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Urban Overtourism Governance: A Configurational Analysis of Resident Stress and Sustainability

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Abstract: This study examines how urban overtourism shapes residents' emotional stress and perceptions of sustainability. Focusing on Málaga, Spain, the research highlights the growing importance of psychosocial well-being in tourism governance. The objective is to identify how governance configurations — particularly participatory and sustainability-oriented policies — affect residents' experiences under tourism pressure. A multi-analysis design combines covariance-based structural equation modelling (CB-SEM) with fuzzy-set Qualitative Comparative Analysis (fsQCA), using survey data from 453 residents. Results reveal multiple causal pathways to both high and low stress, showing that environmental benefits alone do not mitigate negative impacts when trust and participation are lacking. Findings suggest that resilience depends on perceived fairness, responsiveness, and visible improvements in urban life. This study contributes to theory by integrating urban stress, carrying capacity, and regenerative tourism frameworks. It concludes that adaptive and inclusive governance is essential for achieving equitable and psychologically sustainable tourism in overtouristed cities.

Keywords: urban tourism; tourism governance; resident stress; sustainable tourism; urban planning; overtourism; psychosocial well-being; carrying capacity; regenerative tourism; community resilience

Gobernanza del sobreturismo urbano: un análisis configuracional del estrés de los residentes y la sostenibilidad

Resumen: Este estudio analiza cómo el sobreturismo urbano influye en el estrés emocional de los residentes y en sus percepciones de sostenibilidad. Centrado en Málaga, España, la investigación destaca la creciente importancia del bienestar psicosocial en la gobernanza turística. El objetivo es identificar cómo las configuraciones de gobernanza —en particular las políticas participativas y orientadas a la sostenibilidad— afectan las experiencias de los residentes bajo presión turística. El diseño metodológico combina modelos de ecuaciones estructurales basados en covarianzas (CB-SEM) con Análisis Comparativo Cualitativo de Conjuntos Difusos (fsQCA), a partir de encuestas a 453 residentes. Los resultados revelan múltiples vías causales tanto hacia altos como bajos niveles de estrés, mostrando que los beneficios ambientales por sí solos no compensan los impactos negativos cuando faltan confianza y participación. Los hallazgos sugieren que la resiliencia depende de la equidad percibida, la capacidad de respuesta institucional y las mejoras visibles en la vida urbana. Este estudio contribuye a la teoría integrando los marcos del estrés urbano, la capacidad de carga y el turismo regenerativo, y concluye que una gobernanza adaptativa e inclusiva es esencial para lograr un turismo equitativo y psicológicamente sostenible en ciudades saturadas.

Palabras Clave: turismo urbano; gobernanza turística; estrés de los residentes; turismo sostenible; planificación urbana; sobreturismo; bienestar psicosocial; capacidad de carga; turismo regenerativo; resiliencia comunitaria

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1. INTRODUCTION

In the past decade, the exponential growth of tourism in urban destinations has raised growing concern among scholars, policymakers, and residents. Cities such as Málaga, Barcelona, and Amsterdam are experiencing social tensions, environmental degradation, and shifts in community well-being, driven by the unequal distribution of tourism's benefits and burdens. According to the UNWTO (2024), urban tourist arrivals exceeded 950 million in 2023, marking a full post-pandemic recovery and intensifying pressure on urban systems. This resurgence has reignited debates on how to manage tourism sustainably while safeguarding residents' quality of life. Recent research highlights the psychological toll of tourism on urban populations, including stress, diminished sense of control, and disruptions to local identity (Perkumienė & Pranskūnienė, 2022; Cohen & Gössling, 2015). However, while tourism research has extensively addressed economic and spatial impacts (Milano et al., 2019), fewer empirical studies have directly examined psychosocial dimensions or the mediating role of governance in resident well-being. While governance and sustainable planning have received increasing interest, few studies have examined how decentralised or participatory approaches influence residents' well-being in overtouristed environments. Measurement challenges and the absence of integrated analytical frameworks linking governance to emotional well-being have further hindered empirical advancement. This study addresses these gaps through a multilevel approach that connects subjective stress perceptions with governance configurations.

Specifically, the article seeks to bridge two major research gaps: (1) understanding how governance mechanisms—particularly participatory models—shape community resilience; and (2) integrating urban stress theory, social carrying capacity, and regenerative tourism into empirical tourism research. These issues are especially pertinent in Mediterranean cities like Málaga, where tourism profoundly reshapes urban cores

and provokes conflicting resident responses. To explore these dynamics, this study applies a multi-analysis design, combining Structural Equation Modelling (SEM) with Fuzzy Set Qualitative Comparative Analysis (fsQCA). This dual approach enables the testing of linear relationships while also revealing complex, context-specific causal configurations that affect resident well-being.

The findings aim to contribute to ongoing debates on urban tourism management and offer actionable insights for policymakers in Southern Europe and other comparable contexts. The study also advances theoretical understanding by integrating multiple frameworks into a unified model of urban tourism resilience, providing guidance for mid-sized and Mediterranean cities seeking equitable and psychologically sustainable governance strategies.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Urban tourism has become a central component of the global tourism system, driven not only by increased mobility and economic opportunities, but also by the appeal of concentrated cultural and historical resources in urban environments (Ashworth & Page, 2011; Maitland, 2019). While this growth brings economic benefits, it also triggers significant social and environmental challenges, particularly in destinations experiencing high tourist pressure (Koens et al., 2018; Milano et al., 2019). The term "overtourism" has emerged to describe such adverse effects, especially in cities where tourism flows surpass local capacity, leading to overcrowding, rising living costs, and a deterioration in residents' quality of life (Goodwin, 2017; Seraphin et al., 2018).

