SUSTAINABLE TOURISM AND CULTURAL HERITAGE: A QUANTITATIVE INTERDISCIPLINARY APPROACH BASED ON VISITOR PROFILES

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1. Introduction

This study addresses the impact of visits to the Civil War shelters in Alicante on the city's cultural memory heritage [1,2]. This analysis is situated within the broader context of how historical sites can serve as powerful vehicles for education, reflection, and the preservation of collective memory [3–5]. The research is part of the Operational Program FEDER Sustainable Growth 2014-2020, which emphasizes the importance of integrating historical and cultural heritage recovery into sustainable urban development [4]. The Civil War shelters in Alicante, rehabilitated and opened to the public, offer a unique window into Spain's troubled past, allowing visitors to connect directly with the experiences of those who lived through that turbulent period. The opening of these spaces aims not only at the physical conservation of the shelters but also at promoting a deeper understanding of their history and the war's consequences on contemporary society, as developed in the field of mnemohistory [6–8]. The main goal of this study is to assess the impact of visits to these shelters on the public's understanding and appreciation of cultural memory heritage. It aims to analyze the profile of the visitors, their motivation for visiting the shelters, and how these visits contribute to historical education and the recognition of cultural heritage. Furthermore, it seeks to identify patterns and trends in visits to offer recommendations that can improve the management of these historical sites in [9–11].

The research hypotheses suggest that the rehabilitation and opening of the shelters have a positive impact on cultural memory heritage, attracting a broad spectrum of visitors and fostering a greater understanding of the history of the Spanish Civil War. The findings are expected to contribute to better management of cultural memory heritage and promote effective communication and education strategies [12]. Considering previous works in the field, this study positions itself at the intersection between cultural heritage management, historical education, and cultural tourism [13–16]. Through the discussion of similar studies and the application of proven methodologies, it seeks to offer a novel perspective on the importance of the Civil War shelters in Alicante as tools

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for stimulating public interest and historical understanding.

The present study adopts an interdisciplinary approach, positioned at the confluence of disciplines such as tourism, cultural heritage management and education. This methodological framework allows for a holistic understanding of the impact of visits to Civil War shelters in Alicante, addressing not only their touristic relevance but also their educational significance and their contribution to the management and conservation of cultural heritage. For instance, from the perspective of tourism, the study investigates how the shelters become tourist attractions that promote responsible and educational tourism, encouraging visitors to reflect on history and collective memory. From the realm of cultural heritage management, it analyzes how the appropriate presentation and interpretation of these sites contribute to their conservation, valorization, and transmission to future generations.

Finally, in the educational domain, the impact of visits on the visitors' awareness and understanding of the historical period represented by the shelters is assessed, emphasizing the importance of integrating these spaces into both formal and informal educational programs. The intersection of these disciplines in our research enriches cultural heritage management by offering multifaceted strategies for its conservation and promotion.

This interdisciplinary approach also underscores the need to adopt management practices that consider the various dimensions of cultural heritage, ensuring its sustainability and relevance to a wide range of audiences.

The relevance of an interdisciplinary approach in studying the impact of visits to cultural heritage has been widely supported by existing literature, covering everything from cultural tourism management to heritage education and conservation [17–20]. In parallel, works such as those by Boyd and Timothy explore the intersection between tourism, education, and heritage management, suggesting that the integration of these fields can significantly enhance the sustainability of cultural heritage [13,21,22]. Furthermore, studies, like that by Richards, emphasize the importance of understanding the profiles and motivations of visitors to design more effective conservation strategies [16]. This approach is reinforced by Leask and Fyall, who argue that an interdisciplinary understanding of tourism and heritage management can lead to more inclusive and participative practices in cultural heritage conservation [23]. The literature also highlights the utility of visitor surveys as a tool for gathering crucial data on public perception and valuation of heritage [10]. These studies demonstrate that surveys not only inform about visitor preferences and behaviors but can also be pivotal in planning educational and conservation interventions tailored to their needs and expectations.

2. Research objectives

The general objective of this study is to assess the impact of visits to the Civil War shelters in Alicante on the city's cultural memory heritage. This analysis seeks to understand how the rehabilitation and opening of these sites contribute to the valorization and understanding of the city's troubled past in the contemporary urban context.

The specific objectives include determining the demographic profile of the visitors, both local and national and international; analyzing visitation trends in different seasons of the year; evaluating the level of knowledge and motivation behind the visits to these shelters; and projecting future visitation trends to improve the management and promotion of these spaces as part of the cultural heritage. Additionally, the study aims to explore the effectiveness of different types of visits (guided, dramatized, etc.) in conveying knowledge about the historical memory associated with the shelters.

