

Navigating Public Transit: The Nexus of Service Quality and Government Influence

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Abstract

This study aims to perform a comprehensive bibliometric analysis of "public transportation," "service quality," and "government intervention" research. To reach our goal, we used the PRISMA protocol and VOSviewer to find the relevant documents in the Scopus database between 2013 and March 2024. A total of 660 documents were analyzed. The results showed an increasing trend in publications over the years—China was the top country in terms of publication outcome. The analysis identified the most productive institutions, such as the "Ministry of Education of the People's Republic of China" and the "Budapest University of Technology and Economics". The analysis also identified the most productive author, such as Duleba, S. The study also identified the most cited document, "Integrating shared autonomous vehicles in the public transportation system: A supply-side simulation of the first-mile service in Singapore". "Sustainability Switzerland" is the most productive journal in the list. The paper identified the most frequent keywords, such as "public transportation/public transport/public transportation system" is the most frequent keyword with 249 occurrences. This bibliometric analysis provides insights into the current state of research in the relevant field. It also provides insights into the direction of future research in this field.

Keywords: Bibliometric Analysis, Public Transportation, Service Quality, Government Intervention, Scopus Database

Introduction

In the realm of public transportation, service quality, and government intervention are pivotal in shaping the effectiveness and efficiency of transportation systems (Luo & He, 2021; Morton et al., 2016; Obsie et al., 2020). Research has shown that improving perceptions of service quality is essential for increasing the attractiveness and retaining the ridership of public transport systems (Luo & He, 2021). Understanding the service quality of public transportation based on users' perceptions is vital for local governments and transit service providers in planning efforts to enhance system performance (Obsie et al., 2020). Enhancing the quality of service on public transport is often positioned as a strategy to attract passengers towards using bus transit (Morton et al., 2016). Moreover, assessing the quality of public

transport means enables the improvement of their quality and ultimately increases the number of users (Ibrahim et al., 2020). Service quality is crucial for meeting passenger needs, reducing congestion, and enhancing urban quality. Studies have shown that government interventions, such as fiscal expenditure efficiency (Zou, 2022), policies supporting the service sector (Zhunussova & Dulambayeva, 2019), and subsidies for public transport (Rabie & Burger, 2019), can significantly impact public transportation usage. Improving service quality has been linked to a higher acceptance of public transport, thereby promoting a shift from private to public modes of transportation (Patil et al., 2022).

Government intervention plays a crucial role in ensuring the provision of high-quality public transportation services. Studies have found that the government's role is crucial in enhancing the service quality of public transportation (Prabowo et al., 2019). Governments have also suggested prioritizing the development of public transportation as a major national policy to actively encourage the development of intelligent public transportation systems (Xu et al., 2023). Furthermore, recent laws aim to determine a new division of responsibilities within public administration systems for the planning, implementation, and financing of public transport, emphasizing the importance of government involvement in transportation systems (Augustyn, 2020). Furthermore, assistance from the central government is essential for supporting public transport services and ensuring equality in service provision (Li & Deng, 2016). Various government interventions, such as educational initiatives and infrastructure enhancements, have been identified as key factors influencing the acceptance and utilization of public transport (Patil et al., 2022). Soft measures like information interventions and service improvements have also been identified as effective strategies for influencing mode choice and travel perception in public transport (Fan & Chen, 2020). State intervention in transportation has historically aimed at addressing market failures and improving service accessibility (Yobo, 2018). Furthermore, government efforts to develop public transport not only aim to enhance the quality of life and reduce congestion but also play a role in economic development (Peng et al., 2019).

Additionally, government measures, such as implementing physical distancing policies during pandemics, have implications for public transport operations and passenger safety (Islam et al., 2020). However, factors like the COVID-19 pandemic have led to a decline in public transport ridership due to safety concerns (Park & Kim, 2021). Nevertheless, government measures, such as physical distancing policies, have been studied for their implications on public transport usage (Thomas et al., 2022). Government interventions can influence public opinion and decision-making regarding public transport. Studies have shown that government interventions, including prevention and control measures, can impact the public's adoption of protective actions and recommendations (Duan et al., 2020). Moreover, the intensity of government intervention can significantly affect the diffusion of public opinion, underscoring the interconnectedness between government actions and public perceptions (Hou et al., 2022).

Aware of the growing interest in neuromarketing, several studies analyzing scientific production on public transportation and service quality have already been published. However, no previous research was performed to map the ("public transportation") AND ("service quality" OR "government intervention") research production in the Scopus database. Therefore, this study differs from other review papers concentrating on the global academic research trends of studies between 2013 and March 2024 on the Scopus database. To this end, this study tries to fill the gap in the scientific literature. This study aims to provide a comprehensive bibliometric analysis of "public transportation" AND "service quality" OR

"government intervention," identifying the most prolific countries, academic institutions, authors, and journals. In addition, the articles with the highest numbers of citations, the co-citation network of authors and papers, and the hot keywords with occurrences will be determined. The main contributions and steps of this bibliometric analysis study are summarized and listed as follows:

- (1) To identify the growth of annual scientific publications based on journals' outputs.
- (2) To identify the overall performance, such as productive countries, institutions, journals, and authors.
- (3) To identify the most prominent themes/keywords in the ("public transportation") AND ("service quality" OR "government intervention").
- (4) To identify the most-cited articles to be considered in future studies.

