



Review

A Bibliometric Analysis of Museum Visitors' Experiences Research

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Abstract: This study identified research trends, intellectual connections, and social connections in the field of museum visitor experiences. It also outlines future research to understand existing scientific research and shed light on key areas of research. The study reviewed 407 articles published in peer-reviewed journal articles, which were generated from the Scopus database. Bibliometric analysis software VOSviewer and Harzing POP were used. Citation analysis, co-authorship analysis, bibliometric coupling, and co-occurrence analysis have been employed. Findings highlight the need for increased representation from scholars in the Global South to ensure a more inclusive and comprehensive understanding of museum visitors' experiences worldwide. Nine key research areas for future studies were identified: sustainability, mixed reality, social media, accessibility, emotion, co-creation, interpretation, exhibition, and museum visitors' experience and engagement. The results benefit stakeholders and researchers by allowing them to stay informed about the latest developments and breakthroughs in the global academic landscape and visitors' experiences in museums.

Keywords: bibliometric analysis; future research; intellectual connection; museum visitors' experiences; performance analysis; social connection



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1. Introduction

The concept of 'experience' has been a subject of scholarly interest for a long time, tracing its origins to philosophical inquiries, notably in Immanuel Kant's seminal work "Critique of Pure Reason" [1]. Over time, the study of experiences has permeated different disciplines, particularly marketing, business studies, and social science, including tourism and hospitality. In the context of museums, empirical research has increasingly focused on two main themes: the roles and values of museums as centers of conservation of heritage [2–7] and the nature of visitors' experiences within these cultural institutions [8–12].

The study of visitors' museum experiences is associated with the visitors' interests, ranging from educational pursuits to leisure-seeking and inspiration [13]. While some visitors seek knowledge acquisition and learning opportunities [14–16], others pursue relaxation and entertainment. Another type of visitor is drawn to the heritage collections in the museum with special interests in designs, aesthetics, or other cultural details [17]. In this sense, museums facilitate a blend of educational enjoyment and allow visitors to derive personalized meanings from their encounters [18,19].

To study museums effectively, it is important to research visitors' experiences, including their interests, movements, behaviors, and motivations [20–22]. Visitor experience encompasses various dimensions: physical aspects, such as movements and the museum's layout; sensory experiences, including perceptions and responses to objects and surroundings; restorative experiences, where visitors seek escapism, relaxation, and comfort. It also includes introspective experiences like imagination and reflection, transformative experiences involving personal growth and creativity, and hedonic experiences characterized

by enjoyment and amusement. Emotional experiences involve nostalgia, surprise, and joy, while relational experiences stem from social interactions and a sense of belonging. Spiritual experiences involve connections to the sacred, and cognitive experiences include learning, discovery, and exploration [16,23].

In the 21st century, museum studies are shifting from a focus on heritage preservation to prioritizing visitors' experiences [24,25]. More recently, the development of augmented reality and virtual reality in the meta-verse world has further changed the dynamics of museum visitors' experiences [26]. Thus, museum experiences in recent times offer multi-sense experiences and engagement through multiple channels [27,28]. Consequently, the "sensory turn" in both museum studies and museum practice has emerged, emphasizing the importance of multi-sensory visiting experiences via the visual, auditory, olfactory, tactile, and other senses [29].

Conducting bibliometric analysis in the tourism and hospitality industries has become very common in understanding the social and intellectual aspects within a particular field of research, identifying a research agenda, and assessing the academic growth of research subjects [30–32]. A review paper using bibliometric analysis has several advantages [33]. First, the nature of museum visitor experience studies benefits from qualitative and quantitative approaches, mapping research trends, tracking the evolution of research themes, and helping to understand the field's growth trajectory by analyzing large datasets [33]. Second, bibliometric analysis identifies and analyzes key influential works, highlights foundational papers, and shows collaborative patterns in museum visitor experience studies [34]. Third, it identifies under-researched areas and emerging trends, suggesting opportunities for future study [35]. Lastly, it informs museum management and policymakers about the current state of research, guiding decisions on funding, resource allocation, and strategic priorities [36]. Considering these advantages, previous researchers have conducted bibliometric papers on topics such as digitalizing museums [37], museum education [38], museum exhibitions research trends [39], oleotourism and museology [40], museums and art therapy [41], technology adoption [42], immersive technology [43], and architectural aspects of the museum [44]. However, a comprehensive analysis of museum visitors' experiences is lacking. Hence, this study addresses the following research questions to fill the research gap that existed in the study of museum visitor experience studies:

RQ1. How has the museum visitors' experience research evolved?

This question addresses the contemporary trajectory of museum visitor experience research in terms of publication trends, journal diversity, geographical and institutional distribution, and overall key contributions. It seeks to provide insights into the development of the field over time.

RQ2. What are the intellectual and social connections among different works in the study of the museum visitor experience?

This question addresses identifying the most influential authors, key papers, research trends, thematic patterns, and the evolution of ideas, reflecting shifts in research interests and underrepresented areas in academic literature in the study of museum visitor studies. By doing so, it can reveal the underlying structure of the field and highlight important contributions.

RQ3. What key research remains to be conducted to inform further and advance the field of museum visitors' experiences, both theoretically and in practice?

This question looks towards the future of museum visitor experience research, identifying potential areas for further investigation. It seeks to provide insights into the gaps in knowledge and research directions that can inform both theoretical advancements and practical applications in the field.

Overall, this study provides a comprehensive overview of the influence and scope of research in the field of museum visitor experiences. It identifies publication trends, patterns of collaboration, and an emerging research agenda, serving as a vital resource for researchers and practitioners. From a theoretical perspective, as indicated by [45] This analysis contributes to clustering knowledge (in the bibliometric coupling, co-occurrence,

and co-citation analysis), the evolutionary development of the field of museum visitor experiences studies, and identifying knowledge gaps and research directions

2. Methodology

In this section, we detail the method used, i.e., bibliometric analysis, the data extraction mechanism with justifications, and the software used for analysis. That is, VOSviewer version 1.6.19 and Harzing POP 8.9.4538.8589 (Publish or Perish), and the validity and trustworthiness of the study.

2.1. Bibliometric Analysis

Bibliometrics is a methodology used to assess and track the advancement of specific disciplines [46]. It entails compiling information from published studies, such as citations, author affiliations, keywords, discussed themes, and techniques [47]. According to [48], bibliometrics serves as a valuable tool for comprehensively analyzing the progress of disciplines. Bibliometric analysis is used to “present the state of the intellectual structure and emerging trends of a research topic or field” [33] (p. 287). At the same time, bibliometrics is used to analyze a broad scope and a large dataset for manual review, preferably more than 300 papers [33] (p. 292). It can examine the intellectual, social, and conceptual structure of academic fields, offering insights into their evolution, the networks of researchers, and the key themes shaping scholarly discourse [49]. While traditionally quantitative, bibliometric analysis is increasingly applied in qualitative contexts across various disciplines [50]. For this paper, both qualitative (e.g., nature of collaboration based on co-authorship analysis and interpreting the meaning of co-occurring terms, identifying emerging themes or trends within the literature by using co-occurrence) and quantitative (e.g., bibliometric coupling analysis) bibliometric analysis is applied. Thus, researchers tried to extract qualitative insights by investigating deeper into the context, relationships, and meanings behind the quantitative data to obtain a more comprehensive understanding of the research landscape in the museum visitor experience.

2.2. Data Extraction

For this bibliometric analysis paper, we adhered to a structured three-step process for data extraction: (1) data generation from the Scopus database, (2) screening, and (3) data export for final analysis.

In the initial data generation step, we utilized the Scopus database, renowned as one of the largest and most comprehensive repositories of peer-reviewed scientific publications [51]. The search process began by carefully crafting a set of keywords to ensure a broad yet relevant capture of literature on museum visitor experiences. The keywords used were “museum” AND “visitor experiences” OR “tourist experiences” OR “traveler experiences”, reflecting the diverse terminology employed in this research domain. Recognizing that terms like “visitor experience”, “tourist experience”, and “traveler experience” are often used interchangeably in the literature, we strategically employed the “OR” syntax connector to encompass all relevant studies. This approach allowed us to gather a wide-ranging dataset that accurately represents the various perspectives on visitor experiences in museums. The search query was executed using the TITLE-ABS-KEY syntax in Scopus, resulting in the identification of 785 publications (Figure 1). The search was designed to capture a broad range of literature, ensuring that the dataset was extensive and inclusive of various publications related to the research area. The result was an initial pool of articles, conference papers, book chapters, and review types of scholarly work. These records were exported into an Excel file to facilitate further processing and filtering in the second step.

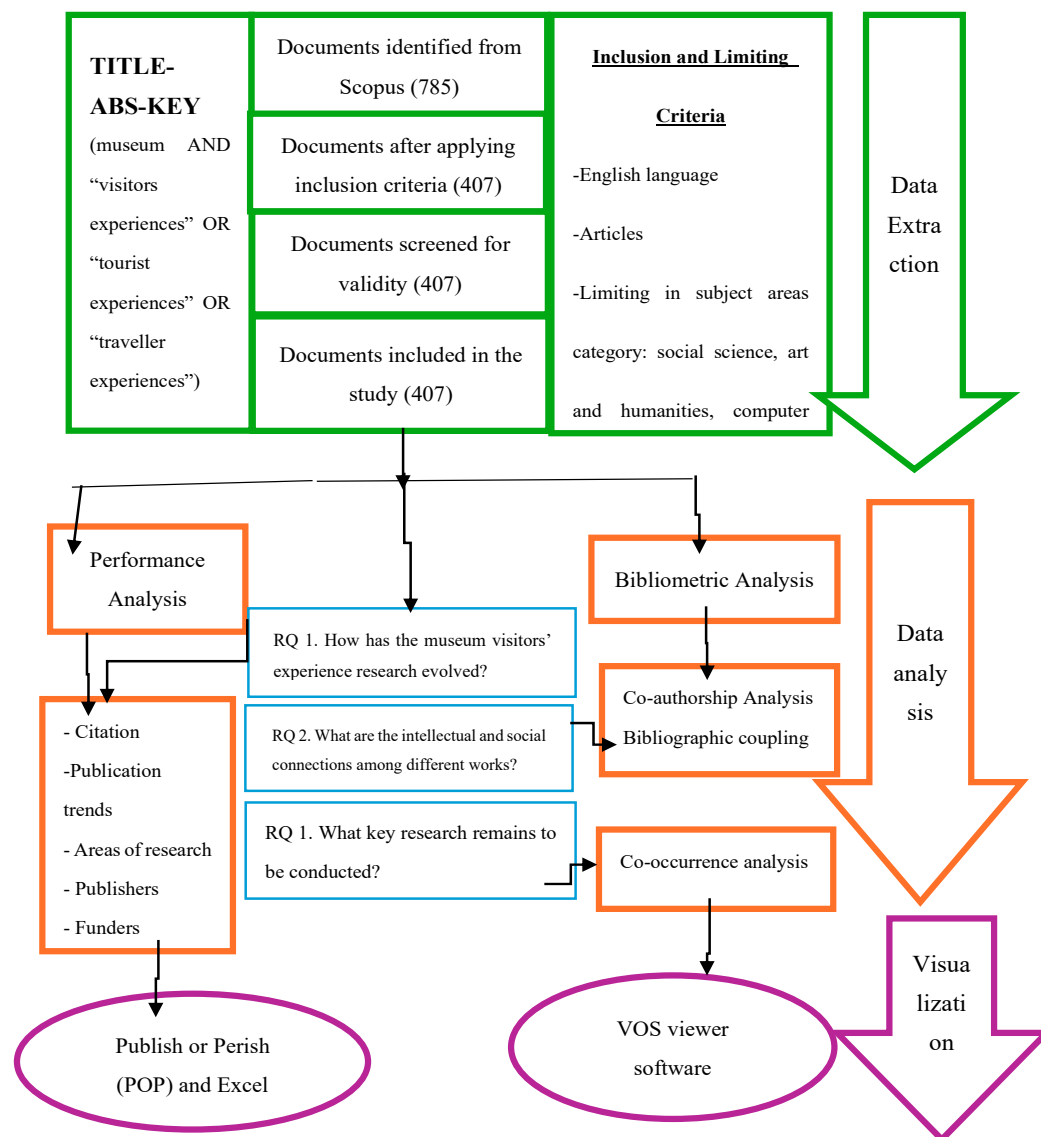


Figure 1. Data extraction strategy and analysis.

After generating the initial dataset from Scopus, the next step involved screening the 785 documents based on inclusion and exclusion criteria. This step was crucial to ensure that only the most pertinent studies were included in the final dataset, enhancing the bibliometric analysis’s accuracy and relevance. Initially, in the “Document Types” options, we focused on journal articles published in English as an inclusion criterion. We prioritized journal articles due to their standardized formatting, which is essential for bibliometric analysis, as it ensures consistency in the data (e.g., citations, abstracts, keywords, and authorship) [52]. Furthermore, journal articles represent complete studies, including comprehensive methodologies, data, results, and conclusions, which have undergone peer review, ensuring quality and reliability [53]. Structured metadata, such as author names, affiliations, and publication dates, provided by journal articles is crucial for accurate bibliometric analysis [54]. In the option of “Subject Area”, we limited the subject to social sciences, arts and humanities, computer sciences, business and economics, and engineering. This selection of articles based on the subject area was made to capture the interdisciplinary nature of museum and visitor studies. We also included publications in computer science to explore how technology is used to enhance visitor experiences through interactive exhibits, augmented reality (AR), virtual reality (VR), and mobile applications. Similarly, we included engineering papers to access research related to exhibit design and safety in

museums, such as innovations in lighting, structural integrity, and display technologies that enhance the visual and interactive aspects of exhibits. Conversely, we excluded articles in press, commentaries, research notes, book chapters, conference proceedings, and journal articles written in languages other than English. This comprehensive screening process reduced the initial 785 articles to 407, all of which were deemed relevant for the final analysis. These 407 articles, spanning the years 1986 to 2023, were selected after a detailed review of their titles, abstracts, and keywords, ensuring their validity for our research objectives.

