Investigating the Economic Significance of Tourism Destinations: A Bibliometric Analysis of the Travel Cost Method

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Article History	Abstract
Article History Accepted: 22 May 2024 Revised: 28 May 2024 Published: 30 June 2024	This paper presents a comprehensive bibliometric analysis aimed at investigating the efficiency and trajectory of the Travel Cost Method (TCM) in tourism research. Drawing upon a systematic search of scholarly publications using electronic databases such as Web of Science, Scopus, and Google Scholar, we identified a corpus of articles focusing on TCM application, methodology, or evaluation in the context of tourism. Employing VOSviewer software, we conducted a detailed analysis of bibliometric indicators including citation counts, coauthorship networks, keyword co-occurrence, and citation bursts to elucidate patterns, trends, and influential works within the TCM literature in tourism. Our findings highlight the growing importance of TCM as a valuable tool for economic valuation, decision-making, and policy formulation in the tourism industry. The analysis revealed a diverse array of research themes spanning economic valuation, visitor demand analysis, environmental impact assessment, and sustainable tourism management. Methodological advancements, including the integration of stated preference techniques and spatial analysis methods, were identified as key drivers enhancing the accuracy and reliability of economic valuation estimates. The implications of the findings extend beyond academia to inform practice and policy in the tourism sector, offering practical insights for tourism planners, managers, and policymakers seeking to balance economic development with environmental conservation and social welfare objectives. By contributing to a deeper understanding of the role of TCM in shaping tourism research and informing sustainable tourism management
	practices, this study provides valuable insights for stakeholders in academia, industry, and policy-making. Keywords: Tourism, Research, Bibliometric, Analysis, Sustainable.



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INTRODUCTION

Tourism stands as a cornerstone of global economic activity, fostering socio-cultural exchange and economic growth across the world. In the pursuit of sustainable tourism management, methodologies for accurately valuing the diverse array of resources and experiences offered by tourist destinations have garnered substantial attention. Among these methodologies, the Travel Cost Method (TCM) emerges as a particularly potent tool for

assessing the economic value of recreational sites, natural landscapes, and cultural attractions.

Rooted in economic theory, the Travel Cost Method estimates the economic value of non-market goods and services by scrutinizing the expenses incurred by tourists during their visits to destinations. Originally developed within the realm of environmental economics, TCM has found widespread application in tourism research. It serves to evaluate the economic significance of various destinations, gauge visitor demand, and inform policy decisions aimed at sustainable tourism development.

Despite its ubiquity, there exists a compelling need for a comprehensive understanding of the evolution, trends, and applications of the Travel Cost Method in tourism research. Bibliometric analysis offers a systematic approach to address this need by quantitatively examining the scholarly literature. Through this lens, it identifies key research themes, influential publications, and emerging trends within the field. By synthesizing the wealth of knowledge dispersed across scholarly publications, bibliometric analysis provides valuable insights into the trajectory of research, facilitates the identification of research gaps, and guides future research endeavors.

In this paper, we employ bibliometric analysis to explore the efficiency of the Travel Cost Method in tourism research. By systematically analyzing a corpus of scholarly publications, we aim to uncover the evolution of TCM research in tourism, identify influential authors and institutions, map out key research themes, and assess methodological advancements and challenges encountered in its application. Through our analysis, we seek to contribute to a deeper understanding of the role of TCM in shaping tourism research and to inform stakeholders in academia, industry, and policy-making about its implications for sustainable tourism management.

This paper is structured as follows: Section 2 provides an overview of the methodology employed in our bibliometric analysis. Section 3 presents the results of our analysis, including trends, patterns, and key findings. Section 4 discusses the implications of our findings for theory, practice, and policy. Finally, Section 5 concludes the paper by summarizing key insights and suggesting directions for future research.

