

AN ANALYSIS OF THE CONSUMERS PERCEPTION TOWARDS STREET FOOD OF KOLKATA CITY

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ABSTRACT

Among the myriads of urban centers known for their gastronomic delights, Kolkata, the capital of West Bengal, India, stands out as a city with a rich and unique street food heritage. The present research is focusing on the consumers perception towards street food consumption in Kolkata city. A structured questionnaire was framed using Google forms and distributed to respondents using online platforms. Convenience sampling techniques were used for the collection of the data. A total of 100 valid responses were found. Descriptive statistics and Structural Equation Modelling were used for the analysis of the data. The findings of the study concluded that easy availability, taste and convenience to eat are the factors which influence their purchase decision of street food. The findings of the second objective also concluded that street food in Kolkata city is not hygienically cooked, packed and street food vendors need to improve food safety and hygienic factors.

Keywords: Consumers, Perception, Street Food, Structural Equation Modeling.

INTRODUCTION

Street food is a vital and essential component of culinary culture, acting as a window into the many tastes and customs of a city. Kolkata, the capital of West Bengal, India, stands out among the many cities recognized for their culinary delights as a city with a distinctive and long history of street cuisine. The street food scene in Kolkata is a fusion of innovation and tradition, highlighting the culinary inventiveness and cultural variety of the city. Formerly known as Calcutta, Kolkata is well-known for its rich cultural history, mouthwatering street food, and more. Many communities, including Bengali, Chinese, Anglo-Indian, and Marwari, have left their mark on the city's cuisine, resulting in a symphony of flavors that appeal to a wide range of palates (Choudhury, 2018). The colonial era, when traders, immigrants, and communities mixed and brought their culinary traditions to Kolkata's busy streets, is when the city's street food culture first emerged. These culinary influences came together and changed over time, creating a distinct culinary character that is still strong today. Kolkata's street cuisine is a celebration of contrasts, ranging from acidic to spicy and sweet to savory. Famous meals like the city's "Kathi Rolls," which combine Indian flavors with wraps in the Western style, are a prime example of this fusion (Banerjee, 2017). The city also offers a wide variety of street food options, such as the well-known "Puchka" or "Pani Puri," which is a crispy puri filled with a tangy tamarind water, mashed potatoes, and spices.

Beyond only good cuisine, Kolkata's street food scene promotes social interaction and a feeling of community. People from all walks of life congregate to enjoy these culinary delicacies in the convivial atmosphere created by the lively street markets and busy food booths, which

promotes a sense of unity and shared experience (Bandyopadhyay, 2020). Kolkata's street food offers a trip through history, culture, and community in addition to being a delicious experience. A distinctive culinary environment that pays homage to the city's rich history has been created via the merging of many culinary traditions. The objective of this study is to investigate in greater detail the different aspects of street food in Kolkata, including its cultural relevance, historical origins, and dynamic nature.

A complex interaction of elements influences consumer decisions about what to buy when it comes to street food, reflecting the diverse nature of this gastronomic experience. Important aspects like flavor and taste (Smith et al., 2016) act as sensory cues that lead buyers to make decisions that suit their tastes. When it comes to establishing consumer trust, street food vendors are largely influenced by factors like hygiene and food safety (Gupta & Jana, 2015). Consumers prioritize solutions that strike a balance between perceived value and cost-effectiveness, making price affordability an essential factor (Khan, 2017). Furthermore, it is acknowledged that street food sellers' accessibility and convenience are important factors that affect decision-making (Wang et al., 2018). Given that consumers frequently desire familiarity or area peculiarities, cultural and regional influences are crucial (Lee & Lee, 2014). Research by Kim et al. (2019) and Chen et al. (2017) emphasize the significance of recommendations and word-of-mouth on customer decisions, emphasizing the part that social influence plays in forming perceptions. Additionally, Smith and Brown (2016) examined how street food's aesthetic appeal affects how desirable it is overall. According to research by Zhou et al. (2018), innovation and distinctiveness draw customers looking for new culinary experiences. Essentially, the process of making decisions about street food involves a complex combination of factors, each of which has a unique effect on the behavior of the customer. The intricate confluence of attitudes, interests, and cultural influences that determine consumers' gastronomic choices is shaped by their impressions of street food. Studies like Smith et al. (2016) have shown that street food's taste and flavor profile have a big impact on customers' overall happiness and enjoyment. Consumer impressions are significantly influenced by the hygienic measures taken by street food vendors (Gupta & Jana, 2015). According to Khan (2017), price sensitivity is a significant factor in how customers assess the value proposition of street food options. In addition, Wang et al. (2018)'s research highlights the importance of accessibility and convenience in influencing the whole street food experience, making these variables important elements in determining consumer perception. According to research by Lee and Lee (2014), consumers find street food options more recognizable and appealing due to cultural and regional influences. Good word-of-mouth, as Kim et al. (2019) pointed out, is a powerful motivator that helps customers make decisions. According to Smith and Brown (2016), one aspect of street food's aesthetic attractiveness adds to the enjoyment one gets from it visually. According to Zhou et al. (2018), the inventive and distinctive quality of street food products adds a level of excitement for customers looking for new culinary experiences. In the end, the way that people view street food is complex and involves a variety of factors, including practical considerations, cultural ties, and sensory experiences, all of which influence how they make decisions.