In the final step, the 407 selected journal articles were exported in two formats: Comma Separated Values (CSV) and Research Information Systems (RIS). These formats were chosen to facilitate analysis using VOSviewer version 1.6.19 and Harzing's Publish or Perish (POP) software. VOSviewer was utilized to perform network analyses and visualizations, such as co-authorship networks, citation analysis, and keyword co-occurrence maps, while Harzing POP software was employed to assess citation metrics and other bibliometric indicators. These tools provided a robust framework for analyzing the dataset and uncovering trends, patterns, and key insights within the research field of museum visitor experiences. The software features are presented below.

2.3. The Software Application

For this study, VOSviewer version 1.6.19 software is used to generate network maps. This software allows for the visualization of relationships between various "items", such as publications, researchers, or terms. The word "term" in the VOSviewer language is a keyword extracted from the titles or abstracts of scholarly publications. These keywords and terms are mostly used as descriptors in the literature, capturing and representing concepts, subjects, or key ideas. To visually represent and understand the thematic structure of a research field based on the content of the literature, "terms" are used in bibliometric analysis to extract textual concepts, relationships between documents (co-citation), create networks among documents (co-occurrence), and share topics within the field of study. Links represent the connection between items, and these items are grouped into distinct, non-overlapping clusters (one item belongs to only one cluster). Clusters are labeled numerically for easier identification (cluster 1, cluster 2, etc.) [55].

In VOSviewer, there are three types of visualizations: network, overlay, and density. The network visualization depicts labels and circles. The size of the label and the circle of an item are determined by the weight of the item. The higher the weight of an item, the larger the label and the circle of the item. Colors are used in network visualization to determine the cluster to which the item belongs. The overlay and network visualization are similar but add a color gradient representing additional data dimensions like impact factors of the journals and the year of publication [53].

We further utilized VOSviewer for comprehensive data examination, including co-authorship, co-occurrence, bibliographic coupling, and co-citation analysis. Co-authorship analysis identifies networks of scientific collaboration among authors. Co-occurrence analysis focuses on the frequency of keywords or terms appearing together within the published documents. Bibliographic coupling refers to shared ('coupled') references between two publications, highlighting thematic linkages. Co-citation refers to the frequency with which two publications are cited together, indicating their interconnected influence [49]. Additionally, Harzing POP (Publish or Perish) software was used to derive overall citation metrics, identifying prominent authors, citations, and publishers—which are performance analyses of the study [56]. Performance analysis is used to assess the effectiveness of research constituents' contributions to a given field by identifying the performance of different research constituents (e.g., authors, institutions, countries, and journals) [33].

2.4. Validity and Trustworthiness of the Study

Our bibliometric analysis paper upholds the principles of trustworthiness and validity, which are essential for academic rigor and replicability [45]. The method used both quantitative (for example, performance analysis, bibliometric coupling, and co-occurrence)

and qualitative data (for example, co-authorship analysis) with two software programs (VOSviewers and Harzing POP), further contributing to the credibility of the study. The researchers ensure the conformability of the study through the well-organized documentation of each method and procedure (Figure 1). Findings are transferable because the themes, keywords, and emerging research agendas will apply to other similar institutions (archives, galleries, and different types of museums). The themes, future research areas, keywords, and performance analysis make this study transferable because the area of study is engaging and open for discussion in the wide spectrum of museum visitor experience studies.

3. Results and Discussion

We present a comprehensive overview of the selected articles, encompassing the topics, themes, and areas of study covered, as well as the overall citation score. To understand how museum visitors' research evolved in the publication trend and performances (RQ1), we analyzed the trends of publication in time, journal publishers, influential authors, countries, and funding institutions. To examine the intellectual and social connections among different works in the study of the museum visitor experience (RQ2), we performed co-authorship analyses, co-occurrence analyses, bibliographic coupling analyses, and co-citation analyses. Finally, we presented the future research agendas (RQ3) with the help of co-occurrence/co-word analysis and a qualitative examination of the recent paper in the field of museum visitor experience.

3.1. Performance Analysis

The researchers identified trends and patterns in academic production over time by categorizing and analyzing articles published from 1986 to 2023 (RQ1). The starting year of 1986 is based on the first article on museum visitors' experiences by [57] on museums and the tourist experience (Figure 2).

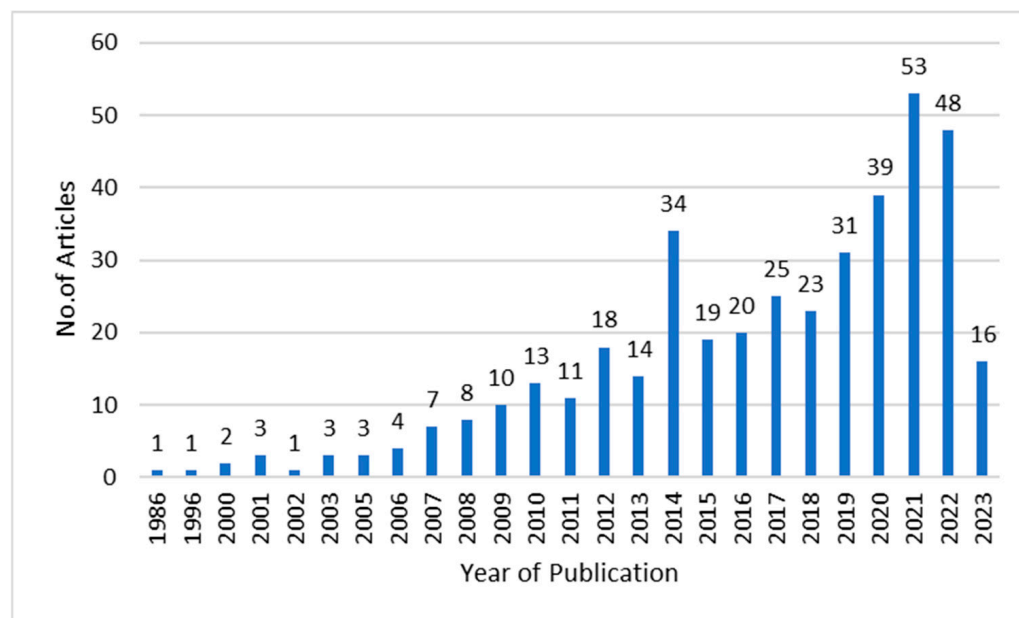


Figure 2. Published articles by year (1986–2023).

From 1987 to 1996, no such academic articles were published in the Scopus database, suggesting a limited interest in museum experience during this period. One reason for the lack of research on experience during that period is that museums were considered “conventional” educational and learning centers [58,59]. The other reason for the low productivity of research before the 2000s related to a different stakeholder focus: “Attention is mostly concentrated on the intentions of museum founders, acquisitions of curators,

discoveries of researchers, and objectives of educators. The voice of the visitor is rarely heard in the historical record” [60] (p. 66).

However, since 2000, there has been a notable increase in the research output of museum visitors’ experiences. This is linked to the growing prominence of the experience economy theory [61], the evolution of technology, and the general shift of museums towards more interactive and engaging places of education and entertainment [62–65]. The emergence of the experience economy theory in the study of museum visitor experiences has significantly transformed research outputs. This theory has reshaped the literature and publication trends by diversifying museum experience studies across the four realms: entertainment (primarily associated with the desire for enjoyment), education (the desire to learn), escapism (the desire to travel and engage in activities), and aesthetics (the desire to be in a particular place) [61]. The development of augmented reality (AR) and virtual reality (VR) shapes the development of visitor studies in 21st-century museums [66]. An interactive museum is the result of technology development [67]. Interactive museums provide a more immersive and engaging tourist experience by blending the physical and digital domains. Due to this development, visitors can experience 3D models, lifelike environments, and simulated experiences, enhancing their understanding and emotional connection to the content [68]. Research in the field of museum visitor experience studies has focused on using multi-sensory experiences such as sound, touch, and movement to create a multi-sensory experience for visitors [66]. Thus, all these developments may contribute to the advancement of visitor experience studies after the 2000s.

From 1986 to 2023, 407 articles were published in 159 journals. These journal publishers spanned different disciplines and were directly or indirectly associated with museum visitors’ experience research. Among these publishers, 110 journals published only one article, while the remaining 49 published more than one. The top publishers are *The Journal of Museum Management and Curatorship* (58), *The Journal of Museum Education* (21), and the *International Journal of the Inclusive Museum* (18) (Figure 3). However, it also reveals significant contributions from journals in the fields of tourism, visitor studies, technology, and computing, highlighting the interdisciplinary nature of research in museum visitor experiences.

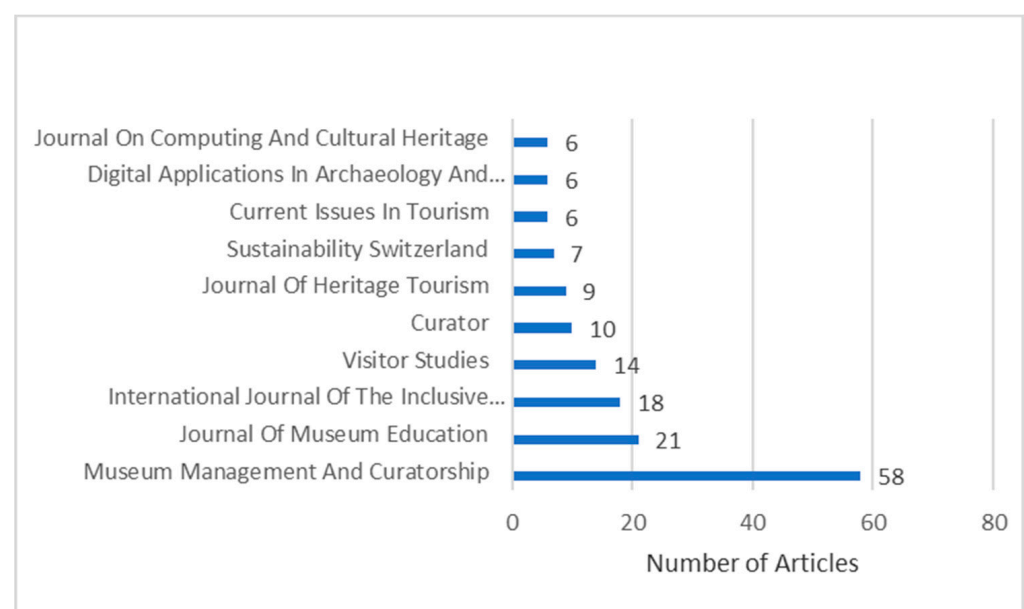


Figure 3. Top ten publishers.

The distribution of journal articles from various publishers indicates that many of them are disseminated across different publishing platforms. There is a noticeable trend in publishing studies on museum visitor experiences in multidisciplinary journals. The

recent rise of major publishers such as the *Journal of Computing and Cultural Heritage* and *Digital Application in Archaeology and Cultural Heritage* is directly associated with technological advancements. This emergence has led to subsequent studies on the application of technology in museums and its impact on museum visitors' experiences.

Among the four hundred seven (407) articles analyzed, 312 were affiliated with the top ten contributing countries, as displayed in Figure 4. In total, the articles had affiliations with 62 countries. The United States (72 articles) and the United Kingdom (65 articles) lead the number of articles published on museum visitors' experiences, while contributions from Asian and African countries are notably fewer.

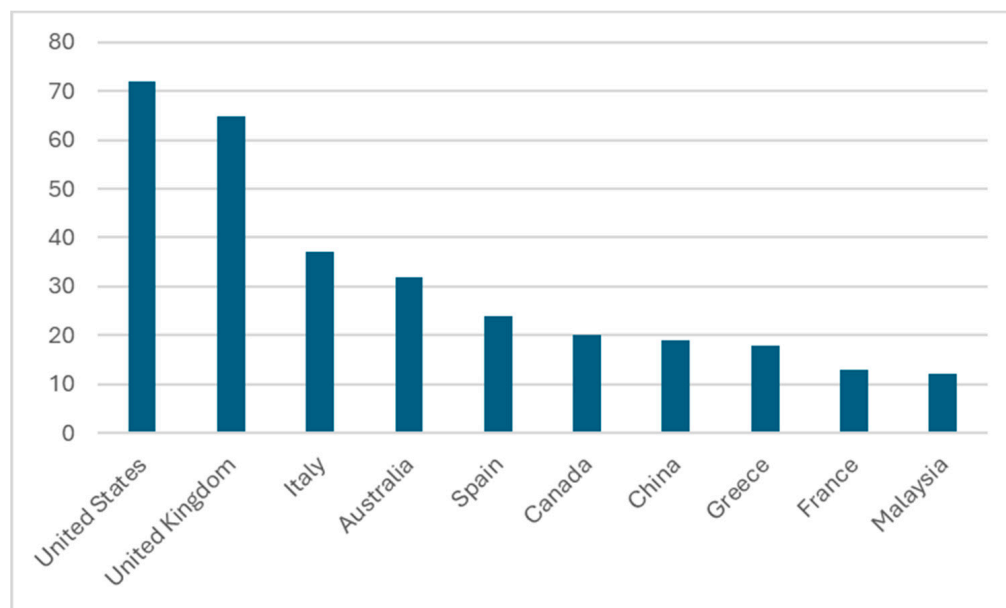


Figure 4. Top ten countries per article.

