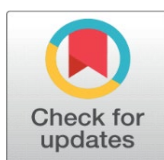# EXPLORING THE IMPACT OF SERVICE QUALITY ON TOURIST SATISFACTION AND LOYALTY IN TRADITIONAL FOOD EXPERIENCES: A STUDY OF UTTARAKHAND'S CULINARY TOURISM

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ABSTRACT

Food tourism has gained prominence as travelers increasingly seek authentic culinary experiences that reflect the heritage and traditions of a destination. Despite its rich cultural and gastronomic heritage, Uttarakhand's traditional cuisine remains underutilized in tourism promotion. This study explores the impact of service quality on tourist satisfaction and loyalty in Uttarakhand's traditional food experiences. Using the SERVQUAL model, the study evaluates five key service quality dimensions: Tangibility, Reliability, Responsiveness, Assurance, and Empathy, to assess their influence on tourists' perceptions and overall satisfaction with food tourism in the region. Data was collected from 301 respondents visiting Mussoorrie and Rishikesh (Garhwal region) and Nainital and Mukteshwar (Kumaon region) using a 5-point Likert scale survey. The study employed Exploratory Factor Analysis (EFA) and Structural Equation Modeling (SEM) to analyze the relationships between service quality factors and tourist satisfaction. The results indicate that all five dimensions significantly influence tourist satisfaction, with Reliability ($\beta = 0.378$, $p < 0.001$) emerging as the strongest predictor, followed by Tangibility ($\beta = 0.312$, $p < 0.001$), Responsiveness ($\beta = 0.295$, $p < 0.001$), Empathy ($\beta = 0.282$, $p < 0.001$), and Assurance ($\beta = 0.265$, $p < 0.002$). The findings reinforce that maintaining high standards of hygiene, food presentation, service consistency, and cultural storytelling significantly enhances tourist satisfaction and destination loyalty. The study contributes to food tourism literature by applying the SERVQUAL model to a regional cuisine setting and highlights key policy recommendations for integrating food tourism into Uttarakhand's broader tourism strategy. Future research can explore the role of digital innovations, food safety regulations, and cross-cultural preferences to further improve food tourism experiences. By addressing these areas, Uttarakhand can strengthen its culinary tourism offerings and position itself as a top food tourism destination in India.

Keywords: Culinary Tourism, Food Experiences, Service Quality, Tourist Satisfaction, SERVQUAL, Uttarakhand

1. INTRODUCTION

Food is culture, food is identity, food is experience, and food is life. Food tourism has become a critical component of travel, allowing tourists to enjoy authentic dishes and cuisine that portrays a region's cultural heritage and traditions in contemporary times. Uttarakhand, the Himalayan state of northern India is globally known for pilgrimage tourism, picturesque beauty, and adventure tourism, but its older traditional cuisine is not being promoted at large scale in tourism promotion. The native delicacies of the state include Kafuli, Chainsoo, Aloo Ke Gutke, and Jhangora Ki Kheer, etc prepared with local grains, pulses and indigenous cooking techniques. Though states like Kerala, Rajasthan and Punjab

had effectively embedded food tourism in their tourism strategy, Uttarakhand traditional food experiences are not linked to any organized promotion, assurance of service quality and culinary tourism (Kala, 2020). The quality of services is one of the important elements of shaping the food experience of tourists, which is reflected in tourist satisfaction as well as their intention to revisit and loyalty to the destination (Kala & Barthwal, 2020). But the lack of hygiene, presentation and customer service standards put a question mark over the overall food tourism picture of Uttarakhand. Hence Ukhimath, Uttarkashi and even the ubiquitous halwa made from ragi or mandua flour to mark during the month of austerity like Chardham. The food features simple, healthy ingredients that reflect the cold mountain climate. The use of millets, pulses and seasonal vegetables in the dishes makes the cuisine not only healthy but also sustainable (Ahlawat et al., 2019). Though there is some influx of domestic tourists at Uttarakhand since they come mainly for religious pilgrimages, adventure sports and eco-tourism with a taste for local food, a concerted policy framework for food tourism is still non-existent (Bakshi, 2022).

