

## Evaluating the Key Elements Contributing to Visitor Contentment at Cultural Festivals

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### Abstracts

This study analyzes the elements that influence visitor contentment at cultural events by developing and testing several hypotheses. This framework considers visitor contentment as the dependent variable (DV) with independent variables (IVs) including program content, event logistics, social atmosphere, facilities, customer service, and accessibility. A survey of 270 visitors was conducted to evaluate these variables and their impact on visitor contentment. Statistical analysis was evaluated using SPSS 25. ANOVA, multiple linear regression, and chi-square tests were among the statistical techniques used to assess the effects and associations of each factor. Chi-Square test results show that all hypotheses have substantial relationships ( $p$ -values  $< 0.05$ ) and that each independent variable has a significant effect on visitor contentment. ANOVA supports the results that program content ( $F=7.45, p<0.001$ ), facilities ( $F=8.20, p<0.001$ ), and other factors significantly impact visitor contentment. According to multiple linear regression analysis, program content (coefficient=0.421,  $p<0.001$ ) and facilities (coefficient=0.512,  $p<0.001$ ) have the greatest impact on visitor contentment, followed by event logistics (coefficient=0.308,  $p=0.003$ ), customer service (coefficient=0.189,  $p=0.028$ ),

accessibility (coefficient=0.294,  $p=0.002$ ), and social atmosphere (coefficient=0.267,  $p=0.001$ ). These results emphasize the significance of every element in improving visitor contentment, with facilities and program content being especially important.

**Keywords:** Visitor Contentment, cultural festivals, Chi-Square test, Analysis of Variance (ANOVA).

## Introduction

Cultural festivals are colorful events that introduce traditions, cultural backgrounds, and achievements of the population of the planet [1]. They draw so much traffic from both residents and visitors and afford them a good platform to socialize, be entertained, and interact culturally. In recent times, the focus has shifted towards the idea of visitor satisfaction as one of the metrics that determine the sustainability and profitability of these festivals. Reducing the level of contentment for the visitors will cause these events to lose their appeal and the long-term positive impacts shall not be realized in the economy and the society [10].

Different aspects determine the level of satisfaction of the visitors of cultural festivals; these are aspects such as performance, catering services, accessibility, and event management [14]. The cultural experience factor thus plays a crucial role in enhancing the tourist satisfaction index other than the technological aspect of the festival. Every festival can be more engaging, and sincere, in touch with traditions, and an opportunity to have meaningful conversations with artists and other visitors [6].

Another important factor that defines the level of contentment of the visitors is the available seating arrangements, transportation, security systems, etc. If the basic needs of the visitors' comfort, convenience, and security are met properly, then they are likely to be satisfied [5]. Festivals that demonstrate an ability to manage the crowd, informative advertisements, and a range of services that could target various segments of visitors are likely to make a better impression in the eyes of the visitors [7].

Also, there are changing expectations of visitors due to increased online communities and online involvement. The resources that allow people to describe their experience, communicate with others, and recall the most important moments that took place in the framework of a festival are as significant to the organizers as the effect that occurs during the definition of the event itself [8]. This study evaluated the effects of several variables on visitors' contentment at cultural events.

The remaining portion of this research is divided into the following sections: Part 2 - Related works, Part 3 - Methods, Part 4 - Results, and Part 5 - Conclusion.

## Related works

Comparing the findings of a linear regression evaluation with the Penalty-reward Contrast Analysis (PRCA), a non-linear approach [15] offered the nonlinear effect of quality factors on

the total participants' rating of the Brazilian Oktoberfest. The findings showed that by being aware of potential irregularities, they comprehend the festival's overall assessment of quality better and make more informed decisions about what to provide or enhance.

To determine the relative significance of each component, the research [11] focused on the relationships between destination features, festival instances, individual principles, overall festival contentment, attachment to the area, and plans. Several useful recommendations were made in considering the results regarding the administration and promotion of afterward Da Lat Flower Festivals in the residential market.

The association between experiences and enjoyment at a music festival was examined in [3] as its mediating role by assessing festival importance. They demonstrated that four experience dimensions make up the experience market in the environment of music festivals. The results showed that the participants' experiences were primarily attractive and entertaining when they participated passively.