The structure of this research is as follows: Section 2 outlines the methodology employed in this study. Section 3 is concerned with a bibliometric analysis of pertinent literature. Section 4 discusses the results of the paper. Section 5 provides concise conclusions. Finally, Section 6 presents the study's limitations and potential future directions.

Methodology

The research used the PRISMA protocol to find relevant papers and conducted a bibliometric analysis to determine global research trends in ("public transportation") AND ("service quality" OR "government intervention"). The PRISMA has been used in several studies (Ahmed et al., 2023b; Ahmed et al., 2022; Alsharif et al., 2022). The study looked at the most productive countries and academic institutions, leading journals in the field, prolific authors, most-cited papers, and occurrences of keywords to assess improvements in publications. This study aims to provide an overview of the current trends to fill the existing gap. Accordingly, four research questions were established to justify the structure and to gain the full view of the existing scientific research in the analyzed domain:

- (1) Is there and what is the annual growth of scientific publications in the field?
- (2) What are the most productive a) countries; b) academic institutions; c) journals; and d) authors?
- (3) What are the most prominent keywords in selected articles?
- (4) What are the most-cited articles in the field?

Endeavoring to answer the research questions, the current study starts by extracting articles and review articles from the Scopus database in March 2024. In addition, this study has followed the instruction of Halsharif et al. (2020) to present a thorough bibliometric analysis detecting and listing the most productive countries, academic institutions, journals, and authors; later on, a brief description of each analyzed parameter is provided. The VOSviewer software was utilized to create visualization maps, which simplifies bibliometric research across various fields (see (Halsharif et al., 2022; Pileliené et al., 2022)). In particular, VOSviewer has been used in several studies related to neuromarketing (see Ahmed et al. (2021); (Alsharif et al., 2023; Alsharif et al., 2021)) to gain a comprehensive understanding of the development of ("public transportation") AND ("service quality" OR "government intervention") research.

The procedure used in the study enabled the identification of 660 documents that were published between 2013 and March 2024. The study's authors focused specifically on documents, including articles and reviews between 2013 and March 2024 due to the significant increase in the number of publications during this period. Additionally, only papers written in English were included, as it was the most typically used language in the field. The

study aimed to identify as many relevant papers as possible to explore and analyze the global academic trends (e.g., productive countries, institutions, authors, and other relevant factors) related to the ("public transportation") AND ("service quality" OR "government intervention") research. The selection process for the articles is shown in Figure 1.