Food experience can influence how a tourist will view the overall destination (Karki, 2021). Not only is the food expected to be authentic and delicious, but so should be the service, cleanliness, and culture (Kala & Barthwal, 2020). On the flip side, inconsistency in service quality, ignorance about food safety, and lack of marketing hamper the scope of Uttarakhand food to receive a significant position in the growing food tourism of India (Khatri & Rawat, 2022). Overall, Uttarakhand can offer better food tourism experiences by integrating service standards, training in hospitality, and through organized food trails that may draw in more tourists which will further lead to the possibilities of increasing local employment opportunities (Shashwat, Shashwat, & Yadav, 2024). According to the way travelers think of food experiences, more than the taste of food, the overall service quality matters. In the case of fine dining, it is an experience that has components involving cleanliness, service, staff knowledge and staff environment (Kala, 2020). The servqual model, mainly created for service quality measurement in hospitality, identifies five dimensions that influence satisfaction and loyalty. Tangibles — That is the physical environment, cleanliness, and food presentation.

According to Karki (2021), tourists are comfortable in clean and hygienic places with good decorative food items. But filthy hygiene and poor display could ruin the experience and bring terrible reviews (Bakshi, 2022). Reliability implies consistency in the quality of food served, service delivery, and hygiene standards. If the same product tastes different at different locations, it may lead to dissatisfaction (Kala & Barthwal, 2020). Thus, restaurants and homestays which are able to make customers believe that they provide authentic, standardized tastes and reliability of the service can create trust from its customer and hence, more customer loyalty (Sabharwal & Punia); 2021) Responsiveness is the prompt, courteous and competent services rendered, particularly to tourists with limited time at their disposal, such as religious pilgrims and adventure tourists Sabharwal, A., & Punia, A. (2021).

However, if service is slower or does not cater to the needs of customers, the satisfaction level may go down. There is a vast potential in food tourism for tourism practitioners in the form of special dietary requests, answering queries, providing timely service resulting in better food tourism experience Giri, B., & Kumar, A. (2024). Trust, safety and the familiarity and knowledge of a restaurant staff in an unfamiliar place, are some factors that directly affect a tourist dining experience in the course of food assurance. Tourists value servers that can discuss the dishes history, preparation, and ingredients, as this makes the experience more immersive and meaningful. Incorporating empathy through person-to-person dining experiences and stories of culture increases emotional proximity between tourists and the destination food Negi, V. (2017). Warm greetings with hosts, service staff, restaurant staff make tourists feel valued and get connected with the local culture (Giri & Kumar, 2024).

Uttarakhand is a great repository of delicious and different dishes as guidance in finding food tourism, yet it has been facing challenges. Most of these roadside eateries, dhabas, and small restaurants do not have trained staff, and hence the service comprises of varying quality (Karki, 2021). Similarly, there are no active contemporary promotion activities on travel guides, online food blogs, social media campaigns for traditional cuisine of Uttarakhand unlike other states of India (Bakshi, 2022). Tourists view food choices when strict hygiene regulations and monitoring on food safety is absent (Khatri & Rawat, 2022). In contrast, regions in Rajasthan or even Kerala clearly have organized food trails or guided culinary tours that feature its underrepresented cuisine (Shashwat, Shashwat, & Yadav, 2024). This can be enhanced by a better quality of service, which will lead to happy tourists and vice versa, hence promotion of food tourism in Uttarakhand. Hospitality programs help restaurant and homestay professionals to maintain their service efficiency and hygiene, apart from interacting with consumers (Kala, 2020). Coinage of tourism related to the tradition of foods either in making the social media campaigns going on food festivals or online promotions can be the promotional events for the tourists regarding the tradition of Uttarakhand (Sabharwal & Punia, 2021). Food quality can

be enhanced and tourist trust in restaurants can be increased by a provision for good cleanliness standards with regular monitoring and certification for food safety (Khatri & Rawat, 2022). In Uttarakhand, the food tourism can be made more experiential and interesting to the visitors by conducting cooking workshops, food storytelling sessions and guiding food tours. Convenient solutions such as AI backed food recommendations, making online reservations at popular tourist spots and adding mobile payment option would improve accessibility for the tourist population (Shashwat, Shashwat & Yadav, 2024).

