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Residents' perceptions of tourism and sustainable tourism management: planning to prevent future problems in destination management - The case of Cáceres, Spain

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ABSTRACT

This study explores residents' opinions with the aim of understanding their perceptions of tourism in order to implement sustainable tourism practices in a medium-sized city such as Cáceres, which has been declared a UNESCO World Heritage Site (WHS), in order to mitigate negative impacts such as gentrification and tensions. Using principal component analysis (PCA) and cluster analysis these attitudes are studied and correlated with socio-demographic factors to enable effective planning of urban tourist accommodation. Residents recognize the benefits of tourism, such as economic growth and cultural preservation, but express concerns about the socio-economic and cultural impacts and emphasize the need to balance tourism growth with the needs of residents. The statistical analyses conducted reveal different attitudes towards tourism and highlight the importance of regulating and managing social and cultural impacts. The study argues for sustainable management strategies for tourism and proposes targeted measures to address community concerns and proactively prevent gentrification. By correlating perceptions with socio-demographic factors, it offers insights for the responsible integration of short-term rentals (VRUs) into urban areas.

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Introduction

Researching residents' perceptions and identifying the key factors that influence the management and planning of sustainable destinations are essential focal points of current tourism research (Rodrigues et al., 2022). Traditionally, the positive impacts of tourism are mainly associated with economic effects, while the concurrent negative impacts are mainly associated with environmental concerns (Koens et al., 2021). Recognizing the undeniable economic benefits as reported by the World Travel and Tourism Council report (2023) – with a significant global economic impact of US\$7.4 trillion in 2022, contributing 7.6% to global GDP – prompts a deeper exploration. Beyond these economic considerations and acknowledging the environmental concerns associated with tourism, there is a need to explore the perceptions and attitudes of destination residents towards tourism from a social perspective. It is crucial to understand how local communities are affected in terms of social cohesion, quality of life, and access to resources as tourism develops in their area. Involving local people in the planning and management of tourism can help ensure that economic benefits are fairly distributed and social concerns are addressed, thereby promoting more sustainable and equitable tourism development.

Understanding residents' perceptions and the factors that influence the management of sustainable destinations is particularly important. The well-being of the local population is a key factor in the success of destinations that aim to promote tourism without exceeding a threshold that could affect the quality

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of life of residents (Dwyer & Kim, 2003). Studies on tourism density (Vargas-Sánchez et al., 2009) show a negative correlation between higher tourism density and residents' perceptions of tourism.

In the case of Cáceres, although the total number of tourists may not be excessively high compared to other destinations, there are notable peaks during specific periods, such as weekends, public holidays, and Easter, which can lead to perceptions of overtourism. Veríssimo et al. (2020) studied similar cases where the perception of overtourism arises not from the overall number of tourists, but from their concentrated presence during peak times. Recently, Cáceres has shown signs of tourism rejection, evidenced by an anti-tourism poster displayed in one of the city's squares, which raises concerns about gentrification linked to the increase in tourist apartments (Torrejón, 2023, 2024). However, this incident appears to be an isolated incident, as overall, resident perceptions of tourism in Cáceres are more positive than negative according to this work. The term gentrification, originally coined by Ruth Glass in London in 1964, has become a robust framework for understanding broader urban transformations (Lee et al., 2007; Smith, 2002). It refers to a socio-spatial shift triggered by the renovation of run-down central working-class neighborhoods to attract the middle class, resulting in the displacement of lower-income residents in favor of those of higher socio-economic status (Cocola-Gant & Lopez-Gay, 2020).

Given this context, it is a timely opportunity to conduct effective tourism planning. By regulating the growth of tourist apartments and addressing community concerns, it is possible to prevent the spread of negative sentiments such as tourism-phobia, a term first appearing in the Spanish press in 2008 to describe local opposition to tourism due to perceived negative impacts (Soliguer Guix, 2023), and gentrification—an issue where increasing tourism-driven demand for housing displaces residents (Mendoza & Russo, 2023; Noblejas et al., 2023).

Then, while existing literature has extensively explored the positive economic impacts of tourism and the negative environmental impacts, there is a significant gap in understanding the social dimension of tourism. Specifically, how local residents perceive the effects of tourism, especially concerning the density and temporal concentration of tourists, remains underexplored. This study aims to fill this gap by examining residents' perceptions in Cáceres, a city experiencing significant tourist influxes during public holidays. By utilizing surveys to gather quantitative data on residents' attitudes and perceptions, this research will make substantial theoretical contributions by providing new insights into how concentrated tourist periods impact local community views, thereby expanding the theoretical framework on the social impacts of tourism. Empirically, the study will offer practical insights into the specific perceptions of residents in high-density tourist periods, which can inform more nuanced and effective tourism management strategies. This research will thus contribute to a more equitable and sustainable approach to tourism development by addressing social concerns and ensuring that economic benefits are more fairly distributed. Most existing studies focus on heavily touristed areas where these sentiments are already well-established, but understanding perceptions in less affected areas can allow for proactive planning (Kim et al., 2013, Mason, 2020).

Literatura review

Holistic perspective on tourism impacts. The triple bottom-line Researchers such as Ritchie and Inkari (2006), Tovar and Lockwood (2008), and Vargas-Sánchez et al. (2009) emphasize the importance of considering the economic, social, and environmental aspects to comprehensively assess tourism impacts. These dimensions play a crucial role in the success and sustainability of tourism (Garau-Vadell et al., 2018). Integrating a holistic approach that includes economic, social, and environmental considerations is essential for effective and sustainable tourism management. Moreover, the concept of the Triple Bottom Line (Elkington, 1997; Slaper & Hall, 2011) highlights the need to balance economic, environmental, and social factors in tourism planning, ensuring that tourism development is sustainable in the long term. These frameworks can inform the segmentation of residents into clusters based on their attitudes towards tourism, providing a deeper understanding of the diverse perspectives within the community.

Overtourism and the challenges of sustainability

Overtourism has been identified as a significant problem affecting residents' quality of life and local communities. Studies by Seraphin et al. (2018), Milano et al. (2019), Jover and Díaz-Parra (2022),

García-Buades et al. (2022) and Kouroupi and Metaxas (2023) highlight its negative impacts, including economic dependence and social conflict. The resulting overpopulation and excessive negative impacts on resources and communities can irritate residents and affect their perception of quality of life (Postma & Schmuecker, 2017; Moscardo, 2009; Lawton & Weaver, 2015; UNWTO., 2018; Goodwin, 2016).