The research shows that Western countries dominate the publication outcome of museum visitor experience research. According to [6,69], the dominance of Western countries, particularly the United States, may have stemmed from the historical development of museums in these regions. "The great majority of U.S. museums were created by individuals, families, and communities to celebrate, commemorate local and regional traditions and practices, and to enlighten and entertain people in local communities" [69] (p. 11). Additionally, [21] (p. 60) also asserted that "museum ideas and their fundamental practices are generally considered to be an occupation of western culture". Similar trends of Western predominance are also shown in [38] bibliometric analysis of museum education.

The limited representation of countries from the Global South, especially from Africa, Asia, and Latin America, is attributed to several factors. Firstly, research on museum visitors' experiences in developing countries is also published in local languages and platforms and thus not indexed by Scopus. Second, these regional discrepancies suggest larger systemic issues, reflecting more significant problems with funding and infrastructure for research and publications in developing nations. Researchers in these areas can encounter difficulties obtaining access to international databases, publishing in Western-dominated journals, or receiving research funding, all of which could reduce their visibility internationally. Third, many of the academic contributions in the field of museum studies from regions such as Africa were published in book form and focused on different aspects of museum studies, such as decolonization movements and the challenges of museum management, rather than on museum visitors' experiences [70–74].

While financial funding for museum visitor experience research seems diverse, it is also strongly Western-centered. A total of 107 funding organizations and institutions have been engaged in supporting the publication. Figure 5 shows the top five funders. Leading

the way are the US-based National Science Foundation and the European Union-based Horizon 2020 Framework Program, which have funded eight and six articles, respectively. The Canadian federal research funding agency of the Social Sciences and Humanities Research Council sponsored five articles. Additionally, both the UK-based Arts and Humanities Research Council and the Spain-originated private research funding organization, Ministerio de Economía y Competitividad, sponsored four articles, respectively.

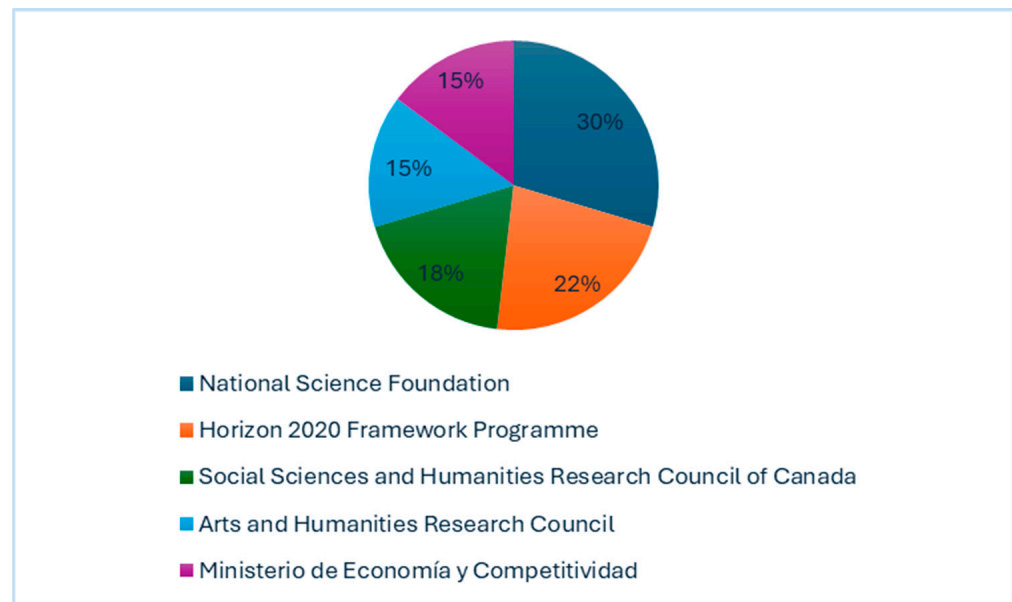


Figure 5. Top five funders.

3.2. Citation of Documents

The citation analysis of documents is used to understand the intellectual structure of the paper, specifically addressing the involvement of museum visitors' experience research (RQ2). The intellectual structure of the authors' work is determined by identifying the most influential authors. Intellectual structure analysis helps to understand the influence, relationships, and connections between different papers and authors. In Table 1, the top cited authors and their work were presented and provided an overview of the most frequently cited authors and their respective works. The primary emphasis of these authors' contributions lies in several key areas, including the marketing approach in museum visitor experience studies and the management of museums with a focus on niche visitor experiences exemplified by phenomena such as dark tourism and memorial tourism in museums. Additionally, their work delves into the critical aspect of authenticity within museum visitors' experiences, exploring the intersection of technology and its application in the context of museum visitor experience studies. Furthermore, these authors have made notable contributions to the understanding of museum services and their role in shaping the overall visitor experience.

Table 1. Top cited authors.

Author/s	Topic	Citation	Publisher
[75]	A Marketing Approach to the Tourist Experience	414	<i>Scandinavian Journal of Hospitality and Tourism</i>
[76]	Shades of dark tourism: Alcatraz and Robben Island	322	<i>Annals of Tourism Research</i>
[77]	Viking heritage tourism: Authenticity and commodification	280	<i>Annals of Tourism Research</i>
[78]	The museum environment and the visitor experience	221	<i>European Journal of Marketing</i>
[79]	Value of augmented reality at cultural heritage sites: A stakeholder approach	162	<i>Journal of Destination Marketing and Management</i>

Table 1. Cont.

Author/s	Topic	Citation	Publisher
[80]	An analysis of visitors' behaviour in the Louvre Museum: A study using Bluetooth data	126	<i>Environment and Planning B: Planning and Design</i>
[81]	Cross-cultural differences in adopting mobile augmented reality at cultural heritage tourism sites.	117	<i>International Journal of Contemporary Hospitality Management</i>
[82]	Not just seeing, but also feeling art: Mid-air haptic experiences integrated into a multisensory art exhibition.	95	<i>International Journal of Human-Computer Studies</i>
[83]	Museum learning via social and mobile technologies: (How) can online interactions enhance the visitor experience?	94	<i>British Journal of Educational Technology</i>
[84]	The Museum as assemblage: bringing forth affect at the Australian War Memorial	84	<i>Museum Management and Curatorship</i>
[85]	Contemplating museums' service failure: Extracting the service quality dimensions of museums from negative online reviews.	84	<i>Tourism Management</i>

Recent citation trends indicate a growing focus on the role of technology in enhancing museum experiences. Notably, [86,87] have received significant attention for their work on exploring and integrating virtual and augmented reality in museums (Figure 6). This shift in citations underscores the evolving nature of the field and the increasing contribution of digital technologies to studies on museum visitor experiences. However, while citations are a useful indicator of an article's influence, they do not always reflect the quality or the impact of the research. High citation numbers can sometimes be influenced by factors such as the journal's overall visibility or the popularity of a specific research trend rather than the intrinsic value of the research.

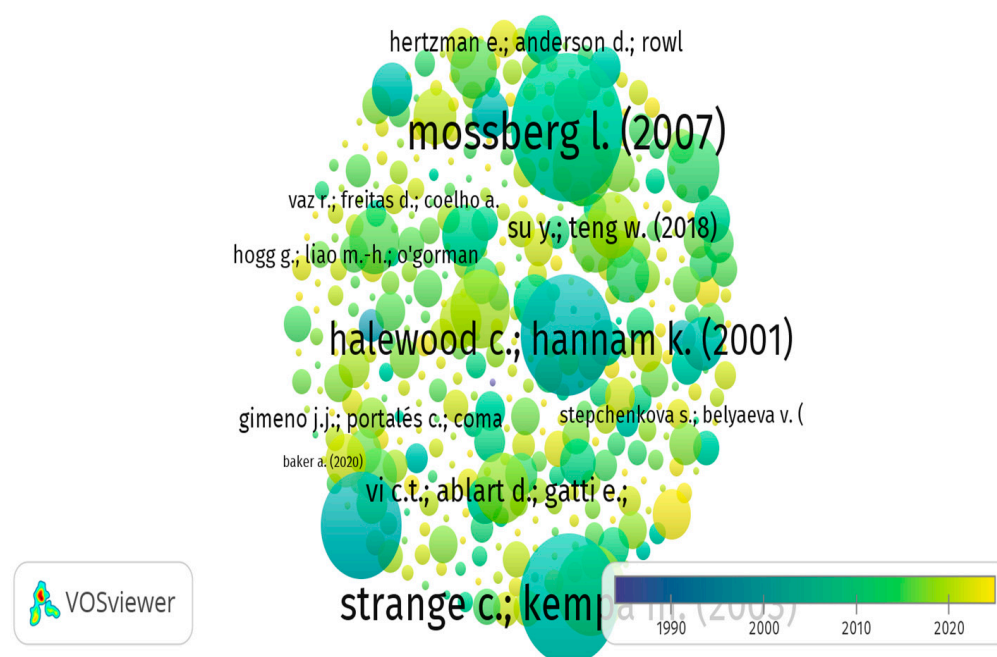


Figure 6. Citations of documents.

3.3. Co-Authorship Analysis in Country

Co-authorship analysis focuses on studying the patterns of collaboration among authors [33]. The goal of co-authorship analysis is to uncover various insights related to collaboration dynamics, trends, and networks within a specific field of study or across multiple disciplines [34]. For this study, the researchers analyzed co-authorship to understand the country's collaboration in the social structure of knowledge (RQ2). Co-authorship analysis in a country is the most used method to understand the social structure of knowl-

edge [88]. The country's network is determined based on the number of publications in co-authorship, as shown in Figure 7. It identified how researchers from a given country collaborate with authors from other countries in producing research articles on museum visitors' experiences. The overall network analysis highlights the authors from the United States as the leading contributors, with 12 countries linked and a total link strength of 16 across 22 articles. This signifies the United States' prominent role in international research collaborations, featuring a considerable number of co-authorship linkages. Australia follows with 10 countries linked, displaying 15 link strengths among 22 documents. The UK ranks third in terms of co-author connections with other countries.

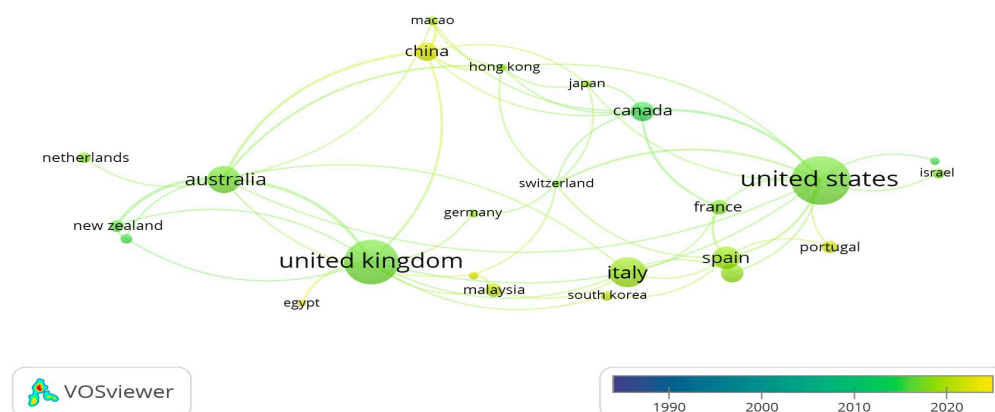


Figure 7. Co-author's analysis.

In the context of examining co-authorship patterns within specific countries through overlay visualization, certain noteworthy trends and dynamics emerged. Authors from the United States demonstrate a robust pattern of collaboration between the years 2014 and 2018. This suggests that during these years, researchers from the United States engaged in extensive cooperation, resulting in a substantial number of co-authored papers. After 2020, Chinese authors have shown a strong collaborative presence and have taken the lead in terms of co-authorship connections. This indicates that Chinese authors are actively participating in contemporary publishing trends, with their collaborative efforts becoming increasingly prominent after 2020 (Figure 7).

3.4. Bibliographic Coupling by Authors Articles

Bibliographic coupling is a method that involves examining the shared references among different works in museum visitors' experiences [89]. It identifies the intellectual connections between different works by examining the overlap in the sources they cite. By using this technique, the researchers identified intellectual connections between authors' documents, showing that they are related (RQ2). Out of 407, only 320 articles are found to be bibliographically coupled with each other, meaning that they share common references.

