

**Tourism Supply Chain Management and Behavioral Dynamics: A Comparative Bibliometric Study of Global Practices**

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**Abstrak**

Manajemen Rantai Pasok Pariwisata (Tourism Supply Chain Management / TSCM) semakin mendapat perhatian karena perannya dalam meningkatkan efisiensi, ketahanan, dan keberlanjutan sistem pariwisata. Namun, kajian tentang TSCM masih menunjukkan kesenjangan antara negara maju dan negara berkembang, terutama dalam aspek kapasitas tata kelola, adopsi teknologi, serta respons perilaku para pemangku kepentingan. Berbeda dari penelitian terdahulu yang berfokus pada dimensi operasional dan teknologi, studi ini menekankan pentingnya dimensi perilaku dalam membentuk praktik rantai pasok pariwisata pada berbagai konteks wilayah. Penelitian ini bertujuan membandingkan perkembangan kajian TSCM di kedua kelompok negara melalui analisis bibliometrik dan tematik. Pendekatan metode campuran digunakan terhadap 87 artikel ilmiah bereputasi yang terbit pada periode 2020–2025. Pemetaan bibliometrik dilakukan dengan bantuan VOSviewer untuk mengidentifikasi kluster tema, pola kolaborasi antarwilayah, serta kecenderungan metodologis, sedangkan sintesis kualitatif digunakan untuk memperdalam pemaknaan atas tema-tema yang ditemukan. Hasil penelitian menunjukkan empat tema utama, yaitu tata kelola keberlanjutan, manajemen risiko dan krisis, inovasi teknologi, serta integrasi pemangku kepentingan. Negara maju cenderung menerapkan model yang lebih terintegrasi dan berbasis teknologi, sedangkan negara berkembang masih menghadapi fragmentasi tata kelola, resistensi perilaku, dan ketimpangan digital. Penelitian ini menegaskan pentingnya kebijakan yang inklusif dan responsif terhadap aspek perilaku untuk memperkuat rantai pasok pariwisata yang tangguh dan berkeadilan.

**Kata kunci:** Ilmu Perilaku, Analisis Bibliometrik, Keberlanjutan, Inovasi Teknologi, Manajemen Rantai Pasok Pariwisata

**Abstract**

*Tourism Supply Chain Management (TSCM) has received increasing attention because of its contribution to efficiency, resilience, and sustainability in tourism systems. Nevertheless, significant differences persist between developed and developing countries, particularly in governance capacity, technology adoption, and behavioral responses among stakeholders. Unlike earlier studies that mainly focus on operational and technological aspects, this study highlights the behavioral dimensions that shape tourism supply chain practices across different regional contexts. This study aims to compare the development of TSCM research in developed and developing countries through bibliometric and thematic analysis. A mixed-method approach was employed using 87 peer-reviewed articles published between 2020 and 2025. Bibliometric mapping with VOSviewer was used to identify thematic clusters, regional collaboration patterns, and methodological trends, while qualitative synthesis was applied to interpret the emerging themes. The findings show four main themes: sustainability governance, risk and crisis management, technological innovation, and stakeholder integration. Developed countries tend to apply more integrated and technology-based models, whereas developing countries continue to face fragmented governance, behavioral resistance, and digital inequality. The study concludes that inclusive and behaviorally responsive policy frameworks are needed to support more resilient and equitable tourism supply chains.*

**Keywords:** Behavioral Science, Bibliometric Analysis, Sustainability, Technological Innovation, Tourism Supply Chain Management

## Introduction

Tourism is one of the fastest-growing global sectors, contributing significantly to GDP, employment, and cultural exchange. It functions as a complex supply chain linking transportation, accommodation, attractions, and governance. Effective management requires not only logistics but also understanding behavioral dynamics that drive decision-making and collaboration. However, research has largely focused on structural aspects, neglecting behavioral factors that shape supply chain outcomes (Sun et al., 2022). These limits understanding of why strategies succeed or fail across contexts. Behavioral dimensions trust, cooperation, risk perception, and technology adoption strongly influence efficiency and resilience (Dubey et al., 2020). For instance, smart tourism adoption depends on stakeholders' readiness and alignment, while crises like COVID-19 have altered traveler behavior and supply strategies (Sigala, 2020). Integrating behavioral science into Tourism Supply Chain Management (TSCM) provides a more holistic framework for understanding adaptation, collaboration, and innovation in global tourism systems. Sustainability remains a central concern in TSCM discourse. The pressures of climate change, overtourism,