By recognizing the important elements, the research [12] forecasted and explained visitor contentment for local festivals, allowing festivals to develop a suitable tourism plan. The explainable artificial intelligence (XAI) findings showed that the explanation and prediction outcomes provided insightful information for determining the issues with local festivals and possible solutions.

To revitalize local food explored and discussed in [9] the significance of food culture qualities on visitors' contentment and sponsorship purposes. The findings showed that characteristics related to food culture had a major impact on visitor contentment. Cooking techniques had indirect impacts on sponsorship desire and minimal impact on satisfaction.

The experience, behaviors, and characteristics of visitors that significantly affect how satisfied they are with the food offered at Plum Fair, which was held in Osečina, are examined in [13]. The findings demonstrated that most of the visitors were from nearby cities and were attracted to the area because of its rural and traditional heritage.

The contentment of visitors and their assessments of the facilities and events offered by Katara Cultural Village were analyzed in [2]. Results indicated that visitors were generally satisfied with Katara's events and services, achieving 78.6% and 71.3% overall. Furthermore, the outcomes of the one-way ANOVA and t-tests showed that there were no notable variations in the distinct demographic groups such as nationality, gender, and age of Katara's events and services.

The impacts of a tourist destination's cultural features on visitor contentment levels and the association between visitor contentment and loyalty were examined in [4]. The findings demonstrated that visitors' evaluations of their overall level of satisfaction were influenced by the destination's cultural features, and that visitor probability of returning was predicted by the ratings in particular.

## Hypothesis development

H1: Program content has a significant effect on visitor contentment.

H2: Event logistics significantly impact visitor contentment.

H3: The social atmosphere of the event significantly impacts visitor contentment.

H4: The quality of the facilities significantly influences visitor contentment.

H5: Customer service has a significant relationship with visitor contentment.

H6: Accessibility significantly affects visitor contentment.

## Methodology

In this section, the key variables were provided, such as the independent variables are program content, event logistics, social atmosphere, facilities, customer service, and accessibility, while the dependent variable is visitor contentment. Fig 1 displays the conceptual framework.

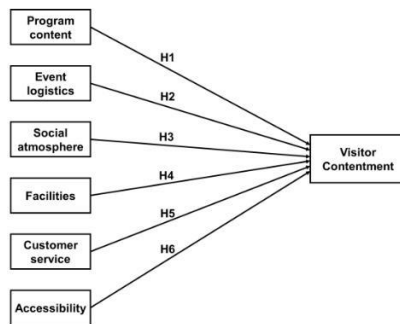


Fig 1 Conceptual framework

## Data collection

The survey was intended to collect information from 489 festival visitors, but only 325 were decided to participate. Only 270 of the 325 participants finished the survey correctly and submitted proper answers to the questions. Thus, the final number of participants for analysis was reduced to 270 because 55 visitors either did not engage in the questionnaire or did not complete it correctly. The dataset includes demographic information including age, gender, marital status, educational level, income level, occupation, and previous attendance at festivals. Table I displays the demographic variables.

Table I Demographic variables

Variables	Category	Frequency	Percentage (%)
Gender	Male	130	48.1%
	Female	140	51.9%
Age	18 – 25	75	27.8%
	26 – 35	95	35.2%

		36 – 45	60	22.2%
		Above 45	40	14.8%
Previous attendance	festival	Yes	190	70.4%
		No	80	29.6%
Educational level		High school	45	16.7%
		Diploma	75	27.8%
		Bachelor's degree	95	35.2%
		Graduation degree	55	20.4%
Income level		Less than 20,000	60	22.2%
		20,000 – 30,000	90	33.3%
		30,001 – 40,000	55	20.4%
		Above 40,000	65	24.1%
Marital status		Single	160	59.3%
		Married	110	40.7%
		Student	75	27.8%
Occupation		Professional/Managerial	105	38.9%
		Service industry	90	33.3%

Survey questionnaire

Program content: The two questions in this part evaluate how satisfied visitors are with cultural festivals, with an emphasis on how the program's substance affects their experience. The purpose of the questions is to assess the attraction and efficacy of the festival's offers while taking into account several variables that affect visitors' satisfaction levels and overall satisfaction.