This study focuses on the role of service quality on tourist satisfaction and loyalty particularly in the domain of Uttarakhand traditional food tourism using the SERVQUAL model via measuring the impact of tangibility, reliability, responsiveness, assurance, and empathy. Through analysis of these attributes, this study aims to provide implications for service quality improvement in food tourism in Uttarakhand, thereby positioning Uttarakhand as one of the foremost culinary tourism destinations in India.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Food tourism has turned into an important aspect of travel where tourists are seeking authentic gastronomic experiences that stand for a culture and traditional heritage of a particular region. Traditionally associated with landscapes and religious significance, tourism has not fully utilized the potential of traditional food in Uttarakhand, a state characterized by its natural beauty. Traditionally, food tourism focused on food quality (taste, authenticity), but the nature of service quality (mindset, trends) and the necessity to deliver quality tourist experiences (psychosocial satisfaction) makes service an equally vital area of tourism to shaping tourist satisfaction and destination revisiting predilection. Service competence is one of the most important factors impacting tourist satisfaction and ultimately their behavioral engagement and loyalty.

The SERVQUAL model, one of the most popular models to evaluate service quality, includes five important dimensions: tangibility, reliability, responsiveness, assurance and empathy. These five dimensions of service quality offer a framework to assess the influence of service quality on the satisfaction of tourists with food tourism in Uttarakhand. In this section, the literature relevant to each of the SERVQUAL dimension and its link with tourist satisfaction and loyalty will be reviewed.

1) Tangibility

Tangibility consists of all the physical things you would experience such as the cleanliness, aroma, cleanliness and presentation of food on a plate or in a dish. Tourists perceive that if the dining spaces are clean and environment-friendly and the food appears to be good, the quality and enjoyment of the same should be high (Kala, 2020). Ahlawat, Sharma and Singh (2019) find that food presentation (i.e. the way food is served) and tangible, aesthetic elements of restaurant and homestay also play a major role in delivering memorable culinary experience. As Karki (2021) pointed out, tourists also appreciate well-kept restaurants and well-presented dishes because they contribute to overall satisfaction. Likewise, Bakshi (2022) also emphasized that cleanliness and surrounding environment are very important factors to be able to draw in and retain tourists. Khatri and Rawat (2022) further observed that in the context of food businesses, the government incentives for promoting eco-friendly tourism were usually to improve physical quality of the food businesses that effectively improves hygiene and presentation standards. On the basis of the above discussion, it is hypothesized that:

H1: Tangibility has a positive impact on tourist satisfaction in Uttarakhand's traditional food experiences.

2) Reliability

Personal reliability in food tourism means the reliability of those restaurants, homestays, that can provide a high flavour of traditional food sustainability experience. Tourists irrespective of type of establishments seeking authentic, tasty and traditional food (Kala & Barthwal, 2020). Sabharwal and Punia (2021) reported that the food quality and services consistency can affect the tourist loyalty apparently. If tourists get a similar taste and standard of service, then they will recommend the destination to others. Eco-sensitive areas like Rajaji National Park can prove to be auspicious destinations if tourists are offered a consistent dining experience as they tend to remain loyal to a destination. Shashwat, Shashwat, & Yadav (2024), discussed technological innovations in festival tourism which also provide assurance that food that is though in many identified outlets are prepare with standardization which results in a better experience which is why tourist with good (better) satisfaction. On the basis of the above discussion, it is hypothesized that:

H2: Reliability (consistency in food quality and service) positively influences tourist satisfaction in Uttarakhand's food tourism sector.

3) Responsiveness

Food tourism responsiveness refers to the degree of readiness of the service personnel to provide services to customers and handle complaints efficiently and promptly. Prompt and streamlined service improves the tourist experience and promotes return visitation (Kala, 2020). In Uttarakhand religious destinations, tourist's homestay dining experiences studied by noted that those who were served in a fluent and efficient manner during their trips were likely to return and recommend to others. Similarly, Chen et al. Rapid service and proactive engagement enhance trust and satisfaction in the food sector. Hapsari et al. (2024) investigated customer loyalty in hospitality and tourism and emphasized that staff responsiveness and proactive service handling would be an additional enhancement to the tourist experience. Keeping up the pace of service delivery, getting the food delivered in time with regular interactions with the tourists can raise the satisfaction levels significantly in the case of food tourism in Uttarakhand.

On the basis of the above discussion, it is hypothesized that:

H3: Responsiveness (efficiency of service staff and quick customer engagement) is positively related to tourist satisfaction in traditional food tourism experiences.