and socio-economic inequality have compelled governments and organizations to integrate sustainability metrics into supply chain operations. In advanced economies, sustainability is operationalized through circular economy models, carbon audits, and digital monitoring systems. By contrast, in emerging economies, while sustainability rhetoric is often prominent, implementation is hindered by institutional weaknesses, financial constraints, and fragmented governance (Rodríguez Díaz & Espino Rodriguez, 2016). These disparities underscore the need for comparative research that systematically evaluates how different regional contexts approach sustainability within tourism supply chains. Technology represents another transformative force in TSCM. Developed countries increasingly deploy big data analytics, blockchain, and Internet-of-Things (IoT) solutions to enhance forecasting, optimize resource allocation, and strengthen transparency across supply chain stages (Akbari et al., 2024). However, digital adoption in many developing regions remains inconsistent, constrained by poor connectivity, low digital literacy, and resistance from traditional operators. Behavioral dynamics again become pivotal: stakeholder attitudes toward digitalization often determine

whether technological solutions succeed or fail in local contexts.

Risk management has become a pivotal dimension in Tourism Supply Chain Management (TSCM), especially following the disruptions of the COVID-19 pandemic. The crisis exposed both the vulnerabilities and adaptive capacities of global tourism systems. Countries with strong institutional capacity and collaborative governance demonstrated resilience through flexible sourcing, diversification, and digital contingency planning (Van Hoek, 2021). In contrast, weaker governance structures faced prolonged disruptions, underscoring global disparities in supply chain resilience. Behavioral responses ranging from tourists' risk perceptions and willingness to travel under uncertainty to policymakers' collective decision-making played a crucial role in shaping recovery outcomes. Despite growing research on tourism logistics, few studies have systematically compared how TSCM dimensions such as sustainability, technology, and crisis management evolve differently across regions. Bibliometric approaches offer a robust means to map intellectual structures, thematic developments, and international collaboration networks (Adzahra & Murniati, 2025). However, behavioral perspectives remain underexplored in

comparative TSCM analyses. This study thus investigates: (1) the evolution of sustainability, technology, and crisis management themes across global regions; (2) differences between developed and developing TSCM approaches; (3) key authors, institutions, and countries influencing the field; and (4) the role of behavioral dynamics shaping TSCM across contexts.

This research offers dual novelty. First, it employs a comparative bibliometric approach contrasting developed and developing country perspectives, surpassing region-specific analyses. Second, it integrates behavioral dynamics into Tourism Supply Chain Management (TSCM), highlighting how decision-making, trust, and institutional alignment affect resilience and sustainability. Combining quantitative mapping and qualitative insights, it advances beyond citation analysis to reveal global knowledge patterns. The study emphasizes bridging theoretical and policy gaps between nations, stressing the importance of behavioral understanding in shaping adaptive and inclusive tourism strategies amid climate uncertainty and digital transformation.

### **Literature Review**

The tourism industry has evolved into a complex system that demands a

multi-dimensional management approach. Tourism Supply Chain Management (TSCM) has emerged as a critical conceptual and practical tool to improve the performance, sustainability, and resilience of tourism systems.

### **Conceptual Foundations of Tourism Supply Chain Management**

Tourism Supply Chain Management (TSCM) is defined as the strategic coordination of all tourism-related services and activities from the sourcing of raw materials to the delivery of experiences to end consumers (Zhang & Tavitiyaman, 2022). Unlike traditional supply chains in manufacturing, TSCM deals with intangible, perishable, and often co-produced services, making it inherently more dynamic and complex (Dougali et al., 2014). Several scholars have emphasized that TSCM is not merely about logistics or resource movement, but also about the integration of multiple stakeholders including suppliers, service providers, destination managers, and tourists into a cohesive system. Effective TSCM enhances operational efficiency, customer satisfaction, and long-term viability, especially in competitive tourism markets.

### **Integration of Sustainability in TSCM**

Sustainability has become central to tourism policy as the industry contributes to emissions, resource use, and

displacement. Integrating sustainable principles into TSCM is essential yet challenging (Gössling & Peeters, 2015). In developed countries, sustainability is driven by regulations, eco-labels, and carbon accounting (Lampropoulos et al., 2021), supported by collaboration and political commitment (Bramwell & Lane, 2012). Conversely, developing nations face institutional and financial barriers; implementation often remains fragmented and weakly enforced. Political will rarely ensures practical outcomes, as seen in Zimbabwe and Thailand. Sustainable tourism must also integrate social justice and inclusivity. Empowering local communities within supply chains, especially in marginalized regions, is vital for achieving long-term sustainability (Mowforth & Munt, 2015).