3. Research hypotheses

The main research hypothesis posits that the rehabilitation and public opening of the Civil War shelters in Alicante have a significant positive impact on the city's cultural memory heritage, increasing public interest and understanding of the historical events these places represent. It is assumed that there is a positive correlation between the offer of cultural and educational activities in these shelters and an increase in visitors, which in turn contributes to a greater awareness and appreciation of the historical and cultural value of these sites.

Furthermore, it is hypothesized that there are significant differences in the visitor profile based on variables such as age, geographic origin, and type of visit, which require differentiated management and communication strategies to maximize the positive impact of these spaces on Alicante's cultural memory heritage. These hypotheses will be explored through a quantitative methodological design, using statistical analysis to interpret data collected during the study period from August 2023 to January 2024.

4. Methodology

The study employs a quantitative methodology to assess the impact that visits to six Civil War shelters, which have been rehabilitated and made available to the public in Alicante, have had on the city's cultural memory heritage. Within the framework of the Operational Program FEDER "Sustainable Growth 2014-2020" (CCI: 2014ES16RFOP002, Priority Axis: Urban Development 12), the Alicante City Council, under the supervision of the General Sub-Directorate for Urban Development (D.G. of European Funds, Secretary of State for Budgets and Expenses, Ministry of Finance and Public Function), promoted the DUSI Alicante Strategy "Las Cigarreras Area". This strategy, co-financed by the European Commission and by Order HAP/2427/2015 of November 13 (BOE No. 275 of 11/17/15), aims to encourage sustainable urban development through the integration of the recovery of industrial, religious and military heritage, highlighting its historical and tourist importance. In this context, the rehabilitation and public opening of four Civil War air-raid shelters in Alicante took place in 2022, adding to the two that had previously been opened in 2015 (Figure 1). Following the opening of the Civil War shelters, various activities such as guided tours, dramatized representations and cultural events were scheduled around these spaces.

Throughout the year 2022 and the beginning of 2023, the attendance of 5,229 individuals was recorded, of which 3,472 participated in guided tours and 999 in dramatized activities and lectures on historical memory and the function of the air-raid shelters. After this phase and following the hiring of a new company specialized in guided tours by the Alicante City Council, these activities were relaunched in August 2023, with an expanded scope that now includes more resources and extends over a longer period. Six months into this initiative, the objective is to analyze the generated impact, the profile of the visitors, and prospects, leaving the comparison of historical, current, and future data for subsequent research that can derive optimal conclusions for the management of cultural memory heritage. Through a retrospective longitudinal design, data collected from August 2023 to January 2024 were analyzed, with a particular focus on two visitor segments: the general public and organized school groups, aiming to identify patterns and trends in visits that could contribute to a better understanding of their impact on cultural heritage.

In the current study, a quantitative methodology was adopted to assess the impact of visits to Civil War shelters in Alicante on visitors' perception and valorization of

cultural heritage, specifically focusing on the interplay between the tangible heritage (the shelters themselves) and the intangible heritage (the memories and historical significance associated with them). Data from 407 individuals were collected and analyzed through surveys, focusing on the demographic profile of the visitors, their motivations for visiting, and how these visits contribute to the recognition and appreciation of both aspects of cultural heritage.