REVIEW OF LITERATURE

Concept of Street Food

Due to its many cultural incarnations, street food a gastronomic phenomenon woven into the fabric of metropolitan landscapes—defies easy categorization. Street cuisine is a broad

category of portable, ready-to-eat delicacies that attract the attention of onlookers. It is typically defined by its availability, affordability, and readiness in outdoor markets or on the streets (Choudhury, 2018). Gupta and Jana (2015) add to the description by stressing street food's grassroots origins, connecting it to local communities, and frequently emulating traditional cooking techniques. According to Kim et al. (2019), street food is more than just a means of subsistence; it's a means of expressing a region's distinct flavors, scents, and textures through a portable and social culinary experience. The phrase "street food" essentially captures a narrative about food that goes beyond the culinary to represent the vibrancy of urban life, the sense of community, and cultural diversity. Street food is any ready-to-eat food and drink that is served by sellers in public areas including sidewalks, markets and street corners. It is a phenomenon in the culinary world that does not respect regional limits. These movable culinary masterpieces are distinguished by their variety of flavors, which frequently represent the regional cuisine and culture (Simone, 2014). A wide variety of inexpensive, easily accessible dishes that suit a broad palate are included in the category of street food, which is not limited to any one particular cuisine (Wilkins & Thang, 2019). It acts as a concrete representation of culinary legacy, exhibiting the inventiveness and resourcefulness of regional communities in offering residents and visitors alike quick, tasty, and culturally diverse meal alternatives (Visser, 2009). In summary, street food provides a sensory tour through the varied and delectable tapestry of regional cuisine, representing an authentic and dynamic aspect of a city's gastronomic landscape.

Famous Street Food of Kolkata City

Kolkata, often known as the "City of Joy," has a thriving and varied street food scene that satisfies the palates of both residents and tourists. The city's history and cultural fusion are depicted in a different way by each of the classic dishes that make up this culinary tapestry. This traditional street meal from Kolkata, known as the "Kathi Roll," dates back to the 1930s and comes from the Nizam restaurant (Banerjee, 2017). It is made of spiced kebabs wrapped in paratha and is a delicious and convenient option to eat on the go. The "Puchka" or "Pani Puri," a crispy hollow sphere packed with a blend of tangy tamarind water, mashed potatoes, and spices that delivers a taste explosion with each bite, is another popular street dish (Gupta & Jana, 2015). Another popular dish from Kolkata is "Churmur," a tasty mixture of chopped spicy potatoes, crushed puris, and tamarind water. Puffed rice mixed with different spices, peanuts, and chopped veggies is called "Jhal Muri," a famous street food that reflects the city's enjoyment of flavorful and crunchy combinations (Choudhury, 2018). Another well-liked street dish that showcases Kolkata's diverse culinary scene is "Ghugni Chaat," which is made with dried yellow peas cooked with spices and topped with onions and coriander (Mitra, 2016). Famous among the city's "Telebhaja" are its fried delicacies, such as "Aloo Chop" and "Fish Fry" (Banerjee, 2017). "Aloo Chop" is spiced mashed potatoes covered in gramme flour and deep-fried to golden perfection; "Fish Fry" is deep-frying marinated fish fillets, demonstrating Kolkata's love for seafood. With versions like the "Tandoori Momo" gaining popularity, the "Momo," despite coming from Tibetan cuisine, has become an essential element of Kolkata's street food scene (Sanyal, 2013). A great way to cap off a street food adventure is with "Kheer Kodom," a sweet treat made of deep-fried dumplings soaked in sweetened milk (Choudhury, 2018). All in all, street food in Kolkata is a gastronomic journey that takes place all over the city, presenting a fascinating fusion of creativity, tradition, and a wide range of flavours that perfectly encapsulate this energetic metropolis.

Consumers Perception towards Street Food

The way that consumers view street food is shaped by a complex and dynamic interaction of factors that together influence how they experience this type of food in general. As Banerjee (2017) points out in the context of Kolkata's Kathi Rolls, which highlights the role of flavor in customer happiness, taste is one of the fundamental characteristics and a crucial influencer in consumer perception. Furthermore, Bandyopadhyay (2020) clarifies the cultural and social aspects of street food, emphasizing the communal and experiential elements that influence how customers view street food beyond its appetizing qualities. According to Mitra (2016), street food's economic factors emphasize how it shapes consumer views of its value proposition by offering accessible and reasonably priced food options. According to Smith and Brown (2016), street food's aesthetic appeal is important for improving consumer perception because it shows how presentation affects how desirable street food options are. Additionally, Wang et al. (2018)'s research highlights how smartphones mediate the visitor experience and raises the possibility that technology elements may also affect how consumers view street food. Gupta and Jana have done a great deal of research on the safety and hygienic aspects of street food, which are vital in determining customer trust (2015). According to Chen et al. (2017) and Kim et al. (2019), positive word of mouth is a potent influence that not only builds trust but also adds to consumers' general favorable opinion of street food. According to Zhou et al. (2018), street food's inventiveness is another feature that draws customers looking for new and distinctive culinary experiences and adds excitement to their experiences. In addition, Lee and Lee (2014) describe how the sensory features of food play a crucial role in influencing how customers view street food, with the visual, olfactory, and textural qualities adding to the allure of these culinary options. The complex fusion of sensory experiences, cultural influences, economic variables, and social aspects that all combine to the rich and diversified fabric of street food culture essentially forms consumers' impressions of street food. Table 1 shows how consumers feel about street food.

Table 1 CONSUMERS PERCEPTION TOWARDS STREET FOOD		
S. No.	Title of the Research Paper	Important Factors
1	Risk factors in street food practices in developing countries: A review.	Cheap
2	Food safety challenges towards safe, healthy and nutritious street foods	Healthier/Nutritious
3	Street foods in Accra, Ghana: how safe are they?	Easily available
4	A study on the street food dimensions and its effects on consumer attitude and behavioral intentions	Convenient to eat
5	An Evaluation of Saving Culture among Street Food Vendors in Informal Sector of Kogi State, Nigeria	Saves time to eat
6	Sanitary conditions of food vending sites and food handling practices of street food vendors in Benin City, Nigeria	Food Hygiene
7	Street foods: contemporary preference of tourists and its role as a destination attraction in India	Way to attract more tourists
8	A study about the young consumers' consumption behaviors of street foods	Food designed for young people
9	Socio-Economic Condition of Urban Street Food Vendors	Stalls are at overcrowded place
10	<i>Street food quality: A matter of neatness and trust</i>	Good quality raw

		material used
11	Hygienic and sanitary practices of vendors of street foods in Nairobi, Kenya	Hygienically cooked
12	Fulfilment of technical and hygienic requirements among street food vendors in Slovenia	Hygienically packed
13	Practices, knowledge and risk factors of street food vendors in Uganda	Street vendors must improve safety and hygienic factors
14	Measuring Tourist's Motivations for Consuming Local Angkringan Street Food in Yogyakarta, Indonesia	Represent Local cuisine

OBJECTIVES OF THE STUDY

The main objectives of the study are:

1. To identify factors related to consumers perception towards street food consumption.
2. To analyze the consumers perception towards street food consumption in Kolkata city.
3. To suggest measures to street food vendors to enhance the quality of their food and services.