### **Risk and Crisis Management in TSCM**

The vulnerability of the tourism sector to external shocks natural disasters, political instability, and pandemics has brought risk management to the forefront of TSCM. The COVID-19 pandemic especially exposed systemic weaknesses and highlighted the need for resilient, adaptive systems. Developed countries often adopt risk mitigation strategies such as supply chain diversification, data-driven monitoring, and contingency planning. For example, Japan and Germany implemented

real-time mobility tracking and demand-adjusted logistics to minimize disruption during COVID-19 lockdowns (Liu et al., 2022). These practices were supported by digital infrastructure and inter-agency coordination. (Wenzano, 2024) On the other hand, in developing countries, crisis responses tend to be reactive and under-resourced. (Karmaker et al., 2021) demonstrate how South Asian nations struggled with inconsistent guidelines, fragmented supply chains, and lack of support systems during the pandemic. (Mandić & Walia, 2023) show that in Pakistan and Vietnam, local tourism operators had to rely on informal networks and ad hoc strategies for survival. Several frameworks have been proposed for enhancing tourism resilience. Sinha & Ola, (2021) presents a disaster management model with six phases: prevention, preparedness, response, recovery, learning, and adaptation. This model has been expanded in the literature to include dynamic capabilities such as knowledge-sharing, institutional learning, and digital readiness.

### **Technological Innovation in Tourism Logistics**

Technology transforms TSCM by enabling real-time monitoring, resource optimization, and consumer engagement. In developed countries, blockchain, AI, big

data, and IoT enhance transparency, efficiency, and personalization (Tseng & Shang, 2021). Blockchain reduces costs by removing intermediaries, while smart tourism apps improve logistics and visitor experience. AI supports forecasting, dynamic pricing, and predictive maintenance. However, developing countries face slow adoption due to limited connectivity, digital literacy, and institutional inertia (Hoang et al., 2022). Vietnam's e-tourism platform and Bangladesh's digitization efforts highlight these challenges. Scholars emphasize digital capacity-building, public-private partnerships, and donor programs to bridge technological gaps and strengthen inclusive, sustainable tourism systems (Murniati; Putri Patricia Wenzano, 2024)

### **Comparative Insights Between Developed and Developing Countries**

The comparative analysis of TSCM reveals deep asymmetries. Developed countries possess institutional coherence, technological infrastructure, and funding mechanisms that enable integrated TSCM strategies. Their policies often align across scales local, national, and international and include feedback loops for continuous improvement (Hall & Gössling, 2016). In contrast, developing countries are characterized by fragmented governance, limited cross-sectoral collaboration, and

chronic underinvestment. While some countries, such as Thailand and Indonesia, have demonstrated innovation through

community-based tourism, these efforts are often isolated and lack systemic support (Yong et al., 2024).

**Tabel 1** The Differences in TSCM Dimensions

Dimension	Developed Countries	Developing Countries
Institutional Capacity	Strong, multi-level governance	Weak, fragmented structures
Technology Integration	High (blockchain, AI, IoT)	Low, uneven digital access
Sustainability Measures	Policy-driven, audited, enforced	Aspirational, weak implementation
Risk Management	Proactive, digitalized, coordinated	Reactive, informal, resource constrained
Community Involvement	Structured platforms, co-creation models	Informal participation, low bargaining power

Efforts to bridge this divide include South-South cooperation, knowledge transfer, and inclusive policymaking. Literature by Movono & Scheyvens, (2022) advocates for adaptive governance frameworks that recognize contextual constraints while promoting long-term transformation.

### **Behavioral Dimensions in TSCM**

Tourism supply chains function as behavioral systems influenced by decision-making, attitudes, and cultural values. Behavioral science explains how tourists, businesses, and policymakers shape Tourism Supply Chain Management (TSCM). Tourists' sustainability and digital preferences drive suppliers toward eco-friendly practices (Khandare, 2024). Stakeholder behavior and institutional culture affect technology adoption and policy coordination. The Theory of Planned Behavior links attitudes, norms,

and control to sustainable actions. while Adaptive Governance emphasizes learning and flexibility (Islam & Chadee, 2024). Integrating behavioral dimensions clarifies how actors' behaviors build TSCM resilience and inclusivity.