RESEARCH METHOD

Bibliometric analysis provides a robust framework for quantitatively assessing scholarly literature, enabling the identification of key research trends, influential authors, and emerging topics within a given field (Zupic & Čater, 2015). In this study, we employed a bibliometric approach to delve into the efficiency of the Travel Cost Method (TCM) in tourism research. The methodology encompasses several key steps elucidated below.

 Data Collection: A thorough search of scholarly publications was conducted using electronic databases such as Web of Science, Scopus, and Google Scholar. The search terms encompassed variations of "Travel Cost Method," "TCM," "tourism," "recreational economics," and related keywords. The search was confined to articles

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published in peer-reviewed journals, conference proceedings, and books (Frías-Aceituno et al., 2015) between 2001 and 2019.

- 2. *Data Filtering:* The retrieved publications underwent rigorous screening based on relevance to the topic of TCM in tourism research. This involved scrutinizing titles, abstracts, and keywords to include only those publications directly addressing TCM application, methodology, or evaluation in the context of tourism.
- 3. *Data Analysis*: The filtered publications were subjected to bibliometric analysis using specialized software such as VOSviewer. Bibliometric indicators including citation counts, co-authorship networks, keyword co-occurrence, and citation bursts were examined to identify patterns, trends, and influential works within the TCM literature in tourism (Rafols et al., 2010).
- 4. *Visualization*: The results of the bibliometric analysis were visually represented using network maps, co-authorship diagrams, and citation timelines to provide a comprehensive overview of the TCM research landscape in tourism.
- 5. *Interpretation*: The findings of the bibliometric analysis were interpreted to extract key insights regarding the evolution of TCM research in tourism, prominent research themes, influential authors and institutions, methodological advancements, and emerging research trends.
- 6. *Validation*: To ensure the reliability and validity of the findings, the bibliometric analysis was cross-validated by multiple researchers independently reviewing and interpreting the results. Any discrepancies were resolved through consensus discussion.

By employing this rigorous methodology, we aimed to uncover the underlying dynamics of TCM research in tourism and contribute to a deeper understanding of its applications, challenges, and implications for sustainable tourism management.

RESULT AND DISCUSSION

The bibliometric analysis yielded valuable insights into the efficiency of the Travel Cost Method (TCM) in tourism research. This section presents the key findings regarding the evolution of TCM research, prominent research themes, influential authors and institutions, methodological advancements, and emerging research trends.

- 1. Evolution of TCM Research: The analysis revealed a steady increase in the number of publications on TCM in tourism research over the past 19 years, indicating growing interest and recognition of its importance in assessing the economic value of tourist destinations (Johnson & Judd, 2019).
- 2. Prominent Research Themes: The TCM literature in tourism encompassed diverse research themes, including but not limited to:
 - A. Economic valuation of natural attractions and cultural heritage sites (Loomis & White, 1996).

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- B. Assessment of visitor demand and preferences for recreational activities (Hynes & Hanley, 2015).
- C. Evaluation of the environmental and socio-economic impacts of tourism development (Fletcher & Potts, 2007).
- 3. Influential Authors and Institutions: The analysis identified key authors and institutions contributing significantly to TCM research in tourism. Notable authors such as Smith (2001) and Adamowicz et al., (1994) have made seminal contributions to the methodology and application of TCM in tourism.
- 4. Methodological Advancements: The TCM literature exhibited notable advancements in methodological approaches, including the integration of stated preference techniques such as contingent valuation and choice modeling to enhance the accuracy and reliability of economic valuation estimates (Johnston & Rosenberger, 2010).
- 5. Emerging Research Trends: Emerging research trends in TCM research in tourism include the adoption of spatial analysis techniques to account for spatial heterogeneity in travel costs and destination attributes (Hanley et al., 2017), as well as the application of advanced econometric models to address endogeneity and sample selection biases in travel cost data (Rosenberger & Loomis, 2001).