RESEARCH METHODOLOGY

Type and Source of Data

A structured questionnaire was developed to collect the primary data. Books, journals, previous research, websites, government reports etc. helped in the collection of secondary data. Both primary and secondary data was used for the study.

Sampling Technique

The research utilized a convenience sample method to collect data from participants in Kolkata. Convenience sampling, a form of non-probability sampling, was selected for its practicality and ease of execution, especially when focusing on a specific population group under certain time and resource limitations. The target population comprised people of Kolkata who often consume street food. This method enabled the researchers to access participants who were readily accessible and inclined to partake in the study.

The data collection entailed disseminating structured surveys via internet platforms, including Google Forms. The poll was disseminated through email and social media platforms to maximize outreach across various demographics. This method proved particularly successful in involving urban inhabitants who are more inclined to possess digital communication tools. Of the 150 issued questionnaires, 105 responses were obtained, with 100 considered legitimate and included in the final analysis. The sample size, however limited, was adequate to derive significant insights into consumer beliefs and behaviors about street food consumption.

The organized questionnaire employed for data collection was segmented into two pieces. The initial phase concentrated on delineating the demographic characteristics of respondents, encompassing variables such as gender, age, occupation, income, and residential location. The second segment sought to evaluate respondents' opinions and behaviors about street food eating, employing Likert-scale questions to gauge categories such as hygiene, flavor, convenience, and cultural significance. The selection of these variables was informed by a comprehensive assessment of the literature and consultations with academic experts, street food vendors, and

customers.

Although convenience sampling offers the benefits of rapid and economic data gathering, it possesses intrinsic constraints regarding generalizability. The sample's non-random characteristics may result in selection bias, as individuals do not accurately represent the larger population. Nonetheless, due to the study's exploratory character and emphasis on a particular geographic and cultural setting, this limitation was deemed acceptable. Furthermore, the data was examined utilizing advanced statistical methodologies, including Structural Equation Modelling (SEM), to guarantee dependable and valid conclusions despite the limitations of the sample.

Convenience sampling technique was an appropriate choice for this study, enabling the researchers to collect relevant data efficiently while maintaining alignment with the study's objectives. By leveraging online platforms for distribution, the study achieved a diverse sample of street food consumers in Kolkata, providing a solid foundation for analyzing the factors influencing their perceptions and purchase intentions.

Data Collection

The questionnaire was distributed to 150 respondents and out of 150, 105 respondents had filled the questionnaire. Out of 105 received responses, 100 responses were found valid. Thus, analysis of the data was done based on 100 valid responses. Convenience sampling was used to collect data from respondents of Kolkata city. The survey included respondents who reside in Kolkata city and like to eat street food of Kolkata city. The structured questionnaire was prepared using online platform Google forms and was circulated to respondents through their email ids and other social media platforms. The surveyed questionnaire consisted of closed ended questions in two sections. The first section consisted of questions on demographic profile of respondents. The second section consisted of questions on the consumers perception towards street food consumption in Kolkata city. The questions of second section based on the consumers perception towards street food consumption in Kolkata city were asked on a Likert scale of 1 to 5 where 1 indicates strongly disagree, 2 indicates disagree, 3 indicates neutral, 4 indicates agree and 5 indicates strongly agree. All the variables in the questionnaire were framed after extensive review of literature and consultation from research supervisor, academicians, street food vendors and consumers of street food of Kolkata city. The survey was conducted in the month of December 2023.

Codification of Dataset

The dataset has been encoded to facilitate analysis and maintain uniformity. The variable "Gender" is encoded as 1 for male respondents and 2 for female respondents. In the "Area of Residence," individuals living in rural regions are assigned a code of 1, whilst those in urban regions are assigned a value of 2. The frequency of consuming street food weekly is classified into four tiers: respondents who eat street food "All 7 Days" are assigned a code of 4, "Three Times a Week" is coded as 3, "Twice a Week" as 2, and "Once a Week" as 1.

The average weekly expenditure on street food is categorized as follows: Expenditure categorized as "Up to Rs. 100" is denoted by 1, "Rs. 101-300" by 2, "Rs. 301-600" by 3, "Rs. 601-1000" by 4, and "More than Rs. 1000" by 5. A Likert scale coding has been utilized for perception-related variables such as "Cheap" and "Convenient to Eat." Responses are classified as 1 for "Strongly Disagree," 2 for "Disagree," 3 for "Neutral," 4 for "Agree," and 5 for "Strongly Agree."

This organized codification facilitates effortless quantitative analysis, permitting effective management of data for further statistical or structural equation modelling (SEM).

Structural Equation Modelling (SEM) Design

Structural Equation Modelling (SEM) offers a framework for analyzing intricate interactions among variables. In the realm of street food consumption, independent factors act as predictors that affect customer perceptions and behaviors. These factors encompass price, wherein cost significantly influences consumer impressions, and availability, which indicates the accessibility of street food to consumers. The ease of consuming street food significantly impacts decision-making. A crucial predictor is flavor, emphasizing sensory appeal and its capacity to attract people. Hygiene elements, such as food hygiene and the hygienic preparation and packaging of food, significantly influence consumer trust. Moreover, quality determinants, including the utilization of high-grade raw materials, alongside societal influences such as the attraction of street food to tourists and its appeal to youth, substantially affect customer views and intents. The independent variables, obtained from standardized replies, are crucial for comprehending the determinants of customer behavior.