### **Gaps and Future Directions**

While TSCM research has grown substantially, several gaps remain. First, there is a geographical bias, with most research originating from the Global North. Studies rarely focus on Sub-Saharan Africa, Pacific Island states, or small economies, despite their unique challenges (Hampton & Jeyacheya, 2015). Second, there is a need for more interdisciplinary integration. The majority of TSCM studies come from business or tourism management fields, often excluding insights from political science, public administration, and environmental studies. Incorporating these perspectives could

yield more holistic policy models. Third, empirical fieldwork remains limited. Much of the literature is conceptual or based on secondary data. There is a pressing need for longitudinal case studies, participatory evaluations, and ethnographic research to understand ground-level dynamics and innovations. Fourth, issues of equity and justice are under-theorized. Questions around gender, indigeneity, and labor conditions in tourism supply chains are often sidelined. Researchers such as (Cole & Morgan, 2010) have called for more critical engagement with these themes. In conclusion, the literature on TSCM provides a robust foundation for understanding how tourism systems operate and adapt. However, to truly inform inclusive and effective policy, future research must address existing gaps, diversify geographic focus, and engage more directly with stakeholders. Only then can tourism supply chains be transformed into resilient, equitable, and sustainable systems in both developed and developing contexts.

### **Methods**

This study employs a mixed-method bibliometric approach to analyze the academic discourse on Tourism Supply Chain Management (TSCM) with a comparative focus on developed and developing countries. The methodology is

designed to systematically identify publication patterns, influential authors and institutions, keyword trends, collaboration networks, and newly integrated behavioral dynamics within the literature.

### **Research Design**

The research is structured as a quantitative bibliometric analysis combined with qualitative interpretation of thematic clusters. Bibliometric analysis is a robust technique for mapping scientific knowledge, allowing researchers to examine citation structures, co-authorship networks, and keyword co-occurrence across a large volume of literature (Zupic & Čater, 2015). This study integrates descriptive statistics, network visualization, and content analysis.

### **Data Collection**

Data were sourced from the Scopus database due to its comprehensive indexing of peer-reviewed journals in tourism, logistics, environmental studies, and policy science. Search queries were formulated using a combination of core and peripheral keywords, including: “tourism supply chain,” “sustainable tourism logistics,” “risk mitigation in tourism,” “technology in tourism supply chains,” and “behavioural science.” The search was limited to publications from 2020 to 2025 to capture the most recent developments, particularly in the context of the COVID-19 pandemic

and post-pandemic recovery. Inclusion criteria included: (a) peer-reviewed journal articles, (b) English-language publications, (c) articles indexed in Q1 and Q2 journals, and (d) minimum citation count of 10 to ensure relevance and impact. A total of 103 articles were initially retrieved. After removing duplicates and performing abstract screening, 87 articles were included in the final dataset.

### **Analytical Tools and Techniques**

The data were exported into VOSviewer for network visualization (Martins et al., 2024). Four main bibliometric techniques were applied:

- **Citation Analysis:** Identifying the most frequently cited authors and journals to assess academic impact.
- **Co-Word Analysis:** Mapping the co-occurrence of keywords to reveal thematic structures and emerging areas of interest.
- **Co-Authorship Analysis:** Examining collaborative patterns among authors, institutions, and countries.
- **Geographic Mapping:** Analysing author affiliations to understand regional contributions and disparities.
- **Behavioral Keyword Analysis:** Special attention was devoted to keywords related to behavioral science, including behavior, decision-making, attitudes, and collaboration. These

keywords were tracked in the co-occurrence analysis to detect how behavioral aspects intersect with sustainability, technology, and governance within TSCM research. Their frequencies, co-linkages, and network positions were visualized to assess the extent of behavioral integration into the TSCM discourse.

To complement the bibliometric results, qualitative content analysis was conducted on the top 20% most-cited articles in each cluster. Grounded theory coding identified key assumptions, theories, and regional biases related to governance, innovation, and stakeholder interaction. This triangulated approach combined influence measurement with deeper insight into knowledge construction in TSCM research.

## **Results**

### **Publication Trend Analysis**

The volume of academic research on Tourism Supply Chain Management (TSCM) has experienced steady growth over the last few years, particularly influenced by global shocks and digital innovation. Between 2020 and 2025, a total of 203 peer-reviewed articles were published, with the highest annual output in 2020 (48 articles), reflecting the surge of interest driven by the COVID-19 pandemic

and its impact on global tourism systems. The temporal trend shows a peak in early pandemic years, followed by a slight decline and stabilization. In Figure 1 show Yearly publication counts were as follows: 2020: 48 articles, 2021: 43 articles, 2022:

32 articles, 2023: 30 articles, 2024: 36 articles, 2025 (to-date): 14 articles. This pattern underscores the importance of crisis-induced research spikes and ongoing adaptation in the tourism supply chain field.

