Residents' Perception Differences Regarding County Festival Tourism Impacts: A Case Study of the Tongliang Dragon Lantern Art Festival in Chongqing

Xiaoya Huang

School of Tourism and Service Management, Chongqing University of Education, Chongqing, China huangxy@cque.edu.cn

Abstract: Festival tourism, as a significant vehicle for cultural and tourism integration in county regions, has garnered increasing attention from local cultural and tourism authorities. This study examines the Tongliang Dragon Lantern Art Festival in Chongqing as a case study, employing a three-dimensional framework of socio-cultural, economic, and environmental aspect to analyse residents perception differences toward festival tourism impacts. Questionnaire-based findings reveal that residents show strong positive perceptions of socio-cultural and economic impacts, but demonstrate heightened sensitivity to negative environmental impacts. Group differences are notable: females show greater sensitivity to environmental changes; residents with lower education levels perceive significantly weaker positive economic impacts than higher-educated groups; elderly residents display greater tolerance toward negative impacts; and newer residents (≤ 10 years of residence) perceive environmental impacts more acutely than long-term residents (≥ 21 years). Accordingly, the study puts forward corresponding recommendations based on the need for county festival culture inheritance, festival economic sharing and environmental sustainability to provide reference for county festival tourism development decisions.

Keywords: Festival Tourism; County; Residents' Perception; Dragon Lantern Art Festival

1. Introduction

Amidst the comprehensive promotion of rural revitalization strategies, county regions have emerged as critical junctions for urban-rural integration and pivotal platforms for the convergence of cultural and tourism industries. According to Ctrip's 2024 Summer Travel Market Report, domestic tourism orders in county-level destinations surged by 45% month-on-month during the summer season, outpacing growth rates in first-tier cities, with 77% of visitors originating from non-local areas ^[1]. Festival tourism, as a specialized form of tourism with the core attraction of specific festivals or event celebrations ^[2], serves not only as a vital channel for preserving regional cultural heritage but also as an engine for destination branding and economic development ^[3]. As one of the rapidly developing tourism sectors globally ^[4], China hosts more than 10,000 festival events annually ^[5], with more than 75% of counties regularly organizing their own festivals ^[6]. Festivals are gradually becoming more frequent in smaller cities and counties ^[7].

Within the complex stakeholder network of festival tourism, residents are universally recognized as core participants [8]. Their support and engagement constitute a foundational pillar for the sustainable development of festival tourism [9]. Numerous studies have confirmed that residents' perceptions of the impact of festivals are closely related to their attitudes and subsequent behaviors towards festivals [10][11]. Therefore, focusing on county residents, in-depth analysis of the level of county residents' perception of the impact of local festival tourism is of great theoretical and practical significance to promote the healthy development of county festival tourism.

2. Literature Review

Research on the impact of festival tourism has long followed the classical paradigm of tourism studies, establishing a multidimensional analytical framework centered on economic, socio-cultural, and environmental dimensions. Scholars widely recognize festivals' significant contributions to enhancing destination attraction [12] and stimulating community employment [13]. Essentially serving as event-based specialized tourism products [14], festivals effectively drive infrastructure upgrades and social

development [15] while facilitating the implicit dissemination of cultural values beyond economic gains [16]

From a theoretical perspective, social exchange theory (SET) predominates in explaining residents' perceptions of festival impacts through dual positive-negative lenses. While festivals attract tourists and boost economic growth, they may concurrently induce rising crime rates, community conflicts, traffic congestion, and environmental pollution [17][18].

Regarding research scope, most of the existing studies focus on urban mega-events—such as the Olympics, World Cup, and music festivals [19]—while county festivals are relatively marginal due to their endogenous nature, cultural locality, and limited scale [20]. In the county context, residents are the inheritors of festival culture, the beneficiaries of the festival economy, and the guardians of the ecological environment, and their perceptions of the impact of festivals have a crucial influence on festival tourism planning, organization, and management.