The study adhered to the ethical principles of scientific research, obtaining informed consent from participants and ensuring the confidentiality of data (Figure 2).
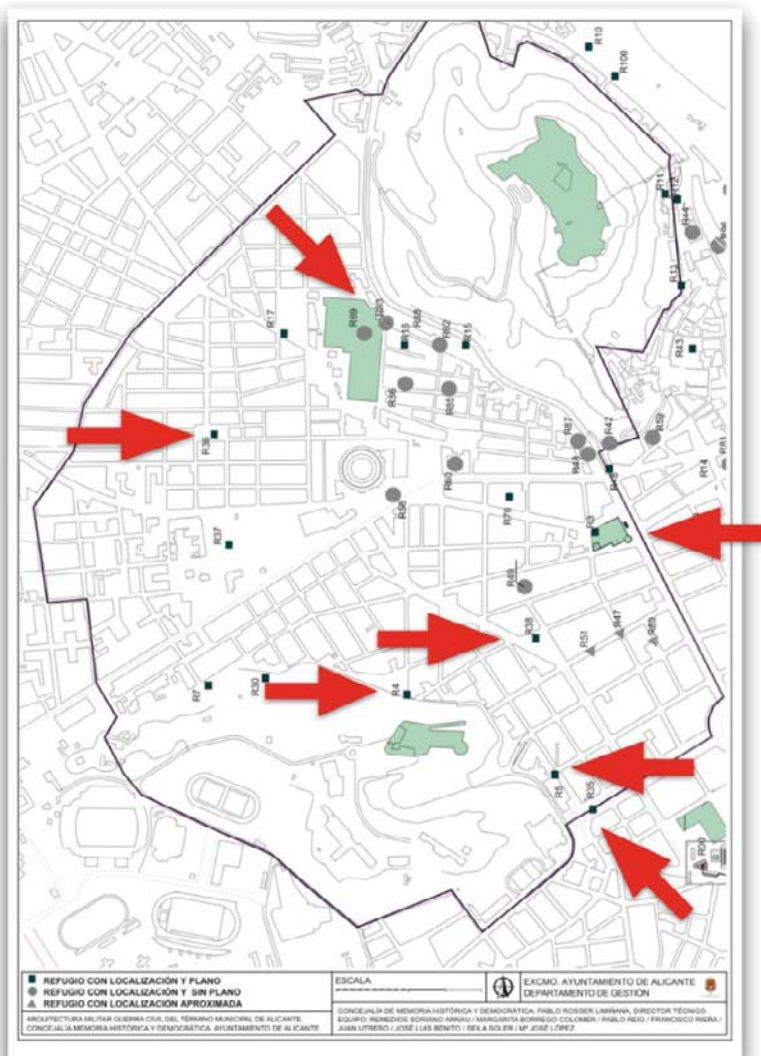

Figure 1. DUSI Area of the city of Alicante with Civil War air-raid shelters (indicated by red arrows) intended for restoration in the project.

Figure 2. Sequence diagram of the conducted research.

5. Results

5.1. Descriptive analysis

The survey data reveal a diverse distribution of visitation dates, with daily visitor numbers showing significant fluctuation. The peak visitation date was recorded on December 9th, 2023, attracting 4.4% of total visits, closely followed by other significant dates like April 11th, 2023, and December 28th, 2023, each accounting for 3.4% of visits.

The bulk of visits (85.7%) fall under the category of "General Public," with "School" visits comprising the remaining 14.3%. Analysis of visitor group sizes indicates a predominance of pairs (36.9%), with the frequency of larger groups diminishing progressively. Exceptional instances of notably large groups (e.g., 90 or 98 visitors) typically pertain to organized gatherings.

Statistical measures point to an average group size of approximately 8-9 individuals, despite a median of 3, underscoring a skewed distribution influenced by a minority of large groups. This is further evidenced by a high standard deviation (14.08661) and variance, highlighting substantial variability in group sizes.

The data underscore a skewed visitor group size distribution, with "General Public" visits notably prevalent. Peaks in visitor numbers, particularly on specific dates, often correlate with organized group reservations. This pattern transcends expected increases on weekends or public holidays.

In alignment with the study's aims concerning Civil War shelter visits in Alicante, the survey data facilitated a nuanced analysis of visit timing. Figure 3 illustrates the monthly visitor distribution from August 2023 to January 2024, offering insight into temporal visitation trends to these historical sites (Figure 3).

There is variability in the total number of visitors per month. Some months show a higher influx of visitors compared to others, which could be influenced by seasonal factors, large, organized groups, or holiday periods.

Figure 3. Bar chart of the total visitor distribution by month from August 2023 to January 2024.

While Figure 3 does not detail the specific days, the underlying data and prior analysis indicate that certain dates within these months experienced significant spikes in visitors.

5.2. Type of visit and total number of visitors

In this study, a streamlined approach was employed to assess the survey's methodology and findings, with a focus on key insights directly related to the impact of visitors on cultural heritage. The analysis reveals that the General Public (Type 1) comprises 85.7% of visits, underscoring the Civil War shelters in Alicante's widespread appeal and accessibility. This prevalence suggests the site's historical and cultural significance attracts a diverse visitor base with varying interests and historical knowledge levels.

Conversely, School Visits (Type 2) account for 14.3% of total visits, highlighting the site's educational potential and the opportunity to enhance educational programs and partnerships with institutions. This points to the necessity for dedicated resources for this demographic, including tailored educational materials and staff specialized in educational engagement.