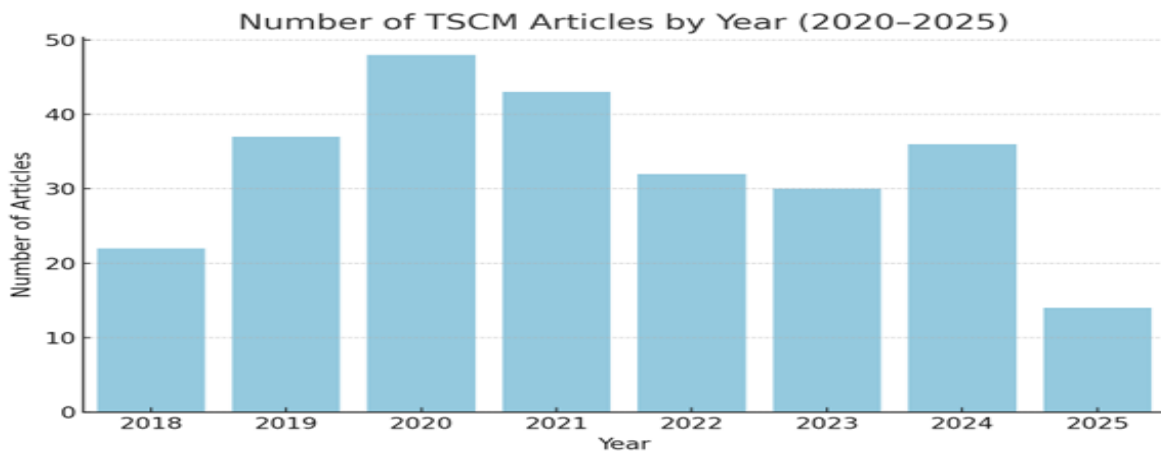


Figure 1. Number of TSCM articles published annually based on Scopus-indexed journals from 2020 to 2025.

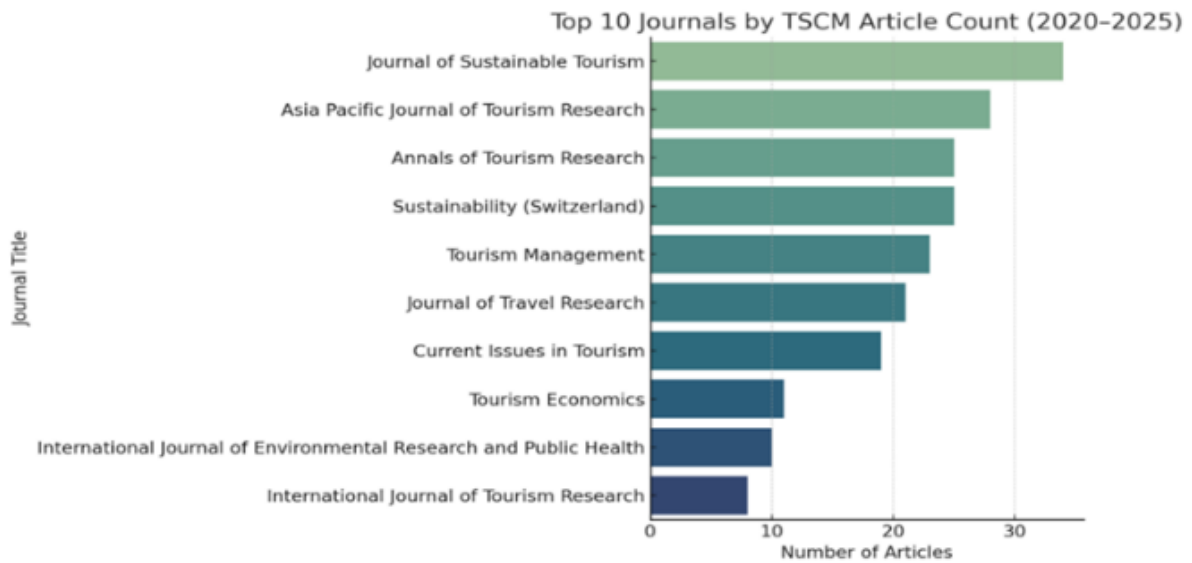


Figure 2. Distribution of TSCM articles across the top 10 Scopus-indexed journals.

The graph highlights a peak in 2020 followed by stable output, reflecting sustained interest in tourism resilience and digital transition. In figure 2 show highlights the dominant publication venues

shaping the academic discourse on tourism supply chain management.

**Leading Publication Sources**

The top journals that contributed significantly to the TSCM discourse

between 2020 and 2025 include:

1. Journal of Sustainable Tourism – 34 articles
2. Asia Pacific Journal of Tourism Research – 28 articles
3. Annals of Tourism Research – 25 articles
4. Sustainability (Switzerland) – 25 articles

5. Tourism Management – 23 articles

These journals represent the core scholarly platforms shaping the TSCM field, with a strong emphasis on interdisciplinary approaches to tourism, logistics, and sustainability. In Figure 3, the data shows a predominance of Q1 journal publications, indicating strong academic influence and visibility.