Dependent variables are the outcomes affected by these factors. In this study, consumer perception, which signifies the comprehensive assessment of street food quality and experience, serves as the principal dependent variable. A key outcome is buying intention, reflecting the probability of consumers acquiring street food in the future based on their perceptions.

Mediators in SEM elucidate the fundamental mechanisms connecting independent and dependent variables. Satisfaction serves as a crucial mediator in this study, illustrating the level of contentment experienced by clients following the consumption of street food. This gratification connects the relationship among price, flavor, and purchasing intention. Trust serves a crucial mediating function, as customer confidence in hygiene, safety, and quality links these parameters to purchase intention. Cultural significance serves as a mediator by connecting the accessibility of street food to the overall customer perspective, highlighting how consumers regard street food as emblematic of local cuisine.

Moderators affect the intensity or orientation of associations between variables. Principal moderators in this study encompass demographic variables like gender, age, occupation, and annual income. These characteristics may affect the extent to which predictors such as hygiene or convenience shape perceptions. The residential environment, whether urban or rural, can influence the impact of availability and flavor on purchasing intention. The frequency of consumption serves as a significant moderator, as the regularity of street food intake may influence how aspects like hygiene and convenience impact overall customer views.

SEM offers a systematic framework for comprehending the interactions among independent, dependent, mediating, and moderating variables regarding street food consumption. These partnerships are essential for discerning useful insights and improving consumer experiences.

The suggested Structural Equation Modelling (SEM) route model delineates the interactions among principal variables influencing street food consumption. Direct pathways are developed to illustrate clear links wherein variables such as price, flavor, hygiene, and availability directly affect customer perception. This perception directly influences purchase intention, indicating the probability of consumers buying street food based on their whole experience and assessment.

The mediated paths in the model offer enhanced understanding of the mechanisms

between predictors and outcomes. Hygiene characteristics affect purchase intention via trust, illustrating how consumer confidence in safety and quality mediates this connection. Taste influences purchase intention through satisfaction, highlighting the significance of customer enjoyment in determining behavioral intentions. The availability of street food influences customer perception by emphasizing its cultural significance, illustrating how its representation of local cuisine enhances its attractiveness.

Moderated effects add complexity by illustrating how specific variables affect the intensity or direction of interactions. Gender influences the relationship between hygiene and trust, suggesting that views of hygiene differ between male and female consumers. The residential location influences the effect of pricing on consumer perception, indicating that urban and rural customers may assess the affordability of street food differently according to their surroundings.

The SEM analysis comprises a sequence of methodical stages. The initial phase, model specification, delineates the interrelations among variables, encompassing direct channels, mediated paths, and moderating effects. Subsequently, data preparation guarantees that all responses are numerically encoded, and that missing data are managed effectively. The measuring model entails doing Confirmatory Factor Analysis (CFA) to authenticate the constructs, including hygiene, contentment, and trust, so ensuring their reliable measurement of the intended notions. The structural model subsequently assesses the links among latent variables, such as analyzing the impact of pricing on perception and, in turn, intention.

The model's adequacy is evaluated by assessing model fit through metrics such as the Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI). These indicators assist in assessing the congruence of the proposed model with the observed data. Ultimately, hypothesis testing evaluates the importance of direct, indirect, and moderated effects, offering insights into which associations are statistically relevant and influential.

This methodical methodology guarantees a comprehensive investigation of the determinants affecting street food consumption, providing practical insights into consumer behavior and the intricacies of their decision-making processes.

According to the suggested SEM route model and the relationships outlined in your notes, the following is the lavaan code for Structural Equation Modelling (SEM) in R. This code encompasses direct, mediated, and moderated pathways:

library(lavaan)

```
# SEM Model Specification model <- '
# Direct Effects
```

```
Perception ~ Cheap + Taste + Food_Hygiene + Easily_Available
Intention ~ Perception
# Mediated Effects
Trust ~ Food_Hygiene
Intention ~ Trust
Satisfaction ~ Taste
Intention ~ Satisfaction
Relevance ~ Easily_Available
Perception ~ Relevance
# Moderated Effects
Trust ~ Gender*Food_Hygiene # Gender moderates the relationship between Hygiene and Trust
Perception ~ Cheap*Area_of_Residence # Area of Residence moderates the relationship between Price (Cheap) and Perception
```

Fit the SEM Model

```
fit <- sem(model, data = dataset_corrected, missing = "fiml") # Summarize the SEM Model Results
summary(fit, fit.measures = TRUE, standardized = TRUE, rsquare = TRUE) # Check Modification Indices
modindices(fit, sort = TRUE)
```

The Structural Equation Modelling (SEM) code delineates several interactions among variables to examine the determinants of street food consumption. The equation Customer Perception ~ Price

+ Taste + Hygiene + Availability indicates that customer perception is directly affected by price, taste, hygiene, and availability. This relationship delineates the principal determinants influencing consumer perceptions of street food. Likewise, the relationship Purchase Intention ~ Customer Perception indicates that the intention to purchase, or the probability of acquiring street food, is directly influenced by the overall evaluation of its quality and experience.

The mediated effects explore the links by incorporating intermediary variables. The Trust ~ Hygiene pathway emphasizes that hygiene affects trust in street food. The path Purchase Intention

~ Trust indicates that trust mediates the relationship between hygiene and buy intention, signifying that trust is a crucial element in converting hygiene into consumer behavior. Likewise, contentment

~ Taste indicates that taste influences customer contentment, whereas Purchase Intention ~ Satisfaction illustrates that satisfaction mediates the connection between taste and buy intention. A separate mediating pathway, Cultural Relevance ~ Availability, indicates that availability impacts cultural relevance, which subsequently affects customer perception via the pathway Customer Perception ~ Cultural Relevance. This illustrates the correlation between the availability of street food and its depiction of local culture, as well as its influence on perception.