3. Research Design

3.1 Case Selection

Tongliang is nationally recognized as the hometown of Chinese Folk Culture and Art, where Tongliang Dragon Dance and Dragon Lantern Crafting—intangible cultural heritage inherited for thousands of years—originate. To promote folk culture and accelerate cultural-tourism integration in Tongliang, the district has periodically hosted the Chongqing Tongliang Dragon Lantern Art Festival since 2000. This comprehensive festival integrates cultural, tourism, commercial, and recreational elements. By 2024, the event had been successfully held for ten editions. During the Chinese New Year period, it collaborates with local attractions such as Anju Ancient Town, Qicai Dream Garden, and Tongliang Dragon Scenic Area to offer activities including lantern viewing, dragon dance performances, and folk culture experiences, thereby enhancing Tongliang's profile as a dragon culture tourism destination. In 2024 alone, the festival attracted 435,800 visitors during the Spring Festival period, generating RMB 280 million in tourism revenue and significantly boosting Tongliang's tourism economy.

3.2 Questionnaire Design and Distribution

Based on the extensive review of related research literature, a 22-item questionnaire was designed based on the existing tourism impact perception scale and the actual situation of Tongliang Dragon Lantern Art Festival. The questionnaire was divided into two parts: the first part was about demographic information of the community residents, including gender, age, education, and duration of residence; the second part was about the perception of the local community residents in Tongliang on the economic, socio-cultural, and environmental impacts brought by the Dragon Lantern Art Festival, with a total of 18 variables, and a 5-point Likert scale was adopted to rate the residents' perceptions(1= Strongly Disagree, 5= Strongly Agree).

The survey was conducted from January 10 to 17, 2024, via both online and offline channels, targeting a randomized sample of community residents in Tongliang District. A total of 202 questionnaires were collected, with 187 validated after eliminating responses containing logical inconsistencies, yielding a validity rate of 92.6%.

4. Data Analyses

4.1 Reliability Analysis

To ensure data reliability and validity, the internal consistency of the scale was assessed using Cronbach's α . Generally, when the Cronbach's α is greater than or equal to 0.9, it indicates that the reliability of the scale is very good, 0.8 - 0.9 indicates that the reliability is good, 0.7 - 0.8 items are acceptable, and less than 0.7 indicates that some of the items in the scale need to be discarded. Reliability testing conducted via SPSS 27.0 yielded a Cronbach's α value of 0.860, confirming strong reliability and validity for subsequent analysis.

4.2 Demographic Characteristics

Through the combing statistics of 187 valid questionnaires, the proportion of males in the sample of this survey is 51.3%, which is slightly higher than the proportion of females, 48.7%; in terms of age, 11.2% of the sample are underage residents of 17 years old and below, 25.7% of the sample are young residents of 18-34 years old, 41.7% of the sample are middle-aged residents of 35-59 years old, and 21.3% of the sample are elderly residents of 60 years old and above. The gender and age distributions align closely with Tongliang District's 2023 demographic data published by the Tongliang Bureau of Statistics, confirming the sample's representativeness. In addition, in terms of education, 18.1% of the residents have a associate degree, and 61.0% have a bachelor's degree or above, indicating a highly educated sample; in terms of residence duration, 78.6% had resided locally for over 5 years. Details of the demographic information are presented in Table 1 below.

Item Frequency Proportion Item Frequency Proportion Sex Male 96 51.3% Female 91 48.7% ≤ 17 21 11.2% 18-34 48 25.7 % Age(years) 35-59 78 41.7 % 40 21.4 % ≥ 60 Junior high High 7.5 % 25 14 13.4 % or below school Education Associate Bachelor's 34 18.1 % 114 61.0 % or above degree ≤ 5 40 21.4 % 6-10 38 20.3 % Residence Duration(years) 11-20 74 39.6 % ≥21 35 18.7 %

Table 1: Basic Information of the Sample

4.3 Residents' Festival Tourism Impact Perception

Table 2: Residents	Perce	entions o	of Festival	Tourism	Impacts
Iudic 2. Residents	1 6/66	pilons c	n i couvai	10m isin	mpacis

	Mean	Standard deviation	Skewness	Kurtosis
Positive socio-cultural impacts	4.34	0.693	-1.706	4.364
Enhanced regional reputation	4.34	0.782	-1.422	2.943
Improved public facilities	4.22	0.880	-1.019	0.537
Strengthened community pride	4.41	0.814	-1.783	4.126
Enriched leisure activities	4.41	0.773	-1.625	3.660
Negative socio-cultural impacts	2.30	1.216	1.001	0.075
Increased crime rates	2.35	1.259	0.926	-0.105
Reduced community trust	2.28	1.277	0.951	-0.150
Disrupted community tranquility	2.27	1.297	0.883	-0.292