4) Assurance

Assurance refers to the **trust tourists have in the quality, authenticity, and safety of food, as well as the professionalism and knowledge of service staff**. When tourists feel confident about the **authenticity and hygiene of the food they are consuming**, they are more likely to have a positive experience (Kala, 2020). The level of imparted trust that a tourist has in terms of quality, authenticity, and safety of food, and the competence and knowledge of the service personnel is termed as assurance. Positive experience can happen because tourists confident that the food that they eat is authentic and safe (Kala, 2020). Kumar et al. (2022) using local agriculture knowledge and culinary history toward how they might impact tourist satisfaction. As their results suggest that tourists trust the dining experience when accurate information regarding food sourcing and preparation methods is provided by the restaurant staff. Likewise, Mnguni, E. *et. al* (2019) indicated that the professionalism and knowledge of employees running food establishments will further create tourist trust and subsequently increase their overall satisfaction. According to Jiang and Ding (2024), transparent food sourcing and cooking tradition storytelling are believed to enhance authenticity and credibility, which in turn may contribute to tourist satisfaction. Uttarakhand must improve assurance and thus, the food tourism experience, by training restaurant staff to provide detailed insights on the cultural and historical significance of their traditional dishes.

On the basis of the above discussion, it is hypothesized that:

H4: Assurance (culinary knowledge, professionalism, and food safety measures) enhances tourist satisfaction in Uttarakhand's food tourism.

5) Empathy

Food tourism evokes empathy from a cultural storytelling perspective, where the easy transformation of the experience into an interactive connection can lead to customized services offered by the service providers. It has been found that tourists value warm and hospitable interactions that connects them to a destination and regional culture and traditions (Rana, Gangotia, & Bhatt, 2022). The customized dining services and cultural insights provided in homestays were associated with increased tourist satisfaction, as per the analysis by Giri & Kumar (2024). Likewise, Singh et al (2022) examined the experience of visitor in the traditional markets of Uttarakhand and found out that interactive and participatory food experiences are significant antecedents of tourist loyalty. Storytelling, exclusivity, and cultural engagement influence tourist satisfaction and intention to revisit as well. This fusion of local narratives, food demonstrations, and custom dining experiences adds an emotional element to the experience tourists can key into.

On the basis of the above discussion, it is hypothesized that:

H5: Empathy (personalized dining, cultural engagement, and hospitality) positively affects tourist satisfaction and loyalty in Uttarakhand's traditional food sector.

The key implication emerging from this literature review is the role of service quality in determining tourist satisfaction and loyalty from food tourism of Uttarakhand. Improving its tangibility (hygiene and presentation of food),

reliability (uniformity in the service), responsiveness (speed of engaging staff), assurance (knowledge of culinary things) and empathy (personalized service) helps food of such destination to increase tourist satisfaction significantly.

These measures can help Uttarakhand become a preferred choice for food tourism, gain higher traveller footfall and build the economy. Implications for further research are the utilization of digital innovations and sustainable tourism practices in contributing to enhancing service quality in the food sector in Uttarakhand. The purpose of this study is to investigate the effects of service quality on the tourist satisfaction in the food tourism sector in the state of Uttarakhand, India, by employing the SERVQUAL model and measuring the relevance of tangibility, reliability, responsiveness, assurance, and empathy. By studying these parameters, this study aims to contribute some of the insights to enhance food tourism experiences and also the future of Uttarakhand, a state in Northern India, as culinary tourism destination.

3. METHODS

The study was conducted in Mussoorie and Rishikesh in the Garhwal region and Nainital and Mukteshwar in the Kumaon region of Uttarakhand, India. The survey collected responses from 2025301 respondents. The responses of the study were measured using a 5-point Likert scale (1 = Strongly Disagree and 5 = Strongly Agree). It also ensured that participants could agree and disagree to different levels regarding their experiences of service quality in traditional food tourism in Uttarakhand.