Overtourism reflects a governance problem, arising when planning and management fail to balance economic growth, environmental sustainability, and social equity (Bramwell & Lane, 2011; Dredge & Jamal, 2015). Traditional top-down governance models have often proven inadequate for addressing the complexity of urban tourism, where diverse and often competing interests among multiple stakeholders must be reconciled (Baggio et al., 2010; Hall, 2011). As a result, scholars increasingly advocate for participatory and networked governance models that integrate residents' voices and prioritize long-term sustainability (Beritelli et al., 2015; Ruiz-Romero de la Cruz et al., 2019).

The transition from sustainable to regenerative tourism reinforces the necessity of governance models that go beyond mitigation—seeking instead to restore and enhance urban ecosystems and community well-being (Ateljevic, 2020; Higgins-Desbiolles et al., 2019). In this context, "smart governance" has emerged as a promising approach for managing complexity by leveraging digital technologies and data-driven tools to strengthen transparency, civic participation, and policy effectiveness. This paradigm incorporates big data analytics, IoT, and artificial intelligence systems to monitor tourist flows, optimize resource allocation, and design adaptive public policies (Buhalis & Amaranggana, 2015; Xiang & Fesenmaier, 2017).

However, implementing smart governance also entails challenges, such as digital divides, concerns over data privacy, and the institutional capacity required to process and apply technological insights (Joppe, 2018; Sigala, 2018). Governance strategies must ensure that technological solutions complement—and do not replace—participatory processes, thereby reinforcing social equity and public trust in urban destinations (Buhalis et al., 2019; Mora et al., 2017). Research is therefore needed to investigate how these governance frameworks can effectively balance sustainability goals with the dynamic realities of urban tourism systems (UNWTO, 2018; OECD, 2020).

2.1. Hypothesis Development

Sustainable tourism is promoted as a strategy to balance economic growth, environmental preservation, and social equity. However, its effectiveness depends on how residents perceive it and how its benefits are distributed. Sustainable Development Theory stresses that strategies must combine ecological goals with community participation and equitable benefit-sharing (Higgins-Desbiolles, 2020; Goodwin, 2021). Studies show that visible improvements—such as green infrastructure and fair benefit allocation—enhance resident support (Caballero Galeote & García Mestanza, 2020; Dirksmeier & Helbrecht, 2015), while poor governance can amplify social tensions and distress (Berselli et al., 2022; Mittal & Dhar, 2016).

Perceived stress and saturation are critical elements in tourism management. Stress is conceptualized as a response to perceived threats (Lazarus, 2006) and becomes particularly salient when overtourism disrupts daily routines. Although sustainable policies may mitigate these impacts, poor implementation or weak local adaptation may cause a sense of overload and loss of control (Godovykh & Tasci, 2021). Declining quality of life and mounting resource pressure elevate psychological distress (Andereck & Vogt, 2000; Mihalič & Kuščer, 2022).

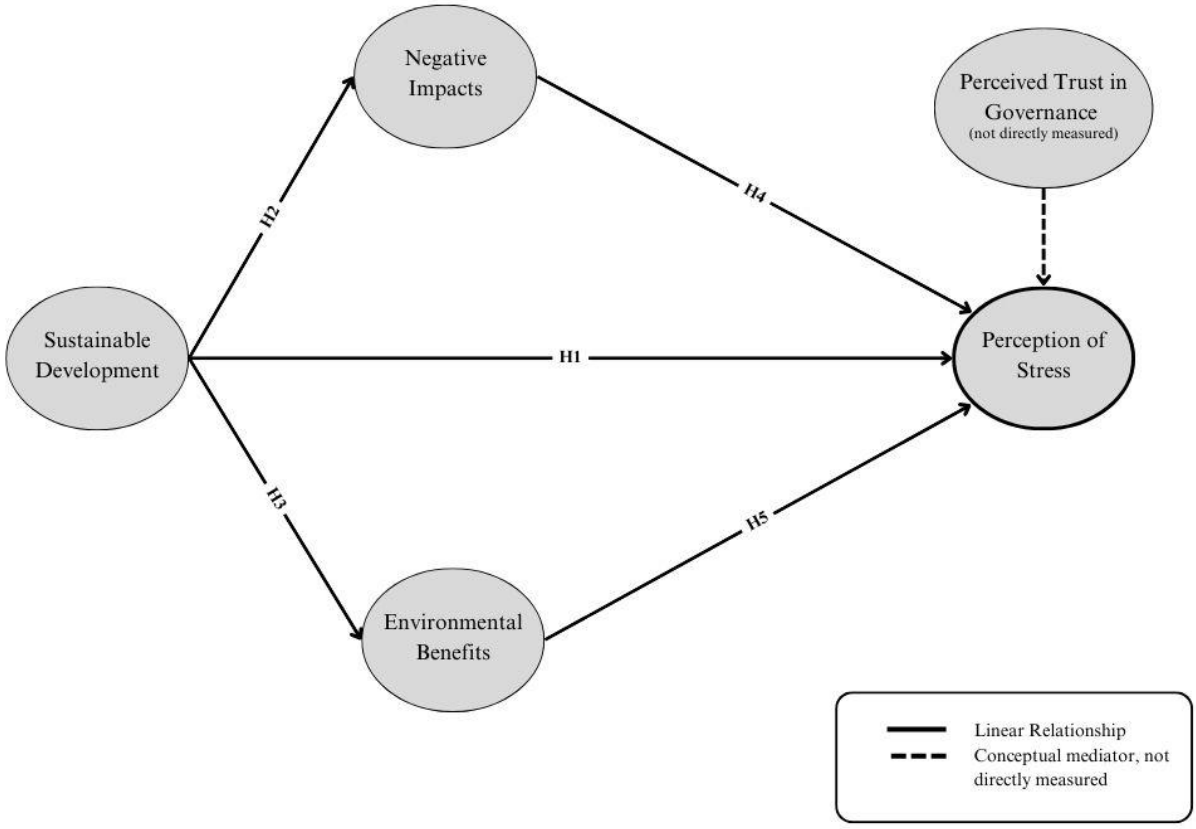
Sustainable tourism policies may enhance environmental conditions, generating tangible benefits (e.g., more green areas, less pollution). However, positive outcomes depend on sound governance. When such policies lack adaptation, participation, or transparency, negative effects such as overcrowding or resident displacement may persist, undermining the effectiveness of environmental gains (Żemła, 2024; Mohd Saufi et al., 2025).