Addressing these multidimensional impacts enables tourism stakeholders to mitigate negative effects and promote sustainable tourism development. Overtourism has emerged as a pressing global issue (Adie et al., 2020), reflecting widespread concern about its impact on various destinations. Recent news reports from reliable sources such as El País (2023, May 1), ABC (2023, August 16), El Confidencial (2023, August 16), and El Diario de Sevilla (2023, April) highlight the urgency of this problem, citing examples of tourism-phobia in Barcelona and growing concerns in the Canary Islands and other destinations. Additionally, the media warn of the risk of gentrification, as illustrated by the situation in Cáceres, reported by El Periódico (2023, January 22). Effective regulation of tourism is crucial to prevent negative consequences and potential problems such as gentrification.

Residents' perceptions and the role of Sustainable Development Goals (SDGs) Furthermore, concepts related to quality of life-oriented sustainable tourism, overtourism, and tourism management have gained scientific attention (Mihalič, 2020; Kuščer & Mihalic, 2019; Mihalic & Kuščer, 2022; Álvarez-Sousa, 2020). These scientific perspectives offer valuable insights into the complex challenges faced by destinations seeking to balance tourism development with the well-being and quality of life of the local population. The intersection of academic research and real-world examples of tourism impacts, highlighted in both academic studies and news reports, underscores the need for comprehensive and sustainable approaches to tourism management.

This approach aims to achieve sustainable destination management while promoting the well-being of residents. Prevailing research in tourism destination planning shows a consistent correlation: with the rapid growth of the tourism sector, the scope for community-oriented sustainable development that primarily benefits residents is decreasing (Var & Gunn, 2020; Rodrigues et al., 2023). Considering that few authors have explored the relationships between locals' well-being and their perceptions and attitudes towards tourism (Bimonte & Faralla, 2016; Ozturk et al., 2015), Hadinejad et al. (2019) pointed out that the impact of tourism on locals' well-being has not been sufficiently explored in studies on locals' attitudes. Therefore, further research is needed to better understand how the impact of tourism affects the perceived well-being of residents (Kim et al., 2013).

A review by Hadinejad et al. (2019) emphasized that in addition to social exchange theory (SET), other theories such as bottom-up spillover theory and institutional theory must also be considered. The inclusion of these theories provides a broader theoretical framework for this study. SET serves as a foundational framework for this study, as it explains the dynamics of interpersonal and organizational relationships based on reciprocal exchanges (Ap, 1992; Gursoy et al., 2009; Madrigal, 1995). It provides a framework for understanding how residents weigh the benefits and costs of tourism, influencing their overall perceptions and support for tourism development. Bottom-up spillover theory is relevant as it explains how experiences in one domain, such as the workplace, can influence overall well-being, aligning with our exploration of how job satisfaction impacts broader outcomes like life satisfaction or societal perceptions. Institutional theory highlights the role of established norms, rules and structures in shaping individual and organizational behavior, offering valuable insights into how organizational culture or societal expectations influence practices and decision-making in our context. These theories, alongside social exchange theory, allow for a multidimensional understanding of the study's phenomena and strengthen its theoretical foundation. They also emphasized the importance of studying the attitudes of residents in countries that have received less attention in geographical research, particularly in Europe, the Middle East, and Africa.

In the context of World Heritage Sites (WHS), such as Cáceres, the impacts of tourism can be particularly pronounced. Previous studies have examined tourism's effects in heritage settings, noting both positive economic contributions and challenges related to preserving local culture and heritage (Madeira et al., 2021). However, there is still a need for more targeted research on how residents in these unique settings perceive tourism during high-density periods, which can offer insights into managing tourism sustainably. Research shows that residents in WHS locations, such as in Malaysia, South Korea and Turkey, generally have positive perceptions due to economic benefits, though these views can differ significantly

based on proximity, socio-economic factors, and rural versus urban contexts (Noor et al., 2019; Rasoolimanesh et al., 2017; Türker, 2013; Kim & Holifield, 2024).). In contrast, in non-WHS locations like York and certain Chinese cities, residents acknowledge both positive and negative impacts, with socio-economic factors playing a key role in shaping these perceptions (Zhuang et al., 2019). Overall, WHS status and sustainable tourism practices tend to enhance residents' support for tourism development (Rasoolimanesh & Jaafar, 2017; Rasoolimanesh et al., 2019). In other more recent studies, such as Nian et al. (2022), the perceptions of residents in the Mount Sanqingshan National Park are investigated regarding the impacts of tourism development. The work finds that perceived benefits positively influence place attachment and community satisfaction, while perceived costs have a negative influence. The study introduces the 'SHE-ABC' framework, which stands for Social, Heritage, Environmental dimensions, along with Attachment, Benefits, and Costs, to assess community satisfaction based on heritage tourism impact perception and place attachment. Cao et al. (2021) examine how residents' attachment to their city or town influences their perceptions and support for tourism development in the Grand Canal Yangzhou Section, China. The findings suggest that place attachment is positively correlated with support for tourism, with variations between urban and rural settings. Soares et al. (2022) analyze residents' perceptions of a proposed tourist tax in Santiago de Compostela, Spain. The study reveals three resident clusters (tax-skeptics, tax-enthusiasts, and tax-reactionaries) and finds that most respondents support the implementation of a tourist tax to enhance the quality of the tourist destination. Alrwajfah et al. (2021) examine the satisfaction of residents in Petra, Jordan, regarding tourism management. It highlights the role of community involvement, tourism development, and resident-tourist interactions in shaping residents' perceptions of the economic, environmental, and socio-cultural impacts of tourism.

It should also be added that the SDGs provide a guide for promoting sustainable development around the world, and it is important to consider how local actions and policies related to gentrification can contribute to achieving these goals (Eslami et al., 2019; Monroy-Rodríguez & Caro-Carretero, 2023). Gentrification is often accompanied by housing and community changes that can impact equal access to housing (SDG 11 – Sustainable Cities and Communities) and the reduction of inequalities (SDG 10 – Reduce Inequalities). It can also have an impact on employment, displacement of local communities, and quality of life, which could be related to other SDGs such as decent work and economic growth (SDG 8) or health and well-being (SDG 3).

Community engagement

Finally, to better understand residents' perceptions of tourism and the potential for sustainable tourism development, the study draws on another key theoretical concept. It is community engagement, which is critical for ensuring that tourism initiatives align with the needs and values of local populations. As highlighted by Pretty (1995), community engagement involves fostering varying levels of participation, ranging from passive involvement to active collaboration, which directly influences how communities perceive and support tourism projects. Similarly, Bramwell and Lane (2000) emphasize that meaningful engagement can empower residents, giving them a voice in decision-making processes and promoting shared ownership of tourism outcomes. This participatory approach not only helps mitigate potential conflicts but also enhances the sustainability of tourism by building trust, promoting equitable benefits, and ensuring that development is socially and culturally acceptable. By incorporating this concept, the study aims to provide a holistic understanding of how community involvement shapes perceptions and supports sustainable tourism practices.