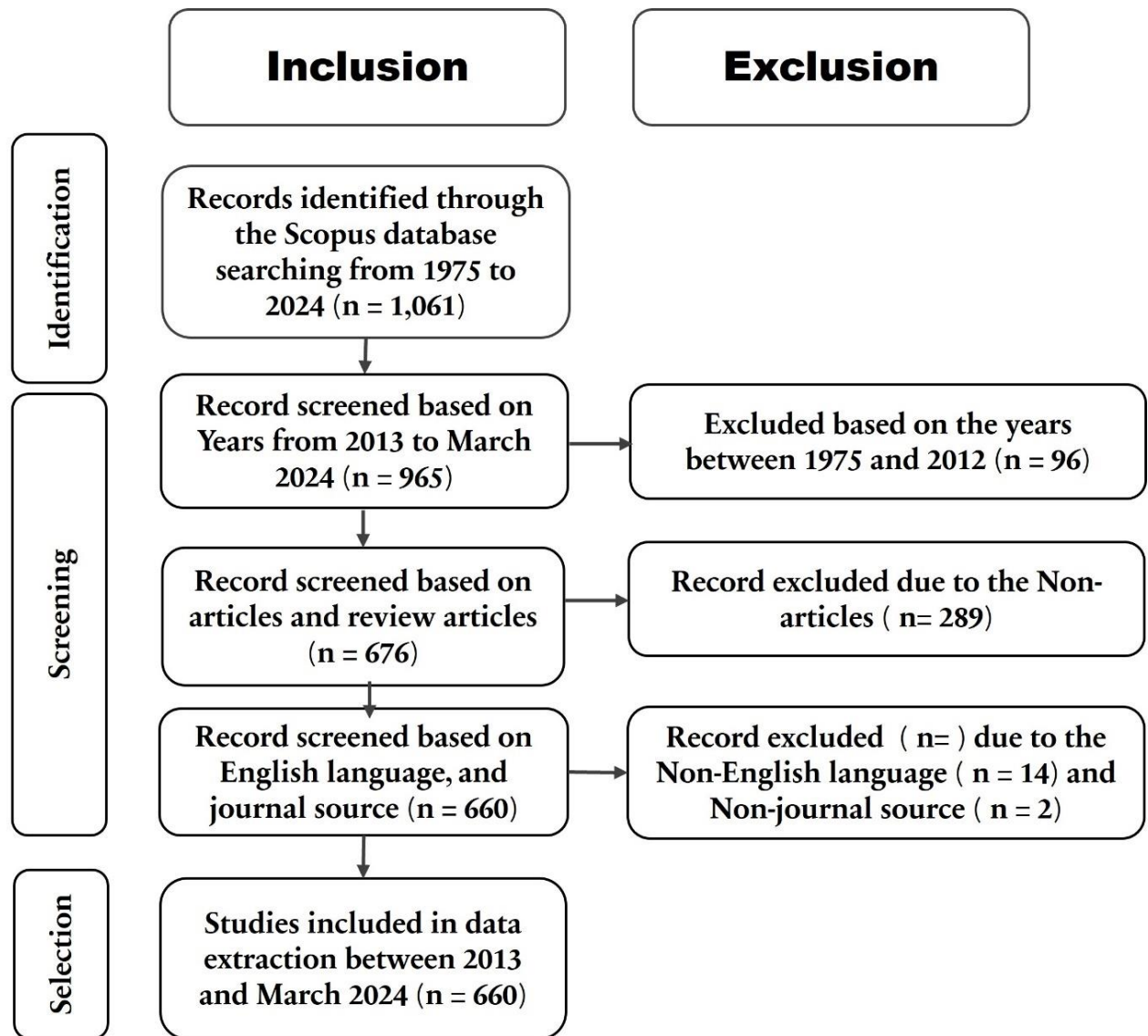


Figure 1. PRISMA process for selecting papers.

Results

As a result of the procedure, 660 academic journal papers in the ("public transportation") AND ("service quality" OR "government intervention") research were identified. The analysis revealed a significant growth in publications, with over 70% of the total papers being published between 2019 and March 2024. Figure 2 illustrates the annual publications and citations of publications, with 20 documents being published in 2013 and the number increasing almost six times in 2023 before slightly decreasing to almost twice in March 2024. The increasing interest among scholars in the ("public transportation") AND ("service quality" OR "government intervention") research has led to a rise in the number of publications and citations.

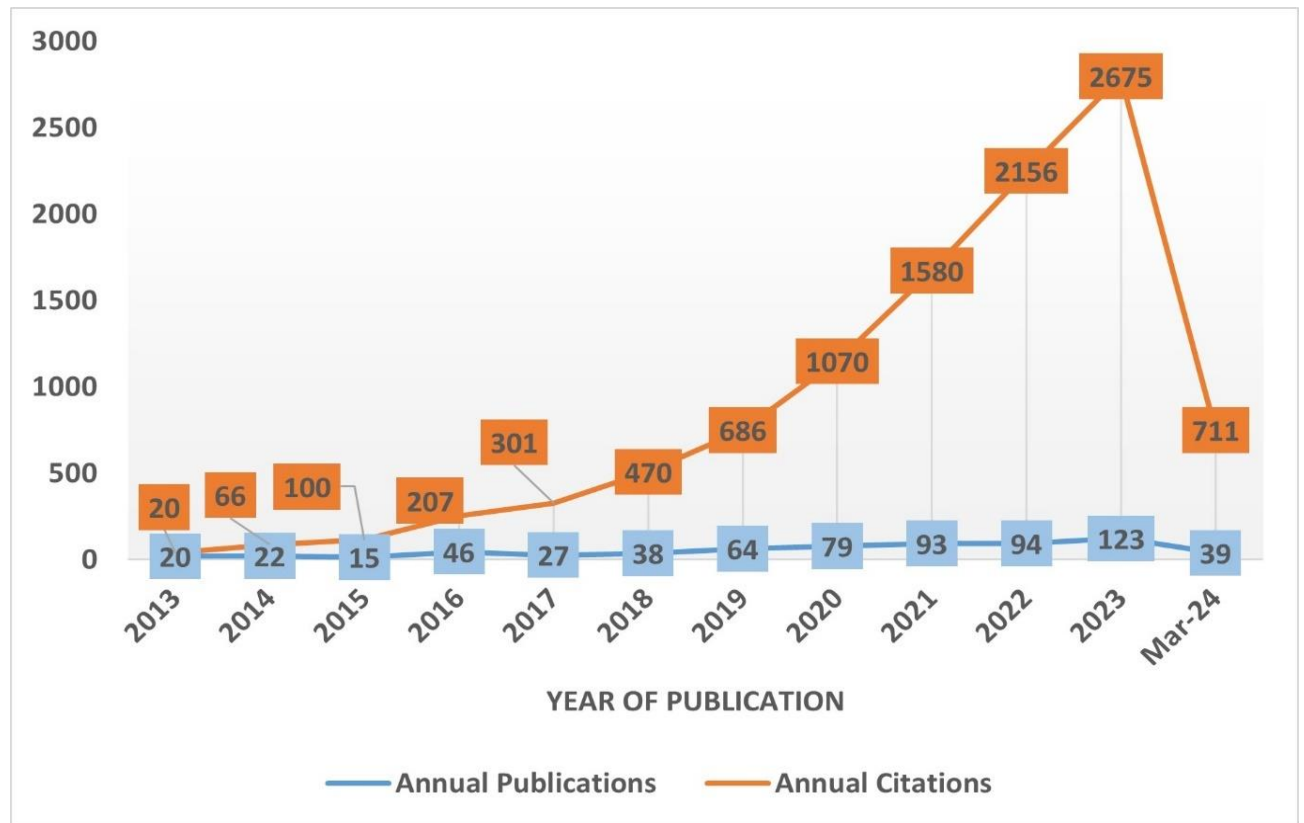


Figure 2. The annual publications and citations between 2013 and March 2024.