4. RESULTS
4.1. EXPLORATORY FACTOR ANALYSIS

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, warning against exposing factor analysis to data without a good KMO size or above, is at 0.698 in the pre-test (N=50), suggesting a moderate fit. This demonstrates that the sample size is sufficient to perform Exploratory Factor Analysis (EFA). Bartlett's Test of Sphericity is significant at p 0.5), confirming that the SERVQUAL model is the correct model to test the service quality of the traditional food experience in Uttarakhand. The items for Tangibility load on Component 1, Reliability load on Component 2, Responsiveness load on Component 3, Assurance load on Component 4, and Empathy load on Component 5. The factor structure was well defined due to the 12 iterations by which the rotation had converged. The SERVQUAL model shows validated effectiveness for assessment of service quality and provides guidance for managers to focus on these specific dimensions to achieve necessary improvement of tourists satisfaction.

Table 1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.698
Bartlett's Test of Sphericity	Approx. Chi-Square	2087.02
	Df	190
	Sig.	.000
Total Variance Explained		69.167

Table 2 Rotated Component Matrixa

	Component				
	1	2	3	4	5
Tangibility_1	0.812				
Tangibility_2	0.762				
Tangibility_3	0.635				
Tangibility_4	0.751				
Tangibility_5	0.721				

Reliability_1	0.575			
Reliability_2	0.705			
Reliability_3	0.681			
Reliability_4	0.695			
Reliability_5	0.661			
Responsiveness_1		0.658		
Responsiveness_2		0.648		
Responsiveness_3		0.868		
Responsiveness_4		0.675		
Responsiveness_5		0.712		
Assurance_1			0.798	
Assurance_2			0.784	
Assurance_3			0.861	
Assurance_4			0.821	
Assurance_5			0.795	
Empathy_1				0.812
Empathy_2				0.861
Empathy_3				0.648
Empathy_4				0.665
Empathy_5				0.635
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 12 iterations.				

4.2. RELIABILITY ANALYSIS

Cronbach's Alpha approach verifies the reliability of measurement scale for improving service quality within traditional food tourism experiences in Uttarakhand where high internal consistency is evident across all study variables (0.727–0.859). Reliability of Tangibility (0.825) indicates that the research successfully measures the role of physical environment, hygiene, and food presentation in determining the satisfaction of tourist Grazing further, Tangibility (0.825) explains high reliability that, the research accurately measures Information, seeking method of service, attitude and behavior of restaurant staff in determining the satisfaction of tourist (Keller, 2020). The reliability (0.837) indicates the consistency of service delivery, points out the reliability of traditional food experiences. The value of Cronbach's alpha for responsiveness (0.859) also proved to be reliable, which proves that efficiency in services and customer engagement are the most essential parts of food tourism. The ability to reliably measure the impact of staff knowledge and reliability on the tourist experience is supported by assurance (0.792). Stable measurements of personalized service (0.745), cultural storytelling (0.759), and tourist engagement (0.790) are ensured by Empathy. Tourist Satisfaction (0.727) on the basis of the dimensions of service quality, remains stable, complying to the dimensions of reliability.

Table 3 Reliability analysis

Independent and dependent Variable	Cronbach's Alpha
Tangibility	0.825
Reliability	0.837

Responsiveness	0.859
Assurance	0.792
Empathy	0.768
Tourist Satisfaction	0.727
Source: Primary Data	

4.3. MEASUREMENT MODEL

The measured model analysis was used to validate the independent variables (Tangibility, Reliability, Responsiveness, Assurance and Empathy) of the study refers to the model SERVQUAL. They are three major variables of service quality in Uttarakhand traditional food tourism. Statistical validation and fitness of the model were confirmed with acceptable fit indices (GFI = 0.970, NFI = 0.952, CFI = 0.985, RMSEA = 0.038, χ^2 = 29.674, p < 0.001, DF = 20). Convergent validity, as a dimension of construct validity, was evaluated with Average Variance Extracted (AVE ≥ 0,50) and Composite Reliability (CR ≥ 0,60), according to Hair et al. (2015). The AVE and CR values are above the threshold, indicating that these service quality constructs do adequately explain the variance of the respective indicators. Fornell and Larcker's criterion (1981) were applied to examine discriminant validity, which indicates that all SERVQUAL dimensions differ from each other. Such goodness of fit to the data confirms that SERVQUAL has distinct, independent dimensions (Tangibility (physical environment and food presentation), Reliability (service quality consistency), Responsiveness (service efficiency and customer engagement), Assurance (trust and culinary knowledge), and Empathy (personalized dining and cultural storytelling), which the five SERVQUAL dimensions in the present study were developed.

