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TABLE OF CONTENTS

RESEARCH ARTICLE

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RESEARCH ARTICLE

The Effect of Attitude and Acceptability of Robot Use in Restaurants on Behavioral Intention

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ABSTRACT
In recent years, it has been seen that technology-based tools have started to take place frequently in our daily lives. This situation is more prominent in organizations such as food and beverage producing human-oriented services. With the increase in technological awareness, it is observed that the tendency of individuals who are curious about creativity and innovation towards businesses that provide smart robotic services is increasing. The aim of this research is to determine the effect of attitude and acceptability of the use of robots in restaurants on behavioral intention. In line with the purpose of the research, relationships were determined with the help of data obtained from the scales developed on the subject. Based on the literature review, five hypotheses were developed. Relationships were tested with the path analysis created within the scope of structural equation modelling. The acceptability of robot use in restaurants by customers has a significant positive effect on behavioral intention, and this variable has the greatest effect on behavioral intention. In addition, "experience" and "advantage" dimensions of attitude towards robot use have significant positive effects, "disadvantage" dimension has a negative effect on behavioral intention. Lastly, according to R-square, 82.6% of behavioural intention is explained by attitudes and acceptability towards the use of robots in restaurants.

Keywords: Robots, Robot Use in Restaurants, Attitude, Acceptability and Behavioral Intention

Introduction

In the service sector, where technological developments are constantly increasing, personalized services for changing consumer demands related to technology are offered with innovative approaches (Sándor et al., 2017). Especially, food and beverage businesses that try to provide their consumers with satisfaction-oriented service are structuring their business processes in line with the latest technological developments. In this context, it is very important to closely follow robotic applications in order to increase the quality of service in the sector where there is an intense competition and not to fall behind. It can be stated that robotic technologies have started to be used in many areas where tourism activities take place (Bowen & Whalen, 2017). There are similar situations for food and beverage businesses, which are one of the most important elements of the tourism sector. For this reason, robotic service applications powered by artificial intelligence and autonomous applications are accepted as a compulsion beyond the necessity for these businesses (Li et al., 2017).

It is very important for the continuity of the enterprises that a product or service produced in the service sector is accepted and satisfied by the customers. For this purpose, businesses use technological tools that can provide customer satisfaction and positively affect their behavioral intentions (Sudari et al., 2019). Robotic vehicles, on the other hand, have recently come to the fore as the most frequently used technological devices in the services sector (Rüßmann et al., 2015; Zeng et al., 2020). The reason for this is both the customers' interest in technology and the quality perception of robotic services. Although there are scientific studies in the literature on the use of robotic vehicles (Yuh, 1990; Feddema et al., 2002; Duchoň et al., 2012), studies related to food and beverage businesses are limited (Bogue, 2009; Cheong et al., 2015; Iqbal et al., 2017). The studies on service robots are still in its infancy, and using user-generated content as a data source is innovative and worth exploring (Huang et al., 2021). Therefore, there is a lack of research on the robotic restaurant experience in the current literature (Seyitoğlu & Ivanov, 2020). It is thought that more research is needed to establish a comprehensive theory (Lu et al., 2020).

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Considering the gaps within the literature, the current study employs the technology acceptability model from a new perspective. Although it is stated that the use of robotics in food and beverage businesses brings satisfaction to customers in many different ways, it has not been concluded whether it fully affects their behavior or not (Kim, 2021). At this point, the research is evaluated with an innovative perspective by revealing original information about the issue. The outputs obtained from the study offer valuable empirical evidence about the technology acceptability model, and robot use in restaurants to both the tourism industry and tourism researchers.

Conceptual Framework

Robots are designed by human beings to perform the tasks they need to improve living conditions (Ficocelli et al., 2015). In addition to providing benefits to people in terms of physical strength and job stress, it also helps to set service quality at a certain level due to the absence of emotion (Scopelliti et al., 2005). Moreover, it is possible to say that a healthier environment is formed with regard to communication due to the fact that robots provide services to everyone on equal terms without prejudices. Nowadays tourism enterprises take these situations into account and follow innovative technology applications and robotic services more intensely (Blöcher & Alt, 2021).

In order to maintain quality standards in food and beverage businesses, many methods such as mobile infrastructures containing various smart applications, wireless calls, robot waiters, individual ordering systems and web-based menus are applied. For the purpose of providing robotic service in restaurants, the first application and action commands are uploaded to the robot. The robot tries to complete the task by following the procedures related to these directions. It is expected that the products loaded on the robot will be delivered to the right destination and served. In this process, the recognition of the space and the features of the area are recorded. Service activities are completed with the delivery process of the products that are successfully taken to the destination (Kamruzzaman & Tareq, 2017).

Robotic services are categorized as mobile robots and industrial robots on two main criteria. Service robots, on the other hand, are used as technological tools with an interface that can carry out industrial and mobile robot features (Hajduk et al., 2013). In this context, service robots that can provide services are demanded by organizations to be beneficial to people and to facilitate the business process of food and beverage businesses. Service robots are accepted as smart devices and act as auxiliary tools in food and beverage activities (Singh et al., 2020). In addition to their contributions to the business process, service robots come into play so as to cope with the challenging conditions that arise in human physiology and to help at the point of work efficiency. Robotic services used in food and beverage businesses offer the opportunity to reduce workload, save time for employees, standardize processes, minimize human-induced errors, reduce employee stress, and specialize in jobs that require skills (Fernando et al., 2016).

In line with service procedures and quality standards, some restaurants use robotic tools, which are technological tools, and classify them according to the type of tasks. In this regard, some of the various robotic tools are summarized as follows (Kılıçhan & Yılmaz, 2020).

The robot bartender can take beverage orders, prepare and serve them correctly. With its advanced coding, detection and preparation capacity, it can serve accurately. *The packaging robot* plays a role in transporting products or services needed in restaurants from one point to another. It fulfills the missions undertaken for desk service, room services and different areas. , this robotic service, which was used for the first time in Singapore, can cook the desired meals and prepare the most suitable product for the recipe. It provides an important service at the point of preparing the meals in a standard way. *The robot waiter* plays a serious role in food and beverage businesses where human physique is insufficient or the desired service quality is not achieved. Robot waiters, whose work process is defined correctly, can provide all the services required by waiter services in these businesses. In addition, they can set standards in service quality because they can perceive different languages and do not reflect their emotions. *Robot hostesses* are one of the technological tools that are frequently used in food and beverage businesses in recent years. They are used especially to guide and welcome guests, as well as to increase sales. According to another view, robotic services in food and beverage businesses are expressed in Figure 1.

With the adoption of robotic technology in restaurants, food and beverage activities have gained a different dimension. Orders from the restaurant have started to be taken by robots. In this context, a well-known pizza brand has accepted customer orders by including a robot with voice recognition and artificial intelligence features. Besides, payments through the robotic service have been begun to be received via credit cards. After this development, many food and beverage businesses have diversified their preparation, cooking and serving services by using robotic service tools. In addition, the Covid-19 pandemic that emerged in 2019 has also allowed an increase in robotic services due to its contagious nature (Singh et al., 2021). Due to infectious diseases and deadly viruses, people have been paying more attention to cleanliness and hygiene factors recently. For this reason, robotic vehicles that do not carry diseases and harmful substances in terms of health give confidence to people (Feng & Wang, 2020).

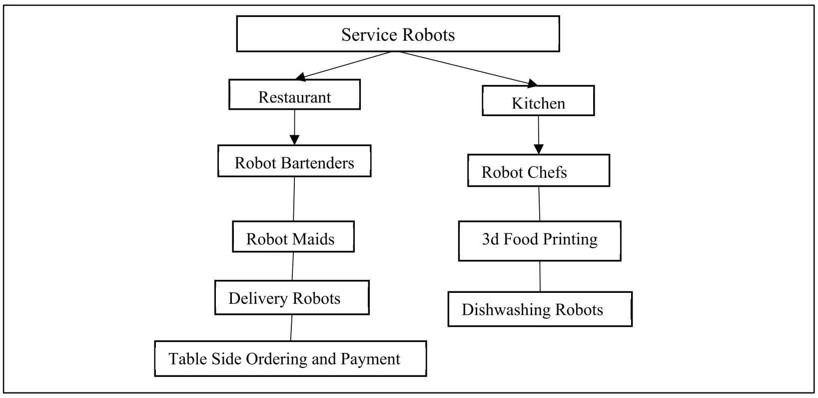

Figure 1. Service automation in food and beverage. **Source:**Ivanov, et al., 2017; Authors.

Robotic processes are used through the use of robotic mopping devices, contactless delivery of food and beverages, cleaning the physical space and vacuuming airborne viruses. Therefore, robotic devices play an important role in creating a contactless customer experience by providing navigation assistance and voice command support (Srivastava et al., 2021). Innovative robotic systems also come to the fore with hygiene practices in the preparation process of food and other products in food and beverage businesses (Gray & Pekkeriet, 2016).

With the transfer of the physical workforce to robotic vehicles thanks to technological developments, the experience of consumers in this regard has started to increase. In this way, consumers can transmit their requests and orders to robots using smart applications and autonomous systems. In addition, robotic services can reveal social behavior by interacting with humans. Thus, individuals who feel the need for socialization are satisfied with the systematic and strategically effective display of communication between service robots and consumers (Luo et al., 2021).

Literature Review and Hypotheses

Experience

Robotic service has reshaped the customer experience in the tourism (Borghi & Mariani, 2021). The use of robots in the service of food and beverage can enable strong service capacity, high efficiency and precise service delivery. In this way, by providing a good service experience to customers, it can lead to positive behavioral intentions (Guan et al., 2021). El-Said & Al Hajri (2022), in their study of customers with dining experience in restaurants where robots are used in the service department, noted that perceived benefit, service speed and experience innovation have a direct effect on satisfaction. The perceived value of experiencing robots in restaurants positively affects attitude. Moreover, the introduction of new technologies such as robot butlers to the service industry can has significant effects on guest behaviors and attitudes (Çakar & Aykol, 2020).

H_1: Perceived attitude towards the experience of using robots in restaurants has a positive and significant effect on behavioral intention.

Disadvantage

The perceptions of customers coming to food and beverage businesses towards robot service providers affect their intention to use them (Seyitoğlu et al., 2021). The possibility of robots providing inefficient or poor service and causing unnecessary problems may lead customers to avoid such technologies (Guan et al., 2021). Hwang, Kim, Kim & Kim (2021) state that risk factors perceived by customers in terms of privacy, financial, temporal, performance and psychological have negative effects on attitudes and behaviors.

H_2: Perceived attitude towards the disadvantages of using robots in restaurants has a negative and significant effect on behavioral intention.

Advantage

Robotic services enormously improve the quality of the service provided. This positively affects revisit intentions in the context of customer loyalty behaviors (Çakar & Aykol, 2020). It has been confirmed that the perceived value of customers' robotic technology used in restaurants (such as animation, cuteness, intelligence, safety) has a positive effect on satisfaction and revisit intention (Jang & Lee, 2020). Besides, De Kervenoael et al., (2020) states that the perceived usefulness of robots increases their value and this, in turn, affects the behavioral intentions of visitors.

H$_3$: Perceived attitude towards the advantages of using robots in restaurants has a positive and significant effect on behavioral intention.

Social Skill

The use of artificial intelligence (AI) and robots in restaurants is not yet widely used. However, managers are looking for new ways to leverage these technologies to provide differentiation and excellence in service. In addition, in restaurant businesses, social and emotional skills are often given importance in order to achieve excellence in bilateral relations and interaction (between the service staff and the customer), hospitality, customer satisfaction and loyalty (Blöcher & Alt, 2021). Thus, managers prefer to use robots except for tasks that require social skills and emotional intelligence (Ivanov et al., 2020). The acceptance of the use of robots in service processes by customers depends on how well robots can meet social-emotional and relational needs (Wirtz et al., 2019). Lu, Zhang & Zhang, (2021) emphasize that the human characteristics of robotic service personnel are the main determinants of preference and that features such as human voice affect the evaluation of the service received and behavioral intentions.

H$_4$: The perceived social skill attitude towards the use of robots in restaurants has a positive and significant effect on behavioral intention.

Acceptability of Robot Use

Although the use of robots is seen as one of the most important trends for service marketers, customer acceptance for the application of robots in service scenarios is still an important issue to examine (Li and Wang, 2021). In the study conducted to identify the factors affecting the acceptance of robots used in businesses; attitude, usefulness and perceived values among all variables were determined as the factors that have the greatest impact on acceptance (Zhong et al., 2020). Furthermore, the perceived benefit and innovativeness of the technology used has positively influenced the acceptance intention (Sung & Jeon, 2020). Technology acceptance is recognized as a vital factor that determines consumers' intention to use a new technology introduced. Hence, it has been determined that consumers with high technology acceptance have higher purchase intentions than those with low technology acceptance (Zhong et al., 2020).

H$_5$: The acceptability of robot use in restaurants has a positive and significant effect on behavioral intention.

Methodology

Based on the theoretical background and literature, 5 hypotheses were established. Figure 2 shows the conceptual model developed for this research. For the purpose of empirically assessing the relations in the conceptual model, measurement items were adapted from the current literature and included in a survey. To measure four dimensions (experience, disadvantage, advantage, and social skill) of attitudes towards robot use, 15 items from Ivanov, Webster and Garenko (2018) were adapted. Acceptability of robot use scale (8 items) was also adapted from Ivanov, Webster and Garenko's study. Behavioral intention was measured using 3 items adapted from Lee- Wingate & Xie (2013). All the items were rated using a 5-point Likert type scale (1– strongly disagree to 5 – strongly agree). In addition, the survey includes questions (sex, marital status, age and education) regarding the demographic characteristics of the participants.

This study employs a quantitative method and a self-administered survey to collect data. Convenience sampling method, one of the non-random sampling techniques, was used in the study. In convenience sampling, data are collected from the population in the easiest, fastest and most economical way. The data were collected from individuals who agreed to participate in the research. The survey was prepared online, and the data were collected between January-February 2022. The prepared questionnaire was shared on various social media platforms. As a result of the sharing, a total of 477 valid responses were gathered. 50.1% (239 respondents) of which were completed by females. Out of 477 respondents, 251 (52.6%) respondents were single, 2020 (42.3%) respondents were between 18 and 29 years old, and 237 (49.7%) respondents were university graduates. Therefore, ethics committee approval was received for this study from the Harran University in 2021 (2021/172).

In an attempt to assess overall measurement quality and test the hypothesized relationships, a two-step approach (Anderson & Gerbing, 1988) was applied. In the first step, confirmatory factor analysis (CFA) was performed to test the validity of the

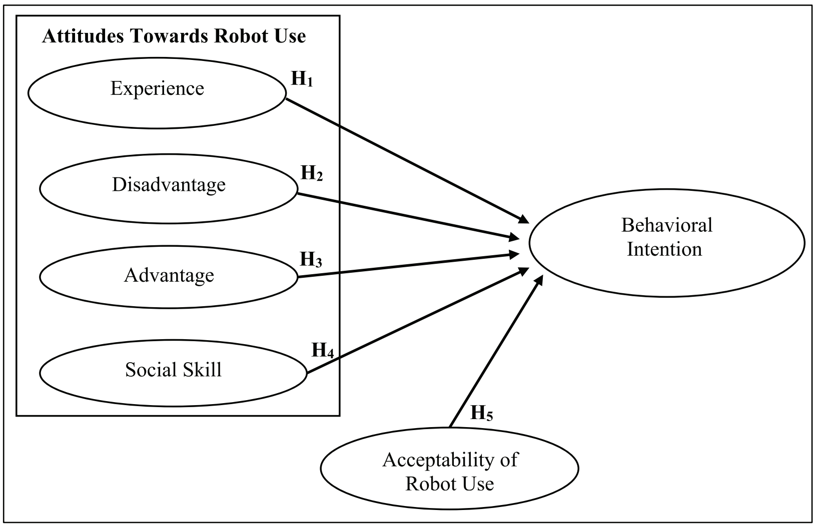

Figure 2. Conceptual model of the study. **Source:**Authors' Own Compilation from Literature Review

measurement scales. Then, structural equation modelling (SEM) was conducted to investigate the relationships hypothesized in the model proposed.

Results

The first step in analyzing the data was the analysis of the measurement model through confirmatory factor analysis (CFA). The CFA results revealed a good model fit with the CFA chi-square at 810.374 with 209 degrees of freedom (p<.001) and x^2/df=3.877<5 (Hair et al., 2010). Besides, other goodness of fit (GoF) statistics indicated a good theoretical model fit based on the reference values (0.90 <CFI <1, 0.90 < NFI < 1, 0.90 < IFI < 1, 0.95 < TLI < 1, RMSEA < 0.08) (Hair et al., 2010). The results are presented in Table 1.

Table 1. *CFA Results for the Model's GoF*

GoF Statistics	*Results*
X^2/df	3.877
Comparative Fit Index (CFI)	0.946
Normed Fit Index (NFI)	0.929
Incremental Fit Index (IFI)	0.946
Tucker-Lewis Fit Index (TLI)	0.966
Root Mean Square Error of Approximation (RMSEA)	0.078

Source: Created by the Authors.

The reliability of the scales was evaluated by Cronbach's Alpha and Composite Reliability (CR). As described in Table 2, all Cronbach's Alpha values are greater than 0.7, and all CR values are greater than 0.60, so it is said to demonstrate reliability (Nunnally, 1970). The validity of the scales was assessed with two methods as convergent validity and discriminant validity by investigating the AVE (Average Variance Extracted) of each construct. All AVEs are greater than the 0.50 standard for all of the constructs proposed, so the convergent validity of the structure is considered sufficient (Fornell & Larcker, 1981). Also, the factor loadings of all measures were significant at the p<.001 level and above 0.70. The results are presented in Table 2.

In order to secure discriminant validity, the values of the square roots of AVEs were compared with inter-construct correlation. Correlation between constructs must be smaller than the square roots of the AVE value for each construct (Fornell & Larcker, 1981). As shown in Table 3, all correlations between pairs of constructs were less than the corresponding square roots of AVEs.

Consequently, all findings confirm that the measurement model represents satisfactory convergent, discriminant validity and reliability. After confirmatory factor analysis (CFA), in the second step, structural equation modelling (SEM) was employed to test the five hypotheses. The conceptual model developed for the research affirmed significant relations among variables except for H_4 Table 4 summarizes the results of testing the hypotheses.

Finally, the effect of "Experience, Disadvantage, Advantage, Social Skill and Acceptability" variables on "Behavioral Intention"

Table 2. *Reliability and Convergent Validity of the Scales*

Constructs and scale items	**Standardized Loadings***	**AVE**	**CR**	**Cronbach's Alpha**
Attitudes towards Robot Use				
Experience		0.705	0.870	0.904
Being served by robots will be an interesting experience.	0.741			
Being served by robots will be a memorable experience.	0.858			
Being served by robots will be a pleasurable experience.	0.875			
Being served by robots will be an exciting experience.	0.879			
Disadvantage		0.506	0.814	0.749
Robots consume too much electricity.	0.731			
Robots can malfunction during service.	0.795			
Robots can misunderstand a question/an order.	0.506			
Robots can't do special requests/they work only in a programmed frame.	0.561			
Robots can't understand a guest's emotions.	0.545			
Advantage		0.655	0.823	0.860
Robots will be faster than human employees.	0.825			
Robots will deal with calculations better than human employees.	0.863			
Robots will provide more accurate information than human employees.	0.785			
Robots will be able to provide information in more languages than human employees.	0.761			
Social Skill		0.562	0.746	0.704
Robots will be friendlier than human employees.	0.643			
Robots will be more polite than human employees.	0.844			
Acceptability		0.728	0.893	0.951
I would like the home delivery service to be done by robots.	0.838			
I would like the guests to be greeted by robots in the restaurant.	0.854			
In the restaurant, I would like the guests to be guided to the tables by robots.	0.866			
I would like robots to take orders at the restaurant.	0.870			
I would like the food service in the restaurant to be done by robots.	0.885			
I would like the beverage service in the restaurant and bar to be done by robots.	0.904			
I would like the drinks (coffee, tea, cocktail) to be prepared by robots at the bar.	0.908			
I would like the tables to be cleaned by robots.	0.682			
Behavioral Intention		0.773	0.853	0.910
I have positive impressions of restaurants where robots are used.	0.810			
I would revisit restaurants where robots are used.	0.880			
I recommend restaurants where robots are used to other people.	0.943			

***:** All factor loadings are significant at the 0,001 level, N=477. **Source:** Created by the Authors.

Table 3. *Discriminant Validity (Fornell-Larcker Criterion)*

		1	2	3	4	5	6
1	Experience	**0.839**					
2	Disadvantage	0.158	**0.711**				
3	Advantage	0.561	0.056	**0.809**			
4	Social Skill	0.326	0.252	0.364	**0.749**		
5	Acceptability	0.672	0.324	0.515	0.575	**0.853**	
6	Behavioral Intention	0.728	0.243	0.630	0.590	0.779	**0.879**

Note: The square roots of all constructs' AVEs are in bold along the diagonal. Lower diagonal values indicate factor correlations. **Source:** Created by the Authors.

was analyzed in line with the purpose of the study. Structural equation modeling (SEM) was employed for the analysis. The final model along with standardized path coefficients is illustrated in Figure 3.