A bibliometric analysis

Leading countries and institutions

The analysis revealed that the countries that produced at least 20 documents could be classified into three categories based on their productivity levels. The 1st category consists of one country that produced more than 120 documents, the 2nd category consists of five countries that published between 90 and 40 documents, and the 3rd category consists of seven countries that produced between 30 and 20 documents. As depicted in Table 1, China, the USA, India, Turkey, Malaysia, and Indonesia have collectively contributed to more than half of the total documents (389 documents) since 2013. Specifically, China has been the most productive country, with 123 documents and the highest total citation count (2089 TCs). The Ministry of Education of the People's Republic of China, an institution in China, has published 16 documents with 395 total citations (TCs). Although Turkey has published 45 documents, its institution, Yıldız Teknik Üniversitesi, has published 13 documents with the highest-cited documents (574 TCs). Additionally, Hungary has published 20 documents with 416 TCs, and its institution, the Budapest University of Technology and Economics, has published the second-highest-cited documents with 389 TCs. At the bottom of the list, Spain has contributed to the fourth-highest-cited documents with 537 TCs, and its institution, Universidad de Granada, has published four documents with the fourth-highest-cited documents (289 TCs). Figure 3 illustrates the map of the countries that contributed to the ("public transportation") AND ("service quality" OR "government intervention") research.

Table 1

The most productive countries and academic institutions with a minimum of 20 publications of the country

#	Country	TPs	TCs	The most prolific academic institutions	TPs	TCs
Category 1						
1	China	123	2089	Ministry of Education of the People's Republic of China	16	395
Category 2						
2	USA	87	2272	University of California	7	284
3	India	51	493	Indian Institute of Technology Roorkee	5	158
4	Turkey	45	1144	Yıldız Teknik Üniversitesi	13	574
5	Malaysia	43	438	Universiti Kebangsaan Malaysia	12	253
6	Indonesia	40	167	Universitas Indonesia	6	4
Category 3						
7	Iran	26	317	University of Tehran	6	29
8	Italy	22	390	Università degli Studi Roma Tre	3	138
9	Canada	21	383	McMaster University	4	20
10	UK	21	257	University College London	4	83
11	Hungary	20	416	Budapest University of Technology and Economics	16	389
12	Japan	20	231	The University of Tokyo	5	37
13	Spain	20	537	Universidad de Granada	4	289

TPs; total publications, TCs; total citations

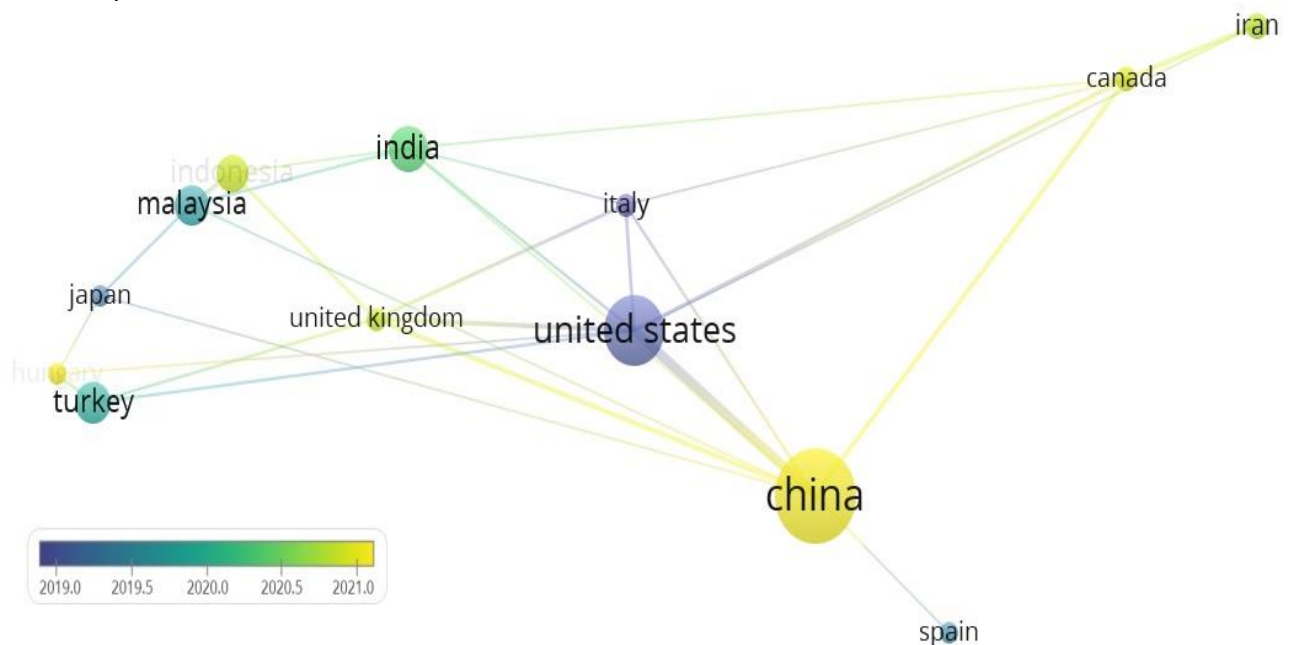


Figure 3. The snapshot of the most productive countries with a minimum of 20 publications. Most productive authors