Based on their shared references, the 320 connected articles are divided into 19 different clusters. These clusters reflect collections of articles that have a similar theme or topic. A total of 2928 links have been found throughout these clusters, illustrating the relationships between these coupled articles. These clusters range in size depending on how the works of different authors are related bibliographically: 34 authors' works are represented in the first cluster, followed by 33 in the second, 30 in the third, 27 in the fourth, and 22 in the fifth cluster. There are two couplings in the least bibliometric coupling. This implies that certain authors only have a small number of references to the works of other authors in the dataset. The information points out two specific works by authors that exhibit a high number of shared references with other works related to museum visitors' experiences. Work by [90] on the "asymmetric impact of interpretation environment service quality on museum visitor experience and post-visit behavioural intentions" and work by [91] on "measuring the Rothko experience in school visitors to modern art museums" each

has 103 and 101 bibliographic coupling links, respectively. This indicates that these two articles have substantial thematic connections with other works in the dataset, stemming from shared references. The analysis highlights a trend wherein the most recent articles have increased opportunities to share references among various works related to museum visitors' experiences (Figure 8, which represents the nineteen clusters).

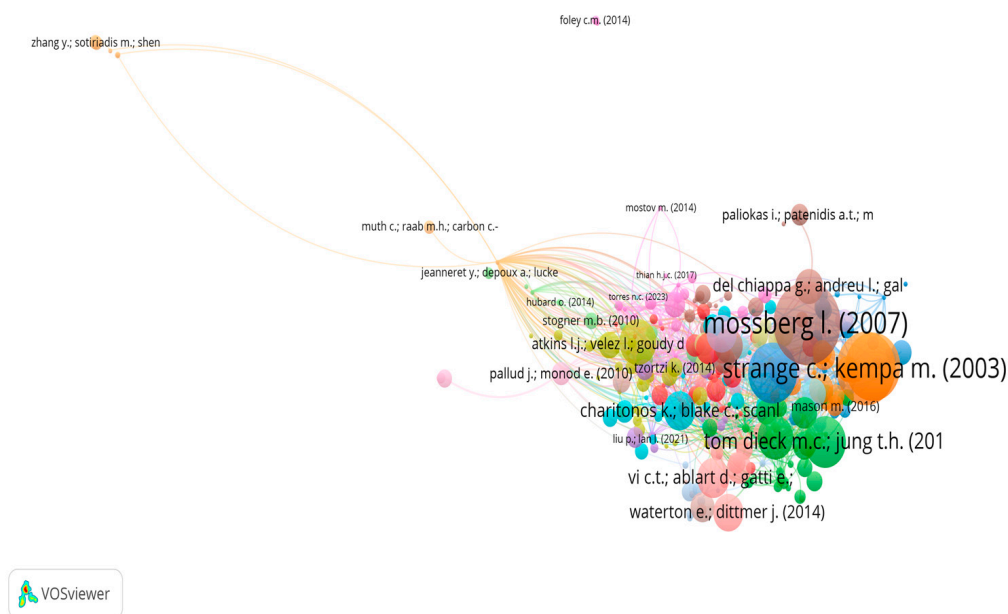


Figure 8. Bibliographic coupling of author's work.

3.5. Co-Citations Analysis

Co-citation analysis focuses on the connections between documents that are frequently cited together by other documents. It further looks at how often two documents are cited together in the reference lists of other documents [92]. Co-citation is used to understand the intellectual structure of knowledge by revealing the structure, directions, and developments in a research domain (RQ2). For this paper, the researchers used co-citation analysis of authors to identify influential works within museum visitors' experiences studies because other co-citation analyses, such as co-citation of cited references and co-citation of sources in the VOSviewer, are very challenging and do not capture the true essence of the study, primarily due to inconsistencies in the format of references and source strings [55].

In the network visualization of co-citations of cited authors (Figure 9), there are three clusters. In this intellectual structure of co-citation of authors, a total of 25,012 link strengths and 3265 links are counted. The first cluster (red-colored) contained 42 authors co-cited together; in the second cluster (green-colored), 38 authors co-cited together; and in the third cluster (blue-colored), 19 authors co-cited together in the co-citation of their works. Co-citation analysis considers documents that are cited together in the reference lists of other documents, even if they do not directly reference each other. For instance, the works of [93–95] and [8] are co-cited, but they are not listed in this compilation of articles. This is because the works of Hooper-Greenhill, Hein, and Falk are books, editorial notes, and book chapters.

With 191 co-citations and 97 links, Falk leads the co-citations of cited writers, followed by Dierking with 135 co-citations and 97 links. Hooper-Greenhill, with 82 co-citations and 89 links, comes in third, followed by Tom Diack, with 70 co-citations and 67 links. Ref. [11] acquired 63 citations and 89 links; Gilmore received 58 citations and 87 connections, and Pine obtained 51 citations and 86 links. Jung received 70 co-citations (Figure 9). This analysis reveals the prominence and influence of certain authors within the field of museum visitor experience research. Falk stands out with the highest number of co-citations. This

indicates that his work has had a significant impact on subsequent research and has become a central point of reference for other scholars.

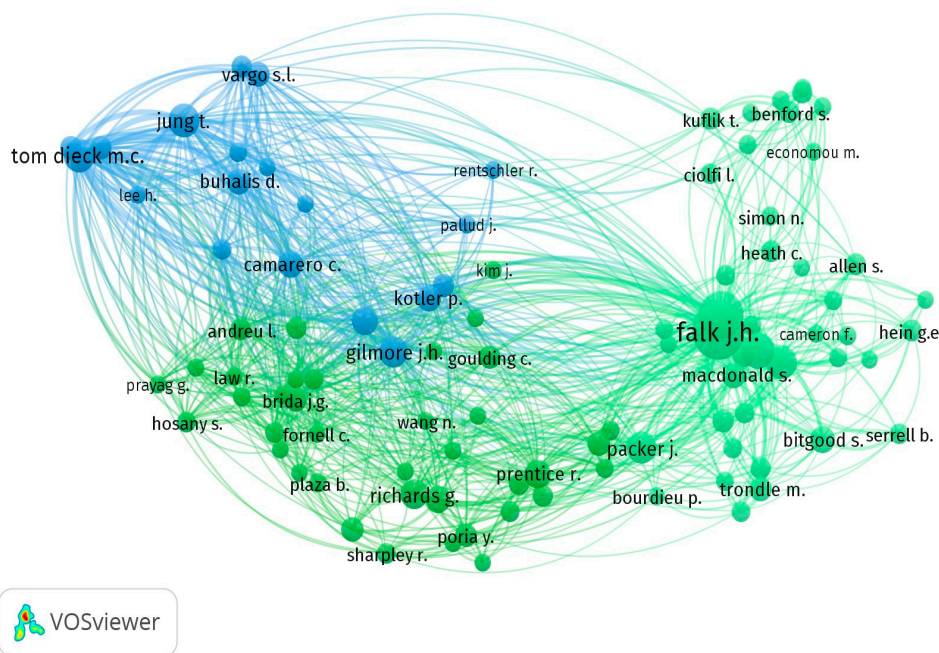


Figure 9. Co-citations of cited authors.

3.6. Co-Occurrence of All Keywords

The co-occurrence analysis of keywords is used to identify and analyze the patterns of how keywords are used together in a collection of scholarly documents [35]. The co-occurrence analysis of keywords provides insights into the thematic trends and research concentrations within the study of museum visitors’ experiences. The co-occurrence analysis of keywords reveals some research areas still need to be investigated by observing the keywords’ total strength. In this sense, the co-occurrence of keywords is used to understand the intellectual structure, knowledge structure, and future research areas in the study of museum visitors’ experiences (RQ 2 and 3) because it identifies research trends, thematic patterns, and the evolution of ideas in the academic literature. Thus, the frequency with which specific words or terms appear together in scholarly publications in the study of museum visitor experience suggests collaborative research (Table 2). In this instance, 58 keywords in 6 clusters were found.

Table 2. Co-occurrence of keywords.

Clusters	Items in the Cluster	Links	Total Link Strength	Documents
Cluster 1 (Application of technology to enhance visitor engagement and interaction)	Art gallery	10	13	5
	Augmented Reality	15	41	19
	Cultural heritage	31	67	22
	Cultural heritages	15	30	10
	Digital heritages	10	14	8
	Education	20	30	11
	Exhibitions	17	37	12
	Mixed reality	12	18	50
	Museums	50	168	86
	User experience	16	20	9
	Virtual Museum	11	19	7
	Virtual reality	20	44	18
	Visitors experience	16	42	20

Table 2. Cont.

Clusters	Items in the Cluster	Links	Total Link Strength	Documents
Cluster 2 (Tourism, museum management, and visitor experiences)	Accessibility	8	9	5
	Aesthetics	10	13	5
	China	15	24	6
	History	19	24	7
	Museum	49	198	86
	Narrative	15	19	6
	Perception	17	32	10
	Tourism	24	38	14
	Tourism attractions	23	55	14
	Tourist behaviour	25	67	17
	Tourist destination	17	29	6
Tourist experience	18	27	9	
Cluster 3 (Museum visitor experiences and engagement)	Art museum	4	8	5
	Emotion	15	18	5
	Evaluation	10	16	6
	Exhibition	12	16	5
	Motivation	12	14	5
	Museum exhibitions	8	24	6
	Museum management	12	21	10
	Museum visitor experiences	9	9	6
	Science museums	1	1	5
	Social media	19	16	6
	Visitors experience	42	104	75
Visitor studies	15	21	11	
Cluster 4 (Heritage tourism and museum visitors)	Authenticity	13	25	14
	Cultural tourism	19	23	11
	Cultural tourism	12	16	9
	Emotions	16	24	8
	Heritage	19	38	12
	Heritage tourism	29	77	17
	Interpretation	16	25	10
	Museum studies	12	12	7
	Tourism development	25	46	8
	Tourism management	20	36	7
Cluster 5 (Design, experience, and sustainability)	Architecture	16	18	6
	Co-creation	13	16	8
	Design	19	11	8
	Experience satisfaction	16	28	9
	Sustainability	11	17	7
	Visitors	15	22	6
Cluster 6 (Innovation and technology)	Innovation	6	8	8
	Innovation	14	21	6
	Italy	14	25	7
	Museum education	2	3	6
Technology	12	18	9	

Cluster one: Technology elements and user experience in museums. This cluster (red-colored) in Figure 10 focuses on keywords related to “augmented reality”, “digital heritage”, “mixed reality”, “virtual reality”, “user experience”, “virtual museums”, and “exhibitions” [96–104]. This cluster, where integration is visible, underscores unexplored areas of research (virtual museum, virtual reality, digital heritage, art gallery) as indicated by the link strength shown. A low link strength indicates that there is room for future research (Table 2). A bibliometric study by [105] found that user experience, satisfaction, and behavioral intention are emerging tourism research areas of augmented reality. This

shows the ongoing evolution and expansion of research in the field of technology-enhanced museum experiences.

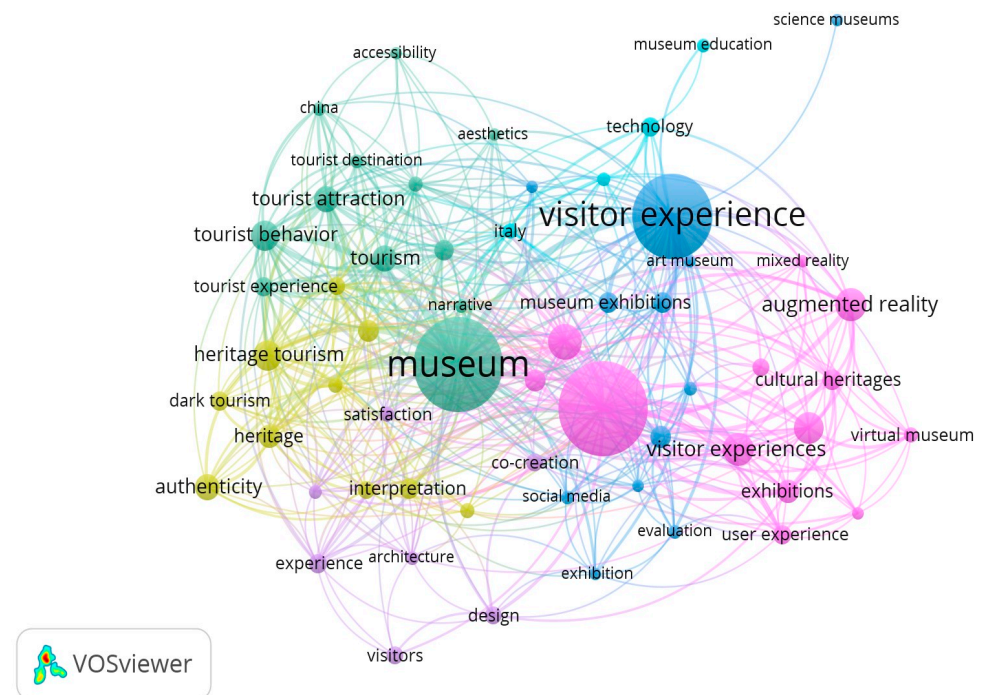


Figure 10. Co-occurrence network.

Cluster two: Tourism, museum management, and visitor experiences. This cluster (green-colored) covers themes related to key terms like “tourist attractions”, “tourist behaviour”, “tourist experience”, and “accessibility”, which are interconnected, indicating research areas involving visitor behavior, attractions, and overall museum experiences [106–108]. In this cluster, the issues of “accessibility”, “aesthetics”, and “narratives” have low strength and are indicative of arenas of further research (Table 2). Especially the issues of managing museum tourism and balancing the accessibility, aesthetics, and narratives that represent emerging research areas.