The visit types exhibit a mean of 1.1425 with a standard deviation of 0.35 across 407 observations, indicating a predominance of General Public visits with minimal variability.

Visitor group sizes show considerable variation, with a mean of 8.4791 and a standard deviation of 14.08661. The distribution into Small (1-2 Visitors), Medium (3-5 Visitors), and Large Groups (more than 5 Visitors) provides insights into visitor behavior, necessitating a tailored approach to interpretive materials and activities.

The strategic implications for site management include catering to both general and educational visits, with special consideration for the infrequent yet significant occurrence of very large groups.

The strong positive correlation (0.809) between the type of visit and group size underscores the relationship between visit type and visitor volume, informing operational planning and resource allocation (Table 1).

Table 1. Correlations

		Type of Visit	Total Number of Visitors
Type of Visit	Pearson Correlation	1	0,809
	Significance (2-tailed)		<0,001
	Sum of Squares and Cross Products	49,735	1619,211
	Covariance	0,122	3,988
	N	407	407
Total Number of Visitors	Pearson Correlation	0,809	1
	Significance (2-tailed)	<,001	
	Sum of Squares and Cross Products	1619,211	80563,572
	Covariance	3,988	198,432
	N	407	407

The correlation is significant at the 0.01 level (2-tailed).

The analysis revealed that the extremely large effect sizes demonstrate not just a significant difference between the types of visits in terms of the total number of visitors, but also the magnitude of this difference. It indicates that the distinct characteristics and impacts of the two types of visits—general public versus school groups—are substantial. Specifically, the effect sizes calculated from our statistical tests suggest that school visits likely draw much larger groups compared to the general public. This considerable variance in visitor numbers has important implications for how the sites are managed and marketed, emphasizing the need to tailor experiences and educational resources to accommodate and engage these distinct visitor segments effectively (Figure 4).
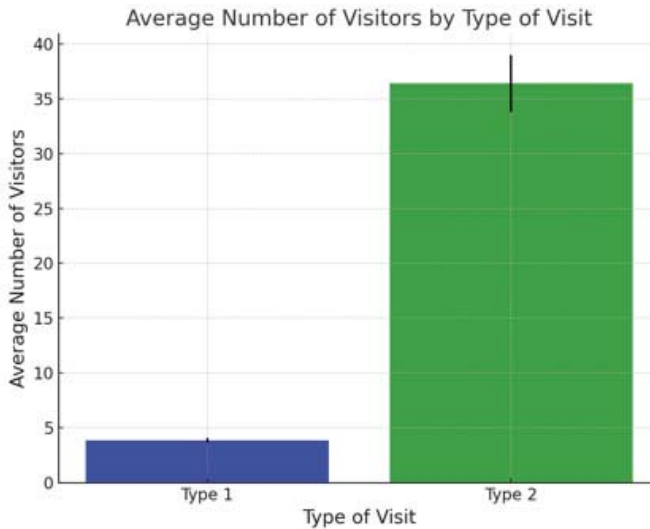

Figure 4. Bar chart displaying the average number of visitors for the two types of visits: general public (1) and organized school groups (2).

The management of the shelters has logically considered this preference or need for school visits to cater to larger groups. In this regard, strategies have been considered to efficiently manage days with a high influx of school groups, including the assignment of additional guides, and the opening of larger spaces to accommodate these groups, ensuring that the visits are interactive and educational for larger groups. To this end, the War Interpretation Center in Alicante was designed and constructed, precisely next to one of the shelters to be visited (the one at Plaza de Séneca).

This information has also been useful for designing programs and materials that are attractive to educational centers and that can handle the volume and dynamics of a large school group.

A notable case study highlighted in this analysis is the "La Rambla de los Castillos" initiative, where individuals of all ages and backgrounds participated in educational workshops [24] (Figure 5).

Figure 5. Schoolchildren engaging in creative workshops as part of the 'La Rambla de los Castillos' initiative, which aims to foster a connection with the city's history through the arts and revitalize the collective memory associated with the Civil War shelters.

The objectives included the participatory reconstruction of the historical narrative, the strengthening of collective identity linked to historical heritage, and the promotion of reflection and consensus in a participatory democracy. The project, executed by Grupo Aranea under our coordination, consisted of two phases. This multidisciplinary group, led by Marta García Chico and Francisco Leiva Ivorra, focuses on creating spaces that encourage minors to engage with and understand public spaces, in this case, more specifically, the Civil War shelters.

The project included interactive sessions with schoolchildren, aiming to spark their interest in the mnemonic heritage and resources of Alicante through playful activities such as drawing, storytelling and theater.