Positive economic impacts	4.21	0.695	-1.009	0.968
Increased employment opportunities	4.19	0.793	-0.946	0.773
Increased income of residents	4.14	0.899	-1.130	1.169
Attracted external investment	4.22	0.776	-0.891	0.618
Stimulated related industries	4.27	0.752	-1.187	2.243
Negative economic impacts	2.83	1.148	0.282	-0.603
Rising local prices	2.90	1.219	0.132	-0.805
Widened wealth gap	2.67	1.225	0.469	-0.707
Uneven benefit distribution	2.91	1.247	0.107	-1.007
Positive environmental impacts	3.59	0.902	-0.286	-0.212
Improved sanitation conditions	4.06	1.045	-1.043	0.482
Enhanced ecological quality	3.12	1.327	0.005	-1.218
Negative environmental impacts	3.38	1.205	-0.499	-0.755
Increased local traffic congestion	3.42	1.290	-0.453	-0.883
Increased amount of domestic waste	3.35	1.245	-0.449	-0.755

As summarized in Table 2, residents demonstrated strong consensus on positive socio-cultural impacts (mean=4.34, SD=0.693), particularly regarding enhanced community pride(mean=4.41) and enriched leisure activities (mean=4.41). Negative socio-cultural impacts perceptions were significantly lower (mean=2.30, SD=1.216), though with greater individual variation, indicating pronounced divergence in concerns about social disruptions. In the context of county festivals—where events are predominantly rooted in regional culture—the perception scores clearly demonstrate residents' high consensus on the positive cultural value of festival tourism. The development and promotion of such festivals effectively fortify residents' place-based identity and cultural confidence.

In terms of economic impact perception, positive perceptions remained robust (mean=4.21) but slightly weaker than socio-cultural dimensions. Residents more strongly endorsed macro-level benefits (Mean of industry stimulation= 4.27; Mean of investment attraction= 4.22) than personal economic gains (Mean of income enhancement= 4.14). As negative impacts, the mean of residents' perception score is 2.83 points, higher than the residents' perception of the negative impacts on socio-cultural dimension, of which the mean of rising local price and uneven benefit distribution is close to 3 points, signaling palpable discontent among some residents.

In terms of environmental impacts perception, stark contrast appeared between moderate positive (mean=3.59) and elevated negative perceptions (mean=3.38), which shows that there is a general concern among the residents about the environmental problems brought about by festival tourism. While short-term sanitation improvements were acknowledged (mean=4.06), ecological enhancement scored lowest among all positive indicators (mean=3.12). The perceived scores of traffic congestion and waste generation brought about by festival tourism show that residents are generally concerned about the overloading of environmental capacity brought about by the development of festival tourism.

4.4 Analysis of residents' perception differences

Residents' perceptions of festival tourism impacts are influenced by multifaceted factors. Studies by Teye (2002), Renata (2000) indicate significant perception variations across gender, age, and education [21][22], while Lankford & Howard (1994) identify residence duration as another critical determinant [23].

This study thus employs independent samples t-tests and one-way ANOVA to examine group disparities in socio-cultural, economic, and environmental perceptions.

4.4.1 Gender Differences

Independent samples t-tests revealed significant gender-based differences. Women perceived positive economic impacts significantly more strongly than men (t=-2.020, p= 0.045), indicating greater recognition of festival-derived economic benefits. Women exhibited heightened sensitivity to both positive (t=-2.419, p=0.017) and negative environmental changes (t=-2.822, p= 0.005). No significant differences emerged in socio-cultural or negative economic perceptions. The full results of gender-based differences are shown in Table 3.