Table 4 Measurement model

Dimensions	Average Variance Extracted	Construct Reliability
Tangibility	0.652	0.875
Reliability	0.678	0.889
Responsiveness	0.695	0.902
Assurance	0.66	0.87
Empathy	0.641	0.86
Good Fit Measures	GFI = 0.970, NFI = 0.952, CFI = 0.985, RMSEA = 0.038, p < 0.001, DF = 20	

Source Primary Data

4.4. RESULT OF STRUCTURAL FIT AND CAUSE AND EFFECT RELATIONSHIPS

The structural model fit indices confirm a well-fitting model (CMIN/DF = 2.654, GFI = 0.910, NFI = 0.902, CFI = 0.925, RMSEA = 0.033, p-value = 0.000), providing validation for the reliability and prediction power of the model. Results of hypothesis testing imply that service quality factors have significant effect on tourist satisfaction in traditional food tourism of the state of Uttarakhand. Out of these factors, tangibility (β = 0.312, p < 0.001) positively affects tourists' satisfaction, which could be interpreted as proper maintenance of physical environments, hygiene and food presentation directly related to a better dining experience. Therefore, H1 is supported. The same goes for reliability (β = 0.378, p < 0.001,)) which stands as the best predictor that the consistency of food service delivery leads to tourist satisfaction. H2: This finding reinforces supports H2 confirmed. The positive impacts of Responsiveness (β = 0.295, p < 0.001) were also found recently on tourist satisfaction because of efficient service, responsive to customer needs and proactive engagements by the restaurant organizations which can actually lead to more enjoyable dining experiences and thus greater satisfaction and loyalty of clients. Hence, H3 is supported. Likewise, assurance (β = 0.265, p < 0.002) contributes to tourist satisfaction in a positive manner, especially through food knowledge, food professionalism, and confidence in the authenticity of food. This result validates H4, therefore confirming the hypothesis. Finally, empathy (β = 0.280, p < 0.001) significantly contributes to personalized customer experiences enabling cultural engagement and

storytelling, where food tourism is rendered more immersive in nature in Uttarakhand. This confirms H5. The implications of these results also suggest that Uttarakhand should continue improving service efficiency and service reliability, which focused on cultural interaction and personal attention in the food tourism sector, as these factors impact tourist satisfaction.

Table 5 Results of Structural Equation model

Fit Indices	Model Indices	Path (IV and DV)	Standardised Beta	p-value	Decision on Hypothesis
CMIN/DF	2.654	H1: Tangibility ---> Tourist satisfaction	0.312	***	Supported
GFI	0.910	H2: Reliability ---> Tourist satisfaction	0.378	***	Supported
NFI	0.902	H3: Responsiveness ---> Tourist satisfaction	0.295	***	Supported
CFI	0.925	H4: Assurance ---> Tourist satisfaction	0.265	***	Supported
RMSEA	0.033	H5: Empathy ---> Tourist satisfaction	0.282	***	Supported
p-value	< 0.001				

Source: Primary Data

5. DISCUSSION

The objective of this study is to analyse the relationship of dimensions of service quality, Tangibility, Reliability, Responsiveness, Assurance and Empathy on tourist satisfaction specifically in the area of traditional food tourism in Uttarakhand state based on the SERVQUAL model. Confirming the importance of service quality as an antecedent to shaping tourists own experience regarding food experiences, the results of structural model indicate that all five dimensions have significant influence towards tourist satisfaction. Of the five dimensions, the strongest predictor was reliability ($\beta=0.378$, p<0.001), followed by tangibility ($\beta=0.312$, p <0.001), responsiveness ($\beta=0.295$, p < 0.001), empathy ($\beta=0.282$, p < 0.001) and assurance ($\beta=0.265$, p <0.002). These results imply that environmental stimuli, stable food quality, stable service and clean and orderly dining environments are significant antecedents to tourist satisfaction.