Table 2 displays the most prolific authors in the ("public transportation") AND ("service quality" OR "government intervention") research, with 20 documents at least. Fifteen authors from ten different countries. One author has produced eight documents, two authors have published seven documents each, six authors have published five documents, and the rest of the authors (6 authors) have released four documents. Duleba, S. (affiliated with Budapest

University of Technology and Economics, Hungary) is the most productive author, with eight documents and 208 TCs. This is closely followed by two authors Borhan, M.N. (affiliated with Universiti Kebangsaan Malaysia, Malaysia) and Moslem, S. (affiliated with University College Dublin, Ireland) have produced seven documents each, with 219 and 194 TCs, consecutively. Additionally, six authors, such as Aydin, N., Carrel, A., Deveci, M., Gokasar, I., Mikhaylov, A.S., and Mikhaylova, A.A. have produced five documents, respectively. Although Aydin, N. (affiliated with Yıldız Teknik Üniversitesi, Turkey) has published five documents, its documents have the highest number of citations (244 TCs). Therefore, Aydin, N. is the most influential author in the relevant field. The rest of the authors have produced four documents each.

Table 2

The most productive authors with a minimum of four documents.

#	Author's name	TPs	TCs	Affiliation	SC ID	Country
1	Duleba, S.	8	208	Budapest University of Technology and Economics	55365486100	Hungary
2	Borhan, M.N.	7	219	Universiti Kebangsaan Malaysia	23033010200	Malaysia
3	Moslem, S.	7	194	University College Dublin	57203017976	Ireland
4	Aydin, N.	5	244	Yıldız Teknik Üniversitesi	56405234700	Turkey
5	Carrel, A.	5	157	College of Engineering, Columbus	55839723800	USA
6	Deveci, M.	5	123	Milli Savunma Üniversitesi	55734383000	Turkey
7	Gokasar, I.	5	123	Boğaziçi Üniversitesi	56024882100	Turkey
8	Mikhaylov, A.S.	5	23	Immanuel Kant Baltic Federal University	57214075325	Russian Federation
9	Mikhaylova, A.A.	5	23	Immanuel Kant Baltic Federal University	57207943693	Russian Federation
10	Carrel, A.L.	4	37	College of Engineering	55839723800	USA
11	Jomnonkwao, S.	4	22	Suranaree University of Technology	36982850800	Thailand
12	Ong, A.K.S.	4	17	Mapúa University	57221675282	Philippines
13	Parida, M.	4	23	Central Road Research Institute	8963649200	India
14	Walker, J.L.	4	95	The University of Oklahoma	7405586662	USA
15	Wicaksono, A.	4	7	Brawijaya University	6506737499	Indonesia

SC ID; Scopus ID

Leading journals

Table 3 shows the journals that have published at least five documents in the ("public transportation") AND ("service quality" OR "government intervention") research. One journal has published 49 documents, four journals have published between 15-35 documents, and the remaining journals have published between 5-15 documents. Sustainability Switzerland (CiteScore 6.8) is the most productive journal with 49 documents and published the third-highest-cited documents. This was followed by the "Transportation Research Record" with 33 TP and 331 TCs. Although the "Transportation Research Part A Policy And Practice" journal has produced 31 TP, its published documents with the highest number of citations (1180 TCs). It has been inferred that the "Transportation Research Part A Policy And Practice" journal is the most influential journal in the relevant field. The 2nd influential journal is the "Transport Policy," with 804 TCs. The least influential journal is the "Transport," with 42 TCs. In the end, the least productive journal is "Transportation," with five documents and 45 TCs.

Table 3

The most productive journals with a minimum of five published documents.

#	Source/Journal	TPs	TCs	CS 2023	Publisher
1	Sustainability Switzerland	49	383	6.8	MDPI
2	Transportation Research Record	33	331	3.1	US National Research Council
3	Transportation Research Part A Policy And Practice	31	1180	13.1	Elsevier
4	Case Studies On Transport Policy	23	314	5.0	Elsevier
5	Transport Policy	19	804	11.9	Elsevier
6	IEEE Transactions On Intelligent Transportation Systems	13	122	14.3	IEEE
7	Public Transport	13	150	5.3	Springer Nature
8	Journal Of Public Transportation	12	87	6.3	Elsevier
9	Journal Of Advanced Transportation	11	156	4.9	Hindawi
10	IEEE Access	9	50	9.5	IEEE
11	International Journal Of Sustainable Transportation	8	225	8.8	Taylor & Francis
12	Transportation Research Part C Emerging Technologies	8	322	15.4	Elsevier
13	Applied Sciences Switzerland	7	61	5.2	MDPI
14	Planning Malaysia	7	14	1.4	Malaysian Institute Of Planners
15	Travel Behaviour And Society	7	39	9.6	Elsevier
16	International Journal Of Environmental Research And Public Health	6	86	7.2	MDPI
17	Journal Of Transport And Health	6	67	6.1	Elsevier
18	Transport	6	42	3.4	Vilnius Gediminas Technical University
19	Transportation Research Part D Transport And Environment	5	141	14.3	Elsevier
20	Transportation	5	117	10.6	Springer Nature
21	Transportation Research Interdisciplinary Perspectives	5	45	12.8	Elsevier