Poorly executed strategies may exacerbate socio-environmental problems. Tourism Social Carrying Capacity Theory argues that when tourism surpasses the limits of a destination, community well-being declines and resistance rises (Mohd Saufi et al., 2025; Chaney & Séraphin, 2023). Failing to incorporate sustainability principles harms both environmental quality and social cohesion (Saarinen, 2021). Overtourism reduces quality of life and intensifies social conflict. As local resources are strained, stress increases, fueling frustration and hostility (Berselli et al., 2022).

On the other hand, environmental improvements may not fully alleviate residents' tension in overtouristed areas. Additional green zones or lower pollution levels can provide some relief, but their effects are mediated by broader social and governance factors.

These hypotheses are visually represented in Figure 1, which outlines the conceptual framework linking governance, perceived benefits and harms, and psychosocial responses to overtourism.

Figure 1. The conceptual model.



2.2. Methodology

The study focused on Málaga, a mid-sized tourist city on the southern coast of Spain. Over the past two decades, Málaga has undergone substantial transformation through pedestrianisation, cultural investment, and green planning. Although it attracts more than 1.3 million tourists annually (UNWTO, 2024), it continues to face tensions between tourism growth and local well-being, making it a suitable case for analysing the effects of tourism governance.

Data collection took place between February and April 2024 through an online survey administered to residents from neighbourhoods with varying levels of tourism intensity. This period encompassed both the pre-peak tourist season and Holy Week (Semana Santa), a time of high tourist influx, thus allowing the capture of resident perceptions during a critical interval of post-pandemic tourism activity. A total of 453 valid responses were obtained. The sample comprised 54% women and 46% men, aged between 18 and 78 years (M = 39.6, SD = 13.1). Most participants (83%) had resided in Málaga for over a decade, and 68% held university degrees. Participation was voluntary and anonymous, with informed consent obtained. Sociodemographic details are presented in Table A2 (Appendix).

The questionnaire measured five constructs using 5-point Likert scales: support for sustainable development, perceived environmental benefits, perceived negative impacts, and perceived stress and crowding, along with demographic controls. Items were adapted from prior studies (Mihalič & Kuščer, 2022;

Higham et al., 2016; García-Buades et al., 2022) and validated through confirmatory factor analysis. Reliability was confirmed using Cronbach's alpha and composite reliability.

Structural Equation Modelling (SEM) was conducted using IBM SPSS AMOS software, enabling simultaneous estimation of measurement and structural models. This approach allowed testing of multiple relationships between latent variables. Factor loadings, average variance extracted (AVE), composite reliability, and discriminant validity (HTMT criterion) were assessed. The significance of structural coefficients was determined through bootstrapping with 5,000 subsamples.

To complement the SEM, fsQCA 4.1 was employed to identify combinations of conditions associated with high or low perceived stress, revealing non-linear causalities. Continuous variables were calibrated into fuzzy sets using percentiles: full membership at the 95th percentile (value = 0.95), crossover point at the 50th (0.50), and non-membership at the 5th (0.05) (Fiss, 2011), ensuring accurate reflection of residents' stress perceptions. A consistency threshold of 0.80 and a minimum coverage of 0.25 were established to ensure robustness. Truth tables and logical minimisation were used to derive the most parsimonious solutions.

This multi-analysis design strengthens both generalisability and contextual understanding: while SEM confirms overall linear associations, fsQCA identifies multiple causal pathways—an essential feature in complex urban environments. This dual-method approach follows best practices in critical tourism studies, deepening insight into how governance, sustainability, and perception interact under overtourism conditions.

3. RESULTS

The data were analyzed using SPSS and AMOS, applying covariance-based structural equation modeling (CB-SEM). Model validation followed two stages: first, an exploratory factor analysis (EFA) to identify latent structures and confirm item grouping; second, a confirmatory factor analysis (CFA) to assess model fit and the structural relationships among constructs. The EFA confirmed that each latent variable was appropriately represented by its items. The CFA verified the model's validity, supporting the hypothesized relationships. Internal consistency was assessed using Cronbach's alpha, with values around 0.8 indicating reliable measurement tools. Convergent validity was confirmed through average variance extracted (AVE), demonstrating that indicators accurately reflected each construct. These analyses provide statistical support for the model and empirical evidence on sustainable tourism dynamics and their impact on local communities. The findings reveal clear patterns in how model variables shape resident perceptions, offering a foundation for future planning and sustainable development in high-tourism-pressure urban areas.