Our finding is consistent with previous research that emphasizes the relevance of service quality in the food tourism industry. The findings are consistent with the statement given by Kala (2020) where it was said that food tourism is not just about the taste of the food but the overall experience associated with the food that includes hygiene, presentation of food as well as the efficiency of the service. The increased effects of tangibility in our study is in line with Karki (2021) and Bakshi (2022) and supports the assumption that food tourists relate cleanliness, atmosphere, and aesthetics with the quality of their food experiences. Likewise, Sabharwal and Punia (2021) concluded that sentience by way of reliability regarding food quality and service consistency is contributing enormously in boosting up tourist satisfaction, therefore rest with our finding that reliability is the utmost predictor of Uttarakhand food tourism tourist' satisfaction.

Our finding of responsiveness having a positive effect is supported by Khatri, M., & Rawat, R. (2022), who stated that quick and efficient services are essential to better tourist satisfaction especially in religious tourism and adventure tourism where the limited time window affects meal choices. Chen et al are also consistent with our results The above lines relate with the finding given by Karki, R. (2021) that responsiveness of staff helps customers trust the hotel while enhancing loyalty. The considerable influence of assurance on tourist satisfaction is consistent with the findings that staff professionalism, food knowledge, and trust in food authenticity positively affects the performance of dining experience among tourists. Lastly, the influence of empathy in our study aligns with assumption in relation to having an effective food experience through personlized dining and cultural hetory. Fernando et al. Our findings are also in line with , which emphasized that repeat visits and positive experiences have been initiated through storytelling and personal service and cultural engagements.

Our study contributes to the literature on food tourism and service quality in several ways. To begin with, while there is a plethora of literature emphasizing the significance of service quality within hospitality (Kala & Barthwal, 2020; Bakshi, 2022), the current study delves into a domain that has received little attention under the frame of Indian food tourism, specifically traditional food experiences in Uttarakhand. In using the SERVQUAL model referenced as food tourism, this study broadens the theoretical use of service quality models away from traditional hospitality contexts.

Second, the study adds to the knowledge of regional food tourism development, revealing that service quality determinants influence tourists' perceptions of these traditional-cuisine centred experiences in a significant way. Secondly, the studies on tangibility, reliability and responsiveness have mainly analyzed fine-dining and the attributes of commercial food chains (Karki, 2021; Sabharwal & Punia, 2021) while local outlets, homestays and traditional food experiences are rarely focused on, which are equally important since tourists often consume such foods that provide cultural interaction and authentic experience (Baud, 2018). Third, the results underscore the significance of food authenticity and cultural narratives since the studies reveal that tourists are interested in not just food but also impactful, culturally immersive experiences Khatri, M., & Rawat, R. (2022). Empathy as a form of attention given by tour operators is shown to be an effective means of improving tourist satisfaction through personalized service, storytelling, and cultural immersion, contributing to the literature on experiential tourism and cultural engagement in food tourism contexts. Lastly, this paper contributes to the existing body of empirical evidence by suggesting strategies that need to be followed to improve food tourism in the region by identifying key service quality factors that need to be prioritized to ameliorate tourist experience in Uttarakhand region. The results indicate that while developing a gastronomic tourism destination, greater emphasis on high service levels, service training, hygiene standards development, and interactive storytelling elements can make the dining experience holistic, rather than restricting attention to taste and authenticity.

The present study sets the stage for developing future food tourism and service quality research on rural destinations. The possibility of these studies in the future can be the role of digital innovations, AI-driven food recommendations, and social media marketing beneficially influences the food tourism experience. Moreover, exploring tourists across various demographic characteristics (e.g., national vs international tourists, adventure tourists vs pilgrimage travelers) also would shed further light on the differences in service quality expectations of visitors. Right future studies may also compare Uttarakhand with different states of India that have integrated food tourism efficiently (e.g., Kerala, Rajasthan) to draw finest practices for heritage of regional meals tourism. In conclusion, the present study reiterates the importance of improving service quality in food tourism for making Uttarakhand a premier culinary tourism destination in India. While addressing necessary hygiene, service efficiency, cultural promotion, and storytelling, vetted food tourism in Uttarakhand can deliver a prosperous regional tourism impact and socio-economic development.

