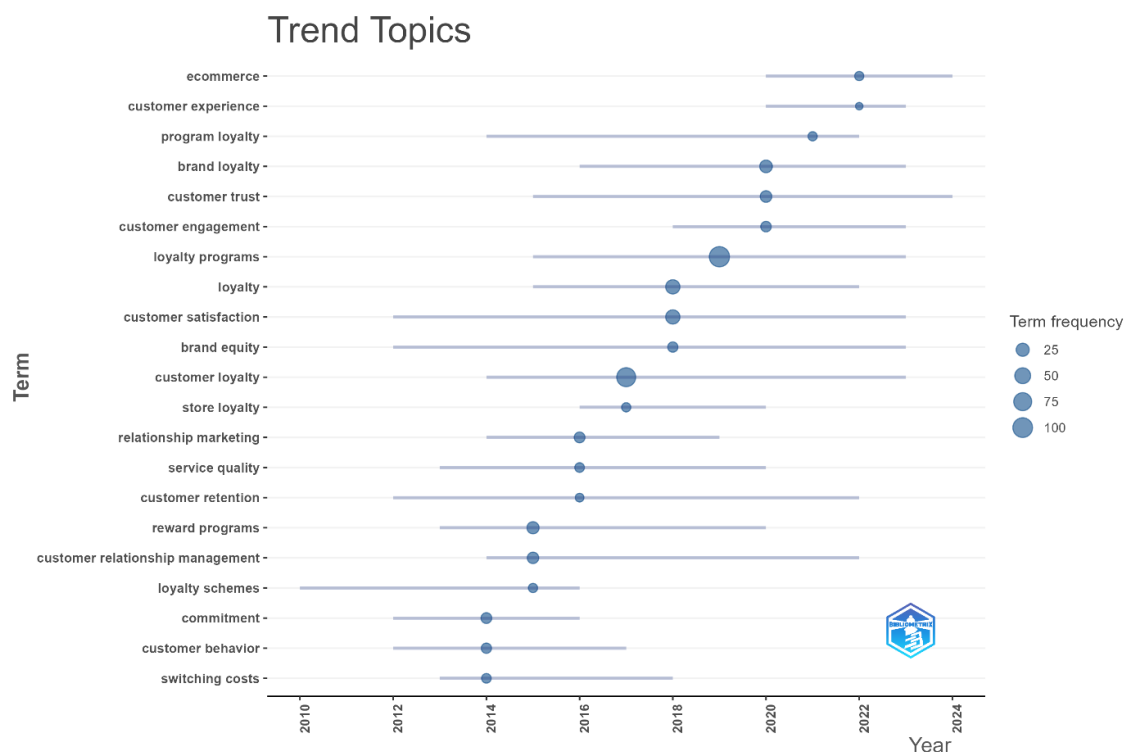


Figure 9. Trending Topics by Year

CONCLUSION

This study aimed to systematically map the structure, thematic evolution, and research patterns of the loyalty programs and brand loyalty literature through bibliometric analysis of 305 Web of Science publications. Four key findings emerge from the analyses.

First, the literature has shown a generally increasing trend throughout the 2010–2026 period, despite periodic fluctuations in annual publication output. This pattern reflects the sustained academic interest in loyalty programs and brand loyalty, particularly in relation to customer retention, customer experience, and digital transformation.

Second, the joint evaluation of the keyword co-occurrence and thematic mapping analyses suggests that the literature is organized around four research streams centered on 'loyalty programs' and 'customer loyalty': program design-oriented, customer relationship-oriented, attitudinal-relational, and service quality-oriented approaches.

Third, the positioning of brand loyalty at the boundary between niche and emerging themes, combined with the relative emptiness of the motor themes quadrant, highlights the need for integrative theoretical models that jointly address loyalty programs and brand loyalty. Fourth, the trending topics analysis suggests a general shift in the field from traditional behavioral and reward-based approaches toward digital experience, customer engagement, and e-commerce; while the fragmented co-authorship network underscores the value of broader international and interdisciplinary collaboration.

Three directions are proposed for future research: (1) comparative bibliometric analyses incorporating alternative databases such as Scopus; (2) development of integrative theoretical models addressing loyalty programs and brand loyalty jointly; and (3) empirical studies centered on emerging themes of customer experience, digital commerce, and program-based loyalty. Turkey's very limited international

academic output in this field represents a significant opportunity for domestic researchers. From a managerial perspective, the findings offer several practical insights. The shift in the literature toward customer experience, engagement, and digital commerce suggests that practitioners should move beyond transactional reward mechanisms and design loyalty programs that foster genuine emotional and relational bonds with customers. The identified research streams also indicate that effective loyalty program design requires consideration of attitudinal dimensions alongside behavioral outcomes, as program loyalty does not automatically translate into brand loyalty. Managers in hospitality, retail, and service sectors — which dominate the publication landscape — may particularly benefit from integrating loyalty program strategies with broader customer relationship management initiatives. This study has certain limitations that should be acknowledged. The analysis was restricted to publications indexed in the Web of Science database, which may not capture the full scope of the literature available in other databases such as Scopus or Google Scholar. Additionally, only English-language articles were included, which may underrepresent research conducted and published in other languages, including Turkish. As with all bibliometric analyses, the findings reflect patterns and structural relationships in the literature rather than causal explanations, and should therefore be interpreted as indicative of research trends and intellectual structures rather than definitive conclusions about underlying mechanisms.

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