The moderated effects in the model include variables that modify the intensity or orientation of associations. The route Trust ~ Gender: Hygiene posits that gender moderates the relationship between hygiene and trust, suggesting that the impact of hygiene on trust differs according to gender. Likewise, Customer Perception ~ Price*Area of Residence incorporates area of residence (urban or rural) as a moderator for the influence of price on customer perception, indicating that urban and rural customers have varying perceptions of street food affordability.

The model is fitted using the `sem()` function in R, which implements the designated SEM model on the dataset. The `oa little missing = "fiml"` guarantees that missing data is addressed by Full Information Maximum Likelihood (FIML), an effective technique for managing incomplete data with little bias. This method guarantees optimal utilization of the dataset in the analysis.

The summary function produces a detailed report encompassing parameter estimates, fit indices such as RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), TLI (Tucker-Lewis Index), standardized coefficients, and R-squared values. These metrics facilitate the assessment of the model's alignment with the observed data. The `modindices()` function yields modification indices that indicate possible enhancements to the model by revealing additional pathways or alterations that could improve the fit. This repeated

method guarantees a strong and polished SEM model that precisely reflects the fundamental relationships within the data.

DATA ANALYSIS AND INTERPRETATION

Demographic Profile of the Respondents

Table 2		
DEMOGRAPHIC PROFILE OF RESPONDENTS		
Variables		%
Gender	Male	71
	Female	29
Age	15-20 years	16
	21-30 years	58
	31-40 years	12
	41-50 Years	14
	Above 50 Years	--
Educational Qualifications	High School	1
	Intermediate	20
	Graduate	55
	Postgraduate	21
	Doctorate	1
	Others	2
Occupation	Student	64
	Government Job	20
	Private Job	9
	Self-Business	3
	Others	4
Annual Income	Not Earning	61
	Up to 3 Lakhs	8
	3-6 Lakhs	11
	6-10 Lakhs	13
	More than 10 Lakhs	7
Area of Residence	Rural	80
	Urban	20

Out of 100 respondents, 71% of the respondents are males and 29% are females. Age distribution shows that 16% of the respondents are between the age group of 15-20 years, 58% are between the age group of 31-30 years, 12% between 31-40 years and 14% of the respondents are between the age group of 41-50 years. Distribution on educational qualification shows that 1% of the respondents are having educational qualification of high school, 20% intermediate, 55% graduates, 21% postgraduate, 1% doctorate and 2% of the respondents are having other educational qualification. Occupation distribution shows that 64% of the respondents are students, 20% are having government jobs, 9% are having private jobs, 3% are having self-business and 4% of the respondents have other occupations. Annual income distribution shows that 61% of the respondents are not earning any annual income, 8% are earning up to 3 lakhs, 11% are earning 3-6 lakhs, 13% are earning 6-10 lakhs and 7% are

earning annual income of more than 10 lakhs. 80% of the respondents are residing in urban area of Kolkata city and 20% are residing in rural area of Kolkata city.

Profile of the Respondents Related to Consumption of Street Food

Figure 1 shows frequency of eating street food in a week. 12% of the respondents mentioned that they eat street food all seven days a week. 39% mentioned that they eat street food once a week. 24% of the respondents mentioned that they eat street food twice a week and 25% of the respondents mentioned that they eat street food 3 times a week.

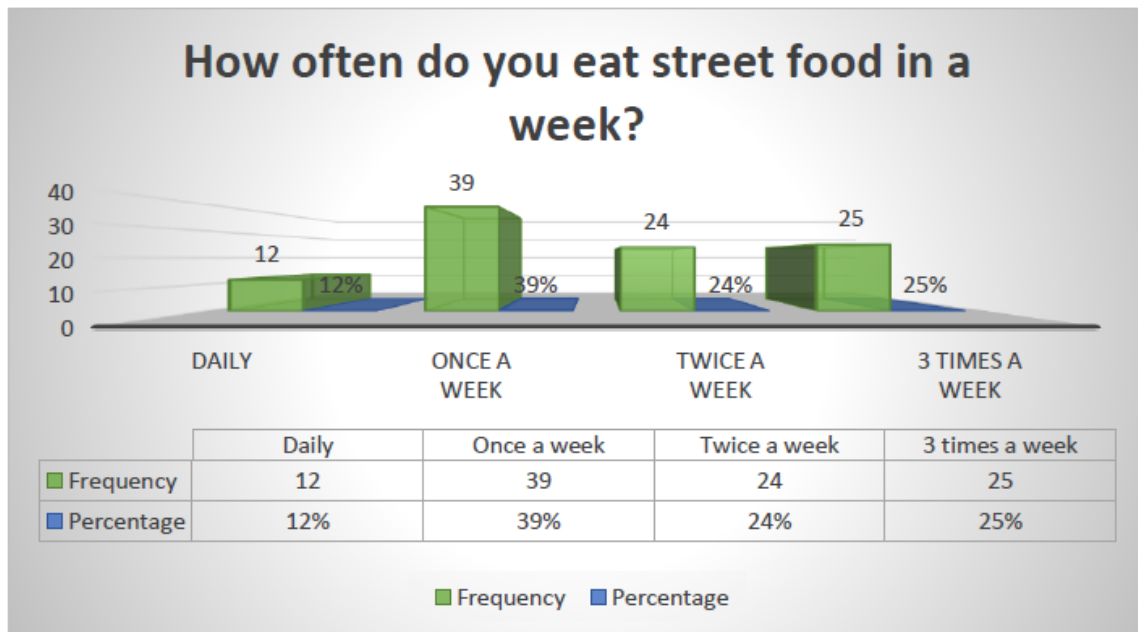


FIGURE 1
FREQUENCY OF EATING STREET FOOD IN A WEEK

Figure 2 indicates the average spending per week on street food. 29% of the respondents mentioned that they spend up to Rs. 100 per week on street food. 41% spend Rs. 101 to 300, 18% spend Rs. 301-600 and 8% spend Rs. 601-1000 and 4% of the respondents mentioned that they spend more than Rs. 1000 on street food of Kolkata city.