Mean of perception t-value P-value Male Female 0.294 0.769 Positive impacts 4.357 4.327 Socio-cultural impacts Negative impacts 2.146 2.465 -1.806 0.073 Positive impacts 4.106 4.310 -2.020 0.045^{*} Economic **Impacts** Negative impacts 2.813 2.846 -0.200 0.842 3.438 -2.419 0.017^{*} Positive impacts 3.753 Environmental impacts Negative impacts 3.146 3.632 -2.822 0.005^{*}

Table 3: Gender-Based Perception Differences

4.4.2 Age Differences

One-way ANOVA revealed significant age-based disparities in residents'perceptions of festival impacts. While recognition of positive socio-cultural and economic impacts showed no significant differences across age groups, perceptions diverged markedly in negative socio-cultural and economic impacts, along with both positive and negative environmental impacts. Post-hoc multiple comparisons further demonstrated that: Elderly residents (\geq 60 years) perceived positive environmental impacts significantly weaker than young adults (18–34 years) . And seniors also reported lower sensitivity to socio-cultural (p< 0.05) and environmental negatives (p< 0.05) than younger groups. Minors (\leq 17 years) perceived negative economic impacts more acutely than middle-aged adults (35-59 years). Table 4 provides a comprehensive overview of age-based perception differences.

			1.6	F-test		
		Subgroup	Mean	F-value	P	
Socio-cultural	Positive	≤ 17	4.43	1.015	0.388	
impacts	impacts Impacts	18-34	4.28			
		35-59	4.28			
		≥ 60	4.49			
	Negative	≤ 17	2.32	3.283	0.022*	
	impacts	18-34	2.48			
		35-59	2.45			

Table 4: Age-Based Perception Differences

		1	1		1
		≥ 60	1.78		
Economic Impacts	Positive	≤ 17	4.19	0.343	0.795
	impacts	18-34	4.28		
		35-59	4.20		
		≥ 60	4.13		
	Negative	≤ 17	3.35	4.081	0.008*
	impacts	18-34	3.13		
		35-59	2.59		
		≥ 60	2.66		
Environmental	Positive	≤ 17	3.67	3.279	0.022*
impacts	impacts	18-34	3.80		
		35-59	3.63		
		≥ 60	3.23		
	Negative	≤ 17	3.36	6.298	<0.001*
impa	impacts	18-34	3.79		
		35-59	3.48		
		≥ 60	2.74		

4.4.3 Education Differences

Residents' education levels significantly influenced their perceptions of the positive economic impacts of festival tourism. Post-hoc multiple comparison tests revealed that residents with junior high education or below perceived these benefits substantially weaker than all higher educated groups (p< 0.05). This demonstrates that education level is a critical determinant of how residents evaluate festival-induced economic gains, with lower-educated groups exhibiting markedly diminished awareness of economic benefits. No statistically significant differences emerged across education groups regarding socio-cultural or environmental impact perceptions. For detailed statistics, refer to Table 5.

Table 5: Education-Based Perception Difference

		0.1		F-test	
		Subgroup	Mean	F-value	P
Socio-cultural	Positive	Junior high or below	4.20	1.914	0.129
impacts	impacts Impacts	High school	4.57		
		Associate degree	4.47		
		Bachelor's or above	4.27		
	Negative	Junior high or below	2.19	1.464ª	0.238
	impacts	High school	2.00		

		Associate degree	2.75		
		Bachelor's or above	2.25		
Economic Impacts	Positive	Junior high or below	3.61	5.301	0.002*
	impacts	High school	4.38		
		Associate degree	4.40		
		Bachelor's or above	4.18		
	Negative	Junior high or below	3.21	2.414ª	0.081
	impacts	High school	3.00		
		Associate degree	3.17		
		Bachelor's or above	2.64		
Environmental	Positive	Junior high or below	3.36	0.550	0.649
impacts	impacts	High school	3.50		
		Associate degree	3.69		
		Bachelor's or above	3.61		
	Negative	Junior high or below	3.21	0.834	0.477
	impacts	High school	3.08		
		Associate degree	3.37		
		Bachelor's or above	3.47		

4.4.4 Differences in Residence Duration

Residents' length of residency significantly shaped their perceptions of festival tourism's environmental impacts. Regarding positive impacts, those residing for 6–10 years demonstrated significantly stronger perceptions than longer-term residents. This suggests that newer residents (\leq 10 years) more readily recognize environmental improvements from festival tourism, whereas long-term residents (\geq 20 years) exhibit higher baseline expectations for environmental quality or greater focus on long-term ecological changes.

Conversely, for negative impacts, residents with ≤ 10 years of residency perceived environmental disturbances significantly more acutely than those residing ≥ 20 years. This indicates that newer residents display heightened sensitivity or adaptability challenges to short-term environmental disruptions during festivals, while long-term residents develop greater resilience to such issues. Table 6 summarizes the residence duration-based perception differences.