Overall, the results of the bibliometric analysis provide a comprehensive overview of the efficiency and trajectory of TCM research in tourism, highlighting its significance in informing sustainable tourism management practices and policy decisions.

Discussion

The results of the bibliometric analysis provide valuable insights into the efficiency and implications of the Travel Cost Method (TCM) in tourism research. This section discusses the implications of the findings for theory, practice, and policy, and identifies key avenues for future research.

- 1. Theoretical Implications: The evolution of TCM research in tourism reflects its growing recognition as a valuable tool for economic valuation and decision-making in the tourism industry. The diverse research themes identified, ranging from economic valuation to environmental impact assessment, underscore the multidisciplinary nature of TCM and its relevance to various theoretical frameworks in tourism studies (Crompton, 2001).
- 2. Practical Implications: The methodological advancements identified in the TCM literature, such as the integration of stated preference techniques and spatial analysis methods, offer practical insights for researchers and practitioners involved in tourism planning, management, and development. By enhancing the accuracy and robustness of economic valuation estimates, these advancements facilitate informed decision-making and resource allocation in tourism destinations (Carson et al., 2001).

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- 3. Policy Implications: The findings of the bibliometric analysis have important implications for tourism policy-making and sustainable development. TCM provides policymakers with a systematic approach to assess the economic value of natural and cultural attractions, prioritize conservation efforts, and design visitor management strategies that balance economic benefits with environmental protection and social equity (González-Molina et al., 2018).
- 4. Future Research Directions: While the bibliometric analysis offers valuable insights into the current state of TCM research in tourism, several avenues for future research warrant further investigation. These include:
 - A. Exploring the applicability of TCM in emerging tourism contexts, such as ecotourism, adventure tourism, and cultural heritage tourism.
 - B. Investigating methodological challenges and limitations associated with TCM, including sample selection biases, data quality issues, and external validity concerns.
 - C. Examining the role of TCM in supporting sustainable tourism governance and destination management initiatives, particularly in the context of climate change adaptation and resilience planning.

By addressing these research gaps, future studies can contribute to advancing theoretical understanding, methodological rigor, and practical relevance of TCM in tourism research and practice.

CONCLUSION

The bibliometric analysis conducted in this study provides a comprehensive overview of the efficiency and trajectory of the Travel Cost Method (TCM) in tourism research. By systematically analyzing the scholarly literature, we have identified key trends, themes, methodological advancements, and emerging research directions within the field of TCM in tourism.

The findings highlight the growing importance of TCM as a valuable tool for economic valuation, decision-making, and policy formulation in the tourism industry. From its origins in environmental economics to its widespread application in tourism research, TCM has evolved into a versatile methodology capable of assessing the economic value of diverse tourist destinations, attractions, and recreational activities.

The analysis revealed the multidisciplinary nature of TCM research in tourism, encompassing diverse themes such as economic valuation, visitor demand analysis, environmental impact assessment, and sustainable tourism management. Methodological advancements, including the integration of stated preference techniques and spatial analysis methods, have enhanced the accuracy and reliability of economic valuation estimates, thereby informing more informed decision-making and resource allocation in tourism destinations.

The implications of the findings extend beyond academia to inform practice and policy in the tourism sector. TCM offers practical insights for tourism planners, managers, and

policymakers seeking to balance economic development with environmental conservation and social welfare objectives. By providing a systematic approach to assess the economic value of natural and cultural attractions, TCM supports sustainable tourism governance and destination management initiatives aimed at enhancing visitor experiences while preserving natural and cultural heritage assets.

Looking ahead, future research should continue to explore emerging trends, address methodological challenges, and investigate the applicability of TCM in evolving tourism contexts. By advancing theoretical understanding, methodological rigor, and practical relevance, TCM research can contribute to more sustainable and resilient tourism systems that benefit both present and future generations.

In conclusion, the findings of this study underscore the importance of TCM as a valuable tool for understanding the economic value of tourism resources and guiding sustainable tourism development practices.

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