6. CONCLUSION

The study contributes by examining how significant role service quality plays in developing tourist satisfaction in traditional food tourism sector of Uttarakhand. This result highlights the importance of tangible, reliable, responsive, assurance and empathy as constructs that directly influence tourist experiences and their perceptions of the destination. Uttarakhand can become a pioneer in culinary tourism as long as the state is able to achieve maximum standards in hygiene, displaying the food appropriately, avoid the inconsistency of service, attitude of staff in restaurant ambience and create experience with its guests. The most important thing we can take away from this study is how hygiene, ambience, and food presentation can impact perception in tourists. This fosters more positive dining experiences for tourists whereby cleanliness is a standard operating procedure in the restaurants and homestays where hygienic protocols are followed and food is well presented. Furthermore, consistency in service and the use of original recipes provides reliability — tourists experience authenticity across multiple restaurants, which builds trust and satisfaction.

The research highlights the roles of responsiveness, assurance and empathy in food tourism. Tourists love enthusiastic service, helpfulness, promptitude, and efficiency, friendliness of staff and local Cultural Narration that binds them to the Heritage, By providing training to restaurant and homestay staff in hospitality best practices, culinary knowledge and customer service, Uttarakhand can take steps to ensure that its food tourism sector can be more credible. Additionally, food tourism offers economic opportunities for rural communities, enhances residents' quality of life, and supports environmental sustainability, making it a great fit for Uttarakhand as a whole. The form of Uttarakhand's traditional food trails and farm to table experiences, cooking workshops and food festivals allow to promote the state's profile at larger horizon. Using digital marketing, social media influencers and travel content creators to raise awareness and bring more food tourism interests can also help. In conclusion, the findings reiterate that quality enhancement of services in food tourism are important to make tourists accept a preferable level of satisfaction which plays a key role in developing destination loyalty and helps to prove the importance of Uttarakhand as food tourism destination.

7. FUTURE RESEARCH DIRECTIONS

This study addressed the role of service quality that is significant in the case of food tourism, practical implications of the study included that the study expands the body of literature with the file of food tourism and the service quality but some of the future research keeps its reference further in the study domain. Scope for Future Research: This study could be extended to other regions of India that have different food tourism experiences, so as to make a comparison of service quality variation across diverse culinary traditions. The research can be broadened to international travelers visiting Uttarakhand to study cultural differences in food tourism preferences and expectations. AI powered food recommendations, mobile payment, and digital reservation system enable the convenience and accessibility of the food travel experience. Future research could explore the effect of adopting technology on service quality and tourists' satisfaction in food tourism contexts.

Food safety and hygiene protocols are necessary to build confidence among residents regarding local food services. Further research could assess the impact of government and regulatory policies to enhance food safety compliance among the food tourism industry in Uttarakhand. Here are some suggestions of the few future researches that can be examined, Considering the growing demand for sustainable travel experiences, future research may assess the influence of sustainable food practices, organic farming and zero waste restaurants on tourists in Uttarakhand towards satisfaction and loyalty. This time lag could add more knowledge about destination brand relationships and brand loyalty development by looking at how tourist satisfaction of food experiences will lead to revisit and de-facto recommendations in the long run. Particularly by addressing the future research directions mentioned here, academicians and industry practitioners can address their concerns in developing more comprehensive strategies to improve food tourism experience and sustain hospitality industry in Uttarakhand. Despite its contributions, this study has some limitations. It was limited in number of subjects, mainly targeting tourists from certain districts of Uttarakhand region. Findings in a larger, more heterogeneous sample across seasons and locations may be more generalizable.

The study based on the surveys response which can lead to response bias as tourists might provide socially desirable answers and/or can have different recall accuracy surrounding their dining experiences. Prospective studies can include observation and interviews to gain a more comprehensive insight into service quality. It is important to note that while the study comprised service quality dimensions, it did not factor in any other potential significant attributes, such as price, food variety, local food, or ease of accessibility of the cuisines. Future research could also investigate the roles these variables play in combination with service quality in determining overall satisfaction of tourists. Tourists often rely more on social media reviews, online restaurant ratings, and food bloggers to decide where to eat, but the impact of any of these on tourists weren't specifically considered. Finally, given a growing significance of digital platforms in influencing food tourism, future studies should examine how these platforms influence the perceptions and decision making of tourists. Nonetheless, this research proffers useful implications to ameliorate the service quality to augment food tourism in the state of Uttarakhand. With a few adjustments around the issues defined above, and with organized food tourism initiatives, Uttarakhand can be a paradise for food tourism accompanying a cohesive tourist experience for the visitors.

CONFLICT OF INTERESTS

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