CS; CiteScore, MDPI; Multidisciplinary Digital Publishing Institute, IEEE; Institute of Electrical and Electronics Engineers

Keywords Analysis

In bibliometric analysis, keyword occurrences provide a quantitative approach to express the strength of links between paired keywords, with a larger number indicating a stronger link (Ahmed et al., 2023a; Halsharif et al., 2023a; Halsharif et al., 2023b). This analysis provides a comprehensive explanation of the article's content. The link strength between keywords reflects their frequency in the article, while the total number of links represents the overall number of keyword appearances in the article. The current paper conducted an author

keywords co-occurrence analysis using VOSviewer software, which involved 32 author keywords with at least five occurrences. This method is important for presenting general claims about the article's content and assessing trend themes in a particular subject, such as public transportation, service quality, and so forth. Figure 4 depicts the most frequently authors' keywords.

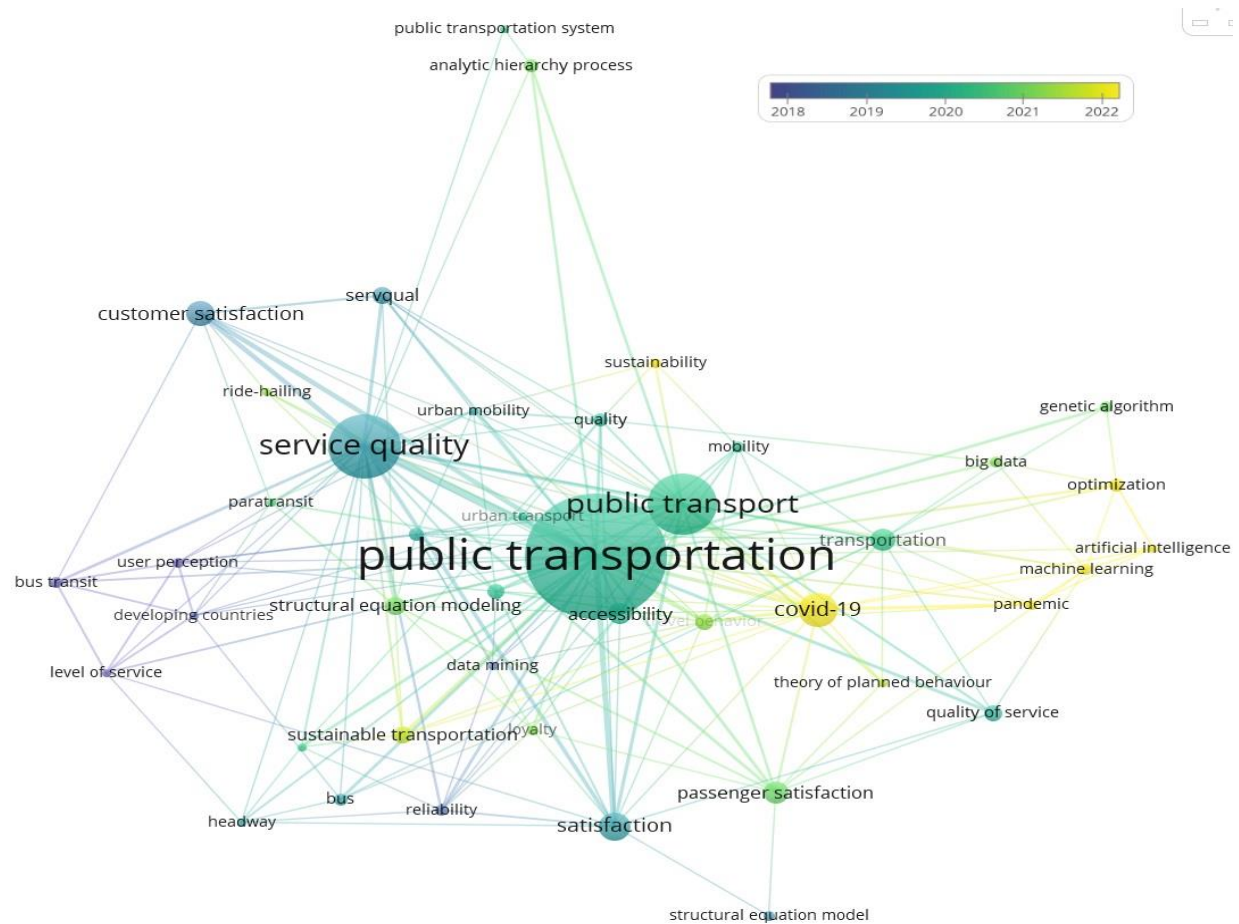


Figure 4. Map of authors' keywords with a minimum of five occurrences.