Table 4. *Hypotheses Test Results*

Hypothesis	Path		Standardized Coefficients	t-value	Hypothesis Supported
H_1	Experience →	Behavioral Intention	0.330^{**}	6.938	YES
H_2	Disadvantage →	Behavioral Intention	-0.159^{**}	3.574	YES
H_3	Advantage →	Behavioral Intention	0.251^{**}	3.164	YES
H_4	Social Skill →	Behavioral Intention	0.081^{NS}	1.520	NO
H_5	Acceptability →	Behavioral Intention	0.454^{**}	7.639	YES

Note: **p<0.001, NS = non-significant. **Source:** Created by the Authors.

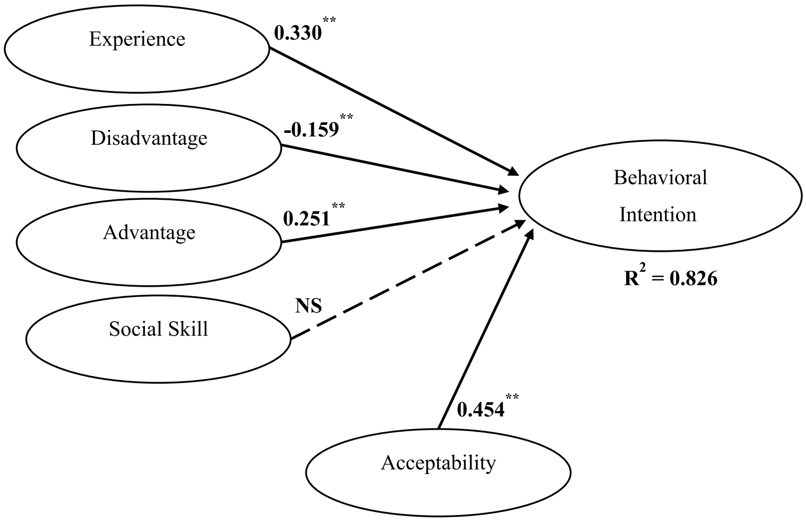

Figure 3. Path results of structural model. **p<0.001, NS=non-significant. **Source:** Created by the Authors.

The statistical results ensure empirical validation for the approval of the fifth hypothesis, with a significant positive impact of acceptability of robot use on behavioral intention (0.454, p<0.01). This variable has the greatest effect on behavioral intention (0.454, p<0.01). This variable has the greatest effect on behavioral intention. The experience variable is the most prominent variable among the attitudes towards robot use with the highest coefficient (0.330, p<0.01). Lastly, according to R-square, 82.6% of behavioral intention is explained by attitudes and acceptability towards the use of robots in restaurants.

Conclusion

The purpose of this study is to determine the effect of attitudes and acceptability towards the use of robots in restaurants on behavioral intention. Based on the literature review, five hypotheses were developed. Relationships were tested with the path analysis created within the scope of structural equation modelling. The structural model affirmed significant relationships between variables except for H4. Social Skill does not have a significant effect on the behavioral intention. The finding can be interpreted as participants do not believe that robots have as many social skills as humans do.

The acceptability of the use of robots in restaurants by customers positively and significantly affects behavioral intention. This variable has the greatest influence on behavioral intention. In addition, experience and advantage dimensions of attitude towards robot use have significant positive effects, and the disadvantage dimension has a negative effect on behavioral intention.

Theoretical Implications

The research sheds light on the literature in determining the effect of customers' attitude and acceptability regarding the use of robots in restaurants on their behavioral intentions. Restaurants are gradually including robots into their operational processes by using them not only as waiters, but also as chefs in the kitchen during the service phase. Stakeholders (service providers and customers) need to act together in order to robotize experiences in food and beverage businesses, which are important parts of the tourism industry (Fusté-Forné, 2021). In the study, it has been concluded that the factor of experiencing robots has an effect on behavioral intention. Restaurants offering robotic services are able to offer different experiences to their customers (Seyitoğlu & Ivanov, 2020). The more customers perceive and experience service robots as useful, the more they tend to visit restaurants where robots are used (Seo & Lee, 2021). The use of service robots in restaurants is largely expressed with the positive experiences of customers (Huang et al., 2021). Different experiences provided to customers increase the attractiveness of businesses.

The opinions of customers on the functional value of robots, namely their advantages, have an impact on their behavioral intentions. In terms of service procurement, it is very important for robots to facilitate and accelerate processes, provide accurate information (Zhu & Chang, 2020), improve cleaning, hygiene and communication opportunities (Zemke et al., 2020) and improve service quality. Such advantages can affect the customer's attitude towards robots and enrich the experience. However, despite the expectations of efficient, effective and quality service by robots, there have been many failures that have negatively affected customers' perceptions and satisfaction levels. For instance, failures in human-robot interaction, the difficulties to create value together, especially the perception and experience of older customers pose some disadvantages (Lu et al., 2020). Thus, the negative situations that robots may cause during service also affect the behavioral intention of customers. Businesses should control such positive and negative situations that can have an impact on customers' behavioral intentions. Creating a control system is crucial for the sustainability of the enterprise.

Another conclusion reached in the study is that social skill does not have a significant effect on behavioral intention. This finding can be interpreted as the participants do not believe that robots have as many social skills as humans do. The impression of customers when they meet and interact with service workers provides some clues about the service they will receive. This situation greatly affects the perceptions and satisfaction levels of customers (Park et al., 2021). Robots used in the service field today are programmed machines. Therefore, since robots do not have human characteristics such as the ability to feel and think, they cannot empathize with customers and help to solve unexpected problems (Fusté-Forné, 2021). Therefore, it can be said that their social skills are not fully developed yet. While service robots perform well in providing functional value, their social interaction skills need to be improved (Huang et al., 2021).

Finally, within the scope of the research, it was determined that the acceptability of robot use had a significant positive effect on behavioral intention. Customers' intention to use robots in restaurants depends on their feelings of trust, their enjoyment of interacting with robots, and their attitudes towards the use of robots (Seyitoğlu, Ivanov, Atsız & Çifçi, 2021). Lee, Lin & Shih (2018) similarly emphasize that the attitude towards the use of robots in restaurants has a positive effect on perceived usefulness and acceptance.

Practical Implications

The innovation of robotic technologies attracts customers to restaurants (Seyitoğlu et al., 2021). In particular, the attractiveness, unforgettable experience, distinctiveness of the ambiance, and food-related features (Seyitoğlu, & Ivanov, 2020) make the use of robots attractive. Robots offer a significant competitive advantage for restaurants. In this sense, businesses can make a sectoral difference by making the right investments. Jain, Liu-Lastres & Wen (2021) state that the use of robots in service processes plays an important role in enriching dining experiences and can enable higher levels of satisfaction. Technologies that restaurants will use in reception, service, kitchen and payment processes can contribute to standardizing services, minimizing errors, creating hygienic conditions and enriching the experience.

Limitations and Future Research Within the scope of the research, the effect of attitude and acceptability towards the use of robots in restaurants on behavioral intention has been examined. Future studies may examine variables that may have an impact on behavioral intention, such as experience innovation, customers' perceptions of prestige, and generational differences. Besides, the study was limited to restaurants. The research can be applied to different areas within the tourism industry such as travel agencies and animation services. Finally, when restaurants implement robots in their operations, they may face the expectation of price reductions (labor cost savings obtained through robotization, etc.) demanded by customers for robotized service (Seyitoğlu et al., 2021). Therefore, such economic expectations of customers can be analyzed.

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RESEARCH ARTICLE

The Use of Retro Venues in Gastronomy Tourism: The Case of Safranbolu

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ABSTRACT

In tourism, an emotional connection is established between tangible and intangible nostalgic elements and the individual, and this affects the visitor experience positively. The aim of this study is to reveal the effects of retro /nostalgic items used in food and beverage establishments operating in Safranbolu and serving gastronomic tourism on the visitor experience along with business promotion and marketing activities. The qualitative research method and the phenomenology research design were employed. Within the scope of the research, 9 food and beverage establishments using nostalgic elements were identified; however, semi-structured interviews were conducted with the 8 business officials. As a result, it was found that retro businesses that use remarkable nostalgic elements in the design of the place also include food and drinks produced by adhering to their original recipes in their menus. It was revealed that the advantages of retro businesses are more than the disadvantages. The establishments have domestic and foreign loyal customers. However, the disadvantages are that they are far from the center, the cost of local products is high, and they have difficulty finding staff.

Keywords: Retro Venues Gastronomy Tourism Safranbolu

Introduction

The use of nostalgic products in marketing matters to consumers and has a significant impact on their preferences in the postmodern consumer culture, where being able to connect with the past is importanted Retro is a concept that has gained popularity across a variety of fields and in hospitality, travel, and dining establishments that provide an unforgettable dining experience (Elshaer, Azazz & Fayyad, 2022, p. 1). Businesses resurrect dated brands using retro marketing to reduce the risk associated with launching a new brand and capitalize on the well-established reputation of the target brand. Businesses in the tourism industry can use nostalgic products like old commercials, black-and-white photos, and music to promote and market their products (Bozkurt & Ünal, 2015, pp. 38–39). Additionally, studies in the literature show that the idea of nostalgia can be connected to foods, drinks, and eating and drinking establishments. According to these studies, people who consume nostalgic food and beverages experience positive emotions, and restaurants that use nostalgic decor have happier customers who are more likely to return (Chen, Yeh & Huan, 2014; Vignolles & Pichon, 2014).

Based on the research on the subject, the aim of the study is to reveal which nostalgic elements are used in the marketing and promotion of food and beverage establishments operating in Safranbolu and how this affects the visitor experience. Since no previous study of this kind was done in Safranbolu, which UNESCO designated as a World Heritage City in 1994, it is anticipated that the research will increase awareness, particularly among businesses that cater to tourists and boost the destination's appeal.

Literatur Review

Perception of Space in Gastronomy Tourism

The element of space is what imparts the environment's character through its distinctive details and qualities, gives the environment identity, and creates and arranges the details (Akkaya, 2020, p.3367). In other words, space is viewed as an architectural

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symbol that combines elements of sight, sound, smell, and touch to create an impression of the surrounding environment. Additional factors that influence the space include texture, lighting, furniture, shape, and scale (Akkaya, Bayrakcı & Özcan, 2018, pp. 63-64).

Space perception, which is defined as people feeling at home in a place a, and grasping the essence or spirit of a place, is a general concept that defines the multidimensional relationship of people with space. The concept of sense of place includes concepts such as "feeling at home," "attachment to place," "dependence on place," "place identity," and "regionalism" (Yıldız, 2015, p.9). According to Antonsich (2010, p. 646), place belonging is related to the feeling of "feeling at home." Belonging means that the individual finds a place that makes him/her feel "at home." The concept of place attachment is defined as the emotional bond or relationship between people and certain places (İşçi, Güzel, & Ataberk, 2018, p. 585). In addition to nurturing the individual's sense of belonging, place attachment makes the individual a part of the settlement to which they belong (Güleç, 2017, p. 21). Place attachment is defined as the perceived strength of the relationship between an individual and a certain place (İşçi, Güzel, & Ataberk, 2018, p. 586). Place identity is an organic process that involves the continuity and development of the bond that the individual establishes with the place (Arabulan, 2008, p. 4). Place identity is also seen as a means for individuals to represent themselves in that place with their identities and for social groups sharing a common space to create a social identity. For this reason, place identity is an expression of individuals' lifestyles and personal identities and a reflection of social identity (Akıncı, 2020, p.19).

The appreciation of local culture and the consumption of genuine foods in their native regions are expressed through the gastronomic perception of place. It involves staying true to the gastronomic product's essence or creating a suitable environment and presenting the product to the tourist experience in its own setting. In order to help tourists form a sense of place, it is beneficial to authentically introduce them to the local cuisine as it is experienced by residents of that area. In this way, tourists can establish a connection between products and places (Nebioğlu, 2016, pp. 31-32). In general, tourism is an activity based on the consumption of places. The historical, cultural values and visual elements of the place are very important for visitors (Yıldız, 2015, p.9).

The various, interesting, delectable, and refined products that are consumed in the act of eating and drinking, which appeals to the senses, play a crucial role in achieving pleasant feelings, lasting impressions, and memorable experiences. Tangible and intangible elements that create a sense of place in the individual also play a role in the formation of deep and strong memories (Kurgun & Özşeker, 2016,p. 34; Skuras, Dimara & Petrou, 2006, p.771).

Retro/Nostalgia Concept and Gastronomy Tourism

The word nostalgia comes from the Greek words "nostos," which means "homecoming," and "ache," which means "suffering." Because of this, the word was initially used to refer to the yearning for home or home caused by distance. Studies have shown that nostalgia, which has long existed in human history, serves existential purposes and is a collection of feelings and experiences that people use to manage their fears. (Vignolles & Pichon, 2014, p. 227). The nostalgic consumption tendency, which is thought to distract individuals from negative emotions such as anxiety, loneliness, depression, and insecurity in daily life, attracts the attention of marketers, and it is seen that the production of products that can evoke nostalgic feelings in people is given importance. In terms of tourism, nostalgia is a motivational factor that pushes people to travel (Shi, Bettache, Zhang & Xue 2021, p.1).

Nostalgia in tourism is directly related to the concept of "experiential value." This is defined as a subjective evaluation of the benefit obtained by consuming a product, service, or aesthetic. Tangible and intangible elements create an emotional bond between the place and the tourist. This bond, also known as "topophilia," develops as a result of the significance people place on particular locations and spaces, as well as how they interpret the given circumstance. In this sense, it is possible to claim that nostalgia, especially in the case of cultural tourists, causes spatial attachment. People who engage in cultural tourism and feel nostalgic are looking for access to historical artifacts (such as a historical building or an inscription) (Christou, Farmaki & Evangelou, 2018,p. 44). The Antique Festival organized in Beyoğlu or nostalgia-themed events organized in hotels with the theme of the 1970s and 1980s are examples of the use of retro marketing in tourism (Tayara & Özel, 2019, p. 103). In addition to its use as a mode of transportation, the Orient Express, which has turned into an alternative type of tourism, is thought to contain nostalgic elements and offer an unforgettable travel experience for individuals with high levels of nostalgic tendencies (Güney & Kızılırmak, 2021, pp. 1711-1712).

Nostalgia consists of local cuisine, gastronomic experience, ambiance, socialization, personal identity, and cultural identity dimensions in gastronomy tourism, where tourists primarily expect a unique dining and drinking experience. When these dimensions are evaluated within the scope of the study, it is concluded that ambiance, which can be expressed through concepts such as environment, atmosphere, decoration, and aesthetic design, can influence tourists' gastronomic experiences; and tourists who form an emotional connection with the environment may have a high propensity to return (Mandal, Gunasekar, Dixit & Das, 2022, p. 298). In a study conducted by Albayrak (2014) to determine the factors influencing restaurant preferences in Istanbul, it was determined that restaurant characteristics (seating arrangement, atmosphere, music, etc.) are the most influential. Başaran, Sünnetçioğlu, and Yıldırım (2019) investigated the effect of nostalgia on the restaurant experience and concluded that the dining environment has a substantial impact on consumer preferences and visits.

Retro Marketing

Businesses are trying to establish a strong emotional connection with their customers by including old brands alongside new brands in today's competitive environment. Nostalgia, which is used as a powerful marketing tool, encourages consumers to spend money because it reminds them of the past and revives memories. It uses themes and products belonging to the past in marketing to create unique emotions in consumers (Holotová, Kádeková& Košičıarová, 2020, p.150). However, it is stated that different age groups have different attitudes toward nostalgic products and brands. Oğuz (2017) examined the effect of retro marketing on brand loyalty and revealed that generation X's perception of retro marketing and brand loyalty level is higher than generation Y and Z's. Similarly, Sarıçiçek et al. (2017) found that consumers' perceptions of nostalgia-based advertisements and retro brands are more positive as their age increases.

Retro marketing inspired by nostalgia is explained in three different ways: repro, retro, and repro-retro. Repro refers to the reproduction of products or services that were fashionable and admired in the past, while retro is the combination of old and new. The concept known as repro-retro or neonostalgia is a product based on nostalgia and developed to revive nostalgic feelings (Yetim, Hastürk & Argan, 2020, p. 782). Brown, Kozinets, and Sherry (2003, p. 22) explain retro marketing based on four themes. This is recognized as the 4A's of retro marketing: Allegory (symbols and stories), Arcadis (the past associated with the present), Aura (being unique), and Antinomy (the desire to return to the past).

In marketing, nostalgia is used to establish the perception of a product's credibility. The consumer is prompted to form an emotional bond with the product. Retro marketing, a postmodernist marketing strategy, expects the individual to simultaneously feel and live the past and the future. This marketing strategy enables the re-presentation of old and forgotten brands to modern consumers through various promotional activities such as advertising and campaigns, thereby creating new job opportunities in the marketing industry (Bilge & Aktaş, 2019, p. 4). In retro marketing, products should be offered to consumers in nostalgic packaging. If a service rather than a product is offered to the consumer, care should be taken to use nostalgic equipment during the presentation. Retro marketing frequently employs wooden products, paper bags as an alternative to plastic bags, and music (Başaran, Sünnetçioğlu & Yıldırım, 2019, p. 257).

In the tourism industry, nostalgic sites in particular are considered places that are an escape to the longed-for past for the tourist and provide a unique travel experience. The vast majority of nostalgic tourists aim to connect with the past, to travel to the places where they spent their childhood or teenage years (Aysen, Çetinkaya & Hassan, 2017, p. 698-699). As nostalgic items, the region's unique food, festivities, and the features of food and beverage establishments can have an impact on consumer behavior, and they can also convert the simple act of eating and drinking into a desirable cultural object (Brito & Vale, 2018, p. 611).

Methodology

The qualitative research method was employed because the research situations were designed to elucidate the knowledge, opinions, and experiences of individuals. The population of this study, which adhered to the phenomenology research design, consists of Safranbolu-based retro food and beverage businesses employing nostalgic marketing techniques. In the district center of Safranbolu, nine businesses operating in this way can be found. Even though the entire population was surveyed, one company was excluded from the study because the interview with a business official was deemed insufficient. In accordance with the research's objective, the snowball sampling technique was utilized.

The qualitative research employed an interview form technique. The face-to-face interviews conducted between June 13 and June 21 lasted an average of 15 to 20 minutes. The interview form consisted of fourteen questions based on the literature (Appendix 1). Qualitative data requires the documentation of actual events, the recording of participant statements, the observation of specific behaviors, the review of documents, or the examination of visual images (Neuman, 2017, p. 233). Consequently, an inductive method was utilized to analyze the research data. The audio recordings obtained from the interviews were converted to written text (word documents), and files (P1, P2, etc.) were created using the participant-assigned letters and numbers. In order to conduct a thematic analysis of the study, the coding process for data analysis was initiated. Themes explain the primary findings of an investigation and are indicative of codes. These themes correspond to the headings in a qualitative report's findings section (Creswell, 2019,p. 155). The research's thematic analysis is presented in Table 1.

A computer program was used to store the data and provide access to the obtained codes during the data analysis process. MAXODA was the software used for the research. The basic features of Maxoda include document entry, encoded personal

Table 1. *Main and Sub-themes of the Study*

Main Themes	**Sub-Themes**
General Information About the Business	Business Establishment Story and Idea Purpose of Establishment Business Design The Most Remarkable Aspect of the Business
Retro/Nostalgia Concept	Definition of Retro Definition of Nostalgia Advantages and Disadvantages of the Retro Approach The Future of the Retro Idea
Demand for Business	Age Groups Requesting the Business Reason for Retro Business Preference Loyal Customer
Marketing Activities of the Business	Introduction of the Business Product/Business Logos

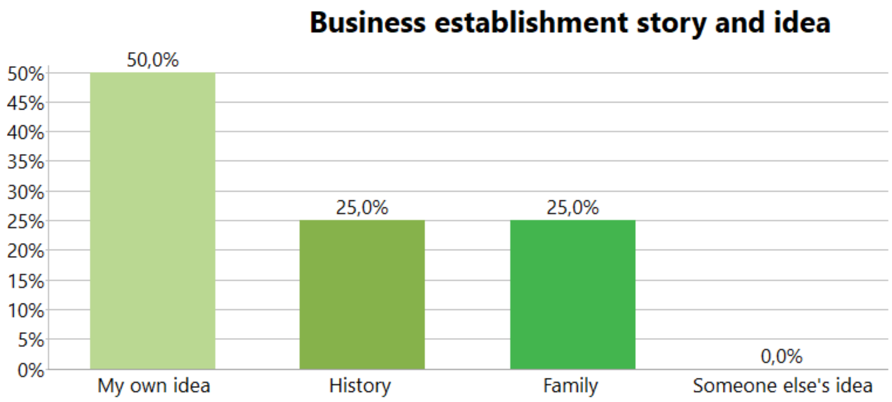

Figure 1. Percentage Graphic of the subthemes of the establishment story and idea of the business related to the main theme of general information about the business.

attributes, research, map creation, and license exchange (Creswell, 2019, p. 190). In this instance, the research was conducted using the Maxoda program to visually support the themes and codes.