Event logistics: The purpose of these two questions is to assess how satisfied visitors are with cultural festivals, with an emphasis on the efficiency of event logistics. Considerations into the effectiveness of event design and execution in raising visitor satisfaction are provided by these questions, which investigate how effectively the logistics contribute to the overall experience and satisfaction of visitors.

Social atmosphere: The two questions in this part are intended to assess how satisfied visitors are with cultural events, with an emphasis on how the social atmosphere and other elements affect their overall satisfaction and perceived advantages.

Facilities: This question examines the overall efficiency of customer service by evaluating how effectively visitors' expectations were met in terms of seating and convenience, as well as their level of contentment with the condition and availability of restrooms and other facilities at cultural events.

Customer service: This question evaluates how quickly visitors' questions or complaints were handled by event staff and how satisfied they were with the way the issues were resolved. It evaluates how well customer service handles problems and reflects the general satisfaction of festival attendees.

Accessibility: The questions evaluate whether cultural festivals provided lots of convenient parking and transportation choices, as well as appropriate accommodations for people with special needs or impairments. By guaranteeing accessibility and simplicity of involvement, these elements have an impact on overall visitor satisfaction. Table II displays the survey questionnaires.

Table II Survey Questionnaires

Category	Questions
Program content	What is your overall rating of the program's content? How much does the program's content match your requirements or interests?
Event Logistics	Were the event dates and times convenient and well-managed? How effective was interaction about event specifics both before and during the event?
Social atmosphere	How interesting were the conversations with other visitors? What degree of comfort did you experience in the event's social setting?
Facilities	To what extent did the seating arrangements and comfort meet your needs? How would you rank the accessibility and standard of restrooms and other facilities?
Customer service	Were your queries or complaints promptly responded to by the event staff? If there were any problems, how satisfied were you with how they were resolved?
Accessibility	Were those with special needs or disabilities sufficiently accommodated? Did you have several convenient parking and transportation choices?

A 5-point Likert scale was employed to collect data from 270 participants regarding visitors' contentment at cultural festivals. The program content responses varied from (1) Low (5) High. The range of event logistics responses for the impact of visitors' contentment was (5) Efficient (1) Inefficient, where the social atmosphere responses ranged from (1) Negative (5) Positive. Responses for the quality of facilities varied from (1) Poor (5) Excellent. The following were the customer service responses: (1) Low (5) High. Responses from accessibility ranged from (1) Not accessible (5) Accessible.

### Statistical analysis

The study employed SPSS 25 to evaluate the degree of correlation between visitor contentment and motivations during cultural festivals. The chi-square test establishes whether variables and visitor satisfaction categories are significantly related. The mean visitor contentment values for various groups or categories are compared using ANOVA. Multiple linear regression evaluates the importance of each component in predicting visitor contentment, allowing to comprehend their respective contributions and overall impact.

## Result

### Chi-square test

Customer service degrees and visitor contentment groups are two examples of categorical variables whose relationships are evaluated using the Chi-Square Test. When there is no correlation between the variables, it contrasts the detected frequencies in a contingency table

with the anticipated frequencies. The test determines if the findings are statistically significant by calculating a p-value and a Chi-square statistic. An important correlation between the variables is indicated by a p – value less than the significance level, which is usually 0.05. This indicates that changes in one category factor are related to changes in another. The findings of the Chi-Square test are displayed in Table III.

Table III Findings of the Chi-Square test

Hypothesis	Chi-square ( $\chi^2$ )	df	p-value
Effect of program content on visitor contentment	15.23	2	<0.01
Effect of event logistics on visitor contentment	8.76	2	0.01
Effect of social atmosphere on visitor contentment	12.45	2	<0.01
Effect of quality of facilities on visitor contentment	10.32	2	0.02
Effect of customer service on visitor contentment	14.87	2	<0.01
Effect of accessibility on visitor contentment	6.59	2	0.04

Every hypothesis undergoes a significance test, whereas the chi-square values indicate the degree of correlation. A significant impact is indicated, by the effect of program content on visitor contentment, which has a chi-square value of 15.23 and a p – value < 0.01. The effects of event logistics and social atmosphere also provide significant outcomes, with p – values of 0.01 and less than 0.01. Based on these results, it can be determined that visitor satisfaction is highly influenced by facilities, event logistics, accessibility, program content, customer service, and social atmosphere.