Cluster three: Museum visitor experiences and engagement. This theme of the cluster (blue-colored) emphasizes museum visitor experiences and engagement [109–114]. It includes terms like “visitor experience”, “visitor studies”, “emotion”, and “social media” and their integration, function, and roles in museum visitors’ experiences. The emotional attachment and dynamics, social media actor’s role, museum exhibition, and motivation were the major subject areas of this cluster (Table 2). In this cluster, the integration of museum visitor experiences and engagement with art museums, science museums, motivation, social media, evaluation, and exhibition still has low strength and implies a need for further investigation.

Cluster four: Cultural heritage and tourism in museums. In this cluster (yellow-colored), the themes of “cultural tourism”, “heritage”, “tourism development”, and “tourism development” are interconnected [115–117]. As shown in the link column, the integration of heritage tourism and museum visitors with keywords such as museum studies, authenticity, interpretation, and emotions is relatively low in strength and requires further research (Table 2). While “authenticity” has long been a central concept in museums [13,118,119], the link strength in this cluster can be further developed. Conversely, the concept of interpretation originated in the US in the 1950s and has been instrumental in the conservation of heritage and sources of visitor experiences [120]. Its emergence in museums as a broad area contributed to its relevance as an emerging area for researchers.

Cluster five: Museum design, experience, and sustainability. This cluster (purple-colored) highlights terms related to design, experience, and sustainability [121–124]. The

terms in this cluster indicate a focus on understanding how museum architecture and design influence visitor experiences and satisfaction, particularly in cultural and heritage contexts. Furthermore, the inclusion of the term “sustainability” indicates a growing interest in ensuring that museum practices and designs are environmentally and culturally responsible. This cluster suggests future research areas for creating positive and sustainable museum visitor experiences, considering architectural design, visitor engagement, and sustainability.

Cluster six: Innovation and technology. This is the last cluster (turquoise-colored) in the co-occurrence of all keyword networks that focus on innovation and technology in the cultural context of museums. “Innovation”, “technology”, and “museum education” are connected, indicating research exploring innovative educational approaches and technology adoption in museums. In this cluster, suggestions for future researchers studying these interconnected themes will focus on new approaches to museum education, such as virtual reality, interactive exhibits, digital storytelling, and other technological tools (Table 2). These approaches help to understand how technology can be used to engage visitors, improve learning outcomes, and enhance overall museum experiences within a cultural context.

An overlay visualization of keyword co-occurrences (Figure 11), given in the order of their occurrences, reveals significant shifts in research themes in the study of museum visitors’ experiences. This suggests a dynamic evolution in the focus of museum-related research.

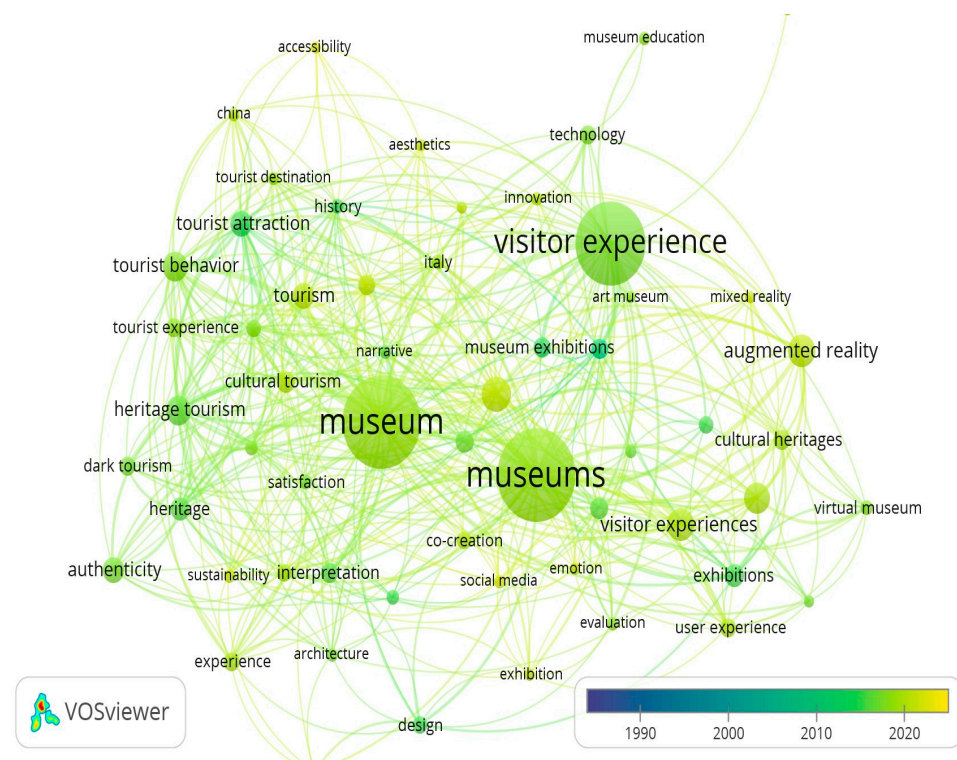


Figure 11. Overlay of co-occurrence of keywords.

A decade ago, subjects such as museum management, museum exhibitions, and tourist attractions co-occurred as keywords reflecting the research landscape at that time. (Figure 12). Figure 12 shows the emergence of keywords as a new research area. Before 2010, key terms like museum marketing, museum product, and public participation are very common in museum visitor experience studies. Between 2010 and 2014, the key terms of a museum as a tourist attraction, design in the museum, museum exhibition, and digitalization of heritage occurred. From 2015 to 2018, keywords like user experiences in museums, virtual museums, virtual reality, authenticity, co-creation, and tourist behavior in museums were very common. Recently, after 2019, the issues of accessibility, social media, aesthetics,

mixed reality, sustainability, emotion, and innovation in museum visitor experience studies have emerged. As such, future researchers in the field of museum visitor experience need to consider these emerging key terms identified through co-occurrence analysis. The new definition of a museum developed by the International Council of Museums [125] also aligns with these emerging themes, emphasizing openness, accessibility, diversity, and sustainability. This reflects a shift towards more inclusive and community-oriented museum practices, with a focus on offering varied experiences for education, enjoyment, reflection, and knowledge sharing.

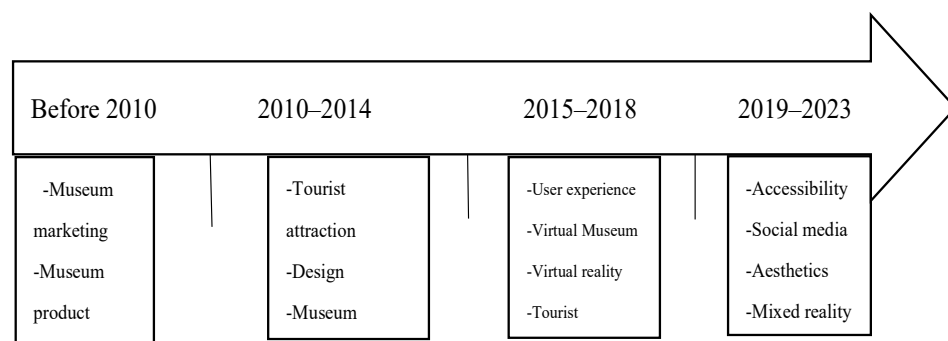


Figure 12. Thematic keywords evolution.

By contextualizing the service of museums as visitor experience centers and exploring the evolving themes in museum-related research, researchers can contribute to a deeper understanding of the evolving role of museums in society and their impact on visitors' experiences.

4. Future Research

As indicated by [126] (p. 442), the visitor experience is a "highly complex psychological, sociological, and cognitive interaction process". Therefore, it is recommended for interdisciplinary and multidisciplinary studies. In this research, we identified nine (9) research areas with possible fields of study for future research agendas (RQ3) (Table 3). These research areas were thoroughly identified from the latest articles' conclusions, gaps, and co-occurrence analysis from bibliometrics. First, sustainability emerges as a concern, highlighting exploration into the antecedents and challenges surrounding the sustainability of museum practices and visitor experiences. Second, the rapid integration of virtual, augmented reality, and mixed reality technologies in museums demands careful examination, especially regarding ethical considerations and digital solutions for museum education and visitor immersion experiences. Third, social media and big data are further sources for the study of museum visitor experiences. Fourth, linked to issues of sustainability and technology, accessibility and inclusivity across age, gender, and disability is crucial for promoting equitable museum experiences and requires further research.

Furthermore, emotion, co-creation, narratives, interpretation, exhibition design, and engagement constitute further domains for future research. Understanding the emotional dimensions of museum experiences, fostering co-creative processes, enhancing narrative authenticity, optimizing exhibition design, and evaluating visitor engagement techniques are crucial in enhancing museum visitor experiences. By addressing these, scholars can contribute to a more nuanced understanding of museum and visitor studies and facilitate the development of innovative strategies to enhance visitor experiences. Table 3 provides an overview of these potential future research agendas, serving as a roadmap for researchers aiming to advance knowledge in museum visitor studies.

Table 3. Potential future research agendas.

Potential Future Research Areas (Grand Theme)	Possible Fields of Themes and Research Questions for Further Study
Sustainability	<ul style="list-style-type: none"> - Sustainability of museum visitors' experiences: antecedents and current challenges [127] - How is behavioural change involved towards the sustainability of museum visitors' experience? [128,129] - How does visitor flow management align with the sustainability of the museum visitors' experience? [130] - Special roles of corporate social responsibility and shared responsibility practices for museum visitors' experience [131]
Virtual, augmented reality, mixed reality digital heritage	<ul style="list-style-type: none"> - The pros and cons of VR and AR in museum visitors' experiences [115] - How are ethical concerns threatening museum visitors' experience studies? [102,132] - How are museum education and technology integrated with digital solutions? [133] - How to manage visitor immersion and experience in the Artificial intelligence (AI) and robotics era in museum visitor experience? [96] - How and what roles does digitalization of heritage play in a visitor's experience during a time of crisis like a pandemic? [99,102,134] - Perception of museum visitors towards technology [100]
Social media	<ul style="list-style-type: none"> - How does social media shape the museum visitors' experiences? [111,134,135] - Social media ethics in museum visitor experience studies [136] - Museum visitor studies and sentimental analysis from social media [137,138] - How are museum visitors' experience studies and big data in deep learning managed and coordinated for a better experience? [139]
Accessibility	<ul style="list-style-type: none"> - Accessibility for all ages, genders, and disabled visitors, technology for accessibility [106]
Emotion	<ul style="list-style-type: none"> - Application of emotion transfer theory in Museum visitor experiences in dark tourism museum sites [117] - Sensor visitor experience (beyond physical—all sense of visitors—mechanism for all sense experience) [102]
Co-creation	<ul style="list-style-type: none"> - How are co-creation, co-interpretation, and co-design integrated into museum exhibition visitors' experience? [98,123] - What special roles does local community engagement in the story co-making in museum visitors' experience? [122] - How does AI support the co-creation and co-design of museums for visitors' experience? [96,121,139] - How co-design and co-creation integrated for visitors' engagement in special niche museum types like memorial museums in Africa: challenges and success stories [121,123,140] - How cultural differences impact the co-design and co-creation of museums for visitors' experience [122,123,140]
History, narratives, tourist experience and interpretation	<ul style="list-style-type: none"> - What is the relationship between narratives/storytelling and interpretation, the integration of history, narrative, and tourist/visitors' experiences? [141,142] - How visitors build stories and narratives in museums [135] - How is authenticity maintained in narration and storytelling in museum visitor experience studies? [143] - What is the participative role of visitors in the construction of a heritage representation in a museum? [144]
Exhibition	<ul style="list-style-type: none"> - What is the relationship between exhibition design, quality and museum architecture [132,133,145] - How user experience fully applies in museums [97] - The application of museum exhibition user experience (MEUX) model for museum visitor experience studies [97] - How to reconcile the museum's aim and the visitors' aim in the visitor user experience delivery [97]
Museum Visitors' Experience and Engagement	<ul style="list-style-type: none"> - Museum visitors' experience and evaluation technique [102]

The complexities inherent in museum visitor experiences necessitate comprehensive research across nine critical areas explained above. Researching the identified themes in museum visitor experiences offers numerous benefits. Investigating sustainability addresses gaps in visitor flow management, corporate social responsibility, and behavioral change, contributing to more sustainable museum practices. Researching emerging technological advancements like virtual, augmented, and mixed reality enhances educational outcomes and immersive experiences while addressing ethical concerns [146,147]. Studying social media and big data usage provides insights into visitor preferences and behaviors, enhancing visitor experiences and aiding operational decisions [148]. Research in accessibility and inclusivity promotes equitable access and inclusive practices, contributing to social justice. Exploring emotion in visitor experiences can improve satisfaction, learning outcomes, and visitor loyalty [149,150]. Researching co-creation fosters engagement and innovation in exhibits and programs [151]. Researching co-creation and co-design via the help of virtual reality gamified experiences enhances the visitor experience in museums [152,153]. Investigating storytelling and narration ensures cultural sensitivity, enhancing the educational and emotional impact of exhibits [154]. Studying exhibition design and visitor engagement techniques optimizes visitor flow, accessibility, and learning opportunities, advancing museum visitor experience studies [101,155]. Researching virtual reality, augmented reality, mixed reality, and game-based experiences for accessibility enhance museum visitor experiences [156–159]. Finally, museum visitor experiences studies consider that one size does not fit all approaches from different realities, disciplines, and theories [8,17,160].