Table 4 provides an overview of the most frequently used author's keywords that have appeared at least five times in the data. The terms "Public transportation/ Public transport/ Public transportation system/" have the highest frequency with 249 instances and 226 total link strengths (TLS), followed by the terms "Service quality/ Serqual/ Quality/ Quality of service/ Level of service," with 109 frequencies and 163 TLS.

Table 4

Top keywords by a minimum of five occurrences.

#	Keyword	Occ	TLS	#	Keyword	Occ	TLS
1	Public transportation/ Public transport/ Public transportation system	249	226	17	Bus	8	9
2	Service quality/ Serqual/ Quality/ Quality of service/ Level of service	109	163	18	Reliability	7	15
3	Covid-19/pandemic	37	53	19	Machine learning	7	11
4	Customer satisfaction/ Passanger satisfaction	37	57	20	Mobility	7	9
5				21	Big data	7	7
6	Satisfaction	24	40	22	Genetic algorithm	7	6
7	Structural equation modelling	19	16	23	User perception	6	13
8	Transportation	17	20	24	Loyalty	6	8
9	Accessibility	16	15	25	Sustainability	6	6
10	Bus transit/ Bus rapid transit	12	23	26	Developing countries	5	12
11	Sustainable transportation	12	12	27	Headway	5	8
12	Travel behavior	11	21	28	Paratransit	5	8
13	Urban mobility/ Urban transport	10	20	29	Artificial intelligence	5	7
14	Analytic hierarchy process	9	11	30	Data mining	5	7
15	Optimization	9	10	31	Theory of planned behavior	5	6
16	Public transit	9	10	32	Ride-hailing	5	5

Occ; occurrences, TLS; total link strengths

Citations Analysis

Analyzing citations is crucial for gaining insights into global trends in a specific research field (Halsharif & Pilelienè, 2023), such as public transportation, as it provides valuable information about the most frequently cited documents between 2013 and March 2024. This information can be used by future researchers or practitioners to identify impactful articles. In this study, we analyzed a total of 660 documents and identified the most frequently cited documents, with over 100 TCs. Table 5 shows that one document had over 200 TCs, and the document titled "Integrating shared autonomous vehicle in public transportation system: A supply-side simulation of the first-mile service in Singapore," was published by the "Transportation Research Part A: Policy and Practice" journal, was the most cited article with 215 TCs. The 2nd most cited document was "Passenger satisfaction evaluation model for Urban rail transit: A structural equation modeling based on partial least squares," published by the "Transport Policy" journal, with 192 TCs. Furthermore, four documents had between 140-180 TCs, while ten documents had citations between 100-139 TCs, with the least cited document being "A multiattribute customer satisfaction evaluation approach for rail transit network: A real case study for Istanbul, Turkey," with 102 TCs.

Table 5

The top cited document with a minimum of 100 TCs.

#	Paper	Year	Journal	TCs
1	Integrating shared autonomous vehicle in public transportation system: A supply-side simulation of the first-mile service in Singapore	2018	<i>Transportation Research Part A: Policy and Practice</i>	215
2	Passenger satisfaction evaluation model for Urban rail transit: A structural equation modeling based on partial least squares	2016	<i>Transport Policy</i>	192
3	A hub location inventory model for bicycle sharing system design: Formulation and solution	2013	<i>Computers and Industrial Engineering</i>	180
4	An integrated novel interval type-2 fuzzy MCDM method to improve customer satisfaction in public transportation for Istanbul	2013	<i>Transportation Research Part E: Logistics and Transportation Review</i>	167
5	Perceived accessibility, mobility, and connectivity of public transportation systems	2015	<i>Transportation Research Part A: Policy and Practice</i>	148
6	Online-review analysis based large-scale group decision-making for determining passenger demands and evaluating passenger satisfaction: Case study of high-speed rail system in China	2021	<i>Information Fusion</i>	147
7	Efficient transit network design and frequencies setting multi-objective optimization by alternating objective genetic algorithm	2015	<i>Transportation Research Part B: Methodological</i>	139
8	Impact of COVID-19: A radical modal shift from public to private transport mode	2021	<i>Transport Policy</i>	135
9	The State-of-the-Art Review on Applications of Intrusive Sensing, Image Processing Techniques, and Machine Learning Methods in Pavement Monitoring and Analysis	2021	<i>Engineering</i>	129
10	Public transport accessibility: A literature review	2019	<i>Periodica Polytechnica Transportation Engineering</i>	126
11	Does the service quality of urban public transport enhance sustainable mobility?	2018	<i>Journal of Cleaner Production</i>	124
12	Multistage large-scale charging station planning for electric buses considering transportation network and power grid	2019	<i>Transportation Research Part C: Emerging Technologies</i>	123