Findings

Within the scope of the research, interviews were conducted with 8 retro/nostalgic business operators in the Safranbolu district center. While 6 of these participants were male and 2 were female, the age range was 24-52.

Theme 1. General Information about the Business

The research reveals that the establishment of all businesses was based on the participants' own ideas. In addition, the participants stated that they were inspired by the history of the places and their family history when establishing retro businesses (Figure 1). Participants P1, P4, and P6, expressed their views on the subject as follows:

P1: *"Our business has been carrying on the family tradition of the coffee business since 1961."*
P4: *"I was not influenced by anyone in the establishment of the business. I was very uneasy about the dilapidated state of such an important historical place for my ancestors. Nowadays, I am more peaceful because its use as a nostalgic sightseeing area reflects the past to the*

present."
P6: *"We had very old things from our grandmothers and grandfathers, and even their grandmothers, and we collected them and made a collection. Then we wanted to utilize them; that's how our story started."*

In the research, 7 of the retro businesses stated that they did not receive any help and support from anyone in terms of business design, while 1 business owner (P4) stated that he received support from an interior designer in Safranbolu. Participants K4 and K8 expressed their views on the subject as follows.

P4:*"We received help from an interior designer in Safranbolu in the design of the business."*
P8:*"I never received any help. I am a mechanical engineer. I drew it myself, and I built it myself. I have built many shops in this way with the build-operate-transfer model in other cities. I made designs that no one else has. I am good at business design."*

It was stated that the establishment purposes of retro businesses are to provide employment for family members, to earn money, to continue the family business, to be the boss of one's own business, to evaluate collections, and to safeguard the culture that is on the verge of extinction and to transmit it to future generations.

The most important characteristic that distinguishes the retro businesses in Safranbolu from other businesses is that the local foods are prepared using the original recipes, the product variety is extensive, the businesses are large, spacious, and entwined with nature, and the architecture of the businesses is remarkable due to their historical background (Figure 2).

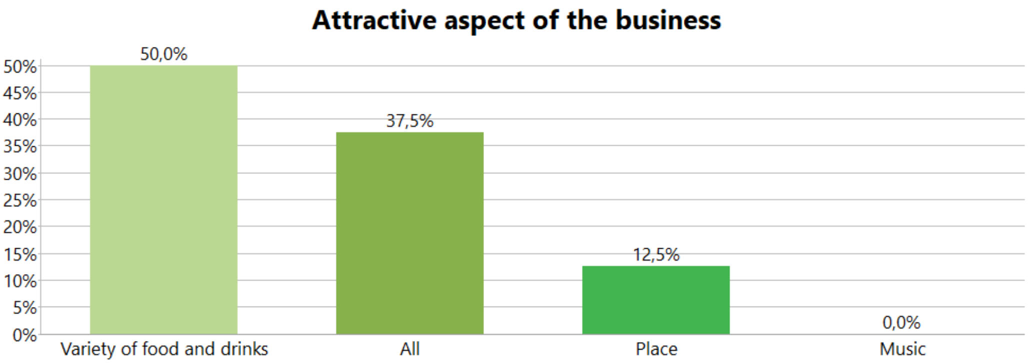

Figure 2. percentage chart of the subthemes of the attractive aspect of the business related to the main theme of general information about the business.

Participants P1, P2 and P6, expressed their views on the subject as follows:

P1: *"We are a business that has proven ourselves. This is actually a coffee spot, so it is a frequented place. We have live music; we also play music from the 70s and 80s. Apart from roasted coffee and salep, we make herbal teas in copper cauldrons. In particular, we offer teas such as linden, rosehip, and chamomile with honey."*
P2:*"What is different from other businesses is that we are unique. We have a wide variety of products; that is, we offer different coffee flavors. In our business, we have coffee types such as mountain strawberry, orange, saffron, Malatya apricot, chickpea coffee, Ottoman coffee, and hilve cilveli coffee."*
P6:*"Our sodas attract a lot of attention; these sodas are Beyoğlu, Elvan, Datça, Gaark, Çamlıca, Bağlar sodas, as well as chickpea powder, rooster sugar, Turkish coffee, kiren sherbet, ravioli, peruhi, Sinop ravioli, chicken and meatball dishes, cakes and cookies. But we make these dishes with the recipes of our grandmothers and other elders."*

The food and beverages on the menus of retro establishments are given in Table 2.

Theme 2. Retro/Nostalgia Concept

It was determined that the concept of retro was known only by 1 operator. On the other hand, it was determined that the concept of nostalgia was dominated by all operators (Figure 3).

Participants were questioned regarding the advantages and disadvantages of the retro approach for businesses. As a result, the advantages of the retro approach for businesses were determined to be longing for the past, dealing with conscious and aware customers, emphasizing local dishes, and making Safranbolu appealing and arousing curiosity. It has been determined that businesses have very few disadvantages. The disadvantages of these businesses were cited as location-distance from the city center (although some businesses view this as an advantage), increased costs due to the presence of locally sourced foods on the

Table 2. *Food and Beverages in the Menus of the Businesses*

	Foods	**Beverages**
Local	Tandoor kebab, Bükme (pita bread), Peruhi, Manti varieties, Stuffed onions, Stuffed leaves with meat, Flatbread, Water pastry, Yayım (noodles), Sini pastry, Höşmerim, Zerde, Fruit jams	Vineyard soda, Linden, Chamomile and Rosehip teas, Kiren (cranberry) sherbet, Hibiscus sherbet, Saffron sherbets, Lemonade, Plum juice, Blackberry juice,
Non-Local	Creamy chicken, meatballs, and grilled meat varieties, Sinop ravioli, Sigara böreği, Pişi, Spread breakfast types, Cake, and Cookie varieties	Roasted Turkish coffee, Ottoman coffee and other types of coffee, types of soda (Sevda, Beyoğlu, Gaark, Datça, Çamlıca), Sahlep,

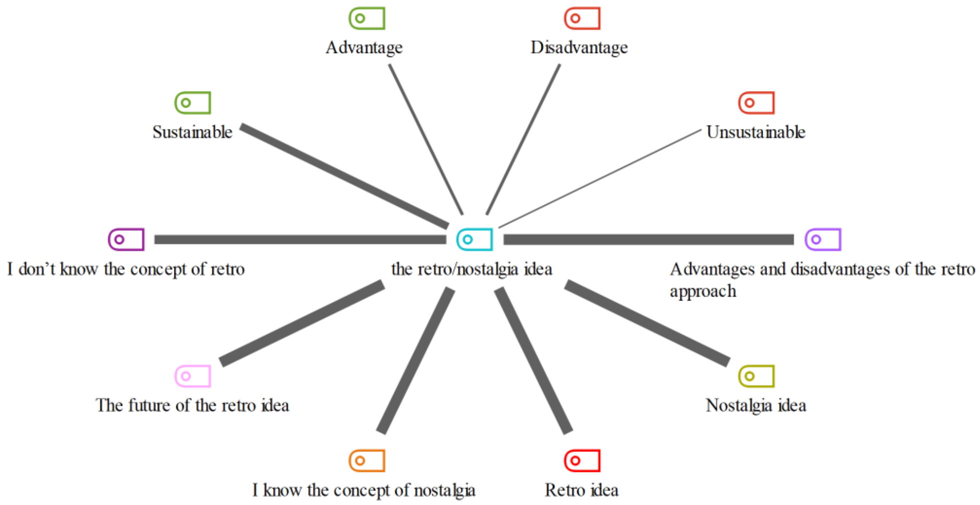

Figure 3. Code-subcode model for the concept of retro/nostalgia.

menus, and difficulties in finding qualified employees. According to the findings of the study, all retro businesses in Safranbolu will continue to operate in the foreseeable future.

Theme 3. Demand for Retro Businesses

In the study, it was determined that all age groups, with 57.1%, preferred retro restaurants the most, followed by those over 30 with 28.6% and those under 30 with 14.4%. It was stated that the primary reasons for preferring these establishments are nostalgia (37.5%), the attractiveness of the physical space (25%), the food and beverages consumed there (25%), and enjoyment (Figure 4). Participants P2, P3, and P7 expressed their views on the subject as follows.

P2:*"We are unique in Turkey; even in the world, there is no coffee museum. We make coffees that no one knows and has never heard of. We serve those who want to experience a different coffee. As Cinci Inn, we do serve not only coffee but also local meat dishes such as kuyu kebab and lamb tandoori in traditional stone ovens. We also serve bending, one of Safranbolu's most important culinary cultures, with kiren (cranberry) syrup."*
P3:*"The reason for the preference is the longing for the past. Because all the furniture and equipment you use in my business are old and nostalgic. Even my coffee cups..."*
P7:*"People are tired of the same things; they are bored of being in closed environments these days. They say they need old times and peace."*

In the research conducted, it was determined that retro businesses have local and loyal foreign customers. These customers are mostly university professors, teachers, university students, health professionals, housewives, and retirees.

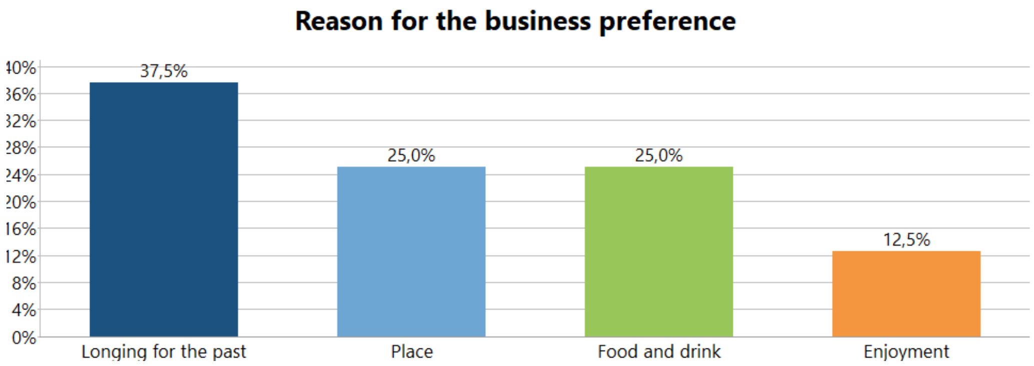

Figure 4. Percentage chart of the attractive aspect of the business theme and subthemes.

Theme 4. Marketing Activities of Businesses

It was determined that the majority of retro businesses (75.0%) actively use social media, print media, and visual media to promote themselves. It was also stated that there are also businesses that promote themselves only through social media (25.0%). Historical and cultural values and modern designs are the elements that businesses take into consideration when determining their product/logos.

In line with the qualitative data obtained, 1,545 word groups emerged from a total of 2,600 words. The word cloud consisting of the 75 most frequently repeated words shown in Figure 5 was visualized. The most repeated word in this word cloud is "business," with 29 repetitions. The second most repeated words are "retro" and "organization," with 21 repetitions. The words "demand," "coffee," and "attention" were found to be the third most repeated words with 14 repetitions each. Other frequently repeated words are "social" (8), "disadvantage," "advantage," "competition," "differentiating," "logo," "old," and "design" (7). The most frequently repeated words and the most important concepts in the word cloud are retro businesses.

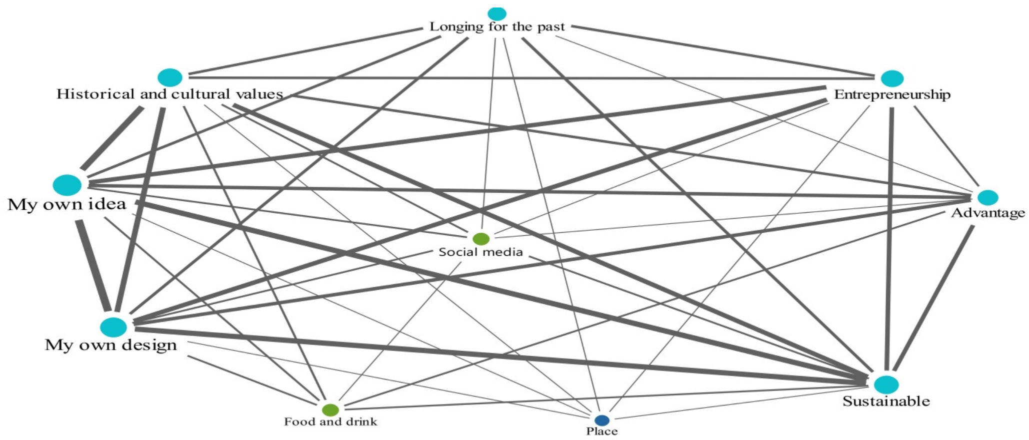

Figure 5. Code map.

Analyzing the code map in Figure 6 reveals that the most related themes are general information about the business, the retro/nostalgia concept, and the marketing activities of the business. The relationship between the sub-codes of my own design, my own idea, and entrepreneurship, in relation to the code of the idea and the story of the establishment of the businesses, is observed to be stronger. It was also determined that the relationship between the sub-codes of the retro/nostalgia concept, namely advantage, and sustainability, and my own design and my own idea is intense; and the relationship between the sub-code of my own design and the codes of historical and cultural values is also intense.

Based on the code map described above and the interviews we conducted, it can be said that the establishment of the businesses started with an entrepreneurial idea, and relatedly, no expert support was received for the design of the business. Historical and cultural values are emphasized in the promotion of the business. The retro/nostalgia approach adopted provides advantages to the business, and this approach will create demand for the businesses in the future.

Conclusions

Retro businesses, which aim to preserve the historical and cultural characteristics of their locations and the family business tradition, were founded without professional assistance. The establishment of these businesses is motivated by the desire to provide employment for family members, economic gain, entrepreneurship, the utilization of old object collections, the preservation of culture on the verge of extinction, and the transmission of this knowledge to future generations. Businesses promote themselves through social media, print media, and visual media in order to continue operations.

According to the research, customers of all ages prefer businesses with a retro aesthetic. It has been determined that retro businesses enjoy both domestic and international customer loyalty. The majority of these customers are professors, teachers, students, health professionals, housewives, and retirees. These businesses are preferred primarily due to a yearning for the past, the attractiveness of the physical space, and the food and beverages provided. The most notable characteristics of the retro establishments in Safranbolu are that local foods and beverages are prepared according to their original recipes, that there is a wide variety of products, and that the establishments are distinguished by their architecture and history. However, the menus of retro establishments mostly include local dishes such as tandoor kebab, bükme (pita bread), peruhi and other types of ravioli, stuffed onions, stuffed leaves with meat, flatbread, water pastry, yayım (noodles), sini pastry, and desserts such as höşmerim and zerde. Bağlar soda, rosehip teas, kiren (cranberry) sherbet, hibiscus sherbet, saffron sherbets, plum juice, and black mulberry juice are some of the local drinks on the menus of retro businesses. The inclusion of more local food and beverages on the menus of retro businesses facilitates the transfer of intangible cultural heritage, serves as a model for businesses in the establishment phase, and creates employment opportunities for local women.

The concept of nostalgia is also more well-known than the concept of retro in Safranbolu businesses. According to business owners who agree that the concept of retro/nostalgia will become more popular in the future, the most significant benefits of this concept are that it brings to mind the past, that it involves more conscious and aware customers, that it emphasizes local dishes, and that it makes Safranbolu more appealing. These results are comparable to those of previous research (Başaran, Sünnetçioğlu &Yıldırım, 2019; Chen, Yeh & Huan, 2014; Mandal, Gunasekar, Dixit & Das, 2022). The interviews revealed that the disadvantages of retro businesses are relatively few and include location-distance from the center (which some businesses view as an advantage), the high cost of local products, and the difficulty in locating personnel.

Retro/nostalgic places can create advantages not only for food and beverage businesses serving gastronomy tourism but also for other tourism businesses; they can increase the competitiveness of businesses by appealing to a diverse customer base and indirectly contribute to the attractiveness of destinations. The most significant limitation is that the research was limited to Safranbolu-based businesses. It is believed that a future study determining the advantages and disadvantages that the use of retro/nostalgic elements in accommodation businesses can provide to businesses and customers could be significant in terms of providing ideas to the tourism industry. Similarly, research can reveal the perspectives of various generations regarding the use of retro/nostalgic elements in tourism businesses.

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Appendix 1: Interview Questions

1. Can you tell us about the story of the establishment of the business?
2. What is the purpose of the establishment?
3. How would you define the concept of retro?
4. How would you define the concept of nostalgia?
5. Which age group has the highest demand for your business?
6. What do you think about the reasons why this type of business is preferred today?
7. Did you get help from experts (architects, etc.) in business design?
8. Do you think the retro idea will create demand in the future?
9. How do you promote your business?
10. What is the most striking aspect/feature of your business? What are the aspects that differentiate it from other businesses?
11. What are the advantages and disadvantages of the retro approach for the business (cost, human resources, competitiveness, etc.)?
12. What do you pay attention to when determining product/business logos?
13. Who and why were you influenced by the idea of business establishment?
14. Do you have loyal customers?

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RESEARCH ARTICLE

Ecotourism Perception and Engagement Classification Among Residents of a Nature City in the Philippines

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ABSTRACT
It is very important to study the behavior of people who have gone to and continue to visit nature-based attractions to learn about their appreciation to nature and the actions they take to help out in protecting them, given that tourism has been linked to environmental degradation as a sector that is prone to overconsumption, resulting in significant waste and pollution. Guided by a descriptive research design and employing a quantitative research approach, the researchers determined the perception and level of engagement of 383 people on ecotourism activities adapted from the Shallow-Deep Model of Ecotourism by Acott et al (1998) used in the Classification Framework on Ecotourism by Alampay and Libosada (2005), resulting in determining whether they are passive or active eco-tourists engaging in shallow or deep ecotourism. Findings serve as an indicator of the position of Filipinos as advocates for ecotourism since the respondents, of all people, are expected to have a strong positive perspective and deep engagement on ecotourism, being from a place that is known for its natural resources, as well as being used as a guide for ecotourism managers and educators in coming up with an effective environmental education program.

Keywords: Ecotourism, Eco-tourists' behavior, Environmental Practice, Filipinos

Introduction

The COVID-19 pandemic is a problem that all people have taken seriously as it has severely affected their lives, but if there is something that has been a challenge for several decades, it would be the achievement of environmental conservation and sustainability. Studies suggest that environmental deterioration has been a problem that the planet has been facing for so many years, but still humans tend to neglect it, and what is worse, is the fact that it has led to many serious phenomena that have made life difficult, such as Climate Change. Climate Change is the changes in earth's dynamics, particularly the temperature. The American Association for the Advancement in Science (2009) explains that observations from throughout the world show that climate change is really happening, and rigorous scientific study shows that greenhouse gases released by human activities are the major cause. Numerous human activities have been observed to be the reasons why it continuously occurs; deforestation, pollution, and tourism among others. Tropical forest trees, like other green plants, absorb CO2 from the atmosphere and emit oxygen during photosynthesis. They also carry out the opposite process, known as respiration, but when forests are growing, photosynthesis exceeds respiration, and the excess carbon is stored in tree trunks, roots, and soil; thus, when forests are cut down, much of that stored carbon is released back into the atmosphere as carbon dioxide, resulting in global warming, one of the many facets of climate change (Union of Concerned Scientists, 2021). Meanwhile, according to the United States Environmental Protection Agency (2022), pollution released into the atmosphere can cause climate change; these pollutants, which include greenhouse gases, are commonly referred to as climate forcers. The presence of ozone in the atmosphere heats the temperature, but different components of particulate matter can either warm or chill the climate. As a result, the more contaminated the air, the greater its impact on climate change. Baloch et al (2022) added that a significant percentage of individuals see socioeconomic benefits such as job and business opportunities, and infrastructural development from tourism development, and growth. However, the natural and environmental capital is seen to be steadily deteriorating. Along with the social environment, social vulnerability is reported as a result of overuse of land, intrusion from other cultures, and pollution in air and water as a result of traffic congestion, accumulation of solid waste, sewage, and carbon emissions, which are significantly higher when people move from one place to another.

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It is clear that humans are the main perpetrators. Therefore, humans are the key to stopping environmental degradation. But to do this, a series of activities must be done; tourism cannot be stopped, obviously provided that it has positive economic benefits, however, the observation of ecotourism that promotes responsible tourism is a must to ensure minimal negative impacts of tourism to the environment, as well as culture. It is also important that people possess a positive environmental attitude and a high level of environmental engagement to ensure the once enforced, ecotourism will really be embraced and practiced by people. Makian and Hanifezadeh (2021) argued that environmental impacts of tourism remain a challenge due to the poor education among host communities, as well as the low level of awareness among tourists on ecotourism issues. Therefore, with people having a lack of knowledge towards it, possessing negative environmental attitudes, and the low level of engagement, the achievement of the purpose of ecotourism cannot be guaranteed, hence, motivating the researchers to conduct this study. Beginning with Filipinos, the researchers have attempted to classify people based on their ecotourism perception and engagement, guided by the classification framework by Alampay and Libosada (2005), which was designed based on the Shallow-Deep Model of Ecotourism by Acott et al (1998). The local community of Los Baños, Laguna was selected as the primary locale as this municipality is known as the Special Science and Nature City of the Philippines, making their behavior critical in this area; if these people who are living in a town that is perceived to embrace environmental conservation and sustainability, have poor attitude and low engagement, then, what more can we expect from those from other places that do not promote ecotourism the way the said town should be promoting it.