5. Conclusions

Recently, a significant amount of research has been conducted on visitors' experiences in different cultural institutions, including museums, due to the vast nature of visitor experience studies, which is a very challenging research area. Therefore, there is a need for a comprehensive review of the literature to understand what we know about its progress, what social and intellectual connections are formed, and what research should be performed in the future. Aiming to systematically analyze existing literature, this bibliometric analysis provided valuable insights into current and future research on museum visitor experiences. By identifying potential research partners and institutions with shared interests, guiding publication choices, and informing funding allocation decisions, geographical distributions, and gaps, it has facilitated collaboration and resource allocation. However, it is crucial to point out the dominance of Western countries in the publication output of museum visitor experiences, which may stem from historical and structural factors. The limited representation of countries from the Global South, particularly from Africa, Asia (except China), and Latin America, calls for greater inclusivity and diversity in research. Moreover, addressing these regional discrepancies requires not only increasing the visibility of non-Western research on international platforms but also decolonizing the field by amplifying voices and perspectives from marginalized regions.

Furthermore, this research has shed light on the changing landscape of research within the field, highlighting the transition from traditional topics like museum management, museum products, museum exhibitions, and tourist attraction to more contemporary concerns such as aesthetics, virtual reality, accessibility, sustainability, mixed reality, social media, co-creation, authenticity, emotion, and augmented reality technologies. Through keyword clustering, it has also pinpointed emerging research themes, guiding researchers and practitioners and ensuring that they remain up to date with the ever-evolving landscape of museum visitors' experiences. Existing and emerging authors can find relevant topics for their research, and researchers and readers can seek information that will be relevant to their needs.

6. Knowledge Implications

The bibliometric analysis of visitor experience research in museums consolidates existing knowledge and serves as a valuable reference for scholars. It mapped the field's

evolution, highlighting established and emerging themes while identifying geographical and thematic gaps. It shows a shift from traditional topics such as museum management to contemporary issues like virtual reality, accessibility, sustainability, social media, and augmented reality, reflecting changing visitor expectations and technological advancements. Additionally, the study emphasizes the need for a more balanced representation of global perspectives, contributing to the decolonization of museum studies and visitor experience research.

7. Practical Implications

This study offers several practical implications for researchers, funders, and museum managers. It helps researchers identify relevant topics and stay updated on current and emerging trends. Museum managers can use this knowledge to enhance visitor experiences by incorporating themes like augmented reality and social media engagement. The findings also guide informed decision-making for museums, funding bodies, and publishers. For instance, funding agencies can prioritize support for underrepresented regions and emerging research areas, while publishers can encourage submissions on cutting-edge topics. Furthermore, the study promotes strategic collaboration and inclusivity. It highlights changing visitor expectations, aiding in resource allocation. Museums can adapt their offerings and engagement strategies based on emerging trends, such as integrating virtual and augmented reality technologies to enhance visitor experiences and attract broader audiences.

8. Limitation of the Study

The research supports decision-making bodies such as museums, funders, and publishers by pinpointing emerging research areas, highlighting funding priorities, identifying collaboration opportunities, and evaluating the impact of research on museum visitor experiences. However, the study has certain limitations. First, the analysis may not capture the full scope of the research domain in the study of museum visitors' experiences. This is because the use of different keywords or terminology variations can affect the quality and comparability of results. The second limitation is that non-English literature or research from specific countries or regions was excluded, which may offer significant insights. The third limitation is related to citation analysis. There is a bias for this study when referring to the citation analysis of the papers since the new articles published after 2020 receive the fewest citations, and the older papers might accumulate more citations over time. The fourth limitation of this study is its focus on single database-generated files, i.e., Scopus. Observing research trends and patterns in publications in other databases (e.g., Web of Science and ProQuest) as well as regional and non-English dominated databases is recommended as a future study.

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References

- Kant, E. *Critique of Pure Reason*; Harvard College Library: London, UK, 1856.
- Blake, J. From global to local heritage: Intangible cultural heritage and the role of the museum. *Anthropol. Middle East* **2015**, *10*, 22–40. [CrossRef]
- Caple, C. *Preventive Conservation in Museums*; Routledge: London, UK, 2012.
- Simmons, J.E. History of museums. In *Encyclopedia of Library and Information Science*; CRC Press: Boca Raton, FL, USA, 2010; pp. 2096–2106.
- Van Huy, N. The role of museums in the preservation of living heritage: Experiences of the Vietnam Museum of Ethnology. *Int. J. Intang. Herit.* **2006**, *1*, 35–41.
- Walsh, K. *The Representation of the Past: Museums and Heritage in the Post-Modern World*; Routledge: London, UK, 2002.
- Witcomb, A. *Re-Imagining the Museum: Beyond the Mausoleum*; Psychology Press: East Sussex, UK, 2003.
- Falk, J.H. *Identity and the Museum Visitor Experience*; Routledge: London, UK, 2016.
- Guo, K.; Fan, A.; Lehto, X.; Day, J. Immersive Digital Tourism: The Role of Multisensory Cues in Digital Museum Experiences. *J. Hosp. Tour. Res.* **2023**, *47*, 1017–1039. [CrossRef]
- Liu, Y.; Lin, H.W. Construction of interpretation and presentation system of cultural heritage site: An analysis of the old city, buoying. *Heritage* **2021**, *4*, 316–332. [CrossRef]
- Packer, J. Beyond learning: Exploring visitors' perceptions of the value and benefits of museum experiences. *Curator Mus. J.* **2008**, *51*, 33–54. [CrossRef]
- Vivan, I. What Museum for Africa? In *The Postcolonial Museum*; Routledge: London, UK, 2016; pp. 195–206.
- Prameswari, V.M.; Sushartami, W.; Ristiawan, R.R. Perceived authenticity of the Pancasila Sakti Museum by high school students. *Int. J. Tour. Anthropol.* **2021**, *8*, 254–275. [CrossRef]
- Filep, S. Moving beyond subjective well-being: A tourism critique. *J. Hosp. Tour. Res.* **2012**, *38*, 266–274. [CrossRef]
- Hornecker, E.; Ciolfi, L. *Human-Computer Interactions in Museums*; Springer Nature: Berlin/Heidelberg, Germany, 2022; Volume 2, pp. i–153. [CrossRef]
- Packer, J.; Ballantyne, R. Conceptualizing the Visitor Experience: A Review of Literature and Development of a Multifaceted Model. *Visit. Stud.* **2016**, *19*, 128–143. [CrossRef]
- Falk, J.H. An Identity-Centered Approach to Understanding Museum Learning. *Curator Mus. J.* **2006**, *49*, 151–166. [CrossRef]
- Dann, G.M.S.; Jacobsen, J.K.S. Leading the Tourist by the Nose. In *The Tourist Is a Metaphor for the Social World*; Dann, G.M.S., Ed.; CAB International: Wallingford, UK, 2002; pp. 209–235.
- Roggeveen, A.L.; Grewal, D.; Townsend, C.; Krishnan, R. The impact of dynamic presentation format on consumer preferences for hedonic products and services. *J. Mark.* **2015**, *79*, 34–49. [CrossRef]
- Black, G. *The Engaging Museum: Developing Museums for Visitor Involvement*; Routledge: London, UK, 2012.
- Kytani, T. Audience Engagement in Contemporary Museum Practices. Master's Thesis, International Hellenic University, Nea Moudania, Greece, 2020. Available online: <https://repository.ihu.edu.gr/xmlui/handle/11544/29467> (accessed on 18 July 2023).
- Walhimer, M. Museum Visitor Research. Museum Planner. 2018. Available online: <https://www.museumplanner.org/museum-visitor-research> (accessed on 18 July 2023).
- Khalifah, Z. Tour Guides Performance in Malaysia: Application of the Importance Performance Analysis. In Proceedings of the 2007 International Tourism Biennial, Dallas, TX, USA, 25–29 July 2007; Çanakkale 18 Mart University: Çanakkale, Turkey, 2017; pp. 697–705.
- Shalaginova, I. Understanding Heritage: A Constructivist Approach to Heritage Interpretation as a Mechanism for Understanding Heritage Sites. Ph.D. Thesis, BTU Cottbus-Senftenberg, Brandenburg, Germany, 2012.
- Wyatt, B. Influences on Interpretation: A Critical Evaluation of The Influences on the Design and Management of Interpretation at Lighter Dark Visitor Attractions. Ph.D. Thesis, Edinburgh Napier University, Edinburgh, UK, 2019.
- Choi, H.S.; Kim, S.H. A content service deployment plan for metaverse museum exhibitions—Centering on the combination of beacons and HMDs. *Int. J. Inf. Manag.* **2017**, *37*, 1519–1527. [CrossRef]
- Drotner, K.; Dziekan, V.; Parry, R.; Schröder, K.C. (Eds.) *The Routledge Handbook of Museums, Media, and Communication*; Taylor & Francis: London, UK, 2019; p. 358.
- Cusripituck, P.; Yamabhai, J. Mobilizing the (im) mobile museum through hybrid curation: A story of hybrid curation of cultural practice during the COVID-19 pandemic. *Adv. Southeast Asian Stud.* **2023**, *16*, 145–155.
- Uchida, M.; Peng, J. Feeling the exhibition: Design for an immersive and sensory exhibition experience. In *The Routledge Handbook of Museums, Media, and Communication*; Routledge: London, UK, 2018; pp. 306–314.

30. Han, Y.; Yang, Y.; Mohamed, R. A bibliometric analysis of work engagement in the hospitality and tourism industry. *J. Hosp. Tour. Insights* **2023**, *6*, 1946–1966. [[CrossRef](#)]
31. Liu, X.; Zeng, Y.; He, J.; Li, Z. Value co-creation research in tourism and hospitality: A comparative bibliometric analysis. *Int. J. Contemp. Hosp. Manag.* **2022**, *34*, 663–686. [[CrossRef](#)]
32. Knani, M.; Echchakoui, S.; Ladhari, R. Artificial intelligence in tourism and hospitality: Bibliometric analysis and research agenda. *Int. J. Hosp. Manag.* **2022**, *107*, 103317. [[CrossRef](#)]
33. Donthu, N.; Kumar, S.; Mukherjee, D.; Pandey, N.; Lim, W.M. How to conduct a bibliometric analysis: An overview and guidelines. *J. Bus. Res.* **2021**, *133*, 285–296. [[CrossRef](#)]
34. Maghsoudi, M.; Shokouhyar, S.; Ataei, A.; Ahmadi, S.; Shokoohyar, S. Co-authorship network analysis of AI applications in sustainable supply chains: Key players and themes. *J. Clean. Prod.* **2023**, *422*, 138472. [[CrossRef](#)]
35. Idbenssi, S.; Safaa, L.; Perkumienė, D.; Škėma, M. Exploring the Relationship between social media and Tourist Experiences: A Bibliometric Overview. *Soc. Sci.* **2023**, *12*, 444. [[CrossRef](#)]
36. Mohamed, B.; Marzouk, M. Bibliometric analysis and visualisation of heritage buildings preservation. *Herit. Sci.* **2023**, *11*, 101. [[CrossRef](#)]
37. Yulifar, L.E.L.Y.; Widiaty, I.S.M.A.; Anggraini, D.N.; Nugraha, E.; Minggra, R.E.S.T.U.; Kurniaty, H.W. Digitalizing museums: A bibliometric study. *J. Eng. Sci. Technol.* **2021**, *16*, 16–26.
38. Bozdoğan, K. A bibliometric analysis of educational studies about “museum education. *Particip. Educ. Res.* **2020**, *7*, 161–179. [[CrossRef](#)]
39. Doğruer, F.S. A Retrospective Study: Bibliometric Analysis of the Museum Architecture Literature Between 1980 and 2020. *Libr. Arch. Mus. Res. J.* **2022**, *3*, 27–43. [[CrossRef](#)]
40. Ferreira, J.; Silvério, A.C.; Vaz, M.; Fernandes, P.O. Analysis of oleotourism and museology: Bibliometric analysis and systematic literature review. In *5th International Conference on Tourism Research; International Conference on Tourism Research*: Jyväskylä, Finland, 2022.
41. Wei, Z.; Zhong, C. Museums and art therapy: A bibliometric analysis of the potential of museum art therapy. *Front. Psychol.* **2022**, *13*, 1041950. [[CrossRef](#)] [[PubMed](#)]
42. Sousa, J.P.; Cordeiro, P.; Cunha, C.R. The Use of Technologies in Museums: A Bibliometric Analysis Based on the Web of Science Database. In *International Conference on Advanced Research in Technologies, Information, Innovation and Sustainability*; Springer Nature: Cham, Switzerland, 2022; pp. 269–282.
43. Li, J.; Wider, W.; Ochiai, Y.; Fauzi, M.A. A bibliometric analysis of immersive technology in museum exhibitions: Exploring user experience. *Front. Virtual Real.* **2023**, *4*, 1240562. [[CrossRef](#)]
44. Doğruer, F.S. A Bibliometric Analysis on Museum Exhibitions Research Trends. *Sanat Ve Tasarım Derg.* **2023**, *31*, 39–56.
45. Lim, W.M.; Kumar, S. Guidelines for interpreting the results of bibliometrics analysis: A sensemaking approach. *Glob. Bus. Organ. Excellence* **2023**, *43*, 17–26. [[CrossRef](#)]
46. Mukherjee, D.; Lim, W.M.; Kumar, S.; Donthu, N. Guidelines for advancing theory and practice through bibliometric research. *J. Bus. Res.* **2022**, *148*, 101–115. [[CrossRef](#)]
47. Diodato, V.P.; Gellatly, P. *Dictionary of Bibliometrics*; Routledge: London, UK, 2013.
48. Zupic, I.; Čater, T. Bibliometric methods in management and organization. *Organ. Res. Methods* **2015**, *18*, 429–472. [[CrossRef](#)]
49. Khan, M.A.; Pattnaik, D.; Ashraf, R.; Ali, I.; Kumar, S.; Donthu, N. Value of special issues in the journal of business research: A bibliometric analysis. *J. Bus. Res.* **2021**, *125*, 295–313. [[CrossRef](#)]
50. Koseoglu, M.A.; Rahimi, R.; Okumus, F.; Liu, J. Bibliometric studies in tourism. *Ann. Tour. Res.* **2016**, *61*, 180–198. [[CrossRef](#)]
51. Prancutė, R. Web of Science (WoS) and Scopus: The titans of bibliographic information in today’s academic world. *Publications* **2021**, *9*, 12. [[CrossRef](#)]
52. Ardito, L.; Scutto, V.; Del Giudice, M.; Petruzzelli, A.M. A bibliometric analysis of research on Big Data analytics for business and management. *Manag. Decis.* **2019**, *57*, 1993–2009. [[CrossRef](#)]
53. Linnenluecke, M.K.; Marrone, M.; Singh, A.K. Conducting Systematic Literature Reviews and Bibliometric Analyses. *Aust. J. Manag.* **2020**, *45*, 175–194. [[CrossRef](#)]
54. De Oliveira, O.J.; da Silva, F.F.; Juliani, F.; Barbosa, L.C.F.M.; Nunhes, T.V. Bibliometric method for mapping the state-of-the-art and identifying research gaps and trends in literature: An essential instrument to support the development of scientific projects. In *Scientometrics Recent Advances*; IntechOpen: Rijeka, Croatia, 2019.
55. Van Eck, N.J.; Waltman, L. *VOSviewer Manual. Manual for VOSviewer Version, 1.6 (19)*; Universiteit Leiden: Leiden, The Netherlands, 2023.
56. Baneyx, A. “Publish or Perish” as citation metrics used to analyze scientific output in the humanities: International case studies in economics, geography, social sciences, philosophy, and history. *Arch. Immunol. Et Ther. Exp.* **2008**, *56*, 363–371. [[CrossRef](#)]
57. Pearce, P.L. Museums and the tourist experience: Australian perspective. *Ann. Tour. Res.* **1986**, *13*, 659–666. [[CrossRef](#)]
58. Hein, G.E. *Learning in the Museum*; Routledge: London, UK, 2002.
59. Semper, R.J. Science museums as environments for learning. *Phys. Today* **1990**, *43*, 50–56. [[CrossRef](#)]
60. Hicks, M. ‘A whole new world’: The young person’s experience of visiting Sydney Technological Museum. *Mus. Soc.* **2005**, *3*, 66–80.
61. Pine, B.J.; Gilmore, J.H. *The Experience Economy*; Harvard Business Press: Boston, MA, USA, 2011.