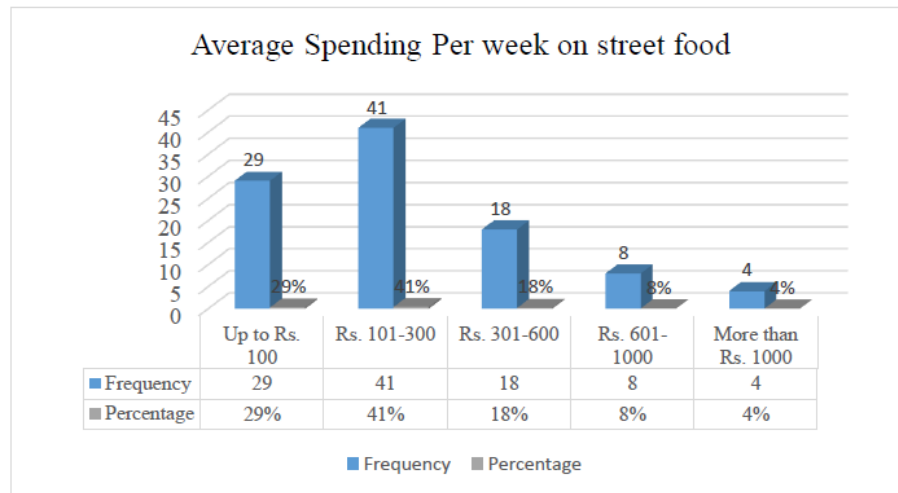


FIGURE 2
AVERAGE SPENDING PER WEEK ON STREET FOOD

Identification of the Factors related to Consumer Perception Towards Street Food

The first objective of the study was to identify factors related to consumers perception towards street food consumption. To achieve this objective, extensive review of literature is done and after extensive review of literature, 14 factors related to consumers perception towards street food were identified which are shown in Table 2. Factors related to consumer perception towards street food are price, Healthier food, easily available, Convenient to eat, Taste, Food Hygiene, Way to attract more tourists, Food designed for young people, Stalls are at overcrowded place, quality of raw material used, Stalls are at overcrowded place, hygienically cooked, Street vendors must improve safety and hygienic factors and Represent Local cuisine.

Consumer Perception towards Street Food of Kolkata City

The second objective of the study was to analyze consumers perception towards street food of Kolkata city. Most of the respondents (67%) agreed that street food of Kolkata is cheap to eat. Only 25% of the respondents agreed that street food of Kolkata city is nutritious. Most of the respondents (83%) agreed that street food of Kolkata city is easily available. Most of the respondents (78%) agreed that street food of Kolkata city is convenient to eat. Most of the respondents (78%) agreed that the street food of Kolkata city is very tasty. Only 20% of the respondents mentioned that the street food of Kolkata city is hygienic. Most of the respondents (68%) agreed that the street food of Kolkata city attracts more tourists in the city. Most of the respondents (69%) agreed that the street food of Kolkata city is meant for young people. Most of the respondents (61%) agreed that street food of Kolkata city is available in overcrowded places. Only 27% of the respondents agreed that street food vendors used good quality raw material for preparing food. Only 19% of the respondents mentioned that street food in Kolkata is hygienically cooked. Only 30% of the respondents mentioned that street food in Kolkata is hygienically packed. Most of the respondents (71%) agreed that street food vendors must improve on food safety and hygienic factors. Most of the respondents (73%) agreed that street food represents local cuisine of Kolkata city Table 3.

Table 3 CONSUMERS PERCEPTION TOWARDS STREET FOOD OF KOLKATA CITY						
Parameters	Strongly Disagree (1)	Disagree (2)	Disagree (3)	Disagree (4)	Strongly Agree (5)	4+5
Cheap	9	2	22	27	40	67
Healthier/Nutritious	20	27	28	20	5	25
Easily available	1	3	13	31	52	83
Convenient to eat	1	8	13	37	41	78
Taste	4	6	12	34	44	78
Food Hygiene	23	20	37	12	8	20
Way to attract more tourists	2	8	22	33	35	68
Food designed for young people	5	3	23	37	32	69
Stalls are at overcrowded place	6	8	25	30	31	
Good quality raw material used	15	28	30	18	9	27
Hygienically cooked	23	23	35	12	7	
Hygienically packed	19	18	33	23	7	30
Street vendors must improve safety and hygienic factors	6	5	18	15	56	71
Represent Local cuisine	6	5	16	30	43	73