The outcome was the creation of various maps of the shelters that were incorporated into a final city map created by the children, reflecting their discoveries and imagination (Figure 6).

Sessions with schoolchildren also included discussions about cities, presentations of elements of Alicante's identity, and the transformation of these elements into imaginary characters, thus enriching the city's narrative.

Through engaging with the narratives and personal recollections collected during the sessions with schoolchildren, the activity facilitated the preservation of the intangible heritage associated with the shelters.

Figure 6. Various drawings of the city of Alicante's shelters made by students from the state school La Aneja in Alicante.

As children and visitors alike shared and listened to stories and testimonies, they participated in living history, bridging the past with the present. This storytelling approach not only served as a repository for memories but also allowed visitors of all ages to form a personal connection with the historical narrative of the place, fostering a sense of continuity and relevance.

Moreover, the analysis of the preferences and motivations behind the visits reveals that specific educational programs, such as guided tours focusing on the history of the Civil War and its impact on the local community, have a significant impact on the valorization of heritage. These programs not only increase knowledge about the historical period but also promote a more nuanced understanding of the importance of preserving such sites for future generations. The diversified profile of visitors to the Civil War shelters in Alicante plays a fundamental role in the conservation and valorization of cultural heritage. This study demonstrates how different demographic groups interact with and perceive memory heritage, directly influencing the management and promotion strategies of these historical sites. For instance, local visitors exhibit a strong emotional and personal connection to the shelters, considering them as an integral part of their local cultural and historical identity. The deep personal connection fosters greater awareness of the importance of heritage preservation and motivates active participation in conservation activities. In contrast, national and international visitors, attracted by the educational and tourist value of the shelters, contribute to their valorization by spreading knowledge about these spaces through social media and other digital platforms, expanding their recognition globally (Figure 7).

Therefore, it is evident that a cultural heritage management strategy that considers the profiles and motivations of visitors can significantly improve the conservation and valorization of heritage.

By tailoring the activities and programs offered to the needs and interests of different visitor groups, shelter managers can ensure broader and more committed participation, which is crucial for long-term heritage preservation.

Figure 7. Micro-theater performed in the antechamber of the Tabacalera air-raid shelter.

5.3. How visitors found out about the shelter visits and the percentage distribution for each

In this refined analysis, we shift the focus from quantitative details to the broader implications of how visitor demographics and discovery methods influence the conservation and valorization of cultural heritage.

The study highlights a diversity of ways through which people learn about Civil War shelters in Alicante, underscoring the pivotal role of digital platforms, personal recommendations, and institutional promotions in attracting visitors of various ages.Key findings reveal that the internet is the primary discovery tool, followed by unspecified sources, which suggests a wide array of untracked or personal methods of learning about the shelters. The importance of tourist offices and previous visits suggests a significant impact of direct promotion and visitor retention on heritage engagement. Recommendations from friends or family and social media emerge as crucial, yet less dominant, channels. The correlation analysis between the type of visit and discovery methods unveils a moderate positive relationship, indicating that different visitor groups learn about the shelters through varied channels, with school groups possibly leveraging educational communications and the general public being reached more effectively through online advertising. This points to an interdisciplinary approach in heritage conservation, where understanding visitor demographics and preferences can guide more targeted and effective communication strategies (Table 2).

The Pearson correlation between these two variables is 0.296, significant at the 0.01 level. This indicates a moderate positive correlation, demonstrating that there is a relationship between the type of visit and the medium through which visitors learn about them. As the type of visit changes, so does the way in which visitors find out about

them, although the relationship is not strongly pronounced and is not the sole determining factor.

Table 2. Correlations

		Type of visit	How did you find out about the shelter visits?
Type of visit	Pearson Correlation	1	0,296
	Significance (2-tailed)		<0,001
	Sum of Squares and Cross Products	49,735	210,855
	Covariance	0,122	0,519
	N	407	407
How did you find out about the shelter visits?	Pearson Correlation	0,296	1
	Significance (2-tailed	<0,001	
	Sum of Squares and Cross Products	210,855	10177,912
	Covariance	0,519	25,069
	N	407	407

The correlation is significant at the 0.01 level (2-tailed).

That is, while school visits might be more likely to be discovered through educational channels or direct communications to schools, and general public visits through advertising or the internet, this trend is not exclusive or absolute.