The SEM model estimated in AMOS showed an adequate fit (Table 1): S-Bχ^2 = 562.406 (p = 0.000), CFI = 0.927, TLI = 0.902, and RMSEA = 0.077—all within recommended thresholds. Factor loadings ranged from 0.659 to 0.876; Cronbach's alpha values ranged from 0.793 to 0.815; and AVE values from 0.557 to 0.600, confirming internal consistency and convergent validity of the measurement model.

Table 1. Psychometric Analysis of the Measurement Model

Factor	Items	Loads	Average factor loadings	α	AVE	CRI
SUST	SUST1	0,754	0,761	0,8030	0,586	0,807
	SUST2	0,869				
	SUST3	0,659				
BEN	BEN1	0,716	0,771	0,8150	0,600	0,817
	BEN2	0,876				
	BEN3	0,7210				
NEG	NEG1	0,682	0,750	0,7930	0,566	0,795
	NEG2	0,74				
	NEG3	0,827				
STR	STR1	0,718	0,744	0,8020	0,557	0,789
	STR2	0,686				
	STR3	0,828				
Goodness of fit						
S-Bχ2 = 562,406 (p=0,000)	CFI		TLI		RMSEA	
	0,927		0,902		0,077	

In the structural model (Table 2), significant relationships were identified between sustainability perception, perceived tourism impacts, and resident stress. Regression coefficients indicate that sustainability perception negatively and significantly affects perceived negative tourism impacts (H2: $\beta = –0.141$; $t = 4.527$; $p < 0.01$) and perceived environmental benefits (H3: $\beta = –0.192$; $t = 6.093$; $p < 0.01$). Perceived negative impacts were positively associated with resident stress and crowding (H4: $\beta = 0.148$; $t = 4.634$; $p < 0.01$). Similarly, perceived environmental benefits had a strong positive association with stress and crowding (H5: $\beta = 0.640$; $t = 15.98$; $p < 0.01$), indicating that environmental improvements may not offset the negative effects of tourism on urban quality of life. However, the direct relationship between sustainability perception and stress was not statistically significant (H1: $\beta = –0.051$; $t = 1.868$; $p > 0.05$), so this hypothesis was not supported.

Table 2. Hypothesis Testing Results (SEM Model)

Hypothesis	Structural relationship	Coef.	Valor t*	Contrast
H_1	SUST → STR	-0,0510	1,868***	Not Supported
H_2	SUST → NEG	-0,1410	4,527***	Supported
H_3	SUST → BEN	-0,1920	6,093***	Supported
H_4	NEG → STR	0,1480	4,634***	Supported
H_5	BEN → STR	0,6400	15,98***	Supported
*=p<0,1; **=p<0,05; ***=p<0,01				

Note: STR = Perception of Stress and Overcrowding, BEN = Environmental Benefits of Tourism, NEG = Negative Impacts, SUST = Sustainability.

To complement the symmetric AMOS analysis, a Fuzzy Set Qualitative Comparative Analysis (fsQCA) was conducted to identify combinations of factors explaining perceived stress and crowding in urban tourism

contexts. Unlike AMOS's linear approach, fsQCA uncovers multiple causal configurations, making it valuable for exploring complex dynamics in high-tourism-pressure destinations (Ragin, 2008). Given that stress arises from interrelated factors, fsQCA allowed a deeper analysis of the interplay between support for sustainability, perceived environmental benefits, and negative socio-environmental tourism impacts (Schneider & Wagemann, 2012).

The necessity analysis revealed that no single factor independently explained stress or crowding, as neither negative impacts (consistency = 0.716) nor sustainability support (consistency = 0.704) reached the 0.9 threshold (Table 3). Nonetheless, both factors recurred in the causal configurations, indicating a significant but not exclusive influence. In contrast, for the absence of stress (~STR), the most relevant conditions were reduced perception of negative impacts (~NEG, consistency = 0.723) and the presence of environmental benefits (BEN, consistency = 0.628), although neither fully met the strict necessity criteria.

Table 3. Summary of analysis of necessary conditions

Condition	Consistency	Coverage	Condition	Consistency	Coverage
BEN	0.572	0.524	~BEN	0.605	0.650
NEG	0.715	0.662	~NEG	0.723	0.769
SUST	0.703	0.572	~SUST	0.600	0.726

Note: STR = Perception of Stress and Overcrowding, BEN = Environmental Benefits of Tourism, NEG = Negative Impacts, SUST = Sustainability.

To explore multiple causal pathways leading to perceived stress, a truth table (Table 4) was constructed using all combinations of three key conditions: support for sustainable development, perceived environmental benefits, and perceived negative impacts. A minimum case frequency of 24 and a consistency threshold of 0.77764 were applied, achieving 80% case coverage. Results for high stress and crowding (STR) yielded an overall solution consistency of 0.712 and coverage of 0.568, showing that the identified configurations explain a substantial portion of stressed residents. Two configurations stood out: the first combined high perceived negative impacts with low sustainability support (NEG~SUST; coverage = 0.477; consistency = 0.753), suggesting that residents facing socio-environmental harm and lacking institutional support are more likely to feel overwhelmed. The second configuration combined environmental benefits with perceived negative impacts (BENNEG; coverage = 0.431; consistency = 0.722), highlighting that positive changes may not offset negative experiences like crowding or noise, leading to cognitive dissonance and emotional strain.