Case of study

This study aims to explore the perception of tourism among the inhabitants of Cáceres, Spain, to develop future tourism management strategies and address issues such as tourism phobia and gentrification in the city. Cáceres, a UNESCO WHS, is a medium-sized Spanish city with an increasing number of Vacation Rental Units (VRUs). Rengifo et al. (2020) have identified a significant increase in the number of VRUs in the city, highlighting the urgent need for regulatory action. However, there are no adequate regulations in Cáceres to effectively control this trend. The concern of residents, especially those in the historic

center, underscores the urgent need for regulations on tourist accommodation. Therefore, this study advocates for the adoption of sustainable tourism practices to mitigate the potential negative impacts of unregulated tourism, including gentrification and tourism phobia, and to proactively prevent these issues through effective planning.

The study focuses specifically on the perception of tourism in Cáceres by its inhabitants and investigates whether socio-demographic factors are related to the vulnerability to excessive tourism that could affect the quality of life of the inhabitants of the city centre. The aim is to contribute to the formulation of effective planning and guidelines for the management and monitoring of tourist accommodation in the urban environment.

Appropriate management is considered essential to ensure that tourism development benefits both the local economy and the local population, thus avoiding the harmful effects of gentrification, such as the displacement of original residents.

Based on this research and the results obtained regarding residents' perceptions of tourism, we could lay the groundwork for future studies to provide recommendations for policymakers and local authorities on how to address potential threats related to (over)tourism. This research serves as a foundation upon which future studies could build to develop actionable recommendations. In future studies, researchers could further explore and refine these recommendations based on evolving socio-demographic trends and local contexts.

The concept of a sustainable tourism model refers to an approach or framework for developing and managing tourism in a way that minimizes the negative impacts on the environment, society, and the economy while maximizing the positive benefits. The aim is to ensure that tourism activities are conducted in a way that conserves a destination's cultural and natural resources, promotes social equity, and contributes to the long-term economic well-being of local communities. The concept recognizes the dual nature of the positive and negative impacts of tourism and seeks a balance that enables economic development while protecting the environment and respecting local culture (Sachs, 2015; Bramwell & Lane, 2000). Organizations, governments, and businesses in the tourism industry are striving to adopt and implement sustainable tourism models to ensure the long-term viability of tourism destinations. Although the city has seen an increase in the number of tourist apartments, no gentrification has been observed (Rengifo et al., 2020). However, this study addresses the perceptions of residents, particularly the increasing presence of VRUs, due to the concerns expressed by residents of the historic quarter of Cáceres, which are reflected in press articles such as that of the newspaper *El Hoy* (2023, 11 October), in which residents call for an ordinance to control saturation in the old town after Mayor Mateos decided not to limit these accommodations.

Data from the Exceltur study conducted in 2023 show that the spread of VRUs has led to a 77.7% increase in housing prices, a 68.4% deterioration in neighborhood life, and significant changes in commerce at the national level. Specifically, in Cáceres, where the General Directorate of Tourism of the Regional Government of Extremadura has provided us with the official data, it was found that in March 2024 there were 204 vacation homes in Cáceres. This data contrasts with the number of accommodations marketed on the Airbnb platform, which shows 381 listings, mainly located in the historic city center. This area aligns with the division proposed by Rengifo et al. (2020), which categorizes the historic center into two distinct zones: the Monumental City, located within the city walls, and the Historic Center, situated outside the walls.

The municipal analysis not only recognizes but effectively highlights that resident dissatisfaction may be due to the lack of regulations governing the use of tourist accommodation in each destination, a concern that has been picked up in the media. Recent press coverage has particularly highlighted the problems arising from the unregulated use of tourist accommodation, such as escalating prices and conflicts between residents and visitors. The international press picked up on this situation in the Canary Islands on 27 January as reported by Boyd, (2024). in the *Mirror*.

The lack of clear guidelines for dealing with these shelters increases the dissatisfaction of residents and underlines the need for more effective regulatory measures.

This view is seamlessly aligned with the perspective expressed by Natalia Bayona, Executive Director of UN Tourism, in an article published in *El País* on 5 March 2024. Bayona emphasizes the need for collective regulation of tourism and attaches great importance to the involvement of citizens. She

emphasizes the central role of citizens, who, alongside hoteliers, are the main actors in the regulatory process to effectively address the impacts on both sides.

Methodology

In the process of collecting data from residents of Cáceres city, a survey was conducted using Google Forms and distributed through various online channels, such as social media platforms and community forums. We have used statistical calculations to determine the required sample size based on a desired confidence level of 90% and a margin of error of 5% (around 250–300 would be suitable) to ensure representation across different demographic groups within the city (Craig & Egerton-Warburton, 2013). According to the data published by the INE as of 1 January 2023, the population of Cáceres city is 96,215. The sample for this study was selected using snowball sampling. This technique was chosen due to its effectiveness in accessing hard-to-reach or specialized populations by leveraging participants' social networks to identify additional subjects. By employing this method, the study aimed to build a sample through referrals, allowing researchers to connect with individuals who might otherwise be difficult to identify or approach. Snowball sampling is particularly beneficial for exploratory research, enabling the inclusion of individuals with specific characteristics or experiences relevant to the study. This approach enhances the depth and richness of the data collected, offering valuable insights into the target population.

Participants were informed about the survey's purpose and were invited to participate. The survey collected demographic information, as well as perceptions of tourism. Since this study involved human participants, informed consent was obtained prior to participation. Participants were provided with detailed information about the study, including its purpose and procedures. They were required to read and acknowledge this information before proceeding with the survey. As the survey was conducted online, they indicated their consent by clicking an 'I agree' button before proceeding to complete the survey. The absence of identifiable personal data, the low risk associated with the questions, and typical research regulations in Spain allowed this type of survey to have been conducted without ethical committee approval. The questionnaire was developed by integrating and adapting existing methodologies from key studies in the field, ensuring that it addresses the relevant aspects of residents' perceptions while being specifically tailored to the context of Cáceres. Specifically, the sociodemographic section of the questionnaire was inspired by Almeida-García et al. (2016), which provided a robust foundation for capturing demographic variables such as gender, age, education level, profession, and length of residence. Additionally, the structure and content of the perception-related questions were guided by the framework established by Rodrigues et al. (2023), building on the seminal work of Andereck and Vogt (2011). The decision to include specific items in the questionnaire was further informed by foundational studies in the field, including those by Allen et al. (1993), Lankford and Howard (1994), and McCool and Martin (1994). These studies have consistently demonstrated the importance of understanding how various dimensions of tourism -such as economic, social, and environmental impacts- are perceived by residents. By incorporating elements from these studies, the questionnaire aimed to capture a comprehensive picture of residents' perceptions, with particular attention to how these perceptions are influenced by their geodemographic characteristics, as highlighted by Rodrigues et al. (2023). Furthermore, the questionnaire's design was tailored to the context of Cáceres, with considerations informed by Rengifo et al. (2020) regarding the classification of respondents based on their place of residence and work within the city. This approach ensured that the questionnaire was both grounded in established research and relevant to the specific characteristics of the study area.