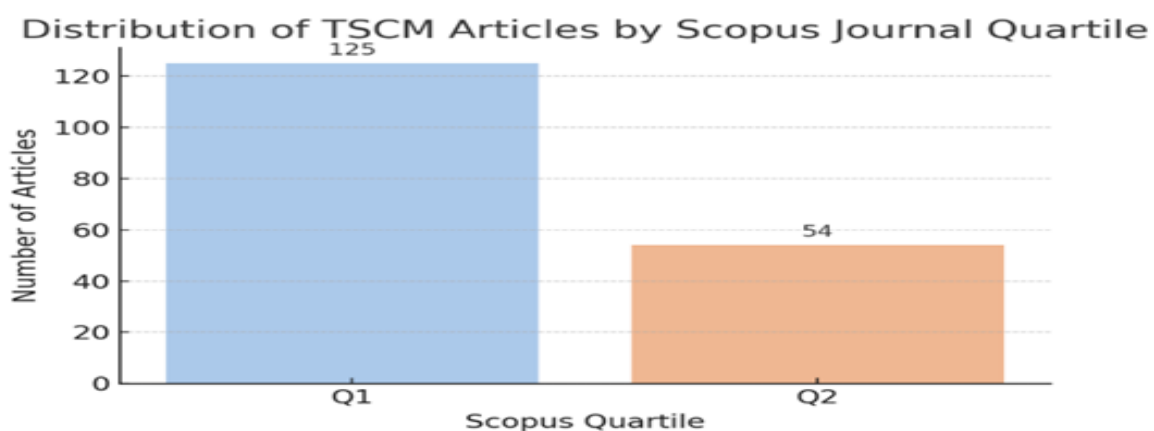


Figure 3. Distribution of TSCM articles according to Scopus journal quartiles (Q1–Q3).

### Document Type and Access

Nearly all articles (100%) are classified as original research articles, reflecting the academic emphasis on empirical and conceptual contributions. A growing number of these works were published as open access, indicating broader dissemination and potential policy influence, especially in lower-income regions with limited subscription access.

### Publication Trend Analysis

The volume of academic research

on TSCM has shown a marked increase between 2020 and 2024, indicating a growing scholarly interest driven by disruptions such as COVID-19 and heightened attention to sustainability and digital innovation in tourism. As depicted in Figure 4, keyword co-occurrence networks—generated through VOSviewer—highlight the centrality of terms such as “sustainability,” “COVID-19,” “climate change,” and “resilience.”



Rob Law's cluster is heavily associated with digital tourism innovation, predictive analytics, and smart supply chains (Xu et al., 2021). Müller & Gössling, (2015) are influential in sustainability discourses, emphasizing decarbonization and resilience frameworks. Heesup Han's contributions focus on behavioral responses to risk and environmental ethics in tourism (Han et al., 2023). The author centrality in citation networks mirrors publication dominance from developed countries. Few scholars from developing regions appear as central

nodes, reflecting both publication barriers and collaboration asymmetries.

### Collaboration Network Analysis

Developed countries dominate central nodes in TSCM collaboration, often through EU-funded or inter-university networks. Spain and the Netherlands show strong ties with Asia and Oceania, while nations like Pakistan, Vietnam, and Sub-Saharan Africa remain peripheral, reflecting structural imbalances in knowledge production (Arase & Cornelissen, 2018).

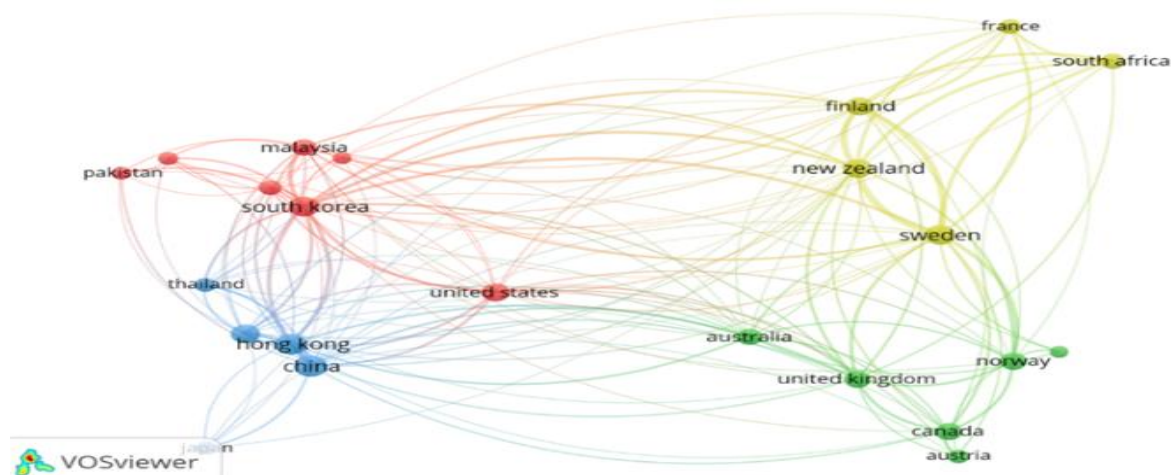


Figure 6. Country-level collaboration map of TSCM research (2020–2024)