For low stress and crowding (~STR), overall consistency was 0.717 and solution coverage 0.821. The most relevant condition was the absence of negative impacts (~NEG; coverage = 0.723; consistency = 0.770), showing that not perceiving harm is strongly linked to lower stress levels regardless of sustainability support. A secondary factor was the perception of environmental benefits (BEN; coverage = 0.628; consistency = 0.756), indicating that visible ecological improvements can ease emotional overload in saturated urban areas. To ensure robustness, the consistency threshold was raised from 0.85 to 0.90 (Skaaning, 2011). As shown in the fsQCA robustness test, coverage and consistency values remained stable, confirming the reliability of the analysis.

Table 4. Intermediate fsQCA Solutions for High and Low Perceived Stress

	HIGH Stress (ST)		Low Stress (~ST)	
Condition / Metrics	**C1**	**C2**	**C3**	**C4**
BEN	-	●	-	●
NEG	●	●	⊗	-
SUST	⊗	-	-	-
Consistency	0.753	0.836	0.770	0.755
Raw Coverage	0.477	0.334	0.723	0.627
Unique Coverage	0.136	0.018	0.193	0.098
Overall Solution Consistency	0.712		0.716	
Overall Solution Coverage	0.568		0.821	

Note: BEN = Environmental Benefits of Tourism, NEG = Negative Impacts, SUST = Sustainability

4. DISCUSSION

This study contributes to overtourism and psychosocial stress literature by showing that residents' responses result from multiple interactive conditions rather than isolated variables. Through a dual-method approach (CB-SEM and fsQCA) the research identifies non-linear, asymmetric, and equifinal causal pathways explaining both stress and resilience in tourism-intensive cities. This challenges traditional linear models and emphasizes the need for adaptive governance that reflects diverse resident experiences. In line with the theory of perceived stress (Cohen et al., 1983), results show that emotional strain stems not just from tourism intensity or environmental conditions, but from residents' perceptions of fairness, credibility, and inclusivity in governance.

Notably, residents with stronger support for sustainability do not necessarily perceive greater environmental benefits from tourism (H3). This negative relationship suggests that those most committed to sustainability are also more critical of current environmental outcomes, possibly perceiving them as insufficient. Even with environmental improvements (e.g., green zones, noise control), stress can persist if trust and perceived agency are lacking. This counterintuitive finding (H5) a strong positive correlation between environmental benefits and stress suggests that improvements alone do not mitigate pressure when confidence in governance is low. In other words, residents may acknowledge ecological advances while still experiencing emotional strain due to tourism saturation, a sign of potential cognitive dissonance. This extends prior studies on tourism-related stress (Almeida-García et al., 2023; Buitrago-Esquinas et al., 2023), validating a more nuanced understanding of sustainability's psychosocial impacts, shaped by both material and symbolic governance dimensions.

FsQCA findings also reveal causal asymmetry: factors reducing stress are not mere opposites of those causing it. Resilience emerges through specific combinations of perceived benefits, sustainability support, and trust in planning—effective even in dense urban settings. Conversely, stress persists when governance is perceived as exclusive or when negative social impacts (e.g., housing costs, crowding) are unresolved. This suggests that partial or technocratic sustainability models focused only on environmental metrics may be ineffective—or even counterproductive—if disconnected from local realities (Fitzpatrick, Parrique, & Cosme, 2022).

While participatory governance is often advocated, its implementation faces structural barriers. In cities like Málaga, public distrust is rooted in top-down planning, weak institutional coordination, and the influence of tourism lobbies. As Novy and Colomb (2019) highlight, urban tourism's political economy frequently limits democratic participation, risking sustainability being reduced to mere rhetoric. Theoretically, this study bridges governance theory and psychosocial stress frameworks, proposing that perceptions of fairness, control, and responsiveness mediate resident well-being. Though constructs like trust and legitimacy were not directly measured, their relevance is evident in configurations linked to lower stress. This points to the potential of incorporating latent governance variables into tourism impact models through multi-method strategies.

From a planning perspective, the existence of multiple effective pathways suggests there is no universal solution. Each city must adopt context-sensitive strategies balancing economic growth and social sustainability. In line with SDG 11 and SDG 12, we advocate incorporating emotional and psychological dimensions—social carrying capacity— into tourism governance. This involves not only managing visitor flows but also ensuring fair housing access, protecting residential spaces, and empowering communities via transparent, participatory policies. Ultimately, sustainability must be seen not only as a technical goal but as a relational and political process. Perceptions of control, inclusion, and responsiveness are as essential as physical interventions. Ignoring these dimensions risks turning sustainability into a technocratic discourse detached from lived realities—a finding with significant implications for policymaking in overtourism-affected cities.

5. CONCLUSIONS

5.1. Theoretical Implications

This study offers a multidimensional theoretical contribution to tourism governance, urban studies, and psychosocial resilience by integrating typically separated frameworks. First, it extends Social Exchange Theory (SET) by showing that resident support for tourism depends not only on cost–benefit evaluations, but also on perceived equity, trust, and transparency in governance. Findings confirm that when sustainability policies are viewed as equitable and community-oriented, they help reduce stress—even in dense tourism contexts. Thus, SET is expanded to include psychosocial mediation, where emotional and perceptual filters shape how tourism is assessed (Nunkoo & Ramkissoon, 2012).

Second, the study advances Urban Stress Theory by applying it to overtourism. Rather than framing urban stress purely because of density, we conceptualize it as a product of interactive conditions—policy responses, environmental measures, and community agency. The fsQCA approach supports a relational understanding of stress, complementing earlier psychological models (Lazarus & Folkman, 1984) with a governance perspective linking institutional action to emotional wellbeing.