The survey questionnaire featured 26 items tailored to residents' opinions, addressing various facets of tourism impact. These items included questions corresponding to the opinions expressed by residents. Respondents used a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to rate each statement, indicating the level of agreement.

A total of 251 surveys were successfully collected between 19 December 2023, and 12 March 2024, as part of the research on tourism in Cáceres city. The confidentiality of the results was maintained, ensuring they were solely intended for academic purposes. The data underwent statistical processing via IBM-SPSS (version 28). The study's sample specifically targeted individuals with direct experience in the

region's tourism, including residents, tourism industry workers, and frequent visitors. This selection ensures that respondents possess the necessary knowledge to provide informed answers. Since the importance of transparency regarding data access, detailed information -on how the data was collected, stored, and managed, ensuring confidentiality and compliance with relevant ethical standards- is available in an appropriate repository for further review (Caro-Carretero & Monroy-Rodriguez, 2024).

The demographic data (Table 1) suggests a mature population with a strong presence of individuals in their middle to late working years. The age group 46 to 55 years is the most represented with 41.8% of the individuals falling into this category. This is followed by the 56 to 65 years age group, comprising 25.1% of the population sampled. The 36 to 45 years age group makes up 20.7%, while the 26 to 35 years age group accounts for 7.2%. Those aged over 66 years represent a small portion of the population at 3.2% and those 25 years or younger are the least represented at 2.0%. There is a slight gender imbalance favoring women (55%). Except for the over-66 age group (heavily skewed toward men), there is an even distribution of men and women, with a slight predominance of women in every age group except the youngest and the oldest.

The population shows diversity in professions, but certain roles like cleaning, government positions, and business ownership are more prevalent. There is a significant presence of autonomous professionals in the older age groups. Most individuals have received higher education, indicating a well-educated population. Most individuals have a university degree or equivalent, comprising 41.0% of the population. Vocational training is held by 15.5% and master's degree by 13.1%. High school diploma and basic education are held by 12.4% and 12.7% respectively. A smaller fraction of the population has a Doctorate, at 5.2%. Vocational training is most prevalent in the oldest age group (over 66 years), while master's degrees are more common in the 26–45 age brackets. There is also a significant presence of basic education in the 56–65 age group.

There is a strong preference for living outside the historical centers (72.9%), which might be due to various factors such as housing costs or availability. Historical center and monumental cities, within city walls, are less populated, with 15.5% and 11.6% respectively. The duration of residence indicates a stable

Table 1. Demographic data.

Demographic data	Percentages
Age distribution	
25 years or younger	2.0%
26 to 35 years	7.2%
36 to 45 years	20.7%
46 to 55 years	41.8%
56 to 65 years	25.1%
Over 66 years	3.2%
Gender distribution	
Women	55%
Men	45%
Professions	
Prevalent roles	Cleaning government positions Business ownership
Education levels	
University degree or equivalent	41.0%
Vocational training	15.5%
Master's degree	13.1%
High school diploma	12.4%
Basic education	12.7%
Doctorate	5.2%
Residence location	
Living outside the historical center	72.9%
Historical center	15.5%
Monumental city	11.6%
Duration of residence	
11 to 20 years	34.7%
10 years or less	31.9%
21 to 30 years	21.1%
31 to 40 years	6.8%
More than 41 years	5.6%
Work location	
Outside historical center	72.9%
Historical center	15.5%
Monumental city	10.4%

Source: Own elaboration.

population with many individuals living in their homes for over a decade. The most common duration of residence is 11 to 20 years, accounting for 34.7%. This is followed by those who have lived in their current home for 10 years or less at 31.9%. Those residing for 21 to 30 years represent 21.1% of the population. A smaller number of residents have lived in their homes for 31 to 40 years and more than 41 years, at 6.8% and 5.6% respectively. Similar to the neighborhood of residence, a large portion works outside the historical center with 72.9%. Historical centers and monumental cities have the same proportion of workers as residents, which are 15.5% and 10.4% respectively. Very few work outside of Cáceres or do not work at all.

Except for the over-66 age group, there is a fairly even distribution of men and women, with a slight predominance of women in every age group except the youngest and the oldest. The most populous age group is 46–55, while the group with the highest gender disparity is those over 66 years of age, heavily skewed toward men.

Measure

An Exploratory Factor Analysis (EFA) is conducted using the principal component extraction (PCA) method and Varimax rotation. The requirements for a factorial analysis have been met, as the data exhibit normality, homoscedasticity, and the absence of outliers. PCA was employed to discern underlying patterns in the perceptions of the residents regarding tourism in Cáceres city. The Varimax rotation was applied to facilitate the interpretation of the components by maximizing the variance of the squared loadings within the factors. Four main components were identified, which seem to reflect different dimensions of attitudes towards tourism. The items are grouped based on the highest loading on each component, which indicates the strength of the association between the items and the latent factors identified by the PCA (Table 2). The extraction of the components was based on the Kaiser-Guttman statistical criterion (the eigenvalue-greater-than-1 rule) and the percentage of explained variance. Through the analysis of the scale components matrix, it was possible to verify that the four rotated obtained components

Table 2. Exploratory factor analysis.