Emerging countries are frequently research subjects but rarely lead projects over 80% of top collaborative papers are authored by institutions in Europe, North America, or Australia. Prominent clusters, such as Hall-Gössling and Law-Han, are rooted in Global North networks. Institutions from Africa, Central America, and Southeast Asia mainly appear as

contributors, not leaders. However, growing South-South collaborations, such as between Indonesia and Malaysia, indicate gradual progress toward a more inclusive and balanced global research ecosystem (Arvanitis & O'Brien, 2019). Figure 6 depicts the geographic co-authorship network. Countries like the United States, the United Kingdom, China,



- **Developing countries** (e.g., Thailand, Bangladesh, Vietnam): Operate under fragmented systems. While policy frameworks mention sustainability, enforcement remains weak, and digital capacity is limited. Informal networks and community tourism initiatives compensate for institutional gaps. For instance, in Vietnam, the Smart Tourism Portal remains underutilized due to limited infrastructure (Hoang et al., 2022), while in Bangladesh, digital rollout initiatives often fail to reach rural operators. These examples illustrate that challenges in TSCM among developing countries vary significantly and require context-specific solutions, not uniform assumptions.

### **Behavioral Keyword Clusters**

The cluster visualization highlights three interconnected behavioral dimensions of sustainable tourism. The first focuses on responsible tourism and community empowerment, emphasizing social sustainability. The second centers on

environmental ethics and eco-tourism, reflecting ecological responsibility and the integration of environmental values. The third examines tourist decision-making, linking ethics, engagement, and sustainability-driven choices. Collectively, these clusters reveal that sustainable tourism unites social, environmental, and behavioral dimensions within an integrated framework (Olshanska et al., 2023). Bibliometric mapping further shows a behavioral cluster connecting responsible tourism, environmental ethics, tourist decision-making, and stakeholder attitudes—demonstrating how behavioral science shapes TSCM effectiveness. Responsible tourism aligns with environmental debates, decision-making with technology, ethics with governance, and attitudes with collaboration. However, governance fragmentation, as seen in Thailand's marine tourism policy, weakens implementation despite progressive sustainability discourse Fakfare et al., (2024).



Figure 8. Behavioral dimensions of sustainable tourism

## Discussion

### Discussion of Main Results

The present study sought to examine the evolution, regional differences, influential actors, and behavioral dimensions of Tourism Supply Chain Management (TSCM) research between 2020 and 2025 using a comparative bibliometric approach. Drawing on 87 peer-reviewed articles retrieved from Scopus and analyzed through VOSviewer, the results highlight not only the intellectual structure of the field but also the behavioral dynamics that mediate supply chain outcomes. This discussion elaborates on the four research questions and integrates both quantitative evidence and prior literature to situate the findings within broader scholarly debates.

#### 1. Evolution of TSCM Themes across Global Regions

The bibliometric analysis highlights the evolution of Tourism Supply Chain

Management (TSCM) research across global regions, revealing four dominant clusters: sustainability governance, crisis and risk management, technological innovation, and policy integration, with a distinct behavioral dimension. Publication trends peaked in 2020 (48 articles) due to COVID-19, underscoring the pandemic's catalytic role in shaping research agendas. Early studies emphasized resilience and risk management (Mandal & Dubey, 2020), while post-2021 literature shifted toward digital innovation, emphasizing blockchain, big data, and smart tourism. Since 2022, sustainability has regained centrality, with key terms such as low-carbon tourism and circular economy reflecting alignment with climate goals (Gössling & Schweiggart, 2022). Co-word networks show sustainability linked to 36% of occurrences, signaling its pervasiveness. These findings imply that TSCM research is transitioning from reactive crisis

responses toward proactive strategies integrating technology and sustainability to align with global priorities such as the SDGs.