62. Alexander, E.P.; Alexander, M.; Decker, J. *Museums in Motion: An Introduction to the History and Functions of Museums*; Rowman & Littlefield: Lanham, MD, USA, 2017.
63. Ledford, A.K. *Applying the Experience Economy Framework to Better Understand the Visitor Experience at the Natural History Museum of Utah*; The University of Utah: Salt Lake City, UT, USA, 2015.
64. Lee, H.; Jung, T.H.; Tom Dieck, M.C.; Chung, N. Experiencing immersive virtual reality in museums. *Inf. Manag.* **2020**, *57*, 103229. [[CrossRef](#)]
65. Radder, L.; Han, X. An examination of the museum experience based on Pine and Gilmore's experience economy realms. *J. Appl. Bus. Res.* **2015**, *31*, 455–470. [[CrossRef](#)]
66. Baradaran Rahimi, F.; Boyd, J.E.; Eiserman, J.R.; Levy, R.M.; Kim, B. Museum beyond physical walls: An exploration of virtual reality-enhanced experience in an exhibition-like space. *Virtual Real.* **2022**, *26*, 1471–1488. [[CrossRef](#)]
67. Jung, T.; tom Dieck, M.C.; Lee, H.; Chung, N. Effects of Virtual reality reality reality Virtual Reality and augmented reality on visitor experiences in museums. In *Information and Communication Technologies in Tourism 2016, Proceedings of the International Conference, Bilbao, Spain, 2–5 February 2016*; Springer International Publishing: New York, NY, USA, 2016; pp. 621–635.
68. Bautista, S.S. *Museums in the Digital Age: Changing Meanings of Place, Community, and Culture*; Rowman & Littlefield: Lanham, MD, USA, 2013.
69. Kotler, N.G.; Kotler, P.; Kotler, W.I. *Museum Marketing and Strategy: Designing Missions, Building Audiences, Generating Revenue and Resources*; John Wiley & Sons: Hoboken, NJ, USA, 2008.
70. Brown, A.K.; Peers, L. (Eds.) *Museums and Source Communities: A Routledge Reader*; Routledge: London, UK, 2005.
71. Gibson, L.K. Decolonizing South African Museums in a Digital Age: Re-Imagining the Iziko Museums' Natal Nguni Catalogue and Collection. Ph.D. Thesis, King's College London, London, UK, 2019.
72. Nwankwo, E.A.; Anozie, O.O.; Obieluem, U.H. Sustainable safety and security at museums in Southeast Nigeria: Implications for national reformation. *Int. J. Tour. Anthropol.* **2017**, *6*, 62–84. [[CrossRef](#)]
73. Scott, M. *Rethinking Evolution in the Museum: Envisioning African Origins*; Routledge: London, UK, 2007.
74. Silverman, R.; Abungu, G.; Probst, P. (Eds.) *National Museums in Africa: Identity, History, and Politics*; Routledge: London, UK, 2021.
75. Mossberg, L. A marketing approach to the tourist experience. *Scand. J. Hosp. Tour.* **2007**, *7*, 59–74. [[CrossRef](#)]
76. Strange, C.; Kempa, M. Shades of dark tourism: Alcatraz and Robben Island. *Ann. Tour. Res.* **2003**, *30*, 386–405. [[CrossRef](#)]
77. Halewood, C.; Hannam, K. Viking Heritage Tourism: Authenticity and Commodification. *Ann. Tour. Res.* **2001**, *28*, 565–580. [[CrossRef](#)]
78. Goulding, C. The museum environment and the visitor experience. *Eur. J. Mark.* **2000**, *34*, 261–278. [[CrossRef](#)]
79. Tom Dieck, M.C.; Jung, T.H. Value of augmented reality at cultural heritage sites: A stakeholder approach. *J. Destin. Mark. Manag.* **2017**, *6*, 110–117. [[CrossRef](#)]
80. Yoshimura, Y.; Sobolevsky, S.; Ratti, C.; Girardin, F.; Carrascal, J.P.; Blat, J.; Sinatra, R. An analysis of visitors' behaviour in the Louvre Museum: A study using Bluetooth data. *Environ. Plan. B Plan. Des.* **2014**, *41*, 1113–1131. [[CrossRef](#)]
81. Jung, T.H.; Lee, H.; Chung, N.; tom Dieck, M.C. Cross-cultural differences in adopting mobile augmented reality at cultural heritage tourism sites. *Int. J. Contemp. Hosp. Manag.* **2018**, *30*, 1621–1645. [[CrossRef](#)]
82. Vi, C.T.; Ablart, D.; Gatti, E.; Velasco, C.; Obirst, M. Not just seeing, but also feeling art: Mid-air haptic experiences integrated into a multisensory art exhibition. *Int. J. Hum.-Comput. Stud.* **2017**, *108*, 1–14. [[CrossRef](#)]
83. Charitonos, K.; Blake, C.; Scanlon, E.; Jones, A. Museum learning via social and mobile technologies:(How) can online interactions enhance the visitor experience? *Br. J. Educ. Technol.* **2012**, *43*, 802–819. [[CrossRef](#)]
84. Waterton, E.; Dittmer, J. The museum as assemblage: Bringing forth affect at the Australian War Memorial. *Mus. Manag. Curatorship* **2014**, *29*, 122–139. [[CrossRef](#)]
85. Su, Y.; Teng, W. Contemplating museums' service failure: Extracting the service quality dimensions of museums from negative online reviews. *Tour. Manag.* **2018**, *69*, 214–222. [[CrossRef](#)]
86. Trunfio, M.; Lucia, M.D.; Campana, S.; Magnelli, A. Innovating the cultural heritage museum service model through virtual reality and augmented reality: The effects on the overall visitor experience and satisfaction. *J. Herit. Tour.* **2022**, *17*, 1–19. [[CrossRef](#)]
87. Shehade, M.; Stylianou-Lambert, T. Virtual reality in museums: Exploring the experiences of museum professionals. *Appl. Sci.* **2020**, *10*, 4031. [[CrossRef](#)]
88. Palácios, H.; de Almeida, M.H.; Sousa, M.J. A bibliometric analysis of trust in the field of hospitality and tourism. *Int. J. Hosp. Manag.* **2021**, *95*, 102944. [[CrossRef](#)]
89. Chaturvedi, R.; Verma, S.; Ali, F.; Kumar, S. Reshaping Tourist Experience with AI-Enabled Technologies: A Comprehensive Review and Future Research Agenda. *Int. J. Hum. Comput. Interact.* **2023**, 5517–5533. [[CrossRef](#)]
90. Kuo, N.T.; Cheng, Y.S.; Chang, K.C.; Hu, S.M. Assessing the asymmetric impact of interpretation environment service quality on museum visitor experience and post-visit behavioural intentions: A case study of the National Palace Museum. *Asia Pac. J. Tour. Res.* **2018**, *23*, 714–733. [[CrossRef](#)]
91. Urpí, C.; Reparaz, C.; Echarri, F. Measuring the Rothko experience in school visitors to modern art museums. *J. Educ. Res.* **2022**, *115*, 173–186. [[CrossRef](#)]
92. Wong, A.K.F.; Köseoglu, M.A.; Kim, S.S. The intellectual structure of corporate social responsibility research in tourism and hospitality: A citation/co-citation analysis. *J. Hosp. Tour. Manag.* **2021**, *49*, 270–284. [[CrossRef](#)]