The study suggests that while digital and personal referral channels are vital in promoting cultural heritage visits, the diverse discovery methods underscore the need for a multi-channel marketing strategy that can cater to a broad audience spectrum. This approach aligns with an interdisciplinary methodology that not only considers statistical correlations but also integrates marketing, education, and heritage management principles to enhance the appeal and accessibility of cultural heritage sites. Overall, the analysis advocates for nuanced communication strategies that address the demographics of visitors and their discovery behaviors. Emphasis is placed on the importance of both digital platforms and personal interactions in the promotion and preservation of cultural heritage, as demonstrated by the following Tau-b and Spearman correlation graphs between age groups and how they learned about the visits (Figure 8). This interdisciplinary perspective offers valuable insights for tailoring visitor experiences and engagement initiatives, ultimately contributing to the sustainable valorization of cultural heritage.

5.4. Presence in the visit groups by age range

Similarly, we analyzed the relationship between the size of the visitor group and the presence of different age groups in visits to the Civil War shelters in Alicante, with a particular focus on the relevance of these data for the conservation and valorization of cultural heritage.
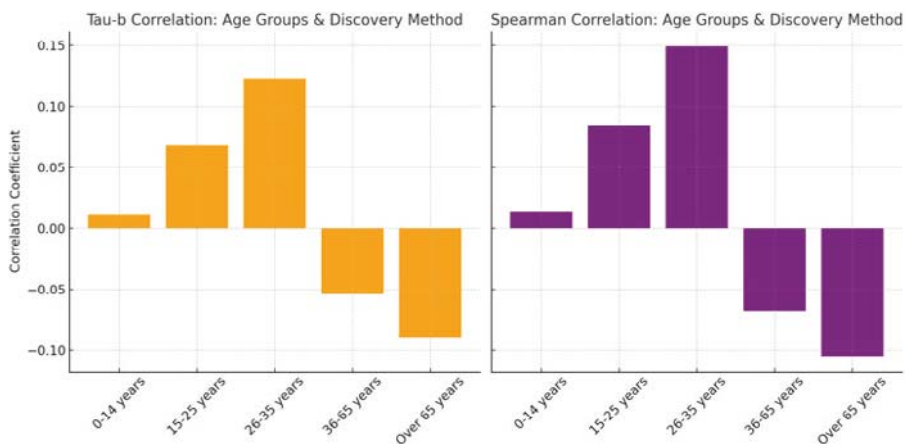
Figure 8. Correlation chart between age groups and how they found out about the visits.

The findings suggest a significant trend: young visitors, especially those between 15 to 25 years of age, tend to participate in larger groups, often organized by educational institutions, which implies a notable interest of this demographic group in the studied cultural heritage. In contrast, groups that include children under 14 years of age or adults over 65 years are less common, which could reflect a lower attraction or accessibility of these visits for such age ranges.

The methodology employed includes ANOVA analysis (analysis of variance) to examine variations in group size among different age groups, revealing statistically significant differences that suggest how the age composition of visitor groups can influence the visit experience and, consequently, the perception and appreciation of heritage. The correlations between the type of visit and the age of visitors indicate that school visits play a crucial role in attracting young people, highlighting the importance of educational programs in heritage conservation (Table 3).

Table 3. ANOVA

Total Number of Visitors					
	Sum of Squares	**gl**	**Mean Square**	**F**	**Sig.**
Mean Square	23551,288	19	1239,541	8,414	<0,001
Within Groups	57012,284	387	147,319		
Total	80563,572	406			

Note: gl = Degrees of Freedom; Sig. = Statistical Significance.

This interdisciplinary approach, which combines statistical analysis with considerations of heritage management and education, underscores the importance of tailoring conservation and promotion strategies to the demographic characteristics of visitors. Identifying visitation patterns by age can inform the development of experiences and programs that maximize visitor interest and participation, ensuring greater valorization

and sustainability of cultural heritage in the long term. In this sense, the study provides evidence to promote more inclusive and targeted practices in heritage management, which can significantly improve its conservation and appreciation by a broader range of audiences.

6. Discussion

Discussion of the findings of this study is enriched by considering previous research that has examined the impact of the rehabilitation of historical sites on cultural heritage and collective memory [13,16,23], as well as those that have used similar methodologies to analyze visitor behavior and profiles [25–27].

These comparisons not only allow the current study to be situated within a broader theoretical and empirical framework but also offer insights into understanding the complexities associated with the management and promotion of cultural heritage in urban contexts.