13	To use or not to use, that is the question: Analysis of the determining factors for using NFC mobile payment systems in public transportation	2019	<i>Technological Forecasting and Social Change</i>	115
14	Equity in transport: The distribution of transit access and connectivity among affordable housing units	2013	<i>Transport Policy</i>	112
15	An integrated MCDM approach to evaluate public transportation systems in Tehran	2017	<i>Transportation Research Part A: Policy and Practice</i>	107
16	A multiattribute customer satisfaction evaluation approach for rail transit network: A real case study for Istanbul, Turkey	2014	<i>Transport Policy</i>	102

Discussion

Over time, there has been an increasing interest in ("public transportation") AND ("service quality" OR "government intervention") research. In line with this, the current study employed the PRISMA framework to identify pertinent articles and review articles in the relevant field. Ultimately, a total of 660 documents were extracted from the Scopus database using the established procedures. Additionally, bibliometric analysis was employed to reveal global academic research trends in the relevant field, which facilitated the identification of the most productive countries, academic institutions, authors, journals, and trend citations for future studies, ultimately saving researchers' time. Specifically, the analysis revealed China as the most productive country, with 123 documents, followed by the USA and India, with 87 and 51 TCs, respectively.

Despite being ranked fourth on the list, the Yıldız Teknik Üniversitesi, a Turkish institute, published 13 documents with the highest number of citations. Furthermore, Duleba, S. was found to be the most productive author, having published eight documents with 208 TCs. This was followed by Borhan, M.N., and Moslem, who published seven documents with 219 and 194 TCs, respectively. Analysis of the most prolific journals in the relevant field revealed that while "Sustainability Switzerland" journal was the most productive journal, publishing 49 documents with 383 TCs, the "Transportation Research Part A Policy And Practice" journal had the highest citations count with 31 documents and 1180 TCs. This suggests that the number of publications does not necessarily reflect the number of citations. The study titled "Integrating shared autonomous vehicle in public transportation system: A supply-side simulation of the first-mile service in Singapore," was identified as the most cited document, with 215 TCs, published in the "Transportation Research Part A: Policy and Practice" journal by 2018. The second most cited document was "Passenger satisfaction evaluation model for Urban rail transit: A structural equation modeling based on partial least squares," published by "Transport Policy" journal in 2016, with 192 TCs.

According to the most frequent authors' keywords, the analysis found that "Public transportation/ Public transport/ Public transportation system/" have the highest frequency with 249 instances and 226 total-link-strengths (TLS), followed by the terms "Service quality/ Serqual/ Quality/ Quality of service/ Level of service," with 109 frequencies and 163 TLS.

In summary, it has been observed that African and South American countries have not made significant contributions to the relevant field. Consequently, this paper calls upon scholars and researchers from these countries to investigate global academic trends in the

relevant studies, as this can offer a comprehensive understanding of studies that can be explored in future research.

Conclusion

The relationship between service quality and government intervention in public transportation is complex and multifaceted. Ensuring high service quality is essential for meeting passenger needs and enhancing urban mobility, while government interventions are critical in shaping policies, infrastructure, and public perceptions related to public transport systems. By comprehending and optimizing the interplay between service quality and government intervention, public transportation systems can be improved to better serve communities and foster sustainable urban development. The growing interest in using these tools in marketing research has led to an increase in academic publications, from 20 documents in 2013 to 123 documents in 2023, with a slight decline to 39 documents in March 2024. This study aims to present a comprehensive overview of the global academic trends, including the leading country, top academic institutions, most prolific authors, most-cited paper, top journals, and a number of citations, with a focus on studies that have studied the ("public transportation") AND ("service quality" OR "government intervention") research.

The study analyzed a total of 660 documents from the ("public transportation") AND ("service quality" OR "government intervention") research. The results showed that developed and some developing countries had the highest number of published documents, with China leading at 123 documents, followed by The USA (87 documents), India (51 documents), and Turkey (45 documents). Most authors produced fewer than six documents, but Duleba, S., Borhan, M.N., and Moslem, S. are the most prolific authors, with eight, seven, and seven documents, respectively. The "Sustainability Switzerland" journal had the most publications, with 49 documents and 383 TCs, while the "Transportation Research Part A Policy And Practice" journal had 31 TPs and 1180 TCs. The study found that the number of publications did not always reflect the number of citations. The paper with the highest number of citations was "Integrating shared autonomous vehicle in public transportation system: A supply-side simulation of the first-mile service in Singapore," with a total of 215 citations, followed by "Passenger satisfaction evaluation model for Urban rail transit: A structural equation modeling based on partial least squares," with 192 TCs.

Limitations and Future Directions

The aim of the paper was to minimize methodological restrictions in the study, but some restrictions were still encountered, and suggestions were made for future research. The study focused solely on articles and reviews published in English language journals between 2013 and March 2024, which were indexed in the Scopus database. This approach, however, ignored other documents such as conference papers, book chapters, short surveys, editorials, books, and notes, which could lead to bias in the study. To address this limitation, the authors recommend that scholars include all types of documents to increase reliability and reduce the limitations and bias. Overall, the paper provides a comprehensive overview of the global academic trends of the ("public transportation") AND ("service quality" OR "government intervention") research between 2013 and March 2024, based on the analyzed publications.

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