#### ANOVA (Analysis of Variance)

ANOVA is used to evaluate if a factor significantly impacts a dependent variable by comparing mean differences across several groups. ANOVA evaluates the average contentment levels across multiple component categories if visitor contentment is divided into several levels. An F-statistic and p – value are generated by the test to determine whether group means differ statistically significantly. Significant differences are shown by a p – value less than 0.05, which implies that the element influences visitor contentment. The result of the ANOVA test is shown in Table IV.

Table IV Result of ANOVA test

Factor	Sum of squares	df	Mean square	F-value	p-value
Program content	312.56	2	156.28	7.45	<0.001
Event Logistics	245.32	3	81.77	5.88	0.004
Social atmosphere	198.67	2	99.33	6.10	0.015
Facilities	321.45	4	80.36	8.20	<0.001
Customer service	278.23	3	92.74	6.00	0.009
Accessibility	245.50	2	122.75	4.72	0.025

Facilities (F=8.20, p<0.001) and program content (F=7.45, p<0.001) both have highly significant impacts on visitor satisfaction. Social atmosphere (F=6.10, p=0.015), event logistics (F=5.88, p=0.004), and customer service (F=6.00, p=0.009) all have a substantial impact on visitor satisfaction. Accessibility (F=4.72, p=0.025) has a moderately significant impact. These variables have a statistically significant influence on visitor satisfaction, according to all p-values.

## Multiple Linear Regression

The association between a DV and several IVs is assessed using multiple linear regression. This analysis accounts for additional variables and evaluates the impact of each IV on the DV. For every IV, it offers a coefficient that shows how strongly and in which direction it is related to the DV. When a coefficient's  $p$  – value is less than the significance level, which is typically 0.05, it shows a substantial impact. By evaluating the IVs' combined impact on the DV, the regression model also assists in the prediction of visitor satisfaction based on the values of those variables. Table V displays the result of the multiple linear regression.

Table V Result of Multiple linear regression analysis

Variable	Coefficient	Standard error	t-value	p-value
Program content	0.421	0.089	4.73	<0.001
Event Logistics	0.308	0.104	2.96	0.003
Social atmosphere	0.267	0.078	3.42	0.001
Facilities	0.512	0.092	5.56	<0.001
Customer service	0.189	0.086	2.20	0.028
Accessibility	0.294	0.091	3.23	0.002

With a significant  $p$ -value ( $< 0.001$ ), program content enhances satisfaction by 0.421 units and has a coefficient of 0.421. The quality of facilities also has a substantial impact on contentment, with a coefficient of 0.512 and ( $p$  – value  $< 0.001$ ). Contentment is also positively impacted by accessibility, social atmosphere, and event logistics;  $p$ -values denote statistical importance. Despite having a positive coefficient of 0.189, customer service has a higher  $p$ -value of 0.028, indicating a less significant but still significant impact.

## Conclusion

This study assessed the impact of multiple factors on the contentment of visitors at cultural festivals. A survey of 270 visitors was carried out to assess these variables' impact on visitor contentment. Chi-Square test and ANOVA results showed that visitor satisfaction is highly impacted by customer service, social atmosphere, event logistics, facilities, program content, and accessibility. The facilities and program content were found to have the greatest impact ( $p < 0.001$ ), with social atmosphere, event logistics, and customer service following closely after ( $p < 0.05$ ). Moreover, accessibility had a slight impact ( $p = 0.025$ ). With coefficients of 0.421 and 0.512, respectively, multiple linear regression verified that program content and facilities are the most important components, highlighting their crucial significance in raising visitor contentment. Different standards and norms of satisfaction may apply to visitors from various cultural backgrounds. Due to this, developing a general satisfaction scale that works for a variety of demographics may be challenging. Future work will include creating metrics for satisfaction that are culturally sensitive, incorporating regional cultural norms and expectations, and employing specialized evaluations to guarantee reliable and pertinent measures of contentment across a range of populations.

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