93. Hooper-Greenhill, E. Education, Communication, and Interpretation. In *The Educational Role of the Museum*; Greenhill, H., Ed.; Routledge: London, UK, 1999.
94. Hooper-Greenhill, E. *Museum and Gallery Education*; Leicester University Press: Leicester, UK, 1991.
95. Hein, H.S. *The Museum in Transition: A Philosophical Perspective*; Smithsonian Institution: Washington, DC, USA, 2000.
96. Fuentes-Moraleda, L.; Lafuente-Ibañez, C.; Fernandez Alvarez, N.; Villace-Molinero, T. Willingness to accept social robots in museums: An exploratory factor analysis according to visitor profile. *Libr. Hi. Tech.* **2022**, *40*, 894–913. [[CrossRef](#)]
97. King, E.; Smith, M.P.; Wilson, P.F.; Stott, J.; Williams, M.A. Creating Meaningful Museums: A Model for Museum Exhibition User Experience. *Visit. Stud.* **2023**, *26*, 59–81. [[CrossRef](#)]
98. Pagotto, M.B. Interpretation design in art exhibitions: Review of literature and design of a practice cycle. *Mus. Manag. Curatorship* **2022**, *37*, 471–490. [[CrossRef](#)]
99. Raimo, N.; De Turi, I.; Ricciardelli, A.; Vitolla, F. Digitalization in the cultural industry: Evidence from Italian museums. *Int. J. Entrep. Behav. Res.* **2022**, *28*, 1962–1974. [[CrossRef](#)]
100. Vrettakis, E.; Katifori, A.; Kyriakidi, M.; Koukouli, M.; Boile, M.; Glenis, A.; Petousi, D.; Vayanou, M.; Ioannidis, Y. Personalization in Digital Ecomuseums: The Case of Pros-Eleusis. *Appl. Sci.* **2023**, *13*, 3903. [[CrossRef](#)]
101. Wang, J.; Chang, M.; Luo, X.; Qiu, R.; Zou, T. How perceived authenticity affects tourist satisfaction and behavioural intention towards natural disaster memorials: A mediation analysis. *Tour. Manag. Perspect.* **2023**, *46*, 101085. [[CrossRef](#)]
102. Wu, Y.; Jiang, Q.; Liang, H.; Ni, S. What Drives Users to Adopt a Digital Museum? A Case of Virtual Exhibition Hall of National Costume Museum. *SAGE Open* **2022**, *12*, 21582440221082105. [[CrossRef](#)]
103. Xu, L.; Yan, S.; Chen, Z.; Chen, X. Design of the Museum Interactive Lighting System Based on the Digital Twin Technology. *Sci. Program.* **2021**, *2021*, 4824417. [[CrossRef](#)]
104. Yang, X.; Zhang, L. Smart tourism technologies towards memorable experiences for museum visitors. *Tour. Rev.* **2022**, *77*, 1009–1023. [[CrossRef](#)]
105. Jingen Liang, L.; Elliot, S. A systematic review of augmented reality tourism research: What is now and what is next? *Tour. Hosp. Res.* **2021**, *21*, 15–30. [[CrossRef](#)]
106. Vaz, R.; Freitas, D.; Coelho, A. Blind and visually impaired visitors' experiences in museums: Increasing accessibility through assistive technologies. *Int. J. Incl. Mus.* **2020**, *13*, 57–80. [[CrossRef](#)]
107. Vesci, M.; Conti, E.; Rossato, C.; Castellani, P. The mediating role of visitor satisfaction in the relationship between museum experience and word of mouth: Evidence from Italy. *TQM J.* **2021**, *33*, 141–162. [[CrossRef](#)]
108. Zhang, Y.; Sotiriadis, M.; Shen, S. Investigating the Impact of Smart Tourism Technologies on Tourists' Experiences. *Sustainability* **2022**, *14*, 3048. [[CrossRef](#)]
109. Cotter, K.N.; Fekete, A.; Silvia, P.J. Why Do People Visit Art Museums? Examining Visitor Motivations and Visit Outcomes. *Empir. Stud. Arts* **2022**, *40*, 275–295. [[CrossRef](#)]
110. Luke, J.J.; Ancelet, J.E. The role of evaluation in reimagining the art Museum. *J. Mus. Educ.* **2014**, *39*, 197–206. [[CrossRef](#)]
111. Kim, J.; Lee, M. Evaluating Visitor Engagement through Instagram: A Case Study of One with Eternity: Yayoi Kusama in the Hirshhorn Collection. *Proc. Assoc. Inf. Sci. Technol.* **2022**, *59*, 729–731. [[CrossRef](#)]
112. Nawijn, J.; Brüggemann, M.; Mitas, O. The effect of Sachsenhausen visitors' personalities and emotions on meaning and word of mouth. *Tour. Anal.* **2017**, *22*, 349–359. [[CrossRef](#)]
113. O'Hagan, L. Instagram as an exhibition space: Reflections on digital remediation in the time of COVID-19. *Mus. Manag. Curatorship* **2021**, *36*, 610–631. [[CrossRef](#)]
114. Suess, A.; Barton, G. Instagram and the museum experience: Theorizing the connection through aesthetics, space and sharing. *Mus. Manag. Curatorship* **2022**, *37*, 641–656. [[CrossRef](#)]
115. Kennedy, A.A.U.; Thacker, I.; Nye, B.D.; Sinatra, G.M.; Swartout, W.; Lindsey, E. Promoting interest, positive emotions, and knowledge using augmented reality in a museum setting. *Int. J. Sci. Educ. Part B Commun. Public Engagem.* **2021**, *11*, 242–258. [[CrossRef](#)]
116. Mitas, O.; Mitasova, H.; Millar, G.; Boode, W.; Neveu, V.; Hover, M.; van den Eijnden, F.; Bastiaansen, M. More is Not Better: The Emotional Dynamics of an Excellent. *Exp. J. Hosp. Tour. Res.* **2022**, *46*, 78–99. [[CrossRef](#)]
117. Selcuk, O.; Kozak, M. Akoglan Capturing Museum experience with emotional transfer theory. *Adv. Hosp. Tour. Res.* **2020**, *8*, 100–124. [[CrossRef](#)]
118. Geurds, A. Culture sketching, The authenticity quest in ethnographic museums. *Creat. Authent. Authentication Process. Ethnogr. Mus.* **2013**, *42*, 1–10.
119. Penrose, J. Authenticity, authentication, and experiential authenticity: Telling stories in museums. *Soc. Cult. Geogr.* **2020**, *21*, 1245–1267. [[CrossRef](#)]
120. Continenza, R.; Redi, F.; Trizio, I. Heritage interpretation: A tool for conserving, protecting, and managing environmental and cultural heritage. *SCIRES-IT-SCIENTIFIC Res. Inf. Technol.* **2017**, *7*, 39–44. [[CrossRef](#)]
121. Darzentas, D.; Cameron, H.; Wagner, H.; Craigon, P.; Bodiaj, E.; Spence, J.; Tennent, P.; Benford, S. Data-inspired co-design for museum and gallery visitor experiences. *AIEDAM* **2022**, *36*, e3. [[CrossRef](#)]
122. Morse, C.; Lallemand, C.; Wieneke, L.; Koenig, V. Virtual masterpieces: Innovation through public co-creation for digital museum collections. *Int. J. Incl. Mus.* **2021**, *15*, 65–83. [[CrossRef](#)]

123. Stanford, R. Design elements evoke embodiment at cultural sites in Rwanda and South Africa. *Mem. Stud.* **2023**, *16*, 611–620. [CrossRef]
124. Thian, H.J.C. Fostering relationships through a co-creative exhibition. *Int. J. Incl. Mus.* **2017**, *10*, 51–62. [CrossRef]
125. International Council of Museum (2022). ICOM Define Final Report (2020–2022). Available online: <https://icom.museum/en/resources/standards-guidelines/museum-definition/> (accessed on 6 April 2023).
126. Kang, M.; Gretzel, U. Effects of podcast tours on tourist experiences in a national park. *Tour. Manag.* **2012**, *33*, 440–455. [CrossRef]
127. Palumbo, R. Enhancing museums' attractiveness through digitization: An investigation of Italian medium and large-sized museums and cultural institutions. *Int. J. Tour. Res.* **2022**, *24*, 202–215. [CrossRef]
128. Luo, J.M.; Ye, B.H. Role of generativity on tourists' experience expectation, motivation and visit intention in museums. *J. Hosp. Tour. Manag.* **2020**, *43*, 120–126. [CrossRef]
129. Orea-Giner, A.; Calero-Sanz, J.; De-Pablos-Heredero, C.; Vacas-Guerrero, T. An Exploratory Analysis of Museum Attributes from the Perspective of Tourists and Residents: The Case of Thyssen-Bornemisza National Museum, Madrid, Spain. *Societies* **2021**, *11*, 64. [CrossRef]
130. Attanasio, A.; Maravalle, M.; Muccini, H.; Rossi, F.; Scatena, G.; Tarquini, F. Visitors flow management at Uffizi Gallery in Florence, Italy. *Inf. Technol. Tour.* **2022**, *24*, 409–434. [CrossRef]
131. Chung, N.; Tyan, I.; Lee, S.J. Eco-innovative museums and visitors' perceptions of corporate social responsibility. *Sustainability* **2019**, *11*, 5744. [CrossRef]
132. Hammady, R.; Ma, M.; Strathearn, C. Ambient information visualisation and visitors' technology acceptance of mixed reality in museums. *J. Comput. Cult. Herit.* **2020**, *13*, 1–22. [CrossRef]
133. Popoli, Z.; Derda, I. Developing experiences: Creative process behind the design and production of immersive exhibitions. *Mus. Manag. Curatorship* **2021**, *36*, 384–402. [CrossRef]
134. Zollo, L.; Rialti, R.; Marrucci, A.; Ciappei, C. How do museums foster loyalty in tech-savvy visitors? The role of social media and digital experience. *Curr. Issues Tour.* **2022**, *25*, 2991–3008. [CrossRef]
135. Piancatelli, C.; Massi, M.; Vocino, A. #artoinstagram: Engaging with art in the era of the selfie. *Int. J. Mark. Res.* **2021**, *63*, 134–160. [CrossRef]
136. Veldkamp, E. Keeping it real: The exhibition of artefact replicas in National Museums of Korea. *Acta Koreana* **2014**, *17*, 557–581. [CrossRef]
137. Baleiro, R. Understanding visitors' experiences at Portuguese literary museums: An analysis of TripAdvisor reviews. *Eur. J. Tour. Res.* **2023**, *33*, 3305. [CrossRef]
138. Kydros, D.; Vrana, V. A Twitter network analysis of European museums. *Mus. Manag. Curatorship* **2021**, *36*, 569–589. [CrossRef]
139. Masselink, L.; Merkle, A.W. Deep Learning: Outreach to a Submarine Museum by Students, Librarians, and Professors. *Int. J. Incl. Mus.* **2013**, *6*, 87–92. [CrossRef]
140. Boukas, N.; Ioannou, M. Co-creating visitor experiences in cultural heritage museums: The avenue towards sustainable tourism development. *Int. J. Tour. Policy* **2020**, *10*, 101–122. [CrossRef]
141. Anderson, D.; Yamashita, S. My identity in the garden—Self-reflections of expatriates' garden visits. *J. Mus. Educ.* **2020**, *45*, 176–186. [CrossRef]
142. Baker, A. Myths of the Odyssey in the British Museum (and beyond): Jane Ellen Harrison's Museum talks and their audience. *Bull. Inst. Class. Stud.* **2020**, *63*, 123–137. [CrossRef]
143. Komarac, T.; Ozretic-Dosen, D.; Skare, V. Managing edutainment and perceived authenticity of museum visitor experience: Insights from qualitative study. *Mus. Manag. Curatorship* **2020**, *35*, 160–181. [CrossRef]
144. Kelton, M.L. Mathematics learning pathways on a school field trip: Interactional practices linking school and museum activity. *Visit. Stud.* **2021**, *24*, 220–242. [CrossRef]
145. Nubani, L.; Öztürk, A. Measuring the impact of museum architecture, spaces and exhibits on virtual visitors using facial expression analysis software. *Buildings* **2021**, *11*, 418. [CrossRef]
146. Giannini, T.; Bowen, J.P. Museums and Digital Culture: From reality to digitality in the age of COVID-19. *Heritage* **2022**, *5*, 192–214. [CrossRef]
147. Lu, S.E.; Moyle, B.; Reid, S. Technology and museum visitor experiences: A four stage model of evolution. *Inf. Technol. Tour.* **2023**, *25*, 151–174. [CrossRef]
148. Robaina-Calderín, L.; Martín-Santana, J.D.; Muñoz-Leiva, F. Immersive experiences as a resource for promoting museum tourism in the Z and Millennial generations. *J. Destin. Mark. Manag.* **2023**, *29*, 100795. [CrossRef]
149. Han, H.; Lee, S.; Hyun, S.S. Role of internal and external museum environment in increasing visitors' cognitive/affective/healthy experiences and loyalty. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4537. [CrossRef]
150. Zheng, J.J.; Wen Shen, H.; Chau, K.Y.; Liu, T.; Li, E.L. Factors influencing conative loyalty in anthropology museum tourism. *Tour. Manag. Stud.* **2021**, *17*, 29–40. [CrossRef]
151. Kastenholz, E.; Gronau, W. Enhancing competencies for co-creating appealing and meaningful cultural heritage experiences in tourism. *J. Hosp. Tour. Res.* **2022**, *46*, 1519–1544. [CrossRef]
152. Chernbumroong, S.; Ariya, P.; Yolthasart, S.; Wongwan, N.; Intawong, K.; Puritat, K. Comparing the Impact of Non-Gamified and Gamified Virtual Reality in Digital Twin Virtual Museum Environments: A Case Study of Wieng Yong House Museum, Thailand. *Heritage* **2024**, *7*, 1870–1892. [CrossRef]

153. Vosinakis, S.; Nikolakopoulou, V.; Stavrakis, M.; Fragkedis, L.; Chatzigrigoriou, P.; Koutsabasis, P. Co-design of a playful mixed reality installation: An interactive crane in the museum of marble crafts. *Heritage* **2020**, *3*, 1496–1519. [[CrossRef](#)]
154. Savenije, G.M.; De Bruijn, P. Historical empathy in a museum: Uniting contextualisation and emotional engagement. *Int. J. Herit. Stud.* **2017**, *23*, 832–845. [[CrossRef](#)]
155. Marzano, M.; Castellini, M. Museums and Crisis Management due to COVID-19, Effects of Pandemic and the Role of Digital and Social Networks Communication. *Eur. Sci. J.* **2022**, *18*, 37–57. [[CrossRef](#)]
156. Bavi, A.; Gupta, N. Gamification of Digital Heritage as an Approach to Improving Museum and Art Gallery Engagement for Blind and Partially Sighted Visitors. *Archaeologies* **2022**, *18*, 585–622. [[CrossRef](#)]
157. Cesário, V.; Nisi, V. Lessons Learned on Engaging Teenage Visitors in Museums with Story-Based and Game-Based Strategies. *ACM J. Comput. Cult. Herit.* **2023**, *16*, 1–20. [[CrossRef](#)]
158. López-Martínez, A.; Carrera, Á.; Iglesias, C.A. Empowering Museum experiences applying gamification techniques based on linked data and smart objects. *Appl. Sci.* **2020**, *10*, 5419. [[CrossRef](#)]
159. Puig, A.; Rodríguez, I.; Arcos, J.L.; Rodríguez-Aguilar, J.A.; Cebrián, S.; Bogdanovych, A.; Morera, N.; Palomo, A.; Piqué, R. Lessons learned from supplementing archaeological museum exhibitions with virtual reality. *Virtual Real.* **2020**, *24*, 343–358. [[CrossRef](#)]
160. Falk, J.H.; Dierking, L.D. *The Museum Experience Revisited*; Routledge: London, UK, 2016.

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