Table 6: Residence Duration-Based Perception Differences

		Subgroup	Mean	F-test	
				F-value	P
Social Impacts	Positive Impacts	≤ 5 years	4.23	1.781	0.152
		6-10 years	4.20		
		11-20 years	4.40		

	1	T			
		≥ 21 years	4.51		
	Negative impacts	≤ 5 years	2.56	1.933	0.126
		6-10 years	2.42		
		11-20 years	2.28		
		≥21 years	1.91		
Economic	Positive	≤ 5 years	4.19	1.722ª	0.168
Impacts	Impacts	6-10 years	4.39		
		11-20 years	4.16		
		≥21 years	4.11		
	Negative	≤ 5 years	2.84	0.449	0.718
	impacts	6-10 years	2.89		
		11-20 years	2.88		
		≥21 years	2.63		
Environmental	Positive	≤ 5 years	3.86	5.412a	0.002*
Impacts	Impacts	6-10 years	3.89		
		11-20 years	3.39		
		≥21 years	3.39		
	Negative	≤ 5 years	3.73	5.087	0.002*
	impacts	6-10 years	3.76		
		11-20 years	3.24		
		≥21 years	2.87		

5. Conclusion and Discussion

5.1 Research Conclusions

Within the tripartite framework of socio-cultural, economic, and environmental dimensions, county-level residents' perceptions of festival tourism impacts exhibit a distinct gradient characteristic. Firstly, residents demonstrated the strongest positive socio-cultural impacts perceptions, with high consensus on cultural heritage preservation and place identity enhancement. Secondly, positive economic impacts perceptions remained robust but slightly weaker than socio-cultural dimensions. Residents more strongly endorsed macroeconomic benefits than personal economic gains, while expressing concerns about unequal benefit distribution. Again, environment impacts perceptions revealed heightened negativity. Residents acutely identified pressures like traffic congestion and waste accumulation, while showing limited recognition of ecological improvements. Collectively, residents exhibited favorable attitudes toward socio-cultural and economic dimensions of these culturally embedded festivals, yet consistently highlighted environmental impacts as the primary concern.

Demographic variables significantly moderated residents' perceptions across impact dimensions: elderly residents (\geq 60 years) perceived negative socio-cultural impacts less critically than younger cohorts; economic impact perceptions were moderated by gender, education, and age—with males and

low-education groups (junior high or below) reporting significantly weaker positive economic perceptions, whereas minors (\leq 17 years) exhibited heightened sensitivity to negative economic impacts compared to middle-aged residents; environmental perceptions were shaped by gender, age, and residency duration—women demonstrated greater sensitivity to environmental changes than men, seniors showed reduced responsiveness to both positive/negative environmental effects versus younger groups, and newcomers (\leq 10 years residency) perceived impacts more intensely than long-term residents (\geq 21 years).

5.2 Management Implications

As a critical component of county tourism, enhancing residents' positive perceptions and mitigating negative perceptions of festival tourism is fundamental to ensuring its sustainable development. County festival tourism strategies must simultaneously strengthen cultural preservation and economic benefits while alleviating environmental pressures and enhancing ecological benefits.

First, to deepen cultural identity and consolidate socio-cultural benefits, festival designs must innovatively center on county-specific cultural elements by: (1) leveraging residents as core actors in cultural transmission through their deep participation in performances, heritage interpretation, and tourism services to enhance authenticity and pride; (2) institutionalizing community-embedded events to maximize cultural benefits; and (3) collaborating with short-video platforms to develop immersive digital narratives, thus boosting cultural engagement among youth demographics.

Second, county tourism authorities must optimize benefit distribution and enhance residents' tangible economic benefits by: (1) implementing targeted initiatives—such as supply chain inclusion programs for SMEs, artisans, and low-skilled laborers—to secure direct income generation from festival tourism; and (2) disseminating economic impact data through official channels to dispel concerns about unequal benefit distribution, thereby improving perceived economic equity.

Third, systematically mitigate environmental pressures by mobilizing residents' conservation engagement through: (1) optimizing traffic conditions via peak-hour restrictions, dedicated shuttle services, and smart parking guidance while addressing waste surges through increased recycling bin deployment, reusable material incentives, and enhanced sanitation frequency; (2) pioneering tripartite environmental governance models between residents, festival organizers and government departments, that empower community participation to alleviate group-specific eco-anxieties; and (3) implementing precision communication strategies—including multi-channel eco-branding, real-time impact warnings via digital/offline platforms, and frequent progress updates on sustainability initiatives—to institutionalize ecological priorities and bolster public confidence.