ITEM	MEAN	SD	F ₁	F ₂	F ₃	F ₄
1. I consider tourists valuable.	4.4	0.8	0.8			
2. The increase in the number of tourists in my city improves the local economy.	4.4	0.9	0.8			
3. Tourism promotes investment in infrastructure and services for the local community.	4.1	1.1	0.8			
4. Tourism increases tax revenue and benefits the city.	4.3	0.9	0.8			
5. Tourism contributes to increased employment opportunities.	4.3	0.9	0.8			
6. I am in favor of investing in infrastructure and tourist services that attract tourists.	4.5	0.9	0.8			
7. I am happy and proud to see tourists visiting my city.	4.6	0.8	0.7			
8. Tourism provides resources for the conservation and maintenance of heritage in my city.	4.1	1.0	0.7			
9. The benefits of tourism outweigh the negative impacts.	3.9	1.2	0.6			
10. Public administration should plan and manage the growth of tourism.	4.6	0.7	0.6			
11. The increase in tourist apartments in Cáceres benefits my city.	3.7	1.2	0.5			
12. Tourism generates more vandalism in the historic center of the city.	1.8	1.0		0.8		
13. Tourism increases traffic problems.	2.6	1.3		0.7		
14. Tourism in the city causes more garbage to be generated.	2.8	1.3		0.7		
15. Tourism makes everything more expensive in my city.	2.7	1.2		0.7		
16. Tourism generates precarious employment.	2.6	1.2		0.6		
17. The increase in the number of tourists in my city generates conflicts between local residents and tourists.	2.2	1.2		0.6		
18. Tourism in Cáceres increases crime.	1.5	0.8		0.6		
19. Tourists are a burden on the city's public services.	2.1	1.1		0.6		
20. Tourism in my city benefits only a small group of people.	2.5	1.3		0.4		
21. I have changed my residence or consider moving due to problems related to tourism, noise, garbage, etc.	1.5	1.0		0.4		
22. Tourism can change the traditional culture of Cáceres.	2.3	1.3			0.7	
23. Cáceres is overcrowded with tourists.	2.4	1.2			0.6	
24. Tourism negatively affects the quality of life of residents.	2.1	1.2			0.5	
25. I believe that the price of housing in the most touristic areas has increased due to tourist accommodations.	3.5	1.2				0.8
26. Tourist housing should be more regulated by public administration.	3.9	1.2				0.8
Eigenvalue			11.4	2.5	1.3	1.0
% Variance explained			27.7	18.4	9.8	6.6

Source: Own elaboration.

explain a cumulative variance of 62.6%, which is consistent with the unrotated components. However, the distribution of variance explained among the components has changed, with the first rotated component explaining less (27.7%) than it did before rotation (43.9%), which indicates that the variance is more evenly distributed across the components after rotation. According to Hair et al. (2018) cumulative variance values equal to or greater than 50% are considered acceptable. The Kaiser-Meyer-Olkin indicator (KMO = 0.933) and Bartlett's sphericity test ($\chi^2(325) = 4245.297$, p -value < 0.001) indicate that there are no issues with data integrity and that the correlations between items are satisfactory and appropriate (with values exceeding $r = .86$, indicating that their use essentially replicates the same behavior found in the original factors), as well as the data exhibit normality (p -value < 0.001). The scale's reliability was assessed through the internal consistency method utilizing Cronbach's alpha coefficient. The values obtained for the four dimensions ranged between 0.7 and 0.9, indicating satisfactory internal consistency (Hair et al., 2018). Subsequently, using the four factors from the EFA, a two-step Cluster Analysis is performed to determine the optimal number of groups, followed by a K-means analysis. Cluster analysis has allowed the establishment of two different groups of residents, but with high similarity among them considering the four previous usage factors. Cluster analysis was selected due to its capability to identify and group similar observations based on multiple variables simultaneously. Applying cluster analysis has led to a deeper understanding of the different subpopulations within our data, facilitating the interpretation of results and enabling more specific recommendations. The identified groups have both practical and theoretical implications that enrich the study's findings.

Results

Exploratory factor analysis

First, in an attempt to reduce and avoid redundant information contained in the 26 items used, a Factor Analysis has been carried out using the PCA, suggesting that it is possible to reduce the initial set of items to four factors or components, thereby explaining nearly 62.6% of the original variance (Table 2).

Factor 1: positive perspectives on tourism

The highest loadings on this component suggest it reflects a positive view of tourism, seeing it as beneficial to the local economy and cultural heritage. Items with high loadings in this component include those related to the value of tourists, economic benefits and support for investment in tourism. The positive sentiment underscores the value of tourism in enhancing the city's vitality and global appeal. It suggests that stakeholders see tourism as a pivotal element for the city's development and prosperity. This component focuses on sustainable tourism strategies aimed at maximizing benefits while mitigating potential downsides. Investment in infrastructure should be balanced with preserving the city's character.

The item with the highest positive loading (.858) suggests a strong belief in the intrinsic value of tourists. Moderate positive loadings (.750 to .843) on items related to economic benefits indicate a perception that tourism contributes positively to the local economy, job opportunities, tax revenue and heritage maintenance.

Factor 2: socioeconomic concerns

This component appears to focus on concerns regarding the socioeconomic effects of tourism, such as increased crime, precarious employment and conflict between residents and tourists. Items related to the increase in housing prices and regulations for tourist housing also have significant loadings here. It points to the need for better regulation of tourist accommodations and more equitable distribution of tourism's benefits, such as developing comprehensive policies that address these challenges, including stricter regulation of tourist housing, measures to control prices in tourist areas and initiatives to ensure that tourism benefits are widely shared.

The item related to vandalism in the historic center shows the highest positive loading (.793), suggesting a strong perception of tourist's impact on crime. Items with moderate positive loadings (.578 to .745) concern the strain on public services and traffic, as well as the need for more regulation on tourist housing.

Factor 3: cultural and social impact

The loadings of this component indicate it represents concerns about the cultural and social impact of tourism, like changes in traditional culture and increased littering. There are high loadings on items reflecting the fear that tourism might alter Cáceres's cultural identity.

This component draws attention to the fear that tourism might overrun local culture and traditions, potentially leading to overcrowding and a diminished quality of life for residents. It underscores the importance of preserving the city's identity and ensuring that tourism development does not come at the expense of local culture and social cohesion. This component suggests strategic implications that involve implementing sustainable tourism practices that honor and integrate local culture. Engage community members in tourism planning and decision-making to ensure that development reflects their needs and values (Crespi-Vallbona & Villanueva, 2024).

The item with the highest loading (.663) indicates a strong belief that tourism can change traditional culture. Moderate loadings on items relating to the generation of garbage and the perceived burden on public services further highlight concerns about tourist's social impact.

Factor 4: regulation and management of tourism

The fourth component seems to be associated with the need for regulation and management of tourism, reflected in items related to the management of tourism growth and the regulation of tourist housing. The focus here is on the need for more stringent regulation of tourist housing and concern over the impact of tourism on housing affordability in tourist areas. This component suggests a recognition of the need for governmental intervention to manage tourism's impact on the housing market and local communities effectively. This component raises the question of reinforcing regulations concerning tourist accommodation and exploring policies aimed at safeguarding residents from being economically displaced from their neighborhoods. This could include caps on the number of tourist apartments, taxes or fees on short-term rentals, and investment in affordable housing.

The highest positive loading (.789) is on the item suggesting an increase in housing prices due to tourism, indicating this is a significant concern. Another item with a strong loading (.767) calls for more regulation on tourist housing, reinforcing the theme of regulatory issues in this component.