Third, the results contribute to the Tourism Carrying Capacity and Regenerative Tourism frameworks by showing that sustainability must address environmental goals alongside social thresholds and community resilience. While regenerative tourism emphasizes long-term systemic restoration (Bellato et al., 2023), our findings stress the need for resident engagement and the inclusion of psychosocial metrics in planning. Carrying capacity emerges as not just physical, but also perceptual and political, shaped by narratives of trust and transparency.

Methodologically, this work enriches theory-building by combining Structural Equation Modeling (SEM) with Fuzzy Set Qualitative Comparative Analysis (fsQCA). This dual strategy tests both general causal relationships and specific configurations, aligning with real-world complexity. The principle of equifinality becomes central: diverse governance trajectories can yield similar outcomes in terms of stress or wellbeing, underscoring the need for adaptive and context-sensitive models. Finally, the study challenges optimistic assumptions in Sustainable Development Theory by revealing how fragmented implementations may exacerbate social tensions. Without democratic participation and resident trust, sustainability risks becoming merely rhetorical. Our findings call for a distinction between discursive and lived sustainability—the latter requiring visible improvements in daily life.

In sum, this research strengthens the theoretical foundations of urban tourism and its governance by linking psychosocial responses with macro-level policy dynamics. It advocates for an integrated theory of sustainable urban tourism—one that incorporates structural barriers, emotional perception, and the interaction between regulation and lived experience.

5.2. Practical Implications

The findings of this study offer practical insights for urban planners, tourism managers, and policymakers aiming to reconcile tourism development with resident well-being. First, the principle of equifinality, demonstrated through fsQCA, shows that no universal solution exists for mitigating urban tourism stress. Instead, cities must design flexible, context-sensitive strategies that reflect the interplay between tourism pressure, policy effectiveness, and resident perceptions.

To reduce stress and crowding in high-pressure environments, strategies should prioritize spatial and temporal redistribution of visitor flows. This includes promoting off-peak tourism, incentivizing visits to less-frequented neighborhoods, and regulating density in public spaces. Cities like Amsterdam and Lisbon illustrate how zoning, digital monitoring, and targeted regulations (e.g., limits on short-term rentals) can relieve pressure when applied consistently and transparently. These measures must be accompanied by visible, credible environmental improvements. Residents are more accepting of tourism when they perceive tangible benefits—such as more green areas, cleaner spaces, or reduced noise pollution. Sustainability must move beyond abstract plans and into everyday urban life. Investments in low-emission transport, noise control, and eco-certified tourism services can shift resident attitudes from rejection to conditional support.

Equally crucial is the implementation of participatory governance. Stress decreases when residents feel heard and involved in planning. This requires more than consultations—it calls for institutionalized co-decision tools like neighbourhood tourism panels, district committees, or participatory budgeting. In cities like Málaga, building this trust is essential, especially where tourism growth has outpaced public involvement. Given current barriers—fragmented governance and dominant private interests—cities should promote small-scale, replicable interventions with immediate impact. Pilot projects in community tourism, observatories with citizen oversight, or urban labs for mobility solutions can enhance legitimacy and political will.

Finally, stress mitigation must consider the psychosocial dimensions of overtourism. This means integrating indicators like residential satisfaction, emotional well-being, and perceived justice into tourism assessments. Just as physical carrying capacity informs infrastructure planning, social and emotional

capacity should guide when and how tourism is acceptable. Urban tourism becomes truly sustainable only when those who live with its daily impacts perceive it as fair, inclusive, and genuinely beneficial.

5.3. Limitations and Future Research

While this study provides meaningful insights into the relationship between urban tourism, sustainability policies, and perceived stress, several limitations must be acknowledged.

First, the research is based on a single case study—Málaga—which, although analytically relevant, may limit the generalizability of findings. Urban contexts with different tourism models, governance traditions, or cultural attitudes toward visitors may produce different psychosocial responses. Future research should adopt a comparative approach, applying this analytical framework to cities such as Venice, Amsterdam, or Porto to test the consistency of configurational patterns across diverse governance regimes.

Second, the reliance on cross-sectional survey data restricts the ability to capture temporal changes in resident perceptions or policy impacts. As tourism dynamics and sustainability measures evolve, so too might their perceived effects on stress. A longitudinal design—integrating before-and-after comparisons or multi-year tracking— would allow for stronger causal inference and deeper policy understanding over time.

Third, although the multi-method approach provides robust explanatory depth, it is limited to perceived stress and attitudes. Complementary data—such as objective noise levels, tourist density sensors, or housing price trends— could triangulate subjective findings and strengthen policy relevance. Integrating objective urban indicators with resident perceptions would enhance both analytical rigor and practical utility.

A further limitation is the limited exploration of discourse and representation. In an era of growing digital activism and anti-tourism backlash, social media and online forums have become influential in shaping public opinion and institutional responses. Future studies should explore how digital narratives and media representations of tourism influence stress perceptions and governance, potentially using sentiment analysis or discourse mapping techniques.

Finally, this study does not fully address the economic dependence on tourism as a moderating factor in governance acceptance. In cities where tourism is a key economic pillar, residents may tolerate greater impacts or resist policies seen as threatening employment. Future research should examine how economic vulnerability shapes support for or resistance to sustainability measures, particularly in post-pandemic contexts prioritizing tourism recovery.