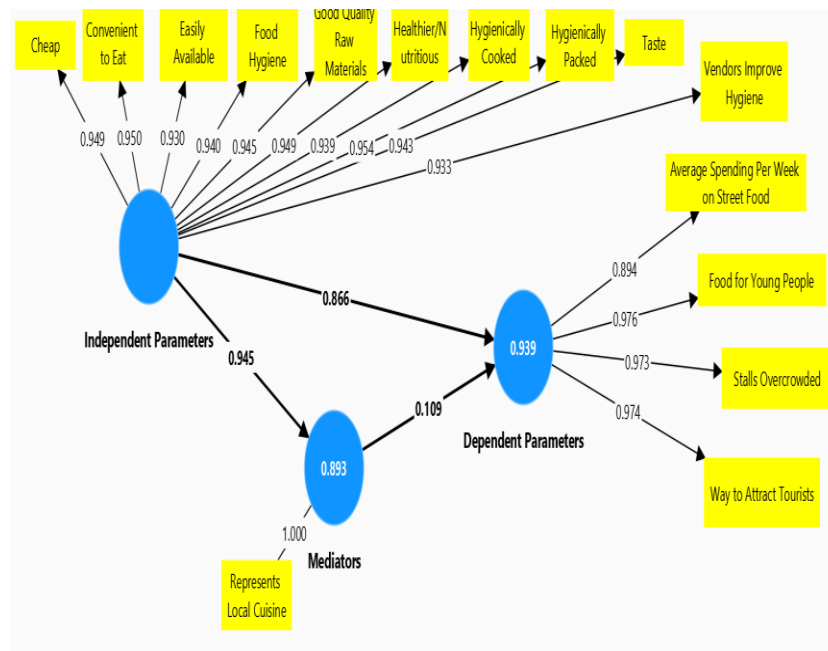


FIGURE 3
STRUCTURAL EQUATION MODELLING USING PLS METHOD WITH THE HELP OF SMART PLS 4

The structural equation model illustrated in the above Figure 3 offers a detailed depiction of the interrelations among independent variables, mediators, and dependent variables concerning customer perceptions and behaviors related to street food. The independent factors comprise variables like "Affordable," "Convenient for Consumption," "Readily Accessible," "Food Safety," "High-Quality Ingredients," "Nutritional Value," "Hygienically Prepared," "Hygienically Packaged," "Flavour," and "Vendors Enhance Hygiene." These variables collectively provide the fundamental components that shape consumer perceptions and eventually their decision-making process about street food intake. Each independent variable demonstrates substantial factor loadings, with values of 0.950 for "Convenient to Eat" and 0.945 for "Food Hygiene," signifying their significant contribution to the overall construct of independent parameters. The strength of these loadings illustrates the significance of these variables in influencing consumer perceptions.

The mediating variable in this model, termed "Represents Local Cuisine," is crucial for connecting the independent variables to the dependent variables. The loading of 0.893 for the mediating construct indicates its importance in the model, demonstrating that cultural and local representation is a vital intermediary element. This mediator encapsulates the perception of availability, hygiene, and other independent criteria through the prism of cultural authenticity and relevance. The mediator's impact on dependent parameters is indicated by a path coefficient of 0.945, highlighting its significance in converting the effects of independent factors into consumer behaviors and attitudes.

The dependent parameters are affected directly by the independent factors and indirectly via the mediating construct. Variables such as "Average Weekly Expenditure on Street Food," "Youth Food Preferences," "Overcrowded Stalls," and "Tourist Attraction Strategies" exemplify

the concrete results and impressions influenced by the independent variables. The elevated route coefficients, specifically 0.973 for "Stalls Overcrowded" and 0.974 for "Way to Attract Tourists," indicate that these elements are substantially influenced by the mediating and independent variables. These dependent characteristics indicate overarching consumer behaviors, encompassing buying habits, perceptions of congestion, and the appeal of street food as a tourist attraction.

The model's overall fit is corroborated by the robust correlations among the components, as seen by the path coefficients and factor loadings. The direct relationship between the independent and dependent parameters, indicated by a coefficient of 0.866, underscores a significant direct impact. The mediating pathway enhances the model's richness and nuance, underscoring the multiple nature of consumer decision-making in the street food scenario. The elevated factor loadings for independent variables like "Taste" and "Healthier/Nutritious" underscore the significant role of sensory and health-related dimensions in influencing customer evaluations. The mediating effect of cultural representation demonstrates how consumers appreciate the congruence of street food with local culinary traditions and authenticity.

The structural equation model offers a comprehensive and complex representation of the interactions among many elements that influence customer perceptions and behaviors related to street food. The substantial factor loadings and path coefficients underscore the significance of both direct and mediated effects, while the strong interrelations across the constructs emphasize the importance of cultural relevance, cleanliness, taste, and availability in shaping consumer attitudes and behaviors. This investigation highlights the complex nature of customer decision-making about street food and offers useful insights into how many factors influence their perceptions and intentions.

Table 4 CONSTRUCT RELIABILITY AND VALIDITY OVERVIEW				
Parameters	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Dependent Parameters	0.967	0.970	0.976	0.912
Independent Parameters	0.986	0.987	0.988	0.890

The above table 4 assesses the reliability and validity of the constructs using four key metrics: Cronbach's Alpha, Composite Reliability (rho_a and rho_c), and Average Variance Extracted (AVE).

For Cronbach's Alpha, both dependent and independent parameters exceed the commonly accepted threshold of 0.7, with values of 0.967 and 0.986, respectively. These results indicate excellent internal consistency, meaning that the items within each construct are highly correlated and measure the same underlying concept effectively.

Composite Reliability (rho_a and rho_c) values for both dependent and independent parameters are above the recommended threshold of 0.7, further supporting the strong internal consistency of the constructs. Specifically, the rho_a and rho_c values for dependent parameters (0.970 and 0.976) and independent parameters (0.987 and 0.988) demonstrate exceptional reliability, signifying that the constructs are well-measured by their respective indicators.

Average Variance Extracted (AVE) provides evidence of convergent validity, measuring the proportion of variance explained by the construct relative to the total variance (including measurement error). Both dependent and independent parameters have AVE values above 0.5, with

0.912 and 0.890, respectively. These values indicate that a substantial portion of the variance in the indicators is captured by the latent constructs, confirming convergent validity.

In summary, the high Cronbach's Alpha, Composite Reliability, and AVE values demonstrate that both the dependent and independent constructs are reliable and valid. These metrics provide confidence in the measurement model, ensuring that the constructs adequately represent the theoretical concepts they are intended to measure. This strong reliability and validity lay a robust foundation for further structural modelling and hypothesis testing Table 5.

Table 5 MODEL FIT INDICES			
Fit Index	Saturated Model	Estimated Model	Interpretation
SRMR	0.054	0.054	The Standardized Root Mean Square Residual (SRMR) value of 0.054 indicates a good fit, as it is below the threshold of 0.08.
d_ULS	0.345	0.345	The unweighted least squares discrepancy (d_ULS) value shows the absolute discrepancy, and here it is relatively low.
d_G	2.166	2.166	The geodesic discrepancy (d_G) value reflects the distance between the implied and observed covariance matrices. A lower value indicates better model fit.
Chi-square	1017.960	1017.960	The high chi-square value suggests a statistically significant discrepancy; however, chi-square is sensitive to sample size.
NFI	0.729	0.729	The Normed Fit Index (NFI) value of 0.729 is below the acceptable threshold of 0.9, indicating that the model fit could be improved.