The researchers have attempted to accomplish the following specific research objectives:

1. To determine the perception and engagement levels of the respondents towards ecotourism activities based on the Shallow-Deep Model of Ecotourism by Acott et al (1998).

2. To classify the respondents based on their ecotourism activities perception and engagement using the Classification Framework on Ecotourism by Alampay and Libosada (2005)

Theoretical Framework

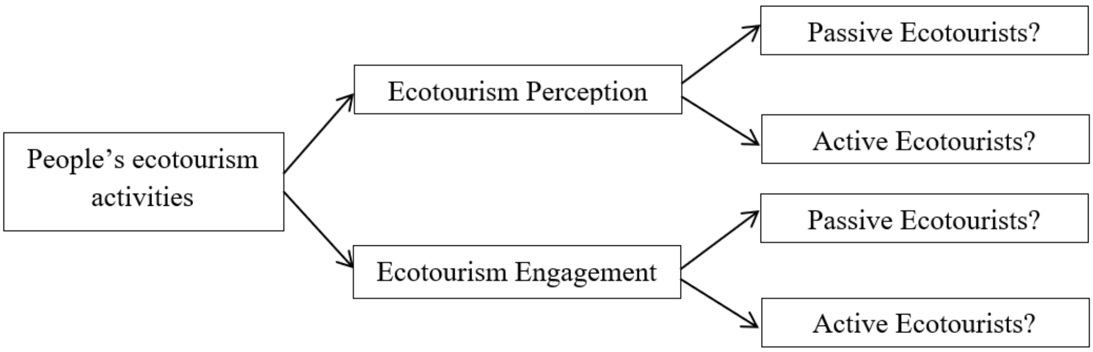

Figure 1. Researchers' made framework inspired by the classification framework on ecotourism by Alampay and Libosada (2005)

Using this Classification Framework, Ecotourists could be classified as either passive Eco-tourists or active Eco-tourists based on their ecotourism perception and engagement.

Literature Review

According to Upadhaya et al (2022), more than 70% of Nepalese people are interested in ecotourism activities, and their interests are influenced by their age, academic degree, and employment. Local residents in the research region viewed ecotourism as having major benefits on infrastructure development and knowledge base expansion. Moreover, the socioeconomic and demographic features of local people impacted their perceptions of the effects of ecotourism. Meanwhile, in a research involving local communities surrounding Lake Natron in Tanzania, Abeli (2017) discovered that, while the majority of local inhabitants regard Lake Natron as significant in boosting their wellbeing, many do not have the same favorable attitude toward the area's long-term protection. Ecotourism as a conservation and development strategy at Lake Natron which has not assisted local communities in reducing resource exploitation and has failed to play a major role in ensuring local people's livelihoods. While the number of visitors visiting and staying around Lake Natron, particularly in the Engaresero village, is growing, the community has little influence over current tourism companies and benefits little from the cash generated by these businesses. Moreover, as compared to other economic activities such as livestock husbandry, the majority of local inhabitants in the communities surrounding Lake Natron either do not create revenue or earn minimal income from other ecotourism related activities, thus, this is recorded as one of the probable reasons for the negative environmental attitude. Lower Kinabatangan in Sabah is no exception; according to Chan et al (2021), local residents realized that the area has significant potential to be developed as a sustainable ecotourism destination and to produce economic gain. Despite this, there is limited participation of local communities in ecotourism development and responsible tourism practices; the socioeconomic demographic of the local community shows that only 42.4% of respondents have work related to tourism activities, with a lack of capital and knowledge in tourism activities being identified as the main barriers to local participation in ecotourism development. These data were consistent with the findings of Gumede and Nzama (2020), who discovered that local communities adjacent to the Oribi Gorge Nature Reserve in KwaZulu-Natal, South Africa, had not been actively participating in ecotourism development processes, particularly those undertaken in rural settings, due to a variety of socioeconomic factors, including a lack of necessary skills, thus, people must have the knowledge and skills towards ecotourism first, before they could develop a positive attitude and high level of engagement. Students at a Chilean institution, on the other hand, have a favorable attitude toward the environment, particularly in terms of recycling, water use, and energy consumption (Heyl et al, 2013). Overall, the students have a positive attitude toward the environment since they care about nature and are aware of the causes of its degradation; however, this is not reflected in their behaviors, particularly the frequency with which they participate in conservation-related activities and events. In the case of the municipality of Sareyn, Iran, it was found that during peak season, inadequate infrastructure and inadequate management can result in unfavorable perceptions regarding the environmental effects of tourism. This perception includes concerns about overcrowding and littering, indicating awareness towards environmental risks associated with tourism.

Abun and Racoma (2017) researched people's environmental attitudes and behaviors in Ilocos Sur, Philippines, with a focus on Catholic school employees. They discovered that these employees believe that nature is only important when it helps humans meet their survival needs, and that they are confused if humans have power over nature. Moreover, they lack comprehension of how to respect and use nature, as well as knowledge of environmental issues and potential hazards, resulting in an unknown level of personal conservation intention and likelihood of action.

Clearly, there is an overwhelming number of studies that has confirmed environmental attitude and engagement of people from various parts of the world. Some studies say people have a positive environmental attitude, while some revealed a negative perception, however, if there is information that is consistent in all studies cited, it is the poor level of environmental engagement among people due to their lack of knowledge and skills towards environmental/ecotourism practices. Additionally, the researchers also noticed the lack of studies that has involved places that are critical in the area of ecotourism, particularly in the Philippines, as well as attempts to classify people based on their ecotourism perception and engagement using suggested models aside from determining their level of attitude and engagement, hence, research gaps that this study has attempted to fill.

Methodology

Following a descriptive research design and utilizing a quantitative research approach, the researchers were able to gather, analyze, and interpret data for this study. Through number scales, data were measured and interpreted. The researchers selected a local community in the province of Laguna, Philippines, and it was chosen to be the subject for this study since it is known to be the Special Science and Nature of the Philippines, indicating that this is one of the many places in the country that embrace environmental-friendly practices. With this, inhabitants of this place are expected to have a strong positive perspective and deep engagement on ecotourism for said reasons, hence, the results of this study could be used as an indicator of the attitude of Filipinos as a whole, because if people who live in a place that promotes ecotourism display poor practices, then what more can we expect in the case of those who live in places that are highly urbanized. Out of the total population, which is 115,353 based on the 2020 Census of the Philippines Statistics Authority, the sample size was computed with a 5% margin of error and a 95% confidence level, resulting in 383 needed respondents for this research. To qualify as respondents, people must be at least 18 years old during the this study, and must have visited an ecotourism/cultural-heritage tourism destination at least once in the last five years.

The research instrument used was created based on the study of Acott et al (1998), and Alampay and Libosada (2005), where the questions that were used to categorize people based on their ecotourism perception and engagements were inspired from. It is a survey composed of 11 questions, 3 of which were asked to determine the respondents' demographic profile, 4 were designed to learn about their ecotourism activities perception, and the other 4 were to know their engagement practices. To measure the people's perception and engagement, a four-point scale was used whereas; 1-Strongly Agree, 2-Agree, 3-Disagree, & 4-Strongly Disagree. It was done using Google Docs, distributed through direct messaging in a social media platform, and recorded a 100% response rate from all people that had been asked.

Frequency and percentage were computed to classify respondents in terms of their demographic profile, while mean scores were computed to measure their perception and engagement.

Table 1.*Likert Scale Interpretations on Respondents' Perception and Engagement on Ecotourism Activities*

Survey Responses	Perception and Engagement Interpretations	Ecotourism Activities Interpretation	Scale
Strongly Disagree	Active Eco-Tourists	Deep Ecotourism	3.26-4.00
Disagree	Somehow Active Eco-Tourists	Somehow Deep Ecotourism	2.51-3.25
Agree	Somehow Passive Eco-Tourists	Somehow Shallow Ecotourism	1.76-2.50
Strongly Agree	Passive Eco-Tourists	Shallow Ecotourism	1-1.75

Results

Table 2.*Respondents' Ecotourism Activities Perception*

Statements	Mean	Descriptive Meaning
I believe that witnessing cultural traditions being followed, watching cultural performances such as dance and music, and seeing artifacts displayed are enough for me to learn about and experience the culture of a community	1.70	Strongly Agree
I believe that there is nothing wrong in limiting oneself to preferring standardized services and consuming food and drinks that have foreign influence when travelling to ecotourism destinations.	1.85	Agree
I think that the only way for natural preservation (preventing wild disturbance and endangerment, and avoiding incidents of deforestation and all types of pollution, among others) to succeed, is to ban humans from access to such natural areas/resources.	2.22	Agree
I believe that natural resources only exist and are only valuable because humans need it. Nature was made for humans to use, and this is also the reason why humans must take good care of it.	1.90	Agree

Table 2 shows that respondents strongly believe that witnessing cultural traditions being performed, watching cultural performances/shows, and seeing artifacts displayed are enough to experience the culture of a community. While they believe that seeking standardized services and consuming food with foreign influence is totally fine when visiting ecotourism destinations, as well as with the statement that banning humans is the only way towards nature conservation, and with the statement explaining that natural resources only exist for the benefit of humans. This is synonymous with the result of the study by Abun and Racoma (2017) involving Employees of Catholic Schools in Ilocos Sur, Philippines, which determined their belief towards nature as something that only exists for humans, hence, without its benefits to humans, it won't be valuable at all.

Table 3.*Respondents' Ecotourism Activities Engagement*

Statements	Mean	Descriptive Meaning
In my previous experiences visiting nature-based and cultural-heritage destinations, I tend to settle with just observing local people perform traditions, watching cultural shows, and looking at artifacts displayed.	1.76	Agree
When I go to nature-based and cultural-heritage destinations, I tend to stay in modern hotels and eat in restaurants that follow foreign-influenced service standards, and serve foreign cuisines.	2.48	Agree
When I go to nature-based and cultural-heritage attractions, I tend to distance myself from places or things that could be fragile instead of learning how to handle them properly (e.g. not getting close to wildlife/animals, not talking to indigenous people, not getting involved in environmental practices, etc)	2.28	Agree
In my previous experiences visiting nature-based and cultural-heritage destinations, I tend to show appreciation only to natural resources that have benefits to me as a human. I do not engage myself in things in nature that I think aren't connected to my existence as a human being.	2.52	Disagree

Table 3 presents that respondents tend to settle with just observing local people performing traditions, watching cultural shows, and looking at artifacts displayed, whenever they visit ecotourism destinations. They also stay in modern hotels and eat in restaurants that follow foreign-influenced service standards, and serve foreign cuisines. Moreover, they choose to distance themselves from places or things that could be fragile instead of learning how to handle them properly, so they could be sure that their actions won't result in any negative repercussions, however, one positive practice that we determined is done by the respondents based on their response to the survey, is that they do not just focus themselves on learning about how beneficial natural resources are to humans, as they also try to learn about how each resource is beneficial to each other. This result is a little bit inconsistent with their perception, provided that they perceive nature as something that only exists for the use of humans, but when they visit ecotourism destinations, they tend to put their attention on appreciating nature more than on its benefits to humans, but also how it helps in other things, like for example, contributing in the survival of other species.

Table 4. *Respondents' Classification Based on Their Ecotourism Activities Perception and Engagement When Grouped According to Age*

Age Group	Ecotourism Activities Perception	Interpretation	Ecotourism Activities Engagement	Interpretation
18-27	1.92	Somehow Passive Eco-Tourists	2.32	Somehow Passive Eco-Tourists
28-37	2.05	Somehow Passive Eco-Tourists	2.27	Somehow Passive Eco-Tourists
38-47	1.50	Passive Eco-Tourists	1.83	Somehow Passive Eco-Tourists
48-57	1.25	Passive Eco-Tourists	1.50	Passive Eco-Tourists

Table 4 shows that in terms of the respondents' ecotourism activities perception, younger people recording higher mean scores have a deeper interpretation, though not deep enough to be considered as active Eco-Tourists, but still closer to being, with the right interventions, compared with older people that were classified as Passive Eco-Tourists. While, in terms of Ecotourism Activities Engagement, the same case applies. Younger people are only considered somehow passive, while older people are really passive eco-tourists. This indicates that the older people get, the less engaged they become in ecotourism practices.

Table 5. *Respondents' Classification Based on Their Ecotourism Activities Perception and Engagement When Grouped According to Sex*

Sex Group	Ecotourism Activities Perception	Interpretation	Ecotourism Activities Engagement	Interpretation
Female	1.99	Somehow Passive Eco-Tourists	2.34	Somehow Passive Eco-Tourists
Male	1.81	Somehow Passive Eco-Tourists	2.13	Somehow Passive Eco-Tourists

Table 5 presents that both sex groups, male and female can be classified as somehow passive eco-tourists in terms of their ecotourism activities perception and engagement, however, it is noticeable that the mean scores recorded on their engagement are slightly higher than their perception.

Table 6. *Respondents' Classification Based on Their Ecotourism Activities Perception and Engagement When Grouped According to Highest Educational Attainment*

Age Group	Ecotourism Activities Perception	Interpretation	Ecotourism Activities Engagement	Interpretation
Doctorate Degree Graduate	1.75	Passive Eco-Tourists	1.25	Passive Eco-Tourists
Master's Degree Graduate	1.81	Somehow Passive Eco-Tourists	1.63	Passive Eco-Tourists
College Graduate	1.93	Somehow Passive Eco-Tourists	2.40	Somehow Passive Eco-Tourists
Secondary Education Graduate	1.94	Somehow Passive Eco-Tourists	2.30	Somehow Passive Eco-Tourists
Primary Education Graduate	1.87	Somehow Passive Eco-Tourists	2.23	Somehow Passive Eco-Tourists

This indicates that mostly their perception and their practice when they visit ecotourism destinations are shallow ecotourism practices, but not all the time, since they are considered not really passive, and that both sex groups tend to display a less shallow appreciation towards nature and culture when they are already in the destination compared to what they have in mind before or during the travel.

Table 6 shows that in terms of ecotourism activities perception, college and secondary education graduates possess the less shallow interpretation towards nature conservation and cultural education and protection, while doctorate degree graduates have the shallowest perception, being considered passive eco-tourists, while, when it comes to their engagement, the same case applies. College graduates and secondary education graduates tend to display a deeper practice of ecotourism, while those who have postgraduate degrees engage in shallow practices when they visit ecotourism destinations. The mean scores also indicate that, from primary education to college education, the higher educational attainment a person has, the deeper their perception and engagement toward ecotourism activities gets, but afterwards, it gets shallower as one obtains a higher level.

Table 7.*Respondents' Overall Classification Based on Their Ecotourism Activities Perception and Engagement*

Statement	Ecotourism Activities Perception	Interpretation	Ecotourism Activities Engagement	Interpretation	Ecotourism Activities Interpretation
People's Ecotourism classification based on perception and engagement	1.92	Somehow Passive Eco-Tourists	2.26	Somehow Passive Eco-Tourists	Somehow Shallow Ecotourism

Based on the overall results, respondents are considered to be somehow passive eco-tourists taking on somehow shallow ecotourism activities, but since, according to Alampay and Libosada (2005), eco-tourists could either be passive or active, meaning that they fall under the category of being passive eco-tourists that engage in shallow ecotourism.

Conclusion

In reference to the results, the researchers hereby conclude that people believe they can learn about the culture of a place just by spectating; they choose to learn by watching cultural acts, observing locals performing traditions, and looking at artifacts displayed in museums. They also think that it is fine to prefer standardized services, and consuming food and drinks that have foreign influence when travelling to ecotourism destinations, in fact, when they visit nature-based and cultural and heritage destinations, they tend to stay in modern hotels and eat in restaurants that follow foreign-influenced service standards, and serve foreign cuisines. Banning humans from access to natural areas/resources is perceived to be the only way to ensure conservation and sustainability as they tend to distance themselves from places or things that could be fragile instead of learning how to handle them properly. Moreover, people think that natural resources only exist and are only valuable because humans need it, however, this contradicts their practice in learning more about the environment aside from its benefits to humans. These findings lend credence to Su and Wall's 2018 study, which explains that people engage in tourism to appreciate natural scenery, including wild animals, to enrich knowledge of an area's natural and cultural attributes, to raise environmental awareness among both tourists and residents, to promote resource and environmentalism, to respect and safeguard native culture, and to enhance physical and mental well-being. However, it is merely superficial or poor, and does not actually suit the demands of any of these beliefs. Lastly, despite residing in a town that embraces environmental-friendly practices, the respondents possess a negative ecotourism perception and a low level of ecotourism engagement, which classify them as Passive Eco-Tourists engaging in Shallow Ecotourism. Gumede and Nzama (2020) supported these findings with their study that shows even people who live in ecotourism-inclined areas are not actively participating in ecotourism development processes, particularly those carried out in rural areas, due to a variety of socioeconomic factors, including a lack of necessary skills. This, however, contradicts Heyl et al. (2013)'s discovery that people have a favorable attitude toward the environment, particularly in terms of recycling, water use, and energy consumption, but supports its conclusion in terms of environmental engagement, which explains that people's attitude, particularly the frequency with which they participate in conservation-related activities and events, are not reflected in their actions.

The researchers hereby suggest that laws on the appointment of Tourism Managers or Officers in cities and municipalities must always be reviewed to ensure that the responsibility to enforce responsible travel is given to someone who has the ability and qualifications. Qualifications on the other hand must not be generic or universal; each city and municipality must have specific criteria in the appointment of a tourism manager or officer depending on the demand of the place, especially places that play a vital role in protecting nature-based destinations as well as preserving culture and heritage. Provided that aside from being an area of study, the environment, and heritage and culture are also part of people's lives that cause their survival and forms their unique identity as part of a community, these must be included in the subjects offered in all education levels, from basic education to postgraduate studies, whether the course is in the field of environmental management, heritage studies, and cultural development or not. There must be programs organized down to the community levels that focus on environmental emergencies awareness, and understanding towards heritage and cultural significance as well; people need to be well informed about the repercussions of their actions towards the environment, so they may develop a sense of consciousness on what they should do and what they shouldn't. Moreover, in particular, older people, especially those who are in their 40s and beyond, must be more exposed to discussions about the environment and culture since their ecotourism perception and engagement were consistently lower than of those who are younger. Likewise to those who have postgraduate degrees compared to those who have only accomplished less in the context of formal education. Since it is also given that the academic community also plays a very important role in the transition of people from being passive eco-tourists to becoming active ones, activities such as, but not limited to, educational tours, must give more emphasis to actual engagement in environmental-friendly practices and cultural traditions rather than the usual set up of taking students to places in order to witness cultural traditions being practiced, watch cultural performances such as dance and music, and see artifacts displayed, as this practice only leads to a shallow environmental and cultural understanding. Students, while they are young, must be encouraged to communicate with local people to learn about their way of life, and they should be motivated to observe practices such as following the 10 commandments of ecotourism. Lastly, to uplift the awareness of people towards environmental sensitivity, the development and distribution of Information Education materials (IEC) for sustainable tourism is suggested.

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RESEARCH ARTICLE

Food Waste Management in Hospitality Operations: A Study of 4- and 5-Star Hotels in Konya Province

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ABSTRACT
Food waste is a significant and growing global problem with multiple contributing factors, including food and beverage production in hotel businesses. Therefore, it is important to determine the extent of food waste in hotel businesses for the sustainability of food. This study aims to identify the causes of food waste in hotel businesses, explore strategies to reduce waste, and determine the most common areas, meals, and products where food waste occurs. The research sample is made up of 12 four- and five-star hotels affiliated with the Ministry of Culture and Tourism in Konya province. Semi-structured interviews were used to collect data, and a descriptive analysis method was employed to analyze the obtained information and develop themes. The findings indicate that several factors contribute to food waste, with conscious personnel and regular work having a reducing effect, while unconscious staff and unplanned work increase waste. The study also revealed that the highest amount of waste occurs during evening open buffet meals, with bread products being the most commonly wasted. Based on these results, recommendations are proposed for hotel businesses to prevent food waste, and further research is suggested to explore the topic in greater depth.

Keywords: Waste, Food Loss, Hotels Kitchen, Waste Control

Introduction

The current rise in global food demand is placing significant pressure on agricultural production. In order to eliminate the problems experienced in responding to this demand, it is necessary to benefit from foodstuffs during the production and consumption processes without any loss. It is critical to reduce the food waste rate in order to respond to increasing food demand and to minimize pressure in food production (Halloran et al., 2014; Makov et al., 2020). Due to these being complex issues with multidimensional structures (Thyberg and Tonjes, 2016; Kibler et al., 2018), food waste brings with it social, economic, nutritional, and environmental problems (Lipinski et al., 2013; Halloran et al., 2014; Eriksson et al., 2015; Secondi et al., 2015). As food waste can trigger multiple issues simultaneously, it is widely recognized as a significant problem in numerous studies in the literature (Campoy-Muñoz et al., 2017; Derqui et al., 2018).