These avenues offer opportunities to expand the theoretical and practical contributions of this study, reinforcing the need for a more interdisciplinary and dynamic understanding of urban tourism governance under stress.

REFERENCES

Baggio, R., Scott, N., & Cooper, C. (2010). Network science: A review focused on tourism. *Annals of Tourism Research, 37*(3), 802–827. https://doi.org/10.1016/j.annals.2010.02.008

Berselli, C., Pereira, L. A., Pereira, T., & Limberger, P. F. (2022). Overtourism: Residents' perceived impacts. *Tourism Analysis, 27*(2), 161–172. https://doi.org/10.3727/108354221X16187814403074

Caballero Galeote, L., & García Mestanza, J. (2020). Qualitative impact analysis of international tourists. *Sustainability, 12*(11). https://doi.org/10.3390/su12114725

Chaney, D., & Séraphin, H. (2023). A systematic literature review on overtourism. *Journal of Environmental Management, 347*, 119123. https://doi.org/10.1016/j.jenvman.2023.119123

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385–396. https://doi.org/10.2307/2136404

Cohen, S. A., & Gössling, S. (2015). A darker side of hypermobility. *Environment and Planning A: Economy and Space, 47*(8), 1661–1679. https://doi.org/10.1177/0308518X15597124

Dirksmeier, P., & Helbrecht, I. (2015). Resident perceptions of new urban tourism. *Geography Compass, 9*(5), 276–285. https://doi.org/10.1111/gec3.12201

Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal, 54*(2), 393–420. http://dx.doi.org/10.5465/AMJ.2011.60263120

Fitzpatrick, N., Parrique, T., & Cosme, I. (2022). Exploring degrowth policy proposals. *Journal of Cleaner Production, 365*, 132764. https://doi.org/10.1016/j.jclepro.2022.132764

García-Buades, M. E., García-Sastre, M. A., & Alemany-Hormaeche, M. (2022). Effects of overtourism, local government, and tourist behavior. *Journal of Outdoor Recreation and Tourism, 39*, 100499. https://doi.org/10.1016/j.jort.2022.100499

García-Hernández, M., de la Calle-Vaquero, M., & Yubero, C. (2017). Cultural heritage and urban tourism: Historic city centres under pressure. *Sustainability, 9*(8), 1346. https://doi.org/10.3390/su9081346

Godovykh, M., & Tasci, A. D. A. (2021). Post-visit emotions and destination loyalty. *Tourism Review, 76*(1), 277–288. https://doi.org/10.1108/TR-01-2020-0025

Goodwin, H. (2021). City destinations, overtourism and governance. *International Journal of Tourism Cities, 7*(4), 916–921. https://doi.org/10.1108/IJTC-02-2021-0024

Gössling, S., Scott, D., & Hall, C. M. (2018). Global trends in length of stay. *Journal of Sustainable Tourism, 26*(12), 2087–2101. https://doi.org/10.1080/09669582.2018.1529771

Gursoy, D., & Rutherford, D. G. (2004). Host attitudes toward tourism: An improved structural model. *Annals of Tourism Research, 31*(3), 495–516. https://doi.org/10.1016/j.annals.2003.08.008

Gutiérrez, J., García-Palomares, J. C., Romanillos, G., & Salas-Olmedo, M. H. (2017). The eruption of Airbnb in tourist cities: Comparing spatial patterns of hotels and peer-to-peer accommodation in Barcelona. *Tourism Management, 62*, 278–291. https://doi.org/10.1016/j.tourman.2017.05.003

Guttentag, D. (2019). Progress on Airbnb. *Journal of Hospitality and Tourism Technology, 10*(3), 233–263. https://doi.org/10.1108/JHTT-08-2018-0075

Higgins-Desbiolles, F. (2020). The "war over tourism": Challenges to sustainable tourism in the tourism academy after COVID-19. *Journal of Sustainable Tourism, 29*(4), 551–569. https://doi.org/10.1080/09669582.2020.1803334

Higham, J. E. S., Cohen, S. A., & Cavaliere, C. T. (2016). Climate change, tourist air travel and radical emissions reduction. *Journal of Cleaner Production, 111*, 336–347. http://dx.doi.org/10.1016/j.jclepro.2014.10.100

Kourkouridis, D., Frangopoulos, Y., & Salepaki, A. (2024). Trade fairs, host cities and tourism development. *Tourism and Hospitality, 5*(2), 333–353. https://doi.org/10.3390/tourhosp5020022

Lazarus, R. S. (2006). *Stress and Emotion: A New Synthesis*. Springer Publishing Company.

Ma, E., Yang, H., Wang, Y. C., & Song, H. (2022). Robot-assisted experiences in restaurants. *Tourism Management, 93*, 104610. https://doi.org/10.1016/j.tourman.2022.104610

Mihalic, T. (2020). Conceptualising overtourism. *Annals of Tourism Research, 84*, 103025. https://doi.org/10.1016/j.annals.2020.103025

Mihalič, T., & Kuščer, K. (2022). Can overtourism be managed? Destination management factors affecting residents' irritation and quality of life. *Tourism Review, 77*(1), 1–17. https://doi.org/10.1108/TR-04-2020-0186

Milano, C., Cheer, J. M., & Novelli, M. (2019). *Overtourism: Excesses, discontents and measures in travel and tourism*. CABI. https://doi.org/10.1079/9781786399823.0000

Mittal, S., & Dhar, R. L. (2016). Effect of green transformational leadership. *Tourism Management, 57*, 118–127. https://doi.org/10.1016/j.tourman.2016.05.007