Cluster analysis

Furthermore, using the four factors from the exploratory factor analysis, a Cluster Analysis has been conducted to classify each individual into different but internally homogeneous groups. To achieve this, a two-step Cluster Analysis is initially performed, recommending the establishment of division into two distinct groups or clusters. The segmentation was based on factors such as demographic characteristics, attitudes towards tourism and perceived benefits and challenges, which align with the conceptual framework outlined in the literature review. Based on this information, a K-means Cluster Analysis is then carried out. Table 3 and Figure 1 show the mean scores in each of the obtained clusters. Thus, the first cluster (C1) consists of 47% of the sample and is characterized by high mean scores in the construct accounting for negative Views on Tourism and by presenting the lowest mean scores in Regulatory Perspectives. In contrast, the second cluster (C2), comprising 53% of the sample, is characterized by high mean scores in the construct accounting for Regulatory Perspectives, with mean values below the average, especially in negative Views on Tourism. Next, the two clusters will be described in terms of residents' perception of tourism in the city of Cáceres. Cluster 1, characterized by negative views on tourism,

Table 3. Final cluster centers.

	CLUSTER 1	CLUSTER 2
F1	0.2	-0.1
F2	0.7	-0.6
F3	-0.2	0.2
F4	-0.4	0.3
N (%)	118 (47)	133 (53)

Source: Own elaboration.

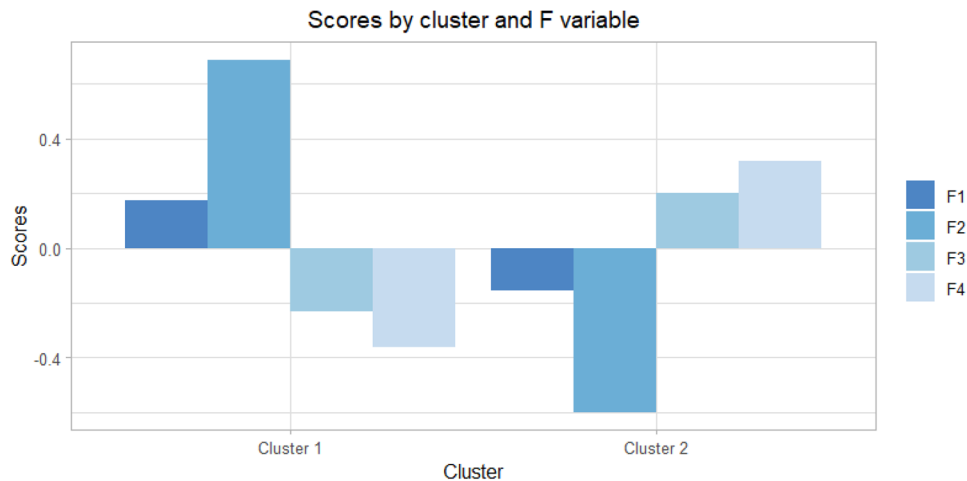


Figure 1. Illustration of scores by cluster and Factor variable. Source: Own elaboration.

Table 4. Descriptive analysis of clusters.

Variables	Cluster 1	Cluster 2
Age		
25 years or younger	3 (2.6%)	2 (1.5%)
Age 26–35 years	14 (12.0%)	4 (3.0%)
Age 36–45 years	19 (16.2%)	33 (24.6%)
Age 46–55 years	52 (44.4%)	53 (39.6%)
Age 56–65 years	25 (21.4%)	38 (28.4%)
Over 66 years	4 (3.4%)	4 (3.0%)
Gender		
Male	50 (42.7%)	63 (47.0%)
Female	67 (57.3%)	71 (53.0%)
Education level		
High school	12 (10.3%)	19 (14.2%)
Basic education	16 (13.7%)	16 (11.9%)
Vocational training	20 (17.1%)	19 (14.2%)
Bachelor's degree	49 (41.9%)	54 (40.3%)
Master's degree	12 (10.3%)	21 (15.7%)
PhD	8 (6.8%)	5 (3.7%)
Residence and work location		
Historic center residence	15 (12.8%)	24 (17.9%)
Monumental city (within walls) residence	9 (7.7%)	20 (14.9%)
Outside historic center residence	93 (79.5%)	90 (67.2%)
Historic center work location	18 (15.4%)	21 (15.7%)
Monumental city (within walls) Work	10 (8.5%)	16 (11.9%)
Outside historic center work location	89 (76%)	95 (70.9%)
Residence Duration		
10 years or less	35 (29.9%)	45 (33.6%)
11 to 20 years	45 (38.5%)	42 (31.3%)
21 to 30 years	22 (18.8%)	31 (23.1%)
31 to 40 years	9 (7.7%)	8 (6.0%)
More than 41 years	6 (5.1%)	8 (6.0%)
Profession		
Health & wellness	24 (20.3%)	30 (19.6%)
Legal & administrative	28 (23.7%)	32 (20.9%)
Education & social services	19 (16.2%)	24 (15.7%)
Technical & engineering	24 (20.3%)	36 (23.5%)
Commerce & management	23 (19.5%)	31 (20.3%)
N (%)	118 (47)	133 (53)

Source: Own elaboration.

reflects residents' concerns about various negative impacts of tourism, such as increased crime, housing prices, traffic problems, precarious employment, social conflicts, and reduced quality of life. Conversely, Cluster 2, characterized by regulatory perspectives, emphasizes residents' beliefs regarding the need for stricter regulations on tourist-use housing by public authorities and concerns about rising housing prices in tourist-heavy areas.

Additionally, Table 4 provides a detailed description of these two clusters based on gender, age, education level, profession, time residing in the place and neighborhood of both residence and workplace.

In both clusters, the 46 to 55 years age group is predominant, though it is more prominent in Cluster 1. The younger (25 years or younger and 26 to 35 years) and older (over 66 years) age groups have minimal representation in both clusters. The distribution in Cluster 2 is slightly more even among the middle-aged groups (36–65 years), whereas Cluster 1 shows a higher concentration in the 46–55 years range. This analysis could serve to understand the age structure of a population divided into two distinct segments, which is useful for planning services, products or programs targeted at specific age groups. In both clusters, women are the majority, but the disparity is less in Cluster 2. Both clusters demonstrate a high educational level and residential longevity, indicating stable, well-educated communities with deep roots in their neighborhoods. Cluster 1 has a slightly higher preference for suburban living, while Cluster 2 leans more towards urban residency with a higher proportion of individuals living in the historical center and Monumental City areas. The data suggests that both clusters comprise a diverse range of professions, yet both clusters seem to have a similar distribution of professions, indicating that the job market is well-integrated across different areas of the city. Cluster 2 has a slightly higher percentage of residents who have lived in their homes for 10 years or less compared to Cluster 1. Cluster 1 has a higher percentage of individuals in the 11 to 20 years category. Both clusters have a similar distribution of residents who have lived in their homes for over 30 years, although Cluster 2 has a marginally higher percentage of residents with the longest tenures (more than 41 years). The distribution across the two clusters is relatively similar, but with subtle differences that might reflect slightly different residential stability or mobility trends. These insights can be useful for understanding community stability, housing policy impact and possibly the need for services that cater to long-term versus short-term residents. Both clusters have a large majority of individuals working outside the historical center, though Cluster 1 has a slightly higher percentage than Cluster 2. Cluster 2 has a higher percentage of individuals working in both the historical center and the Monumental City area.