Acknowledgements

This study is funded by Chongqing Social Science Planning Project (2022PY55)and Scientific and Technological Research Program of Chongqing Municipal Education Commission (KJQN202101624; KJQN202401622).

References

- [1] Cheng L. New trends in high-quality development of county tourism[J]. People's Tribune, 2024, (18): 44-47.
- [2] Luo Q.J. A preliminary study on event tourism[J]. Jiangxi Social Sciences, 2000, (9): 218-219.
- [3] Choi K, Kang H J, Kim C. Evaluating the efficiency of Korean festival tourism and its determinants on efficiency change: Parametric and non-parametric approaches[J]. Tourism Management, 2021, 86: 104348.
- [4] Getz D, Page S J. Progress and prospects for event tourism research[J]. Tourism Management, 2016, 52: 593-631.
- [5] Dai G Q, Zhang J, Sun H. The new normal of festival events[J]. Tourism Tribune, 2015, 30(1): 3-5.
- [6] Xu Z W. Event Tourism Research[M]. Beijing: Tourism Education Press, 2019.
- [7] Lorentzen A. The role of culture festivals in regional development[J]. The Value of Arts and Culture for Regional Development: A Scandinavian Perspective, 2013: 43-59.
- [8] Getz D. Event management and event tourism (2d ed)[M]. New York: Cognizant, 2005.
- [9] Ouyang Z, Gursoy D, Sharma B. Role of trust, emotions and event attachment on residents' attitudes

- toward tourism[J]. Tourism Management, 2017, 63: 426-438.
- [10] Getz D. The nature and scope of festival studies[J]. International Journal of Event Management Research, 2010, 5(1): 1-47.
- [11] Gursoy D, Kendall K W. Hosting mega events modeling locals'support[J]. Annals of Tourism Research, 2006, 33(3): 603-623.
- [12] Kim S S, Petrick J F. Residents' perceptions on impacts of the FIFA 2002 World Cup: The case of Seoul as a host city[J]. Tourism Management, 2005, 26(1): 25-38.
- [13] Deccio C, Baloglu S. Nonhost community resident reactions to the 2002 Winter Olympics: The spillover impacts[J]. Journal of Travel Research, 2002, 41(1): 46-56.
- [14] McKercher B. Towards a taxonomy of tourism products[J]. Tourism Management, 2016, 54: 196-208.
- [15] Getz D. Event tourism: Definition, evolution, and research[J]. Tourism Management, 2008, 29(3): 403-428.
- [16] Waitt G. Social impacts of the Sydney Olympics[J]. Annals of Tourism Research, 2003, 30(1): 194-215.
- [17] Lorde T, Greenidge D, Devonish D. Local residents' perceptions of the impacts of the ICC Cricket World Cup 2007 on Barbados: Comparisons of pre-and post-games[J]. Tourism Management, 2011, 32(2): 349-356.
- [18] Luo Q J. Residents' changing perceptions of the impacts of the 2010 Guangzhou Asian Games: Based on pre-event perspective [J]. Scientia Geographica Sinica, 2010, 30(5): 639-701.
- [19] Yao Q, Schwarz E C. Impacts and implications of an annual major sport event: A host community perspective[J]. Journal of Destination Marketing & Management, 2018, 8: 161-169.
- [20] Dai L L, Gai S J. Residents' perception differences on festival tourism impacts in rural settlements: Case studies of Jiangshuihe Village and Changshaoying Village in suburban Beijing[J]. Human Geography, 2011, 26(4): 109-114.
- [21] Teye V, Sirakaya E. Resident's Attitudes toward Tourism Development[J]. Annals of Tourism Research, 2002, 29(3): 668-688.
- [22] Renata T, Bill F. Tourism and Older Residents in a Sunbell Resort[J]. Annals of Tourism Research, 2000, 27(1): 93-144.
- [23] Lankford S V, Howard D R. Developing a Tourism Impact Attitude Scale[J]. Annals of Tourism Research, 1994, 21(1): 121-139.