Mohd Saufi, S. A., et al. (2025). Overtourism impacts on Cameron Highlands. *Tourism Planning & Development*. https://doi.org/10.1080/21568316.2024.2319155

Muler Gonzalez, V., Coromina, L., & Galí, N. (2018). Residents' perceptions of tourism impact. *Tourism Review, 73*(3), 277–296. https://doi.org/10.1108/TR-08-2017-0138

Nieuwland, S., Lavanga, M., & Koens, K. (2025). Adaptive cycles and touristification. *Tourism Management, 106*, 105011. https://doi.org/10.1016/j.tourman.2024.105011

Novy, J., & Colomb, C. (2019). Urban tourism as a source of contention and social mobilisations: A critical review. *Tourism Planning & Development, 16*(4), 358–375. https://doi.org/10.1080/21568316.2019.1577293

Nunkoo, R., & Ramkissoon, H. (2012). Power, trust, social exchange and community support. *Annals of Tourism Research, 39*(2), 997–1023. https://doi.org/10.1016/j.annals.2011.11.017

Perkumienė, D., & Pranskūnienė, R. (2022). Psychosocial impacts of tourism on local communities: A systematic review. *Sustainability, 14*(4), 2345. https://doi.org/10.3390/su14042345

Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism. *Journal of Tourism Futures, 3*(2), 144–156. https://doi.org/10.1108/JTF-04-2017-0022

Ragin, C. C. (2008). *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. University of Chicago Press.

Ribeiro, M. A., Pinto, P., Silva, J. A., & Woosnam, K. M. (2017). Residents' attitudes and pro-tourism behaviours. *Tourism Management, 61*, 523–537. https://doi.org/10.1016/j.tourman.2017.03.004

Saarinen, J. (2021). Is being responsible sustainable in tourism? Connections and disconnections between responsibility and sustainability. *Sustainability, 13*(12), 6599. https://doi.org/10.3390/su13126599

Santos-Rojo, C., Llopis-Amorós, M., & García-García, J. M. (2023). Overtourism and sustainability: A bibliometric study (2018–2021). *Technological Forecasting and Social Change, 188*, 122285. https://doi.org/10.1016/j.techfore.2022.122285

Schneider, C. Q., & Wagemann, C. (2012). *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis*. Cambridge University Press. https://doi.org/10.1017/CBO9781139004244

Skaaning, S.-E. (2011). Assessing the robustness of crisp-set and fuzzy-set QCA results. *Sociological Methods & Research, 40*(2), 391–408. https://doi.org/10.1177/0049124111404818

UNWTO. (2023). *Tourism and sustainability: Trends and challenges for the future*.

Velasco González, M., & Ruano, J. M. (2021). The crossfire rhetoric. Success in danger vs. unsustainable growth. Analysis of tourism stakeholders' narratives in the Spanish press (2008–2019). *Sustainability, 13*(16), 9127. https://doi.org/10.3390/su13169127

Walmsley, A., Koens, K., & Milano, C. (2022). Overtourism and employment outcomes for the tourism worker. *Tourism Review, 77*(1), 1–15. https://doi.org/10.1108/TR-07-2020-0343

Yrigoy, I., & García-Hernández, M. (2024). Tourism and everyday life in the contemporary city: An introduction. *Urban Studies, 61*(3), 456–472. http://dx.doi.org/10.4324/9780429507168-1

Żemła, M. (2024). European historic cities and overtourism – Conflicts and development paths in the light of systematic literature review. *International Journal of Tourism*.

5.4. Appendix

Table 5.

Variables	Name	Items	Sources
Perception of Stress and Overcrowding	STR1STR 2STR3	I am concerned about many tourists being close to me.I do not feel safe due to tourist crowds.I feel stressed due to tourist crowds.	Kozak & Baloglu (2011); Reisinger & Turner (2003)
Environmental Benefits of Tourism	BEN1BE N2BEN3	Tourism helps preserve natural resources.Tourism supports the existence of green spaces in the city.Tourism increases residents' environmental awareness.	Andereck & Vogt (2000); Gursoy & Rutherford (2004)
Negative Impacts	NEG1NE G2NEG3	Tourism worsens residents' quality of life.Tourism causes noise.Tourism damages the urban environment and heritage.	Ap & Crompton (1998); McGehee & Andereck (2004)
Sustainability	SUST1SU ST2SUST 3	The city should further promote environmental education and protection.My city should invest more in the development of sustainable tourism.My city must transition to a more sustainable tourism development model.	Bramwell & Lane (1993); Butler (1999)

Table 6.

Attributes	Values	Number	Percent (%)
Gender	Male	208	45.9
	Female	245	54.1
Age	18-24	50	12.5
	25-34	90	22.5
	35-44	70	17.5
	45-54	60	15.0
	55-64	40	10.0
	65+	30	7.5
	No Response	60	15.0
Education	Primary education	20	5.0
	Secondary education	100	25.0
	Vocational training	80	20.0
	University degree	120	30.0
	Postgraduate	40	10.0
	No Response	20	5.0
Employment in Tourism	Employed in tourism	90	22.5
	Previously employed	110	27.5
	Never employed	170	42.5
	No Response	30	7.5
Income (€/month)	<1,000	40	10.0
	1,000-1,999	90	22.5
	2,000-2,999	110	27.5
	3,000-3,999	70	17.5
	4,000-4,999	30	7.5
	≥5,000	20	5.0
	No Response	50	12.5
District	Centro	220	55.0
	Other districts	180	45.0

Notes

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