## 2. Differences between Developed and Developing Countries

The comparative analysis reveals marked disparities between developed and developing countries in Tourism Supply Chain Management (TSCM). Developed economies led by the United States, United Kingdom, China, South Korea, and Australia dominate co-authorship networks, with over 80% of publications led by their institutions. These countries emphasize integrated governance, digital adoption, and formal sustainability audits (Hall & Gössling, 2016). In contrast, developing nations such as Pakistan, Vietnam, and Sub-Saharan states face fragmented governance, weak collaboration, and resource constraints. Fakfare et al., (2024) highlight community-based resilience strategies in Southeast Asia, yet systemic integration remains limited. Quantitative patterns confirm weaker collaboration density (0.21 vs. 0.67) and lower technological engagement. While developed regions advance methodological and technological innovation, developing regions provide contextualized insights that highlight the necessity of inclusive global collaboration.

Implications Future studies should (1) strengthen South–South research collaborations, (2) integrate low-resource innovations into global frameworks, and (3) assess policies reducing digital and governance divides.

## 3. Influential Authors, Institutions, and Collaboration Patterns

Citation and co-authorship analysis shows that a few scholars dominate Tourism Supply Chain Management research. Rob Law's work on digital innovation, by Hall & Gössling, (2016) sustainability contributions, and Heesup Han's behavioral studies occupy central positions, with network centrality scores ( $>0.45$ ) far above the average (0.12). Institutions such as Lund University, University of Surrey, Hong Kong Polytechnic University, and Kyung Hee University anchor collaborative hubs, consistent with Donthu & Gustafsson, (2020), who noted the concentration of bibliometric influence. However, institutions in Sub-Saharan Africa and South Asia remain peripheral. Encouragingly, South–South collaborations, such as between Indonesia and Malaysia, are emerging (Fakfare et al., 2024). These findings underscore the importance of inclusive networks for advancing global research equity. Implications Future research should (1)

support capacity-building for underrepresented regions, (2) expand regional collaboration mechanisms, and (3) foster cross-continental partnerships linking Global North and South.

#### **4. Behavioral Dynamics in TSCM Research across Contexts**

A key novelty of this study is the emergence of a behavioral cluster in TSCM research, accounting for 18% of keyword co-occurrences. Terms such as “responsible tourism,” “environmental ethics,” and “tourist decision-making” highlight growing interest in how behaviors intersect with sustainability, governance, and technology. In developed contexts, pro-environmental preferences, institutional trust, and willingness to pay for sustainable services enable advanced supply chain practices (Han et al., 2024). Conversely, in developing countries, barriers such as digital resistance, short-termism, and cultural aversion hinder adoption (Hoang et al., 2022). Nonetheless, grassroots networks provide resilience (Fakfare et al., 2024). The findings align with the Theory of Planned Behavior (Conner, 2020) and Adaptive Governance theory (Becken & Scott, 2024), underscoring behavioral dynamics as central to TSCM outcomes. Implications to future research should (1) integrate behavioral theory into TSCM models, (2)

explore cross-cultural comparisons of behavioral enablers and barriers, and (3) examine policy tools that align stakeholder attitudes with sustainability goals.

The comparative bibliometric analysis shows that while technology and policy innovations dominate TSCM research in developed countries, behavioral dynamics remain crucial globally. In developed regions, pro-environmental behavior and institutional trust drive sustainable logistics (Cohen et al., 2022). In developing nations, low risk tolerance and limited digital literacy impede implementation, though community-based networks foster resilience (Fakfare et al., 2024). Differences between the Global North and South reflect contrasting ethics, governance, and adaptability. Supported by the Theory of Planned Behavior, Institutional Behavior, and Adaptive Governance, the study concludes that integrating behavioral insights through nudging, empowerment, and digital literacy enhances TSCM sustainability and inclusivity.

#### **Limitations**

To enhance reliability, multiple validation steps were undertaken, including cross-referencing metadata and manually reviewing abstracts (Dans Abelenda et al., 2025). However, the study is limited by its reliance on Scopus, which may exclude

regionally significant but less-cited research. Language bias (English-only) and the exclusion of grey literature may also narrow the scope of findings. Despite these limitations, the adopted methodology offers a rigorous framework for examining the intellectual landscape of TSCM research, including its behavioral dimensions, thereby informing more context-sensitive tourism policy and academic development (Murniati et al., 2021).

### Conclusion

This study contributes to the growing body of knowledge on Tourism Supply Chain Management (TSCM) by integrating a behavioral science perspective into bibliometric and thematic analyses. Findings reveal that while sustainability, risk management, and technology remain core themes, the behaviors of tourists, stakeholders, and policymakers significantly mediate the effectiveness of these structural elements. The integration of supply chain and behavioral perspectives provides a more holistic understanding of how tourism systems function under diverse institutional and cultural conditions.

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