The preferences for living and working locations suggest that there are well-established commuter routes and that the historical center, while still a place of residence and work for some, is not the primary hub for either. This might reflect a city where the historical areas are more preserved for cultural and tourism purposes rather than as central business districts.

From a policy and planning perspective, these insights could be instrumental in targeting educational programs, economic development strategies and transportation planning. The difference in residential patterns might be leveraged for urban revitalization projects or for enhancing suburban infrastructures, depending on the cluster in focus. In terms of business strategy, the diversity in professions and stable education levels present opportunities for a variety of services and goods, tailored to a well-educated customer base with a range of interests and needs.

Additionally, a statistical analysis has been conducted to examine the differences between the two clusters more rigorously. Specifically, we performed chi-square tests for categorical variables (such as age groups, gender distribution and residential stability) and t-tests for continuous variables (such as years of residence and educational level) to assess whether the observed differences were statistically significant. The results of the analysis indicate that there are statistically significant differences between the two clusters in several key areas. For instance, the predominance of the 46–55 age group in Cluster 1, compared to the more even distribution of middle-aged groups in Cluster 2, was found to be statistically significant (p -value < 0.05). Additionally, we observed significant differences in terms of gender distribution, with Cluster 2 exhibiting a more balanced gender representation than Cluster 1 (p -value < 0.05). Furthermore, there were notable differences in residential stability and location (p -value < 0.05). Regarding education, Cluster 2 has a higher proportion of individuals with a master's degree and basic education, while Cluster 1 has a greater representation of people with vocational training (p -value < 0.05). These differences also suggest distinct patterns of residential mobility and community engagement across the clusters. Then, these statistically significant differences are important as they help to refine our understanding of the demographic and social characteristics of each cluster, providing a clearer foundation for planning services, products and policies tailored to the unique needs of each group.

Discussion and conclusions

This approach allows us to understand how different segments of the population in Cáceres perceive and are impacted by tourism, considering their views on gentrification, their length of residence and the

proliferation of tourist apartments. Residents across both clusters generally maintain a positive view of tourism despite the presence of gentrification. This perception aligns with findings from Rodrigues et al. (2023) and Postma and Schmuecker (2017), indicating that the increase in the number of tourist apartments does not significantly diminish support for tourism. This positive outlook suggests a recognition of the economic and social benefits that tourism brings to Cáceres. However, the first cluster (C1), characterized by negative views on tourism, may see gentrification as exacerbating existing concerns over tourism's negative impacts, such as increased living costs and social changes. In contrast, the second cluster (C2), with a regulatory perspective, might support tourism but emphasize the need for measures to manage gentrification effects effectively. Besides, the analysis indicates that the duration of residence influences tourism perception differently across the clusters. Longer-term residents, particularly in C1, may be more sensitive to the negative impacts of tourism, including gentrification and changes in community character, aligning with the findings of Rodrigues et al. (2023) that suggest as the duration of residence increases, the perception of tourism's positive impact on quality of life diminishes, moderating the association between perceptions of community development and quality of life. Longer residency implies a reduced influence of community development on perceptions of tourism, with residents less likely to perceive benefits from tourism as their tenure extends. These residents have witnessed the transformation of their city over time, which may diminish their perception of tourism's benefits. On the other hand, residents in C2 might be more open to regulations and policies that mitigate these impacts, striving for a balance that sustains tourism's benefits while addressing long-term residents' concerns. The increase in tourist apartments appears to be a critical factor negatively affecting residents' perceptions of tourism, likely across both clusters. For C1, the proliferation of tourist apartments might reinforce concerns about tourism's negative effects, such as overcrowding and loss of community identity. For C2, the emphasis on regulatory perspectives suggests a demand for policies that control the growth of tourist apartments, aiming to preserve the quality of life for residents and ensure that tourism development benefits the broader community.

While many studies have addressed perceptions in major tourist hubs, this destination's unique characteristics, including its size and limited infrastructure, offer a different perspective. Therefore, it is essential to compare these results with prior studies to highlight similarities and differences. For example, the comparison of the impacts of tourism on residents' perceptions of quality of life between Lisbon (Rodrigues et al., 2022) and Cáceres reveals key similarities and differences in how communities perceive and are affected by tourism. In both contexts, tourism's influence on local communities encompasses a multifaceted array of both positive and negative impacts, which are mediated by various geodemographic and socio-economic factors. In Lisbon, the complexity of residents' perceptions towards tourism is highlighted, distinguishing between positive and negative impacts across five dimensions: Negative impacts on the host community quality of life, Community development, Negative economic impacts, Positive economic impacts, and Positive impacts on the host community quality of life. This approach acknowledges the dual nature of tourism, capable of both enhancing and detracting from the quality of life in host communities. The study's findings underscore the importance of understanding the specific characteristics and attitudes of local populations to effectively manage tourism's impact. Similarly, this research on Cáceres emphasizes the need for sustainable tourism management strategies that take into account the diverse perceptions and impacts of tourism on local communities across four dimensions: Positive Perspectives on Tourism, Socioeconomic Concerns, Cultural and Social Impact and Regulation and Management of Tourism.

The cases of Lisbon and Cáceres advocate for a balanced approach to tourism management, aiming to harness the economic and cultural benefits of tourism while addressing the social and regulatory challenges it poses. In Lisbon, the presence of tourist accommodations has been linked to increased housing values and displacement of residents, underscoring the negative socioeconomic impacts of over-tourism (Mendes, 2018; Pereira & Teixeira, 2017). Likewise, the situation in Cáceres also reflects concerns over increased housing prices and traffic congestion, indicating common challenges in managing tourism's footprint on local communities (Postma & Schmuecker, 2017).

While acknowledging that Lisbon is a capital city with distinct characteristics, comparing Cáceres with Lisbon can still provide valuable insights. Lisbon, despite its larger size and different demographic profile, represents a prominent and dynamic urban environment that can serve as a useful contrast for

understanding varying tourism and socio-economic impacts. The comparison allows us to explore how Cáceres, with its unique attributes, stands in relation to a major city with substantial tourism activity and economic significance. This contrast can highlight distinctive features and potential areas for development in Cáceres, offering a broader perspective that enriches our analysis. While comparisons with other similar-sized cities are also important for contextual relevance, contrasting with a major city like Lisbon can provide additional insights into the challenges and opportunities faced by Cáceres in a larger, more competitive context. Cáceres, despite their smaller size, shares common attributes with other regional cities in terms of historical significance, cultural heritage, and tourism dynamics.