Previous studies, particularly from the field of mnemohistory, but not exclusively, have shown that the rehabilitation and public opening of memory sites, such as Civil War shelters, can play a crucial role in historical education and in strengthening collective memory [6–8,28–30]. These works underline the importance of integrating historical narratives into the urban fabric to promote a deeper and more nuanced understanding of contentious pasts. In line with these investigations, our study finds that the opening of Civil War shelters in Alicante has generated significant interest among the public, thus contributing to greater awareness and appreciation of the city's contentious past [3–5,24,31–33].

Methodologically, the adoption of a quantitative approach to analyze visitors' profiles and their motivations to visit aligns with similar studies in the field of cultural and heritage tourism. For instance, research employing descriptive and correlational statistical analysis has been effective in identifying visitation trends and visitor preferences at cultural heritage sites [13,23]. Like these studies, our work has applied statistical analyses to better understand the demographic characteristics of visitors, their visitation patterns, and how these factors influence the perception and valuation of memorial cultural heritage.However, unlike some previous studies that focus exclusively on quantitative aspects, our approach also includes a deeper exploration of qualitative aspects to better understand the subjective experiences of visitors and their emotional connection with memory sites. This holistic perspective is essential for capturing the complexity of interactions between the public and heritage sites, as suggested by research that combines quantitative and qualitative methods.

Finally, the discussion of this study benefits from comparison with research that has explored the relationship between tourism development and the conservation of cultural heritage [34]. These works highlight the challenges and opportunities of balancing public accessibility with the preservation of authenticity and historical significance of memory sites. In this sense, our study not only contributes to academic knowledge about the management of cultural heritage in urban contexts but also offers practical implications for tourism and heritage conservation policies.

In sum, by situating our findings within the context of previous research, the relevance of the Civil War shelters in Alicante as active memory spaces and their potential to foster responsible and educational cultural tourism is underscored by scholars such as Carretero and Borrelli, Ciro, and Caro-Lopera, Gutiérrez, Martínez-Rodríguez, et al, Movellán Haro, Pappier and Morras, and Restrepo and Espinosa [35–41].

7. Conclusion

After a comprehensive analysis of the collected data on the impact of visits to Civil War shelters on cultural memory and heritage in Alicante, Spain, several important conclusions have been reached. These conclusions facilitate the evaluation of the extent to which the initially proposed research hypotheses have been fulfilled.

Firstly, the results confirm the main hypothesis that the rehabilitation and public opening of Civil War shelters significantly enhance the city's cultural heritage memory (Figure 9).

Figure 9. Four of the shelters rehabilitated in the DUSI Project

This is evident from the notable increase in both local and national/international interest and visitor numbers to these sites since their opening. An increase in visitor numbers reflects heightened public awareness and appreciation of the historical and cultural importance of these spaces, thus corroborating the effectiveness of the rehabilitation strategies and the valorization of heritage related to historical memory. Furthermore, it has been demonstrated that there is a positive correlation between the offer of cultural and educational activities in the shelters and the increase in the number of visitors. Guided tours, dramatized activities, and presentations about historical memory have played a crucial role in attracting the public and in transmitting knowledge about the Civil War period and its impact on Alicante. This confirms the second part of the main hypothesis, indicating that visit modalities enriched with cultural and educational content are essential for enhancing the value of these sites as resources for learning and reflection on the past.

Regarding the specific objectives, the study has revealed significant differences in the profile of visitors based on age, geographic origin, and the chosen visit modality. School groups and young visitors show higher participation in guided tours and educational activities, indicating effective engagement with this segment of the public. On the other hand, individual visitors, or those in small groups, including national and international tourists, display diversified interest in the different visit offerings. This variability in visitor profiles and preferences underscores the importance of developing differentiated communication and management strategies for each segment, to maximize the educational and cultural impact of the shelters.

In conclusion, the study's results suggest that the recovery initiatives and valorization of Civil War shelters in Alicante have been successful in terms of increasing public

interest and enhancing the understanding of Alicante's cultural heritage related to its historical memory. Additionally, these initiatives have facilitated the identification of effective strategies for managing cultural and educational tourism, emphasizing the need to tailor offerings to diverse visitor profiles to ensure enriching and meaningful experiences. It is recommended that the development of educational programs, cultural activities and promotion strategies that highlight the importance of historical memory and encourage active participation from various societal groups, should continue.