The SRMR value of 0.054 is within the acceptable range, indicating that the residual differences between observed and predicted correlations are minimal. This is a positive sign for model fit. The d_ULS and d_G values, while not directly associated with clear thresholds, are reasonably low, suggesting a small discrepancy between the observed and implied covariance matrices.

The Chi-square value is high, indicating that the model does not perfectly reproduce the observed data. However, it is important to note that the chi-square statistic is highly sensitive to sample size, and large samples often lead to significant chi-square values even for well-fitting models. Finally, the NFI value of 0.729 falls below the recommended threshold of 0.9, which indicates room for improvement in model fit. Enhancements could involve refining the model specification or reconsidering some of the variable relationships to achieve better alignment with the data.

Suggestive Measures for Street Food Vendors of Kolkata City

1. To give customers confidence, street food sellers should follow stringent cleanliness and food safety protocols. Foodborne illness prevention strategies include frequent hand washing, storing raw and cooked foods properly, and keeping surfaces and utensils clean.
2. By openly disclosing the ingredients they use, street food vendors can increase consumer trust. Consumers are informed and transparency is established when ingredients and their origins are listed clearly, addressing issues with food quality and allergies.
3. Street food merchants should contemplate introducing inventive and distinctive menu items to draw in a varied customer base. Using originality in food preparation and presentation can help vendors stand out from the competition and attract customers looking for unique dining experiences.
4. Having an online presence and utilizing digital tools for marketing can greatly increase the visibility of a street food vendor. A strong online presence and a devoted clientele can be attained by vendors with the aid of social media, meal delivery apps, and attractive websites.

5. Working together with neighborhood get-togethers, culinary festivals, or local events can give street food sellers a chance to present their products to a wider audience. Engaging in such events promotes a sense of community participation in addition to increasing exposure.
6. By putting in place a mechanism for collecting feedback from customers, street food vendors can learn about the preferences and issues of their patrons. To enhance their offerings, foster client loyalty, and adjust to evolving consumer demands, vendors should routinely solicit input and take proactive measures to resolve concerns.

CONCLUSION

The first objective of the study was to identify factors related to consumers perception towards street food consumption. After extensive review of literature, 14 factors related to consumers perception towards street food were identified. Factors related to consumer perception towards street food are price, Healthier food, easily available, Convenient to eat, Taste, Food Hygiene, Way to attract more tourists, Food designed for young people, Stalls are at overcrowded place, quality of raw material used, Stalls are at overcrowded place, hygienically cooked, Street vendors must improve safety and hygienic factors and Represent Local cuisine. The second objective of the study was to analyze consumers perception towards street food of Kolkata city. The findings of the study concluded that easy availability, taste and convenient to eat are the factors which influence their purchase decision of street food. The findings of the second objective also concluded that street food in Kolkata city is not hygienically cooked, packed and street food vendors need to improve food safety and hygienic factors.

REFERENCES

- Bandyopadhyay, S. (2020). Street Food Culture in Kolkata: A Socio-cultural Perspective. *International Journal of Gastronomy and Food Science*, 21, 100216.
- Banerjee, S. (2017). Kolkata Kathi Rolls: The Street Food That Revolutionized the Concept of Rolls. *Journal of Culinary Science & Technology*, 15(2), 172-185.
- Chen, X., Huang, L., & Huddleston, P. (2017). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management*, 58, 51-60.
- Choudhury, M. (2018). Culinary Mosaic of Kolkata: A Gourmet Journey Through the City of Joy. *Journal of Food Research*, 7(2), 23-35.
- Gupta, S., & Jana, R. (2015). A Study of Consumer Perception of Street Food in India. *International Journal of Management, IT and Engineering*, 5(2), 199-215.
- Khan, M. U. (2017). The influence of perceived value on consumer purchase intention: A study of the fast-food restaurant sector in Peshawar. *International Journal of Management, Economics, and Social Sciences*, 6(1), 6-20.
- Kim, W., Kim, H., & Kim, T. T. (2019). Hotel customers' environmentally responsible behavioral intention: Impact of key constructs on decision in green consumerism. *Sustainability*, 11(16), 4421.
- Lee, H., & Lee, Y. (2014). Food neophobia, sensory aspects of food and beverage and dietary patterns in selected college students. *Journal of the East Asian Society of Dietary Life*, 24(3), 331-340.
- Mitra, S. (2016). Street Food Vending in India: Implications for Policy Design. *Economic and Political Weekly*, 51(12), 38-45.
- Simone, G. M. (2014). *Street food: Culture, economy, health and governance*. Routledge.
- Smith, A. M., & Brown, S. L. (2016). A content analysis of food advertising on Little Debbie brand websites. *Journal of Agriculture, Food Systems, and Community Development*, 6(2), 77-91.
- Smith, J. L., Roy, R., & Smith, A. M. (2016). The influence of ethnic-related information on perception and liking of fruit juice. *Journal of Sensory Studies*, 31(4), 326-337.
- Visser, O. (2009). *The rituals of dinner: The origins, evolution, eccentricities, and meaning of table manners*. Grove Press.
- Wang, D., Park, S., & Fesenmaier, D. R. (2018). The role of smartphones in mediating the touristic experience. *Journal of Travel Research*, 57(3), 347-360.

- Wilkins, J. L., & Thang, L. L. (2019). Street food vendors in Asia: A review of the literature. *Food Control*, 100, 275-285.
- Zhou, L., Li, S., & Li, D. (2018). Factors influencing tourist behavioral intention: The mediating role of destination image. *Journal of Travel Research*, 57(8), 1054-1067.

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