Although there are major problems with obesity and hunger in the modern world, more than 30% of food is wasted (Dorward, 2012). Furthermore, roughly one-third of food produced for human consumption is lost or wasted throughout the entire food chain (Bahadur et al., 2016; Shafiee-Jood and Cai, 2016; Dölekoğlu, 2017; Bellemare et al., 2017; Ribeiro et al., 2018). This rate of loss is equivalent to the total food production of Sub-Saharan Africa over a period of five to six years (Dölekoğlu, 2017). This rate means that approximately 1.3 billion tons of food go to landfills annually (Vilariño et al., 2017). While 20% of this waste occurs in the field, 40% is lost during processing and consumption (Gönültaş et al., 2020). These alarming rates of food waste indicate a significant loss of food worldwide (Joardder and Masud, 2019).

Reducing the amount of food waste through the analysis of numerical data is essential for improving food safety and minimizing the negative impact of food systems. In addition, proper management of food consumption is crucial for increasing resource efficiency and meeting the demands of the growing global population (Timmermans et al., 2014; Makov et al., 2020). In this context, the study aims to identify the causes of food waste in hotel businesses, investigate strategies that can decrease or prevent waste, and determine the most common areas, meals, and products where food waste occurs.

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Literature Review

Food Waste and Food Loss Concepts

As defined by the Cambridge Dictionary, waste refers to "*Unnecessarily spending money, time, effort, etc., meaning spending, extravagance*" (Cambridge Dictionary, 2023). Food waste can occur because of negligent behavior or a conscious decision (Lipinski et al., 2013). In addition, foods formed as a result of spoilage and food lost with waste are also evaluated within the framework of food waste. Thus, the term "waste" encompasses not only food loss but also food waste (FAO, 2013). Among the related concepts, "food loss" is preferred to refer to losses occurring in the early stages of the value-added chain, while "food waste" is used for losses in the final stages (Betz et al., 2015).

When the literature is examined, it is seen that food losses are defined in different ways. These definitions are given in Table 1.

Table 1. Description Related to Food Loss/Waste

Organization/Author	Year	Description
Kling	1943	Food waste is the destruction or deterioration of food or the use of crops, livestock, and livestock products in a way that yields relatively low human food value.
Food and Agriculture Organization of the United Nations (FAO)	1981	Food waste is all food products destined for human consumption that are discarded, lost, spoiled, or consumed by pests at any stage of the food chain.
Food and Agriculture Organization of the United Nations (FAO)	2013	Food waste is food suitable for human consumption that is discarded (usually at the retail and consumption stages).
United States Department of Agriculture (USDA) (Buzby et al., 2014)	2014	Food waste is a subset of food loss and occurs when no edible item is consumed. Only food that is edible at the time of disposal is considered waste.
World Resources Institute (WRI)	2016	Food loss and waste refers to food removed from the food supply chain and associated inedible portions.

Since there are no distinctive definitions of food loss and food waste (used to cover all losses in the value-added chain in the entire process from farmer to consumer), both terms are considered synonymous in this research (Betz et al., 2015).

Causes of Food Waste

Food waste represents a significant issue on a global scale (Papargyropoulou et al., 2014). The causes of food waste are diverse and complex (Bajželj et al., 2020). Since there are numerous factors that contribute to the formation of food waste, and different regions of the world face varying conditions, food waste occurs at varying rates and amounts (Joardder and Masud, 2019).

Sürücü and Tuna (2019) conducted a study that examined scientific publications from 2011 to 2018, aiming to identify the causes of food losses in the production, processing, and distribution/retail stages. According to the study, the reasons for the food waste that occurs during the processing stage originate with logistics, standards, processing, environment, and human factors. In the distribution/retail stage, the reason for food waste was expressed as five factors: logistics, standards, marketing, management, and human elements. Food waste occurs throughout the entire food chain, and the formation of waste starts at the production stage and ends with consumers (Kling et al., 1943).

Multiple factors influence the formation of food waste, and it varies according to different circumstances and applications (Joardder and Masud, 2019). There is a close relationship between the occurrence of food waste and individual choice and preferences in daily life (Derqui et al., 2018). Other factors that lead to food waste include customers putting more food than they can consume on their plates, large portions, a lack of employee education, and inefficient food preparation (Şahin and Bekar, 2018). The number and size of food items served in restaurants are also positively correlated with food waste (Collison and Colwill, 1986). In line with all data, the causes of food waste in the food and beverage industry can be summarized as follows:

- Portion sizes: Inability to produce standardized portions for everyone in the food and beverage businesses.
- Logistics: Difficulty in estimating the customer rate can lead to overstocking.
- Attitudes: The practice of taking home leftover products from restaurants is not universally accepted.
- Awareness: Awareness of food waste as a serious problem is currently low, but it is increasing with environmental awareness.
- Preferences: School cafeterias often face difficulties in meeting the preferences of their students (Bio Intelligence Service, 2010).

Food Waste in Tourism and Hotel Businesses

Food waste has emerged as a significant issue in many sectors and fields due to its adverse social, economic, and sustainability implications (Williams et al., 2012; Papargyropoulou et al., 2016). Tourism and hotel businesses are among the sectors that are particularly affected (Cakmak and Sevinc, 2018). The growth of tourism opportunities, the expansion of hotel businesses, and the wide range of services provided to guests have contributed to an increase in food waste within the tourism and hotel industry (Pirani and Arafat, 2016; Tekin and İlyasov, 2017).

Hotel businesses' kitchen storage areas are a significant source of waste (Rawal and Takuli, 2021). Buffet-style dining options and excess ingredient use in menus contribute to increased food waste and associated costs (Mackenzie et al., 2011). Food waste in hotel businesses negatively affects the income of the business as well as its environmental impact and public image (Trung and Kumar, 2005).

Preventing food waste in hotel businesses involves three crucial stages: pre-kitchen, kitchen, and post-kitchen. In the pre-kitchen stage, it is essential to forecast demand accurately for the kitchen and take necessary actions accordingly. Effective stock control measures should also be implemented during this stage. At the kitchen stage, the correct use of foodstuffs should be made and encouraged. In the post-kitchen stage, it is important to handle customers on an individual basis and implement measures such as food supplementation and informative activities on food waste based on their specific requests (Tekin and İlyasov, 2017; Filimonau and Delysia, 2019).

Hotel businesses play an important role in determining the rate of food waste, measuring the amount, and classifying and categorizing the waste. In line with these responsibilities, they have the capacity to reduce food waste and effectively manage waste in different areas by improving waste management practices (Filimonau and Delysia, 2019). Despite this, the number of scientific publications focused on food waste management in the hospitality and hotel management sector is insufficient (Bender, 1994). Furthermore, Rawal and Takuli (2021) argue that without adequate attention being paid to food waste management, hotel businesses may continue to be a threat to sustainability. Therefore, it is vital to examine, identify, and prevent food waste in hotel businesses.

Methodology

The main purpose of this study is to examine food waste in hotel businesses and the losses that occur in the production and consumption processes. In this context, data for the study were collected using the semi-structured interview technique, which is a qualitative research method chosen for its suitability in exploring and gaining insights into the research topic (Yıldırım and Şimşek, 2016). The semi-structured interview form used in the research was taken from a study conducted by Sezgin and Ateş (2020).

There are 16 hotels with tourism operation certificates that are affiliated with the Provincial Directorate of Culture and Tourism in Konya, and these hotels have been classified as four- and five-star accommodations (Konya Provincial Directorate of Culture and Tourism, 2021). The researchers employed the criterion sampling method, which a purposeful sampling method. The main criterion in forming the sample was that the institutions were implementing practices to reduce food waste. It was determined that all hotel businesses in the universe determined by preliminary interviews were engaged in waste prevention activities. For this reason, an appointment was requested to ensure that the entire research population was interviewed. However, three hotel businesses declined the interview request due to management restrictions, while one hotel business could not accommodate the request due to their busy schedule. Therefore, interviews were conducted with the kitchen chefs of 12 four- and five-star hotels in the research sample.

The researchers conducted the interviews between September 11, and November 14, 2022, with an average duration of 42 minutes per interview. During the interviews, the researchers used a voice recorder to capture the statements of participants, which were later transcribed for analysis. In order to analyze the audio recordings obtained from the interviews and convert the recordings into text, Microsoft Word was used. During the transcription process, repetitive and distorted data were excluded. Once the written text was finalized, electronic notes and opinions of the participants were added to expression tables created in Microsoft Excel for subsequent analysis.

Descriptive analysis was used to analyze the research data and categorize and thematize the questions. Descriptive analysis is a technique that involves summarizing and interpreting data obtained from the research, often quoted from the words of interviewees, and evaluating the results within the framework of cause-effect relationships (Yıldırım and Şimşek, 2016). Three activity steps were followed during data analysis: data reduction, data presentation, and conclusion and validation. During the data reduction stage, the authors analyzed and coded participant statements. Next, they collected expressions with similar codes into categories using Microsoft Excel. For the presentation of the data, themes were created based on the questions asked of the participants and the categories of their responses.

The authors thoroughly analyzed the dataset before conducting the blind coding process. This coding was cross compared to ensure high reliability and validity. Thus, the objective was to draw a general inference, minimize errors, and ensure accuracy. The selection of data presented in the research was based on criteria such as relevance to the theme, diversity, and extreme value. The findings were then interpreted and discussed within this framework.

This research was conducted with the ethical approval of the Scientific Research and Publication Ethics Committee of Isparta University of Applied Sciences (Board Decision: 08/11/2022-125-01).

Findings

As a result of the analyses, each participant was assigned a unique 'K' code, and their answers to the questions asked are given below. Participants provided more than one answer to the questions. Demographic characteristics obtained as a result of interviews with 12 participants participating in the research are given in Table 2 below. The table includes participant code numbers, gender, age, position in the hotel, and education level.

Table 2. *Demographic Information of Participants*

Code	Age	Gender	Position in Hotel	Education Level	Star Number of the Hotel	Professional Experience
K1	38	Male	Executive Chef	Bachelor's Degree	5 Star	13
K2	48	Male	Executive Chef	High School	5 Star	18
K3	32	Male	Executive Chef	Bachelor's degree	5 Star	11
K4	39	Male	Executive Chef	High School	5 Star	25
K5	37	Male	Executive Chef	Associate degree	5 Star	20
K6	41	Male	Executive Chef	Secondary School	4 Star	20
K7	35	Male	Executive Chef	Secondary School	4 Star	22
K8	35	Male	Executive Chef	High School	4 Star	14
K9	54	Male	Executive Chef	Secondary School	4 Star	30
K10	43	Male	Executive Chef	High School	4 Star	28
K11	44	Male	Executive Chef	Secondary School	4 Star	21
K12	32	Male	Executive Chef	High School	4 Star	13

The primary factors contributing to food waste are unpredictable customer numbers and procurement and use of products without conscious consideration. It was determined that employing conscious personnel influences reducing food waste, while employing unconscious personnel effects increasing food waste. At the same time, it was determined that food wastage also occurs during the production phase due to incorrect cooking and cutting techniques. Uninformed personnel were identified as the main cause of food waste among kitchen workers. It was determined that food waste is mostly experienced in the open buffet and occurs during the evening meal. The food groups with the highest food waste were bread, salad ingredients, milk and dairy products, and sea food and meat products. Among the sample group, only three enterprises gave the answer of red meat, two enterprises gave the answer of bread and cheese, and one enterprise gave the answer of rice. The remaining five businesses did not have any recycling programs. All businesses in the sample group stated that returned products are not evaluated due to health and hygiene concerns and are directly discarded. One business stated that posters were hung regarding the food waste prevention activities carried out by the hotel management, and one business stated that they pay attention to employing trained personnel. The study concludes that none of the 10 hotel businesses surveyed had any written policies or practices to prevent food waste, and only verbal reminders were used to encourage waste reduction.

The question "*What are the factors that cause food waste?*" was asked to the participants, and the answers are shown below. When the data on the factors that cause food waste was examined, the answers were gathered under five different themes (Table 3).

"Too many products are often made because the number of customers is unpredictable. Unfortunately, this is also difficult to predict; we do too much for our customers rather than making less and having insufficient products, in order to avoid having to tell a customer that something is unavailable. This is an effective factor in the formation of waste. At the same time, there is this uncertainty based on customers. When customers make a reservation with us, they specify 100 people and then 50 people come. Production is carried out according to the information given by the customer, but when the specified number is not reached, the products are wasted (K3)."

"The use of grammage is very important in the preparation of some products. While the preparation of a product without using weight increases the amount of material allocated to the product, it increases the waste rate for the product in the kitchen and affects the standard taste and flavor of the recipe. To give an example, in meat dishes, we generally use meat by weight. This not only ensures that the meat ratio in the meat dishes is the same, but also contributes to the ease of control of kitchen expense costs. Otherwise, the per capita meat usage rate becomes disproportionate and causes wastage due to the misuse of the meat product (K6)."

"Unfortunately, our people do not have a restaurant and hotel culture. They try to take from every dish because they are paying for the service. In fact, they are aware that they cannot consume it themselves, but I guess they want to take more because they are paying money. They take so much that there is no space left on their plates. I think customers are getting greedy about it because they take much more than they can eat (K7)."

"I think the main reason for food waste is the purchase of food products, which occurs during delivery and acceptance. If we receive a crushed or aired product, we cannot use this product. This directly causes food waste. For this reason, when receiving food products, the expiry date should be checked, and the quality of the product should be examined. I can explain this with an example. For instance, when purchasing meat for hotel kitchens the meat should not very strong and smelly, these should be checked at the delivery stage. If these are not taken care of, the ground is prepared for food waste (K8)."

Table 3. *Factors Leading to Food Waste*

Question	Theme	n	Participants
What are the factors that cause food waste?	Unpredictable number of customers	4	K1-K3-K5-K6-K11
	Customers take too much food	3	K2-K7-K12
	Irregular operation	1	K4
	Not working by weight	1	K6
	Unconscious product purchase and use	3	K8-K9-K10

The participants were asked the question "*What are the factors causing food waste during production?*" and the answers are shown below. The answers regarding the factors that cause food waste during production are gathered under five different themes (Table 4).

"It is about product quality. If the expiry date of the product has not passed and there is no dent or deterioration in the product, the product is used without wastage. However, if the product is spoiled, dented, or expired, that product causes food waste (K1)."
"It happens mostly due to improper cooking. Even in the simplest pasta making, if the pasta is boiled too much, it disperses in an unattractive way, and we cannot serve it to the customer in this way. Or, when a product that needs to be cooked less is cooked more, its primary appearance and taste changes, and we cannot serve it. This causes wastage (K4)."
"Producing products that need to be prepared by weight without weighing them leads to food waste. It also causes the plates not to be of standard size and quantity (K5)."
"It is caused by the wrong cutting of products. Not peeling the products properly, peeling and chopping the skin of the tomatoes too thickly, when necessary, also creates a lot of waste at these stages. Even the simplest cheese is cut wrong (K11)."
"It is due to the carelessness of the staff. Waste occurs because the personnel do not track the products and do not replace the old product when the new product arrives (K12)."

Table 4. *Factors Causing Food Waste During Production*

Question	Theme	n	Participants
What are the factors causing food waste during production?	Material quality	2	K1-K6
	Wrong cooking method	4	K2-K4-K7-K11
	Wrong cutting techniques	4	K3-K4-K8-K10
	Not working by weight	1	K5
	Careless staff	2	K9-K12

The participants were asked the question "*What are the factors related to food waste caused by kitchen workers?*" and the answers are shown below. The answers regarding the factors that cause food waste from kitchen workers are gathered under three different themes (Table 5).

"There is a lot of waste due to the ignorance of the person working in the kitchen. For example, kitchen staff do not know about cross-contamination, they do not know the colors of the boards and the way the knives are used, so they use the wrong methods when preparing products (K2)."
"It is caused by the carelessness of the staff and their laziness. This causes the product to be removed again while there is a product in the preparation phase, due to carelessness. This allows the second one to be prepared before the existing product runs out. Removing surplus products paves the way for waste (K6)."
"It stems from applying the wrong cutting techniques to the product. For example, instead of mire poix, a cook can chop batonnet (K10)."

Table 5. *Factors Related to Food Waste from Kitchen Workers*

Question	Theme	n	Participants
What are the factors related to food waste caused by kitchen workers?	Carelessness and laziness	4	K1-K4-K6-K12
	Uninformed staff	6	K2-K3-K5-K7-K8-K11
	Wrong cutting techniques	2	K9-K10

The question "*What are the practices that increase or decrease food waste?*" was asked to the participants, and the answers are shown below. The answers that can be evaluated within the framework of practices that increase and decrease food waste are gathered under three different themes (Table 6).

"Unplanned work increases food waste. We see this situation more in trainees. We ask them to 'peel 10 onions,' but they peel more than 10. The products that are chopped more than they need to be darken, change color, and stay in contact with the air for a long time. All of this causes the extra peeled product to be wasted (K4)."
"Conscious personnel are very effective and important in decreasing food waste. Conscious personnel buy the right amount of products; they do not buy too many products and waste them. They do not have any extra items on hand. After all, we are not in a village, we are a city hotel, transportation is easy, and everything is at our fingertips; we can buy enough products and restock them according to the amount of consumption (K9)."
"Having a conscious staff can minimize waste. For example, there is a dinner party preparation for 250 people. If we analyze the cost well during the preparation phase and determine how many grams of food and dessert we will give to each customer accordingly, we will contribute to a great reduction of food waste. At this point, the biggest task falls on the personnel working consciously in the kitchen. Otherwise, the products will be prepared unconsciously by an unconscious staff and unfortunately, food will be wasted after the meals are served (K10)."

Table 6. *Practices That Increase or Decrease Food Waste*

Question	Theme	n	Participants
What are the practices that increase or decrease food waste?	Unconscious personnel/ Conscious personnel	9	K1-K2-K3-K6-K7-K8-K9-K10-K11
	Unplanned work/planned work	3	K4-K5-K12

The participants were asked the question "*In which areas does food waste occur the most?*" and the answers are shown below. The data on the areas where food waste occurs most are gathered under three different themes (Table 7).

"It is mostly an open buffet. Since customers take the products themselves, when they are alone with the product, they want to get it all on their plate. They take extra but leave without consuming it (K3)."
"It happens mostly at the breakfast buffet (K4)."
"It happens so much at the buffet. The reasons are that customers take more products than they can consume, and the buffet stays open for a long time. The buffet should not be open more than 2 hours. But nowadays, when there is less staff to work in the kitchen and there is a guest request, the open buffet hours are longer. Extended open buffet hours cause products to deform and accelerate their waste (K5)."
"It mostly occurs during the production phase (K7)."

Table 7. *Areas Where Food Waste Occurs the Most*

Question	Theme	n	Participants
In which areas does food waste occur the most?	Open buffet	10	K1-K2-K3-K4-K5-K6-K9-K10-K11-K12
	Breakfast buffet	2	K4-K8
	Production phase	2	K7-K8

The participants were asked the question "*Which meal has the most food waste?*" and the answers are shown below. Data on meals with the highest amount of food wastage were collected under three different themes (Table 8).

"Often lot of food is wasted in the evening meal. People often have snacks for lunch. Therefore, at dinner they get hungrier and take more than they can consume. Then they cannot eat it all (K1)."
"The most food waste occurs at the evening meal. People get hungrier because they work and get tired from morning to night. Therefore, they take a lot for a dinner, but they cannot consume it all (K2)."
"It happens in the morning at our hotel. This is because there is not always an evening buffet here (K4)."
"It mostly happens between noon and evening (K5)."
"We have morning and evening services. Among these services, the most food waste occurs in the evening service (K9)."

Table 8. *Meals with the Most Food Waste*

Question	Theme	n	Participants
Which meal has the most food waste?	Morning	2	K4-K12
	Lunch and evening	1	K5
	Evening	9	K1-K2-K3-K6-K7-K8-K9-K10-K11

The participants were asked the question "*What are the food groups where food waste is seen the most?*" and the answers are shown below. The answers regarding the food group where food waste is seen the most are gathered under five different themes (Table 9).

"Food waste is seen mostly in seafood. Fish and seafood have a very high rate of spoilage and poisoning, so they can be wasted quickly (K1)."
"We mostly experience wastage in products prepared from milk and dairy products and meat products. We take advantage of the waste in bread by making breadcrumbs (K2)."
"Salad ingredients are wasted. Waste occurs due to cleaning, such as removing the outer sides of the lettuce, and the low consumption after chopping (K7)."
"It happens a lot in bread products. They take it in pieces, but since they do not finish it, those pieces are wasted (K11)."