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Biographical notes

Dr. Pablo Rosser is a Professor at the International University of La Rioja (UNIR) and an Associate Professor at the University of Alicante (UA), where he teaches in the Faculty of Education and at the Permanent University for Adults (UPUA). Additionally, he collaborates as a Professor at the Open University of Catalonia (UOC). Dr. Rosser holds degrees in Geography and History and a doctorate in Historical and Archaeological Heritage. His research focuses on learning preferences in experimental sciences, gender opportunities in higher education and social e-learning.

His work includes both online and in-person teaching, covering topics such as history, archaeology, cultural heritage, tourism and education. He conducts research on learning styles, emotions, and their relationship with active methodologies, critical pedagogy, and AI, specifically ChatGPT. His findings have been presented at international conferences and published in scientific journals.

Another research area involves cognitive and emotional memory and its relationship with cultural heritage, supported by hermeneutics. He also initiated a pilot project in 2021 with Dr. Seila Soler, evaluating the satisfaction, motivation, cognition, emotions, and well-being of UPUA students. This project has produced results presented at national conferences and has been published in scientific journals. Dr. Rosser's dedication

to improving educational quality for older adults and his extensive research make him a valuable contributor to higher education.

Dr. Seila Soler has a cum laude Ph.D. in educational research from the University of Alicante (UA) and is a full-time professor at Isabel I University, where she coordinates master's theses in Secondary Education. She is a member of UNIR's PREFAPLI Research Team, focusing on learning preferences in experimental sciences. Her research aligns with detecting learning style preferences in secondary and higher education. She also contributes to the UA Network for Design and Attention to Gender Opportunities in Higher Education.

With a degree in History, Dr. Soler has worked as an archaeologist and a secondary school teacher. She has conducted teacher training courses at CEFIRE, emphasizing active methodologies. Her research contributions include various published articles and conference presentations on didactic methodologies, critical thinking, and the education of older adults. In collaboration with Pablo Rosser, she initiated a pilot research project on the satisfaction, motivation, cognition, and well-being of UPUA students.

Dr. Soler specializes in the history of education, particularly between the 19th and early 20th centuries. She has developed a novel methodology for analyzing historical educational narratives using QDA software, with significant results in her doctoral thesis and publications. She excels in both qualitative and quantitative analysis for educational statistical analyses and thematic bibliometrics.

Summary

This interdisciplinary quantitative study offers a comprehensive assessment of how visits to the Civil War shelters in Alicante, which have been rehabilitated and opened to the public, influence awareness of cultural memory heritage in an urban context. The framework of the FEDER Operational Program "Sustainable Growth 2014-2020", delves into how these spaces contribute both to sustainable urban development and to historical understanding in society. Through a retrospective longitudinal design, data from 407 visitors were collected and analyzed between August 2023 and January 2024, aiming to profile the visitors, their motivations, and their visitation patterns. Preliminary findings reveal a positive reception and an increase in awareness of the historical significance of the shelters, suggesting a substantial impact on the appreciation of memory heritage. The analysis provides key insights for managing cultural heritage by proposing enhanced strategies for the communication and promotion of historical legacy. This article is positioned at the intersection of tourism research and cultural heritage studies, exploring the links between culture, sustainable development and tourism through an inter- and transdisciplinary approach that encompasses both social sciences and administrative and business practices.

Riassunto

Questo studio quantitativo interdisciplinare offre una valutazione completa di come le visite ai rifugi della Guerra Civile ad Alicante, che sono stati riabilitati e aperti al pubblico, influenzino la consapevolezza del patrimonio della memoria culturale in un contesto urbano secondo il quadro del Programma Operativo FEDER "Crescita Sostenibile 2014-2020". Viene inoltre approfondito il modo in cui questi spazi contribuiscono sia allo sviluppo urbano sostenibile che alla comprensione storica nella società. Attraverso

un disegno longitudinale retrospettivo, sono stati raccolti e analizzati i dati di 407 visitatori tra agosto 2023 e gennaio 2024, con l'obiettivo di profilare i visitatori, le loro motivazioni e i loro modelli di visita. I risultati preliminari rivelano un'accoglienza positiva e un aumento della consapevolezza del significato storico dei rifugi, suggerendo un impatto sostanziale sulla valorizzazione del patrimonio della memoria. L'analisi fornisce spunti chiave per la gestione del patrimonio culturale, proponendo strategie avanzate per la comunicazione e la promozione del patrimonio storico. Questo articolo si posiziona all'intersezione tra la ricerca sul turismo e gli studi sui beni culturali, esplorando i legami tra cultura, sviluppo sostenibile e turismo attraverso un approccio inter e transdisciplinare che comprende sia le scienze sociali che le pratiche amministrative e commerciali.