The body of research emphasizes the crucial role of public administration and destination management organizations in incorporating local residents' perceptions and quality of life considerations into tourism planning and management. Sustainable tourism development requires not only recognizing the positive and negative impacts of tourism but also actively involving communities in the growth model to ensure that tourism development contributes to overall community well-being and quality of life (Moscardo, 2009; Kim et al., 2013).

The results suggest that a four-factor solution might be suitable for data reduction, retaining the most significant variance in the data while simplifying the dataset (the PCA explains approximately 62.6% of the total variance in the dataset). Factor 1 is about the perceived economic benefits and positive value of tourism. Factor 2 focuses on the perceived need for regulation to mitigate issues like crime and increased living costs. Factor 3 captures concerns regarding the social and cultural impacts of tourism. Factor 4 relates to the implications of tourism on housing and the cost of living.

Each factor represents a distinct set of concerns or benefits associated with tourism in Cáceres. By understanding these factors, stakeholders can address the negative aspects and reinforce the positive ones to create a more sustainable tourism ecosystem.

There, the findings reveal a multifaceted structure of attitudes towards tourism in Cáceres, where residents recognize the economic benefits, infrastructure improvement, increased tax revenue, job creation, and preservation of cultural heritage. However, they express concerns about the socioeconomic and cultural consequences, such as increased housing prices, traffic congestion, and strain on local resources. These concerns indicate potential areas of tension between residents and tourists, as well as between economic growth and quality of life. It is advisable that public administration takes these dimensions into account when planning and managing tourism, to maximize its benefits while mitigating negative impacts. Specific policies could be directed at each of the underlying concerns reflected in the different components. A balanced approach to tourism management in Cáceres should aim to harness the positive economic and cultural impacts of tourism while addressing the social and regulatory challenges it poses. Engaging with local communities, implementing sustainable practices, and adopting a regulatory framework that ensures equitable benefits can help achieve a harmonious coexistence between residents and tourists.

Cluster analysis has been also conducted, allowing the establishment of two different groups of residents, but with high similarity among them considering the four previous usage factors, highlighting a diverse landscape of opinions within the city of Cáceres. While there is a general appreciation for the economic and social benefits of tourism, concerns about gentrification, the effects of long-term residence and the increase in tourist apartments suggest a need for nuanced policy and planning approaches. These should aim to support sustainable tourism that respects the needs and preferences of all residents, balancing the benefits of tourism with the preservation of community character and resident's quality of life.

In summary, research into residents' perceptions and the factors affecting the management and planning of sustainable destinations is a vital area in current tourism studies. While there is substantial evidence regarding tourism's positive economic impacts and its associated environmental challenges, there is a notable lack of understanding about the social aspects of tourism. Specifically, the impact of tourism density and its temporal concentration on local residents' perceptions remains underexplored. This study has sought to address this gap by investigating the views of residents in Cáceres, who experience a marked increase in tourists during holidays, weekends, and Easter. By employing surveys to collect quantitative data on residents' opinions and attitudes, the research aims to make significant theoretical and empirical contributions by shedding light on how periods of high tourist concentration affect local community perceptions.

Then, the findings of this study could offer invaluable insights for tourism planners and decision-makers aiming to cultivate a resident-friendly tourism destination in Cáceres, Spain. Understanding the perceptions

and attitudes of local inhabitants towards tourism is crucial for designing strategies that not only attract visitors but also prioritize the well-being of residents. These insights could inform the development of sustainable tourism initiatives in Cáceres that promote economic growth while preserving the city's cultural and environmental heritage. By adopting resident-friendly approaches, decision-makers can address potential conflicts between tourists and locals, fostering community cohesion and ensuring the long-term sustainability of the tourism industry.

Furthermore, the study provides a foundation for ongoing collaboration and dialogue between tourism authorities, residents and businesses in Cáceres. By involving stakeholders in the decision-making process, policymakers can co-create policies and initiatives that reflect the diverse needs and perspectives of the community.

As Cáceres continues to evolve as a tourist destination, these findings serve as a roadmap for responsible tourism development. Through proactive planning and inclusive decision-making, Cáceres could emerge as a model for sustainable tourism in Spain, showcasing the benefits of balancing economic growth with social considerations.

Limitations

Analysis of the survey data revealed a diverse respondent pool in terms of age, gender, and socio-economic background, indicating a degree of representativeness. However, certain demographic groups were potentially underrepresented, such as older adults and individuals with limited internet access or proficiency. Additionally, the online nature of the survey may have introduced selection bias, as participation was voluntary and dependent on internet connectivity and digital literacy. The overrepresentation of university graduates in our sample might also reflect the viewpoints of a more educated segment of the population, potentially overlooking the concerns and experiences of less educated individuals. This could limit the applicability of the results to policy-making, program development, or other areas where a comprehensive understanding of the entire population is crucial. Nevertheless, the sample data has been cross-referenced with local demographic statistics for Cáceres. While our sample does include a higher percentage of university graduates, the overall patterns and trends in our findings align with broader population trends and are consistent with data from other sources.

It is also important to mention that the results may be influenced by a social desirability bias. Respondents tend to overstate their environmental preferences and green behaviors, which may not reflect their actual behavior (Koller et al., 2023). This bias can lead to an overestimation of ecological attitudes and behaviors, limiting the validity of the responses in relation to participants' actual actions. It is crucial to discuss this bias in the context of interpreting the results, as participants may not act in accordance with the attitudes they express in the survey.

Moreover, while residents provide valuable insights into the social and cultural impacts of tourism, they represent only one part of the broader stakeholder spectrum. Sustainable tourism development indeed requires input from a range of stakeholders, including local businesses, government authorities, tourism operators, environmental organizations and tourists themselves. Each of these groups brings a different perspective on sustainability, encompassing environmental, economic, and social considerations. In this study, we focused on residents' perceptions as they are directly affected by tourism in their community, but we acknowledge that a more comprehensive approach would involve gathering feedback from all relevant stakeholders to ensure a holistic view of sustainable tourism development. Future research could therefore benefit from incorporating a wider range of voices to better inform sustainable tourism management strategies.

Authors' contributions

Raquel Caro-Carretero and Sandra Monroy-Rodríguez contributed to the conception and design, analysis and interpretation of the data, conception and design, analysis and interpretation of the data, the drafting paper, revising it critically for intellectual content and the final approval of the version to be published, the drafting paper, revising it critically for intellectual content and the final approval of the version to be published.

All authors agree to be accountable for all aspects of the work.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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