Table 9. *Food Groups with the Most Food Waste*

Question	Theme	n	Participants
What are the food groups where food waste is seen the most?	Sea products	1	K1
	Milk and milk products	4	K1-K2-K5-K8
	Meat products	1	K2
	Bread	9	K1-K3-K5-K6-K7-K9-K10-K11-K12
	Salad ingredients	7	K1-K4-K6-K7-K9-K10-K11

The participants were asked the question "*What are the products that are recycled in order to prevent food waste?*" and the answers are shown below. The answers to the recycling methods that can be used to prevent food waste are gathered under five different themes (Table 10).

"We dry the bread that would otherwise be wasted, pass it through the grinder and use it for breaded recipes (K2)."
"We think that it is not suitable in terms of health and hygiene; there is no recycled product (K3-K6-K7-K10-K11)."
"When rice pilaf is not used, we mix it in Yayla soup and prepare it for consumption again (K5)."
"We cool meat and meat products quickly and use them in a different way the next day (K8)."
"We reuse cheese. We recycle it as a cheese patty. If the bread has not been touched, we use it to make breadcrumbs in the kitchen (K12)."

Table 10. *Recyclable Products*

Question	Theme	n	Participants
What are the products that are recycled to prevent food waste?	Red meat	3	K1-K8-K9
	Bread	2	K2-K12
	Cheese	2	K4-K12
	Rice	1	K5
	No recycled products	5	K3-K6-K7-K10-K11

The participants were asked the question "*What are the methods of recycling products returned from customers?*" and the answers are shown below. A theme was created regarding the recycling of products returned from customers (Table 11).

"We do not recycle it for health and hygiene reasons. After all, it is not possible to determine what disease people have from their outward appearance. That is why we do not take any risks. If even a fork touches the product coming directly from the customer, we throw it away (K1-K2-K3-K4-K5-K6-K7-K8-K9-K10-K11-K12)."

Table 11. *Methods of Recycling Products Returned from Customers*

Question	Theme	n	Participants
What are the methods of recycling the products returned from the customers?	Not recycled	12	K1-K2-K3-K4-K5-K6-K7-K8-K9-K10-K11-K12

The participants were asked the question "*What are the activities carried out by the hotel management related to food waste?*" and the answers are shown below. Responses regarding the studies carried out by hotel management on food waste were evaluated and gathered under three different themes (Table 12).

"Management places posters where employees empty customers' plates to reduce food waste (K1)."
"We are paying attention to this issue, and we want our staff to pay attention as well. For this reason, we employ trained personnel in the kitchen staff (K2)."
"To be honest, they only talk about food not being wasted. There is no written warning, etc. other than that (K3-K4-K5-K6-K7-K8-K9-K10-K11)."

Table 12. *Activities Carried Out by Hotel Management Related to Food Waste*

Question	Theme	n	Participants
What are the activities carried out by hotel management related to food waste?	Banners are hung	1	K1
	Employing trained personnel	1	K2
	Verbal expression	10	K3-K4-K5-K6-K7-K8-K9-K10-K11-K12

Discussion and Conclusion

Food and beverage businesses, which are an integral part of the food industry (Ayenigbara and Fadoju, 2020), encompass a wide sector involved in the processing, packaging, and distribution of raw materials, and semi-finished and finished food products (Demir and Istanbullu-Dincer, 2020). Among these factors, the hotel business is a significant contributor to food waste due to its role in food production, preparation, and service. Consequently, identifying and addressing food waste in the hotel industry is crucial for promoting the sustainability of the food system. Upon evaluating the findings of the study, it was determined that several factors contribute to food waste, such as the "unpredictability of customer numbers," "excessive food purchasing by customers" and "unconscious product usage." The plurality of answers suggests that the factors leading to food waste are diverse and interrelated. (Heikkilä et al., 2016; Eriksson et al., 2017). Şahin and Bekar (2018) also found that hotel customers who take more food than they can consume on their plates cause significant amounts of food waste. These findings are consistent with the results of the present study. Notably, the factors leading to food waste are mostly attributed to customers. On the other hand, according to Aamir et al. (2018), the primary causes of food waste in the food and beverage industry are the food left on the plates of the customers, overproduction, and food spoilage. The findings obtained from these studies are in agreement.

Participants reported that conscious staff and regular work practices can help to reduce food waste, while unconscious staff and unplanned work can increase waste. Okumuş (2020) stated that faulty practices caused by the personnel at the food preparation stage cause food waste. Similarly, Parry et al. (2015) identified irregular and unplanned food preparation as a significant factor in food waste generation in the food and beverage industry. These statements are similar to the findings of the study. This study found that improper cooking methods and incorrect cutting techniques during food production also contribute to food waste. It has been stated that the main reason for food waste caused by kitchen workers is the lack of knowledge of the personnel. Sezgin and Ateş (2020) further support these findings by reporting that inadequate food preparation practices during production and a lack of staff knowledge and experience are the primary factors contributing to food waste in hospitality businesses.

It has been determined that the most food waste occurs at the open buffet. Keskin et al. (2019) found that open buffets create a disadvantage for hotel businesses due to the amount of food waste generated. These findings are consistent with the results of this study. The most frequent answer given by the participants to the question of which meal has the most wasted food was "evening," followed by "morning" and "lunch and evening" answers, respectively. According to participant responses regarding the food groups, "Bread" was the most frequently cited item, followed by "Salad ingredients." A study by the Turkish Grain Board (2013) reported that bread wastage is highest in student cafeterias, followed by restaurants, hotels, and similar establishments. Tekiner et al. (2021) also found that bread and vegetable products are among the most commonly wasted items. As such, hotel businesses have a significant role in generating food waste, particularly regarding bread, and implementing various measures to reduce waste in this area is crucial.

When the participants were asked about the recycled products, most of them answered that they do not have recycled products in their hotel. This finding is consistent with the observations made by Cuglin et al. (2017), who noted that recycling is not an integral part of restaurant management systems. However, several businesses reported recycling red meat (three enterprises), cheese (two enterprises), bread (two enterprises), and rice (one enterprise). Although bread is the most wasted product, it is noteworthy that only two businesses recycle bread. Food waste formed in different processes and stages can vary in terms of composition properties. For this reason, although it is not possible to reuse the products themselves, they can be recycled in such a way that they can be added to different foods (Ho and Chu, 2018). None of the businesses reused products returned by customers, as they are deemed unsuitable from a health and hygiene standpoint, which agrees with the findings of Öcal (2021), who reported a lack of recycling in food and beverage businesses due to health and hygiene concerns. Customers prioritize cleanliness and food safety when choosing businesses to visit. Therefore, it is crucial for businesses to prioritize hygiene and provide services in a clean and hygienic environment (Ayenigbara and Fadoju, 2020).

The most frequent answer to the question about activities carried out by hotel management related to food waste was the absence of standardized strategies or written policies, with practices being communicated verbally rather than documented in writing. In this context, it has been determined that hotel businesses do not have specific solution methods for food waste. Hospitality businesses, restaurant operators, and food companies should develop their own methods to combat existing problems and develop solutions (Dilistan-Shipman, 2020). The lack of a clear solution for preventing food waste in the hotel industry is a significant finding. Consequently, several suggestions have been developed based on these results. These recommendations are listed below:

- Similarities and differences can be revealed by conducting research in different businesses (e.g., hospitals, airline companies, and school cafeterias).
- Studies on food waste in hotel businesses should be compiled and analyzed with bibliometric analysis, and different results and suggestions should be compared.
- The lack of standard food waste prevention practices by hotel businesses makes it difficult for hotels to cope with the food

waste situation. For this reason, hotel businesses should adopt, develop, and implement concrete strategies to prevent food waste.
- Incentives such as subsidies or tax deductions should be provided for hotel businesses that implement the right practices to prevent food waste.
- Hotel businesses should employ knowledgeable, qualified, and equipped personnel who know the practices of preventing food waste.
- In order to reduce the food waste rate in relation to the kitchen staff, standard food recipes should be developed, and the staff should be trained on the reuse of food waste in the menus.

Theoretical Contributions

The research focused on analyzing food waste prevention practices in four- and five-star hotels. This study serves as a guide for conducting similar research in other businesses, provinces, and regions, highlighting similarities and differences. The findings of the study are exemplary in terms of determining the principles of food waste management in hotel enterprises. Furthermore, it is crucial to identify food waste prevention practices within establishments, organize training sessions and seminars for staff members, and establish guidelines for both businesses and employees to follow.

Practical Contributions

The main factors that cause food waste in hotel businesses have been identified. In addition, it has been determined that there is more than one factor in the formation of food waste and these factors are interconnected. It has been revealed that wrong cooking methods, the use of wrong cutting techniques, unconscious personnel, and unplanned work during production lead to food waste. The approaches for controlling this situation have been determined. This research conducted in hospitality establishments will raise awareness among employees regarding food waste and provide them with information on the subject. It provides the foundation for businesses to reevaluate the costs associated with food waste and explore new initiatives and practices in this regard. All these findings will help industry professionals to be conscious of the practices that can prevent food waste.

Limitations of the Research

Some limitations arise as qualitative research methods are chosen within the scope of the study. Material and time constraints constitute the primary constraint of the research. The study focused on the opinions of executive chefs working in four- and five-star hotels in Konya between September 11, and November 14, 2022. Furthermore, the study was limited by the fact that it included only 12 male participants.

Future studies should aim to expand the sample size, conduct interviews with a homogeneous group of male and female participants, increase the number of hotel businesses, and be conducted in other provinces to achieve different results.

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RESEARCH ARTICLE

Analysis of Customer Reviews on Korean Restaurant Experience: The Case of Zomato Istanbul

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ABSTRACT

Globalization and the internet era have resulted in an increase in curiosity about different cultures and in an expansion of cultural diversity concerning food choice. In this direction the number of ethnic restaurants which carry the role of making known a culture's gastronomic identity through food, service rituals and atmosphere has increased around the world. As a result choosing a restaurant has become more challenging for customers. In the process of making a decision about which restaurant to go to, online reviews are seen to be vital and reliable sources of information due to the information given by other customers. Today consumers have the power of greatly impacting the promotional activities of restaurants. Therefore the importance of online reviews, especially for ethnic restaurants which are distinct from ordinary restaurants due to bearing the responsibility of promoting another culture, is considered non-negotiable. The aim of this study is to analyse customer reviews on the Zomato platform regarding Korean restaurants located in Istanbul. For the purpose of the study 510 Turkish and English reviews made between November 2013 - May 2022 regarding eleven different Korean restaurants based in Istanbul were analyzed and coded under six main themes and thirty-seven sub themes following qualitative research methods and content analysis techniques. In line with the findings, it was discovered that Korean restaurant customers gave importance to the taste of food and beverages, staff and service, facility, price, authenticity and menu related issues respectively.

Keywords: Korean Cuisine, Ethnic Restaurant Experience, Online Review, Zomato, Istanbul

Introduction

As a result of the internet age and globalization, the ease of access to information and the spread of international travel have made people more aware of different cultures. This situation has led to an increase in interest in different cultures and to the spread of cultural diversity in the choice of food. Moreover the growing interest in eating out due to changes in social life and improvement in living standards with the rise in income levels is associated with an increasing number of customers eating at ethnic restaurants. Responding to this interest in ethnic restaurants, which reflect a certain culture with their menu, decoration, atmosphere and presentation rituals, the number of ethnic restaurants are growing globally as well as the competition between them.

In order to be successful in the ethnic restaurant market, where competition has increased with the increase in supply and demand, restaurants should first enhance the attraction factors for customers to choose the restaurant. Secondly, they should ensure customer satisfaction and loyalty. However, it seems unlikely that these service development efforts will be successful at the point where communication with the customer cannot be made effectively. From the customers' side the decision-making process regarding ethnic restaurants is not only shaped by physical and social needs such as nutrition, keeping up with trends, sense of belonging and gaining status. In addition to these, the issue of whether the atmosphere, decoration, food and service rituals effectively reflect the cuisine of the foreign country is considered an influence factor in the selection of ethnic restaurants. Since the success of a restaurant relies on the satisfaction levels of customers, electronic word of mouth (E-WOM) activities, which are more effective than promotional activities, are considered an issue to which attention must be paid.

E-WOM, which is defined as online reviews that provide one-to-one communication between customers visiting the restaurant

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and potential customers, and where the restaurant experience is conveyed without any interest, spreads through social media platforms and websites such as TripAdvisor, Zomato and Yelp. With that, it is thought that ethnic restaurants, which have the responsibility of promoting a different culture with their meals, presentation styles and atmosphere, unlike ordinary restaurant businesses, should pay more attention to E-WOM activities. Korean restaurants, the number of which is increasing globally, are the output of the 'Korean Wave' movement (Hogarth, 2013) and the healthy food trend. They are among the ethnic restaurants that should consider E-WOM activities as a vital tool for success.

In this context, this research aims to analyze online reviews on the Zomato platform for Korean restaurants that offer a balanced and nutritious dining experience. As a result of the analysis, the points to which customers give the most importance in the Korean restaurant experience are determined and suggestions are made regarding these points. It is thought that determining these points correctly and developing suggestions in line with these points will positively affect the restaurant businesses by enriching and improving the customer experience.

Literature Review

Restaurants that reflect the culinary culture of a different place from the country in which they are located are accepted under the title of themed restaurants and are defined as ethnic restaurants. (Jang, Ha & Park, 2012). Considering that the culinary culture of a country is affected by geographical conditions, religious rituals, economy and socio-cultural climate (Beşirli, 2010) it can be said that getting to know a country's culinary culture is an important step in getting to know that country. Ethnic restaurants, which give the feeling of discovering another country without traveling (Zelinsky, 1987 cited in Roseman, 2006), take on the role of cultural ambassadors in this context. Ethnic restaurants, where the elements of a certain culture-specific atmosphere are reflected not only on the food but also on the atmosphere, are distinguished by conveying the unique aspects of the culture to the consumer (Sukalakamala & Boyce, 2007). The intention to visit ethnic restaurants, the number of which is increasing with the effect of globalization, emerges with the desire to consume unusual foods, to have a unique and different dining experience, to get to know a different culture and to go out of one's routine (Roseman, 2006). In Turkey there are several examples of ethnic restaurants serving Indian, Italian, Japanese, Chinese, Thai, Lebanese, Iranian and Mexican cuisine (Teyin et. Al., 2017; Yavuz & Mesci, 2020). In addition, Korean restaurants are among the ethnic restaurants operating in Istanbul, bringing authentic Korean flavors to consumers in Istanbul.

Korean cuisine is distinguished by the use of seasonal products, the use of vegetable oils instead of animal fat, and the widespread use of fermentation technique (Kim et. al., 2016). Whole grains, legumes, vegetables and seafood are among the basic ingredients in Korean cuisine, which is known for its low-calorie and balanced meals (Min & Lee, 2014). One of the most important features that distinguishes Korean culinary culture from other culinary cultures is the table ritual, 'Babsang'. 'Babsang', which is a combination of the words '*Bab*' meaning cooked rice and '*sang*' meaning '*table where you can enjoy eating*'. It consists of '*Bap*' (cooked rice), '*Kuk*' meaning a soup-like dish, and '*Yangnyum*' which refers to an appetizing sauce and '*Banchan*' meaning various side dishes (Kwon et. al, 2015; Kim et. al., 2016). The side dishes mentioned as '*banchan*' consist of vegetables fermented and seasoned with herbs, sesame oil or perilla oil. *Kimchi*, a traditional spicy cabbage pickle, is definitely included in the side dishes and served with every meal (Jang, Mattila & Van Hoof, 2021). Furthermore signature dishes that belong to Korean cuisine can be listed as tteokbokki (stir fried rice cakes served in a spicy sauce), rabboki (rice cakes and noodle served in a spicy sauce), kimbap (rice and a selection of vegetables or meat wrapped in seaweed sheets), bibimbap (rice and a selection of sauteed vegetables and meat served with Korean chilli paste (*gochujang*) sauce and raw or cooked egg), jajangmyeon (noodle with black bean sauce) and bulgogi (*bul* means fire and *gogi* means meat in Korean; this dish prepared by sauteing or grilling marinated meat).

The growing popularity of Korean cuisine with the aforementioned characteristics can be explained by several factors. This situation is primarily associated with the ethnic food trend observed globally (Clemes, Gan & Sriwongrat, 2013). In addition, it is thought that the trend of healthy eating observed around the world has increased the interest in Korean cuisine, which offers balanced and nutritious options due to the widespread use of vegetables and healthy cooking techniques used in the meals (Kwon et. al. , 2015). Finally, it is thought that the 'Korean Wave' movement (Hogarth, 2013), which started from China in the early 1990s and has spread all over the world since the mid-2000s, increased the curiosity towards the Korean culinary culture (Oh & Chae, 2017). It is known that it is more difficult to promote products belonging to a cuisine in a different country due to the reservations of consumers against a foreign food culture. However, it is observed that when the knowledge about a foreign food culture increases, the consumption behavior also increases (Choe & Hong, 2018). In this context, the demand for Korean cuisine is gradually increasing owing to the trend that refers to the marketing of popular culture products such as Korean television series, pop music groups, computer games and animated series (Yoon, 2017). Since the demand is increased the supply is increased and eventually competiton among Korean restaurants has become more intense.

In order to survive in the competitive enviroment these restaurants must take distinctive measures. In the course of determining these measures, acknowledging the customers' opinions and suggestions about their dining experience carries an immense importance. Along with that the increase in the number of restaurants also complicates the restaurant selection process of customers. In addition to affecting the purchase intention, service improvement activities also have an impact on intentions to revisit by providing customer satisfaction and loyalty (Kivela, Inbarakan & Reece, 1999). In the complex decision-making process online reviews are seen as a strategic source of information for the modern restaurant consumer who gives importance to the experience benefit rather than the physiological benefit, and also for the restauranteurs who aim to sustain customer satisfaction and customer loyalty (Vajjhala & Ghosh, 2021). E-WOM is defined as positive or negative comments made by the consumer about a product or company and accessible to a large number of people via the internet and it is defined as expressing emotions for the purpose of seeking advice, supporting the company, worrying about other customers, social benefit, supporting the platform, economic encouragement and extroverted/positive self-development (Hennig-Thurau et. al., 2004). While positive comments encourage the potential customer's purchasing behavior and strengthen the brand image, negative comments can negatively affect the customer's brand perception by reducing the purchase intention (Lee, Rodgers & Kim, 2009; Racherla & King, 2014). Positive reviews give restaurants the chance of increasing sales, making the business more visible on online platforms. Negative comments provide strategic clues to enrich the customer experience, as well as the benefit of seeing the faults of the business and taking the service quality to the next level (Vajjhala & Ghosh, 2021).

The abundance of options offered in today's consumer society causes customers to be more selective and more difficult to be satisfied. Customer satisfaction, which determines the success and reputation of restaurants, depends on factors such as food and service quality, food safety, price-performance relationship, decoration, ambiance (Karaca & Köroğlu, 2018; Sever & Girgin, 2019). However, in ethnic restaurants that act as an intercultural bridge, the issue of whether the food, presentation and atmosphere reflect that culture and the ability of the restaurant to provide an authentic dining experience is added to these factors (Liu & Mattila, 2015; Özdemir, 2022: 243). This situation increases the responsibilities of ethnic restaurants, including Korean restaurants, to provide a certain service quality.

Methodology

The aim of this study is to analyze customer reviews on the Zomato platform regarding Korean restaurants located in Istanbul. For the purpose of this study the online reviews on the Zomato platform made about Korean restaurants based in Istanbul are analyzed following qualitative research methods and content analysis techniques. Currently there are 17 Korean restaurants listed on the Zomato platform. Only 11 of these restaurants are included in this study due to 4 of them being permanently closed and 2 of them serving Chinese and Japanese cuisine in addition to Korean cuisine. As a result, there are 11 restaurants included in the study. In total these 11 restaurants had 521 online reviews from customers but 11 of the reviews were left out because 4 of the reviewers did not experience the Korean restaurant, 6 of the reviews did not contain any data about restaurant experience and one reviewer's language was neither Turkish nor English. Therefore within the scope of the study 475 Turkish and 35 English reviews, in total 510 reviews, made between November 2013 and May 2022 regarding eleven different Korean restaurants based in Istanbul were analyzed. The restaurants are coded as R1, R2, R3, R4, R5a, R5b, R5c, R5d, R5e, R6 and R7 in the study. The reason for coding five of these restaurants between R5a and R5e instead of using numbers is that these restaurants are different branches of the same company. The study implicates both negative and positive reviews for the purpose of gaining a deeper understanding of Korean cuisine customers.

Findings

Table 1. *Descriptive Findings Regarding Korean Restaurants in Istanbul*

FACILITY CODE	LOCATION	POINT	INTERACTIONS	REVIEWS	PICTURES POSTED BELOW REVIEWS	AVERAGE POINTS OF REVIEWS POSTED WITH PICTURES
R1	Nispetiye	3.9	29	15	25	4.3
R2	Sultanahmet	3.1	13	16	10	3.5
R3	Esentepe	3.6	189	69	68	4.2
R4	Mecidiyeköy	4.0	46	56	70	4.0
R5a	Fatih	4.1	131	132	123	4.0
R5b	Beşiktaş	3.7	2	9	4	4.2
R5c	Kadıköy	3.1	30	61	55	3.4
R5d	Bakırköy	3.2	66	71	47	4.3
R5e	Başakşehir	3.9	2	19	17	4.6
R6	Taksim	3.7	15	15	7	4.7
R7	Kadıköy	4.0	52	58	32	4.6
TOTAL		3.6	575	521	458	4.1

The descriptive findings gathered from the Zomato platform between November 2013 and May 2022 regarding 11 restaurants are displayed on Table 1.According to information given on Zomato the restaurants are located in Nispetiye, Sultanahmet, Esentepe, Mecidiyeköy, Fatih, Beşiktaş, Kadıköy, Bakırköy, Başakşehir and Taksim. The average point of the restaurants is 3.6, the total number of comments is 524, the total number of interactions received by the comments is 575, the number of comments under which photos are shared is 458, and the average of the scores of the comments shared with pictures is 4.1.

When looking at the descriptive findings it is understood that the Korean restaurants included in the study are located in various areas of Istanbul. Also 3.6 out of 5 points being the average point of the restaurants shows that suggestions for improvement are needed. When looking at the number of total interactions this finding suggests that the online reviews made by customers have an undeniable repercussion upon future customers. In addition when examining the average point of reviews posted with pictures it is clear that this is higher than the overall average point of restaurants. This shows that customers tend to visualize positive restaurant experiences rather than negative ones. The range of Korean food items mentioned in the reviews is displayed in Table 2.

Table 2. *Range of Food Items Mentioned In Reviews*

RANK	FOOD	NUMBER OF MENTIONS IN REVIEWS
1.	Kimbap	121
2.	Ddokbokki	87
3.	Kimchi	79
4.	Banchan	55
5.	Rabboki	53
6.	Ramen	52
7.	Yangyeom Chicken	50
8.	Jajangmyeon	45
9.	Bibimbap	35
10.	Bulgogi.	27
11.	Mandu	22
12.	Su Gan Chicken	22

As seen on the table kimbap, ddokbokki and kimchi are the most mentioned Korean food items among the customers. Next, banchan which refers to the side dishes served with main dish, rabboki, ramen, yangyeom chicken, jajangmyeon, bibimbap, bulgogi, mandu and su gan chicken are also remarkbly recognized in the reviews. On Table 3 the range of reviews including intention of visit, recommendation of food and beverages and recommendation of restaurant is displayed. Restaurant customers recommended the food and drinks offered 70 times, but stated nine times that the food and beverages they had tried should not be purchased. Moreover they recommended visiting the restaurant 107 times and stated that the restaurant was not worth trying 43 times. In addition, customers stated in the comments that they intended to revisit the restaurant 72 times, and that they would not visit the restaurant again 38 times.

Table 3. *Range of Reviews by Recommendation and Intention of Visit*

RECOMMENDATION OF FOOD AND BEVERAGES		RECOMMENDATION OF RESTAURANT		INTENTION OF VISIT	
POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
70	9	107	43	72	38

These findings show that customers have a tendency to recommend positive restaurant experiences more than negative ones. Furthermore it can be said that an intention to visit a restaurant was affected by positive experiences more than by negative experiences. In the study, main themes and sub themes are formed according to the analysis of online reviews included in the study and in previous research (Emir, 2011; Min & Lee, 2014; Erdem & Yay, 2017). In this direction 6 main themes and 37 sub themes are formed. Furthermore reviews on the Zomato platorm regarding Korean restaurants are coded under these main themes and sub themes and categorized as either positive or negative. On Table 4 main themes and sub themes formed specificly for the study and range of reviews by main themes and sub themes are displayed.

When Table 4 is examined, it can be said that Korean restaurant customers mention, in this order, food and beverages, staff and service, facility, authenticity, price and menu in a positive manner. With that, in order of frequency, the subjects of complaints are food and beverage, staff and service, price, facility, authenticity and menu. When the food and beverage sub theme is examined from the positive aspect the analysis shows that the customers pay most attention to the taste of the foods and beverages served in

Table 4. Range of Reviews by Main Themes and Sub Themes

MAIN THEMES	SUB THEMES	CODES	
		POSITIVE	NEGATIVE
FOOD AND BEVERAGE (660)	Taste of Food And Beverages	327	106
	Portion size	63	37
	Freshness of food	27	14
	Quality of food	20	46
	Compatibleness with Turkish taste palate	6	4
	Halal food	9	1
	TOTAL	**452**	**208**
STAFF AND SERVICE (548)	Skill of handling complaints and requests	16	18
	Level of communication by staff	0	9
	Kindness of servers	34	34
	Polite gestures	95	18
	Involvement of service staff	69	29
	Duration of service	34	37
	Temperature of food	7	7
	Knowledge about food and presentation	36	6
	Taking orders correctly and completely	0	5
	Absence of menu item	0	15
	Quality of service and presentation	49	33
	TOTAL	**343**	**205**
FACILITY (307)	Heating	0	3
	Ventilation	1	5
	Accessibility	12	30
	Interior design	93	31
	Scale and size	16	12
	Room lighting	0	3
	Hygiene	35	16
	Ambiance	35	10
	TOTAL	**215**	**92**
PRICE (184)	Price fairness	61	93
	Mischarges	0	2
	Unexpected charges	0	23
	Payment options	0	5
	TOTAL	**61**	**123**
AUTHENTICITY (167)	Ethnic atmosphere	36	13
	Diversity of side dishes	10	6
	Free side dishes	41	21
	Originality of food	25	15
	TOTAL	**112**	**55**
MENU (56)	Diversity of menu	25	20
	Uniqueness or originality of menu	5	0
	Explanatoriness of menu	2	1
	TOTAL	**32**	**24**

the restaurant . This sub theme is followed by portion size, freshness of the food, quality of food, Korean foods' compatibleness with Turkish taste palate and halal food options. Some prominent examples of customer statements are:

"The food was delicious and the portions were large, my friends and I enjoyed it very much. I will visit again as soon as possible." (Translated from Turkish)
"If there are those who have a prejudice against Far Eastern cuisines, I must say in advance that almost everything on the menu is suitable for Turkish taste" (Translated from Turkish)
"It is also useful to say that it is halal for Muslims who pay attention to what they eat and drink." (Translated from Turkish)

On the negative side, the taste of the food and beverages is the most complained about subject in the comments. Following this, quality of food, portion size, freshness of the food, compatibleness with Turkish taste palate and halal food options are other subjects of complaint for the customers as quoted:

"Pork is used in most dishes. . . halal meat can be used as meat, sunflower or olive oil can be used as oil" (Translated from Turkish)
"I've been going to this place occasionally since it first opened, but it still maintains the same tastelessness. There is no taste in the food. The kimbap is not fresh, the kimchi smells stale, the food I normally enjoy is tasteless here" (Translated from Turkish)

Regarding staff and service related subjects, customers most value polite gestures and involvement of the service staff, quality of service and presentation, and knowledge about food and presentation. After that, duration of service, kindness of service staff, skill of handling complaints and requests, and temperature of food are considered attractive factors when accomplished properly. Some of the customer review quotations can be listed as:

"The waiters are very interested and say what is good and especially suitable for Turkish taste" (Translated from Turkish)
"The employees are very caring, polite and smiling. The lady on duty helped us in choosing the kimbap" (Translated from Turkish)
"In this place where I went with my friend, they welcomed us with a smile. Since we are not familiar with Korean cuisine, they helped us with interest." (Translated from Turkish)

On the negative side, duration of service, kindness of servers, and quality of service and presentation are the most mentioned factors. With that, involvement of service staff, staff's skill of handling complaints and requests, polite gestures, absence of menu items, level of communication by staff, temperature of food, knowledge about food and presentation, and taking orders correctly and completely are also taken into consideration when reviewing Korean restaurants. Some reviews concerning these issues are:

"First of all, I want to talk about the fact that, in a restaurant, the interest and sincerity of the employees is more important than the taste most of the time. This restaurant was missing that. . . .. a sullen welcome, the waiters left the menu, no help. I would understand if they were busy. I called and wanted suggestions, they hardly explained with a lip movement." (Translated from Turkish)
"Its menu is extensive but only in the booklet. So if you couldn't deliver the products, what you need to do is for the employee to come to us and say, "This group of products cannot be served today, I'm sorry."" (Translated from Turkish)
"The service is terrible, we waited 45 minutes for our dishes, the waiters are really young and unexperienced, and sad to say, LAZY."

Regarding sub themes, our research showed that customers pay attention to the interior design of the restaurant the most. After interior design, the most praised subjects are hygiene and ambiance of the restaurant referring to the sound and odor of the restaurant. Scale and size of the restaurant and accessibilty to the restaurant are also seen as attraction factors among the customers. Some prominent examples of customer reviews are:

"If you search on the internet and look at the correct address, the place is very easy to find, even if you go for the first time." (Translated from Turkish)
"It has a very warm environment." (Translated from Turkish)
"The environment is calm and stylish." (Translated from Turkish)
"First of all, the place was extremely clean and tidy." (Translated from Turkish)

The findings show that customers complain about accessibilty, hygiene and scale and size. Furthermore ambience,ventilation, room lighting and heating are also subjects of complaint. Some of the reviews that paid attention to these subjects are:

"The decor can be said to be the most negative aspect of the place. From the outside, it does not have a view that will allow you to enter." (Translated from Turkish)
"We found the place very difficult in terms of transportation... and the interior decoration of the place was not taken care of." (Translated from Turkish)
"Very sloppy and stuffy place." (Translated from Turkish)
"The spoon that came was very stained, even dirty; there was a big dried food scrap on it. . . . .. There was also dust on the serving plate. They definitely need to pay more attention to hygiene." (Translated from Turkish)

An examination of the topic of prices revealed that, contrary to the other main themes, negative comments are more than positive ones. The findings show that customers valued fair prices but also complained about unfair price policies the most. Some reviews concerning price related issues are:

"If I evaluate it in terms of price performance, I can say that it is not worth the money we paid. Sorry :(Will I go again? I won't." (Translated from Turkish)
"The Korean waiter was very caring and cute, but unfortunately it was not enough to save the performance/price balance. I wouldn't go again, I wouldn't recommend it to anyone."(Translated from Turkish)
"Although the prices seem high, I would definitely recommend it. The restaurant deserves its price." (Translated from Turkish)

Also unexpected charges are seen as an important subject of complaint. There are also negative reviews about inadequency of payment options and mischarges such as:

"It was strange that the service charge was higher than the 10% service charge specified in the menu? I recommend that you keep in mind that the account will be brought by reflecting at least 10% difference on the pricing in the menu." (Translated from Turkish)
"It's nice that it's shabby, but if two people eat one dish, what's the point of charging 5 TL? I don't understand, is it the price for the sticks?" (Translated from Turkish)
"Of course, it would be much better if Sodexo or other food cards were passed." (Translated from Turkish)

Considering that the aim of the study is analyzing ethnic restaurants' online customer reviews, authenticity of food, service rituals and matching atmosphere with the culture are considered vital. The sub themes regarding free side dishes and diversity of side dishes refer to the 'banchan' – side dishes served next to main dishes in Korean cuisine. These sub themes are formed based on the fact that there are a remarkable number of reviews praising or criticizing the existince or diversity of side dishes in the restaurants. The most praised subject is whether the restaurant offers free side dishes or not. The following positive subject among customers is the ethnic atmosphere created at the restaurant. Also, originalty of food and diversity of side dishes are considered attraction factors. Some of the reviews including these issues can be listed as:

"The restaurant plays old-new Korean songs. Squid Game, which is very popular now, was also included inside, which in my opinion was a very cute detail. (Translated from Turkish)
"Everything is so authentic. From the steel chopsticks and rest used to the Korean music playing in the venue." (Translated from Turkish)
"There is a wide variety of appetizers served at the beginning of the meal. I recommend you try them all." (Translated from Turkish)
"My favorite Korean restaurant in all Istanbul; it gave the real experience of being in Korea. Very good and the best thing is the side dishes and the grill table."

The most complained about subject is also free side dishes. Furthermore, on the negative side, originality of food, ethnic atmosphere and diversity of side dishes are subjects of complaint respectively. Some of the customer statements that paid attention to these subjects are:

"The varieties of appetizers they serve are few and the kimchi is unfortunately to be paid for." (Translated from Turkish)
"Frankly, I was slightly disappointed because I expected a more Korean style seating system instead of the classic desk chair. The reason for this is that there are clothes belonging to Korean culture inside and you can take pictures by trying on those clothes." (Translated from Turkish)
"The taste of most dishes is unfortunately far from the ones in Korea. Especially the last time I ate ddeokkbeokki, I was shocked. It was officially made with our chili paste, not gochujang." (Translated from Turkish)
"I would also expect a restaurant theme with a little more modern or traditional Korean motifs." (Translated from Turkish)

The topic of the menu is the least matter of concern according to the reviews, however there are some reviews regarding diversity of menu, both positive and negative, that are worth the restaurants' attention. Also, uniqueness and originalty of menu and explanatoriness of menu are both praised by customers in some cases. Some of the customer statements concerning the menu theme are:

"The menu is not descriptive at all, when the employees are asked about its content, they say we don't know." (Translated from Turkish)
"I was prejudiced, but really, I think everyone can find something to suit their taste. There are so many varieties." (Translated from Turkish)

Results, Discussion and Suggestions

Interest in ethnic restaurants has increased globally both as a result of seeing eating out as a social experience rather than a physiological need and growing curiosity towards different cultures. Customers of ethnic restaurants, which are increasing in number all over the world, evaluate their experiences impartially in the comments they make on various online platforms. These comments provide important feedback to restaurant owners as well as being a guide for potential customers.

In line with the increasing interest in ethnic restaurants and especially Korean restaurants, customer reviews for Korean restaurants were analyzed in this study, the aim of which was to have a deeper understanding of the experiences of Korean restaurant customers in order to enrich and improve the restaurant experience. According to the findings, food and beverage and service and staff related factors were the subjects which Korean restaurant customers paid most attention to. Taste of food and beverage were the most attractive, yet most complained about, factor compared to other elements similar to previous research (Sukalakamala & Boyce, 2007; Albayrak, 2013; Sünnetçioğlu, Yıldırım & Bertecene, 2020). This shows that even though customers visited Korean restaurants for the purpose of experiencing an ethnic cuisine, their first aim was eating a delicious meal and receiving a welcoming service. The fact that the customers mentioned factors regarding food and beverage and service and staff more than authenticity related subjects also proves this.

While the staff and service factor was the second most mentioned subject among customers (in keeping with prior research) (Doğan, Güngör Tanrısevdi, 2016; Özkale, 2021), polite gestures and involvement of the servers were the second most influential factor of all sub themes . Customers seek a smiling face, a friendly attitude and interest from the service staff. When dining in an ethnic restaurant it can be said that customers feel out of their comfort zone and insecure about their choices due to not being compeletely familiar with the cuisine. Given this fact, it is thought that customers need to be informed about the menu with a positive attitude when visiting Korean restaurants.

The findings show that customers paid attention to the interior design of the restaurants included in the study. In addition to this, ethnic atmosphere was considered an attractive factor for customers. Under the authenticity theme it was interesting that banchan culture related reviews occurred the most. According to a study made by Jang et. al. (2021) as the number of side dishes served in Korean restaurants increases so the willingness to try Korean cuisine increases. Thus, as with the finding in which customers sought to experience traditional food rituals, so also the number of side dishes might be appealing for customers. Also according to the findings it is notable that customers complained about the compatibility of the served meals with the original recipes. In the light of the growing popularity of Korean culture on mass media, customers visiting these restaurants have an awareness of at least how the food is supposed to look like even if they haven't experienced it before. Therefore serving ethnic food in as original a way as possible is considered a key element.

The price theme was the third most complained about subject among the customers. This finding matches with previous research (Emir, 2011; Taştan ve Kızılcık, 2017). This result is considered to derive from the fact that food production in Korean cuisine consists of imported ingredients. For this reason the prices are easily affected by currency changes. Menu related subjects were the least mentioned theme in the reviews. This finding shows similarity with previous research made by Erdem & Yay (2017) and Taştan & Kızılcık (2017). Under this theme customers complained about and praised the diversity of the dishes most.

Based upon the analysis of online reviews regarding Korean restaurants, suggestions for Korean restaurants to obtain a more successful business through enhancing and enriching customers' restaurant experience are listed below. Korean restaurants in Istanbul should:

- Regularly check online reviews about the restaurant to gain a deeper understanding of strengths and weaknesses in the organization.
- Prioritize the taste of foods and beverages, form recipes for every dish in the menu and follow the recipes strictly to achieve a stable flavor profile, especially regarding the most mentioned dishes in the comments.
- Determine the appropriate portion amount for each meal on the menu and make sure that the kitchen staff do not exceed this portion amount.
- Train the kitchen staff about the products and cooking techniques used in Korean culinary culture; ensure that authentic products, recipes and techniques are used in the meals served.
- Offer traditional Korean food rituals and presentations properly in order to reflect Korean culture fairly.
- Incorporate banchan culture in the menu. Considering how much customers praise these free of charge small treats, they should offer appetizers in banchan table culture in sufficient quantity and variety.
- Make sure that the service staff's attitude towards customers is friendly, kind and involved. In order to achieve this, attention should be paid to the job satisfaction and organizational loyalty of personnel.
- Educate staff about Korean cuisine culture, food and beverages served in the restaurant along with service rituals by organizing regular tasting events for service staff.
- Include cultural elements (cultural music, traditional decorational items such as paintings, statues or posters) in dining areas as well as create a cozy and elaborate interior design.
- Follow a stable price policy as far as possible, taking account of a fast changing economic climate.

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RESEARCH ARTICLE

The Effect of Food Neophobia, Variety Seeking, and Food Consumption Motivation on Intention to Purchase Local Food*

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ABSTRACT
Since local food is considered essential to attract tourists to a destination, we focused on a number of negative and positive factors influencing the local food purchasing decision. In this context, the purpose of this study is to determine the effect of food neophobia, variety seeking and food consumption motivation on the intention to purchase local food through quantitative research. The data were obtained from 655 international tourists visiting Istanbul between May-August 2021 through a face-to-face survey and analyzed using Structural Equation Modeling (SEM), which validates the use of partial least squares (PLS). The results indicate that food neophobia, variety seeking, and food consumption motivation have a significant effect on the intention to purchase local food. Consequently, theoretical and practical recommendations were presented in line with the findings.

Keywords: Food Neophobia, Variety Seeking, Tourist Food Consumption Motivation, Local Food

*This study was conducted based on PhD thesis "The Effects of Variety Seeking, Food Neophobia and Food Consumption Motivation on Tourists' Intention of Local Food Purchase: The Case of Istanbul".

Introduction

Today, local food is recognized as essential to tourism (Sthapit et al., 2020). Hence, it significantly impacts destination branding, competitive advantage, and the development of cities or regions (Mgonja et al., 2017) and is also seen as a vital reflector of the cultural image of destinations. In this way, local food, which is considered a national symbol, can be used to attract tourists to destinations.

Although local food is a crucial attraction in terms of tourism, negative situations regarding local food may constitute an obstacle in tourists' destination selection process. For this reason, it was revealed that food neophobia (FN) is a key factor in studies conducted to examine consumer behavior toward local food (Sthapit, 2017). FN is defined as "a personality trait that affects food consumption preferences" (Pliner and Hobden, 1992). Insufficient information about destination-specific foods and negative experiences with food can affect tourists' attitudes toward local food (McFarlane and Pliner, 1997). Another characteristic that affects local food consumption is variety seeking (VS). Warde et al. (1999) argue that tourists' tendency toward VS in food is a form of cultural experience. It has also been observed that tourists with a high VS tendency enjoy experiencing unfamiliar foods and trying new recipes (Molz, 2004). Thus, this situation reflects positively on tourists' travel behavior.

Motivation, another essential factor affecting tourists' travel behavior, constitutes the reason for tourists' travel related to destination-specific food (Lacap, 2019: 241). In the related literature (Fields, 2002; Promsivapallop and Kannaovakun, 2020; Tomassini et al., 2021), it is understood that there are many factors affecting food consumption motivation (FCM), and these motivation factors are dimensioned in different ways by researchers. Additionally, tourist motivations and behaviors positively affect local food purchase intention (LFPI). Therefore, foods specific to different cultures ensure that tourists in search of novelty have a stronger tendency to purchase local food (Bianchi, 2017: 555).

Considering the background information given above, the present study aims to determine the effect of tourists' FN, VS, and FCM on LFPI. Previous studies have been conducted on the topics of FN (Kashif et al., 2021; Wolff and Larsen, 2019), VS

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(Derinalp Çanakçı and Birdir, 2020; Hwang and Lin, 2010; Kwun et al., 2013; Shenoy, 2005), FCM (Fields, 2002; Mak et al., 2012), and LFPI (Bianchi, 2017; Conoly et al., 2023). However, the research on the relationships between FN, VS, and FCM and the possible effect of these variables on LFPI is limited, and this research purports to contribute to the literature in various aspects. The following sections present the extended literature of the constructs, the proposed hypotheses, and the research model. Later, methods and analyses introduced. In the last section, the findings are presented and discussed in light of the literature. The chapter also includes some suggestions and limitations for future studies.

Theoretical Background and Hypotheses Development

Food Neophobia

According to Jeager et al. (2021), FN is defined as "the resistance to new foods and caution or rejection of unfamiliar foods." Johnson et al. (2018: 86) define it as a personal trait that affects individuals' food preferences. Therefore, this term is a personality trait or the behavior of individuals when they accept or reject new and unknown foods (Dimitrovski and Crespi-Vallbona, 2017: 478).

FN affects willingness to experience new foods depending on socio-demographic status, level of education, and degree of urbanization (Frewer, 2012; Meiselman et al., 2010). Pauperio et al. (2014) reported that tourists' local FN decreased significantly with increasing educational attainment. Siegrist et al. (2013) concluded that there was a decrease in FN levels with increasing income levels. Au and Law (2002) found that females are more concerned about trust in local food. Flight et al. (2003) suggested that living in urban environments may increase exposure to different cultures, and this may increase food knowledge.

Moreover, health anxiety is closely related to FN. A study found that health anxiety has a significant impact on food consumption (Liu et al., 2017). Another study indicated that tourists might be reluctant to experience local foods that are perceived as unhealthy (Cohen and Avieli, 2004). Moreover, distrust towards food has become a major problem (Frewer, 2017; Siegrist et al., 2018). For this reason, the desire to consume healthy and safe food brings the search for hygiene to the forefront (Barrena and Sanchez, 2012: 72-73), and therefore health should be considered in the consumption process.

The degree of FN can affect tourists' perceptions and decisions to consume unfamiliar foods (Aqueveque, 2015: 244-245). However, it is also claimed that people who tend to reject unfamiliar foods may exhibit more positive attitudes towards those foods when exposed to the same foods (Asperin et al., 2011). Therefore, understanding tourists' different behavioral tendencies towards food choices is a key approach in terms of increasing the preferability of destination-specific products (Olabi et al., 2009).

The relevant literature reported that FN causes tourists to avoid experiencing new foods from different regions or cultures (Pliner and Salvy, 2006; Sthapit, 2017; Sthapit et al., 2020). In this regard, tourists take precautions about new foods during their travels, which leads to a tendency to reduce the VS (Kim et al., 2010). Nevertheless, Choi (2019) found that FN has a negative effect on VS behavior. Furthermore, Samant et al. (2017) noted that FN negatively affects the consumption of ethnic foods. Accordingly, it can be argued that people with high FN tend to restrict their search for variety (Cui et al., 2021; Lenglet, 2018). It is also discussed in the literature that FN is an important variable that directs tourists' FCM (Pourfakhimi et al., 2021; Promsivapallop and Kannaovakun, 2020). La Barbera et al. (2018) concluded that people with high FN exhibit negative attitudes toward local cuisines during their travels. However, with decreased FN, tourists may be motivated to experience different cuisines (Choi and Jeon, 2020; Huang et al., 2019; Wan Zainal Shukri, 2017). Mak et al. (2017) concluded that FN positively affects FCM. Therefore, in line with the information in the relevant literature, it is indicated that FN in tourists may affect FCM. It is stated that factors such as hygiene and health issues trigger tourists' FN, which negatively affects their LFPI (Onozaka et al., 2010). Therefore, tourists are unwilling to experience local food (Eertmans et al., 2005; Ghanem, 2019). Hsu et al. (2018) concluded that FN could reduce LFPI. However, Sivrikaya and Pekerşen (2020) suggested that FN significantly affects purchase intention. In this way, FN may affect the LFPI. Hence, the following hypotheses are proposed in this research:

H1: Tourists' FN affects VS.

H2: Tourists' FN affects FCM.

H3: Tourists' FN affects LFPI.

Variety Seeking

VS affects individual behaviors in food consumption and is described as a personal tendency used in consumer research (Bigne et al., 2009: 103-104). People's need for novelty directly affects their consumption behavior. Therefore, VS has been extensively analyzed in product marketing (Goukens et al., 2007). The concept also refers to seeking novelty in unfamiliar products (McAlister and Pessemier, 1982: 311). Accordingly, variety seekers are individuals who enjoy tasting unfamiliar food types and eating exotic foods from different countries (Molz, 2004: 53-70).

Farmaki (2012) stated that people mostly travel to discover new cultures and to seek variety. In this context, the prominent VS tendency can be categorized as high and low levels. It has also been revealed that the eating out behavior of tourists with a high VS tendency is higher than other groups (Beldona et al., 2010). VS is seen as an important factor in tourists' choice making and can also be effective in tourists' decisions and behaviors regarding destinations (Barroso et al., 2007: 175-177). For this reason, the literature on food consumption explains that tourists' VS tendencies toward local foods play an essential role in their participation in food-related activities (Halverstadt, 2017).

In the related literature (Ha and Jang, 2013; Shenoy, 2005), different studies examine the relationship between VS and food consumption. In these studies, it is discussed that VS makes tourists feel a strong desire to experience local gastronomic attractions and tend to consume local foods. Mak et al. (2017) found that VS positively affects FCM. When the studies on this topic are analyzed, it is understood that VS is a crucial variable affecting FCM (Beldona et al., 2010; Bigne et al., 2009). In addition, VS is considered a key factor in the local food purchase decision process. Previous studies reported that tourists' VS tendencies significantly influence their local food consumption or purchasing behavior (Kwun et al., 2013; Legoherel et al., 2012). Therefore, VS impacts FCM and LFPI. Thus, it is hypothesized that:

H4: Tourists' VS affects FCM.

H5: Tourists' VS affects LFPI.

Food Consumption Motivation

Motivation is considered a critical construct that influences tourists' preferences to travel to certain destinations (Wiriyapinit, 2017: 18) and guides their food consumption behavior. Therefore, many studies have been conducted to understand their motivation and food consumption behaviors (Fields, 2002; Tse and Crotts 2005). Previous studies have revealed that (Ares, 2011; Mak et al., 2012) demographic characteristics of tourists (age, gender, nationality, income, and marital status) are among the crucial factors affecting FCM. In addition, various religious practices and beliefs (Monin and Szczurek, 2014) also significantly restrict tourists' food consumption (Gonzalez et al., 2020). For example, in Islam and Judaism, the prohibition of certain foods and the requirement of specific preparation methods (halal, kosher, etc.) indicate that religious beliefs strongly influence food consumption (Bon and Hussain, 2010). In addition, past experiences (Ryu and Jang, 2006) may increase tourists' familiarity with local foods and their consumption intention.

The related literature suggests that many studies have been conducted to determine FCM. Fields (2002) determined the motivation factors under four dimensions: "physical motivators," "cultural motivators," "interpersonal motivators," and "status and prestige motivators." Moreover, Kim et al. (2009) identified the motivation factors under nine headings: "exciting experience," "escape from routine," "health concern," "learning knowledge," "authentic experience," "togetherness," "prestige," "sensory appeal," and "physical environment." Mak et al. (2017) examined motivation factors under seven dimensions: "novelty and variety," "authentic experience and prestige," "interpersonal and culture," "price/value and assurance," "health concern," "familiarity and eating habit," and "sensory and contextual pleasure."

It is claimed that tourist motivation and destination-specific food experiences affect purchase decisions (Hwang and Lin, 2010; Kastenholz et al., 2016). Moreover, some studies in the relevant literature indicate that physical motivations, such as "escaping from routine," "gaining experience," "sensory appeal," and "health concerns" (Ahmad et al., 2019; Ghanem, 2019) affect the local food purchase decision process. However, Madaleno (2017) found that tourists' FCM has a negative effect on LFPI. Therefore, as can be inferred from these studies, FCM affects LFPI. Thus, it is proposed that:

H6: Tourists' FCM affects LFPI.

Local Food Purchase Intention

Local food is defined as "authentic products that represent the culture of a destination" (Sims, 2009). Bosona and Gebresenbet (2011) define it as the food produced, sold, and consumed in a specific area, while Sthapit et al. (2020) define it as "food prepared using traditional methods of a particular region."

Local foods are qualified products specific to a particular destination and recognized as a "symbolic social experience." In addition, this term is an important factor influencing destination choice (Silkes et al., 2012). Therefore, it can effectively create tourism demand for the destination.

Identifying the factors affecting LFPI is of great importance. In the relevant literature, the LFPI is influenced by product price (Vermeir et al., 2020), product quality (Besharat, 2010), attitude (Min and Hong, 2021), number of previous visits (Frisvoll et al., 2016), lack of knowledge about local foods (Nie and Zepeda, 2011), taste, appearance and authenticity (Youn and Kim, 2017), and motivational factors (Kim et al., 2013). Therefore, different factors affect tourists' LFPI.

Research Model

In line with the literature review, a conceptual research model is proposed. Figure 1 illustrates the hypothesis model.

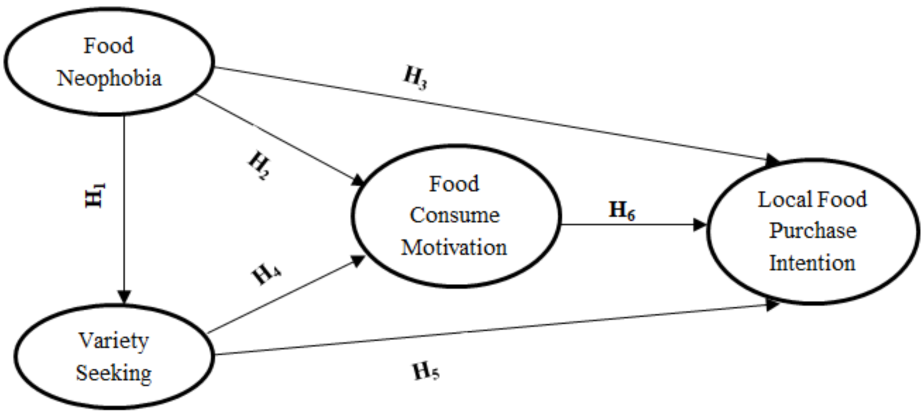

Figure 1. Research model.

Methodology

Sample and Data Collection

The present study utilized convenience and quota sampling; the data was collected from international tourists visiting Istanbul from May-August in 2021. The reason Istanbul was chosen as a research area is that it reflects the food culture of different traditions and ethnic groups, as well as the widespread availability of regional, national, and international food varieties that it offers. Furthermore, Istanbul's powerful image and brand value create the potential for it to become a gastronomy-oriented center. In this research, the survey technique was used. Questionnaire forms were distributed and applied to hotel establishments operating in Istanbul between the relevant dates. The minimum sample size of 384 recommended by Yazıcıoğlu and Erdoğan (2014) and the analysis methods to be used were taken into consideration. It is accepted that it is sufficient to reach a size ten times the number of parameters in order to apply the structural equation model (Kline, 2011). In this study, since the number of variables other than the questionnaire, including demographic characteristics, is 50, a minimum sample size of 500 was expected to be reached. As a result, 700 questionnaire forms were reviewed, and 45 questionnaire forms were excluded from the analysis due to the determination that some questionnaires were partially completed or more than one option was marked. Therefore, 655 questionnaire forms were determined as suitable for statistical analysis. This study received approval numbered 2020/101 from the ethics committee of Necmettin Erbakan University.

Survey Instrument

In this study, a questionnaire consisting of five sections was used. The first section contains demographic variables. In the second section, the 8-item, single dimensional FN scale used in the study conducted by Ritchey et al. (2003) was used to determine whether tourists have a neophobia of experiencing new foods. In the third section, the VS scale developed by Steenkamp and Baumgartner (1992), which consists of 8 items and a single dimension, was used to measure tourists' VS tendencies towards food. In the fourth section, the FCM scale developed by Mak et al. (2017) was used. The FCM scale consists of 31 items and seven dimensions. In the fifth section, the LFPI scale consisting of 3 items and one dimension, prepared by Bianchi (2017) by compiling different studies in the relevant literature, was used. The evaluation of all statements of the concepts in the questionnaire form by the participants was measured with a five-point Likert-type scale.

Data Analysis

SmartPLS package software was used for the data analysis of the study. This software is evaluated with a two-stage approach as a measurement model and structural model (Hair et al., 2017). In the measurement model stage, indicator reliability (outer loadings), internal consistency (composite reliability-CR and Cronbach's alpha), convergent validity (average variance extracted-AVE), and divergent validity (Fornell-Larcker criterion and Heterotrait-monotrait (HTMT) ratio of correlation) values were presented (Hult et al., 2018). In addition, variance inflation factor (VIF), explained variance (R^2), model fit, effect size (f^2), predictive relevance (Q^2) and path coefficients test results were evaluated at the structural model stage.

Findings

Participant Profile

Of the 655 participants, 52.5% were female, 56.6% were between the ages of 18 and 45, 66.7% were married, and 46.7% had a bachelor's degree (Table 1). When the nationalities are analyzed, it is seen that Russian tourists are in first place at 17.7%, German tourists are in second place at 17.3%, and Kuwaiti tourists are in last place at 5.3%. Regarding their monthly income levels, it is understood that those with an income from $2,001-4,000 constitute the largest group, with a rate of 34.8%. It was concluded that the rate of those who had traveled to a destination before only to experience local food was 30.7%, and most of the participants had knowledge about Turkish cuisine, with a rate of 79.7%. In addition, it was determined that most tourists were visiting Istanbul for the first time, at a rate of 45.6% and that the tourists were mainly accompanied by family members, at a rate of 37.4%.

PLS Structural Equation Modeling

Table 2 illustrates the values related to the variables. In the analysis process, no statement was excluded for all measurement tools. For the FCM variable, the mean values of the statements were taken according to the dimensions created in the relevant literature, and the evaluations were carried out on the dimensions instead of the statements in this context. Accordingly, in the process of testing the measurement model, each of the dimensions for the FCM scale was included in the analysis as the statements of a measurement tool. It was concluded that the factor loading values of the statements in Table 2 were greater than 0.70, but only the health concern dimension of the FCM scale was found to have a value of 0.60. However, some sources state that values above 0.50 (Hair et al., 2019) can be considered in this context. Therefore, the factor loadings are above the ideal value. In addition, Cronbach's alpha and CR values of the variables are above 0.70, indicating that internal consistency is ensured (Hair et al., 2010). Moreover, the fact that all AVE values are above 0.50 (Hair et al., 2010) indicates that the scales in question have convergent validity. Hence, the expected values related to the model are met.

Fornell-Larcker and HTMT criterion coefficients were calculated for the discriminant validity of the scale. According to the Fornell and Larcker (1981) criteria, "the square root of AVE in each latent variable should be more than other correlation values among the latent variables." Table 3 illustrates that the value of each variable has a value greater than the other values in its column and row.

The values of the HTMT are also presented in Table 4, and it is determined that all values are below 1.0 (Henseler et al., 2016). PLS does not generate a Goodness-of-Fit Index, but the Standardized Root Mean Square Residuals (SRMR) value gives the most approximate value in terms of model fit. While it is generally stated that the SRMR value should be lower than 0.08, some researchers (Domínguez-Quintero et al., 2020) argue that a value lower than 0.10 is acceptable. In this study, the SRMR value was within the ideal value range, with a value of 0.073. After the factor structure of the scale was confirmed, and the structural fit was determined, the model was tested with path analysis.

Evaluation of the Structural Model

Model estimation was performed using the 5000 Bootstrapping (Resampling Method) technique. Before determining the path coefficients, VIF, R^2, f^2, and Q^2 analyses of the model were performed. VIF analysis determines whether there is a linearity problem between the variables of the model. Values of each variable greater than 10 (Henseler et al., 2009) indicate that there is a linearity problem. According to Table 5, it was determined that all of the values are below the critical value. After determining the VIF values, R^2 determination coefficients were examined to see how much the independent variables explain the dependent variables. The R^2 value is between 0 and 1, and the explanatory power increases as it approaches 1 (Hair et al., 2019). The results show that FN explained 84.2% (R2=0.842) of VS. In addition, FN and VS variables were found to explain 78.9% (R^2 =0.789) of FCM. Finally, it is seen that 76.6% (R^2=0.766) of the LFPI, which is the final dependent variable tested in the study, is explained

Table 1. *Overview of Participants' Demographics*

		Frequency	(%)
Gender	Male	311	47.5
	Female	344	52.5
Age	18-25	108	16.5
	26-35	122	18.6
	36-45	141	21.5
	46-55	111	16.9
	56-65	99	15.1
	66 and more	74	11.3
Marital status	Married	437	66.7
	Single	218	33.3
Education level	High school	83	12.7
	Associate	181	27.6
	Bachelor	306	46.7
	Master's or Ph.D. degree	85	13
Nationality	Russian	116	17.7
	German	113	17.3
	English	70	10.7
	Iranian	70	10.7
	French	66	10.1
	Ukrainian	60	9.2
	Dutch	43	6.6
	American	42	6.4
	Azerbaijani	40	6.1
	Kuwaiti	35	5.3
Income	Less than $2,000	189	28.9
	$2,001-$4,000	228	34.8
	$4,0001-$6,000	141	21.5
	$6,001-$8,000	97	14.8
Traveling for Local Food	Yes	201	30.7
	No	454	69.3
Having Knowledge of Turkish Cuisine	Yes	522	79.7
	No	133	20.3
Number of the visit	1st	299	45.6
	2nd	190	29
	3rd	117	17.9
	4th and more	49	7.5
Traveling companions	Single	60	9.2
	Family member (s)	245	37.4
	Friend (s)	220	33.6
	Relative (s)	130	19.8

by FN, VS, and FCM variables. Therefore, the R^2 value obtained in this study is well above the acceptable level. It was stated that the effect size (f^2) and Q^2 values should also be examined along with R^2. For an average effect, f^2 should be 0.15, and Q^2 should be greater than 0 (Cohen, 1988). Considering the effect size, f^2 for VS produces a strong value of 0.345. However, f^2 for FCM produces a value of 0.056, and f^2 for LFPI produces a value of 0.006, albeit at a low level. In addition, as seen from the Q^2 values, the value of VS is 0.562, the value of FCM is 0.514, and the value of LFPI is 0.708 (Table 5). Therefore, it can be accepted that the model's predictive power for all three dependent variables is at a high level. After the necessary preliminary evaluations were completed in the structural model, the research hypotheses were tested, and path analysis was performed.

According to the results of the structural equation model, FN has a significant effect on VS (β=0.918, t=139.134, p<0.01), FCM (β=0.277, t=5,280, p<0.01), and LFPI (β=0.091, t=2.107, p<0.05). Thus, hypotheses H_1, H_2, and H_3 are admitted. On the other hand, VS positively affects FCM (β=0.627, t=12.469, p<0.01) and LFPI (β=0.145, t=2.746, p<0.01). Hence, hypotheses H_4 and H_5 are also accepted. Finally, FCM positively affects LFPI (β=0.663, t=15.524, p<0.01). Therefore, hypothesis H_6 is also accepted.

Table 2. *Measurement Model*

Constructs	Factor Loadings	t-value	Cronbach's Alpha	CR	AVE
Food Neophobia					
I am constantly sampling new and different foods.*	0.873	72.307	**0.950**	**0.959**	**0.744**
I do not trust new foods.	0.866	77.243			
If I do not know what a food is, I will not try it.	0.850	59.636			
I like foods from different cultures.*	0.911	124.65			
At dinner parties I will try new foods.*	0.884	92.615			
I am afraid to eat things I have never had before.	0.877	91.175			
I am very particular about the foods I eat.	0.767	38.993			
I like to try new ethnic restaurants.*	0.863	69.251			
Variety Seeking					
When I eat out, I like to try the most unusual items, even if I am not sure I would like them.	0.837	71.521	**0.942**	**0.945**	**0.715**
While preparing foods or snacks, I like to try out new recipes.	0.863	92.735			
I think it is fun to try out food items one is not familiar with.	0.916	135.34			
I am eager to know what kind of foods people from other countries eat.	0.833	77.592			
I like to eat exotic foods.	0.874	90.124			
Items on the menu that I am unfamiliar with make me curious.	0.769	36.744			
I prefer to eat food products I am used to.*	0.762	29.737			
I am curious about food products I am not familiar with.	0.898	117.05			
Food Consumption Motivation					
Novelty and variety	0.914	167.04	**0.949**	**0.952**	**0.712**
Authentic experience and prestige	0.892	105.4			
Interpersonal and culture	0.928	186.77			
Price/value and assurance	0.822	56.204			
Health concern	0.609	19.04			
Familiarity and eating habit	0.817	52.891			
Sensory and contextual pleasure	0.882	103.55			
Local Food Purchase Intention					
I would definitively buy locally sourced products.	0.992	941.19	**0.989**	**0.993**	**0.979**
I would surely buy locally sourced products.	0.994	136.26			
I would most likely buy locally sourced products.	0.982	479.82			

Note: *Items are reverse coded.

Table 3. *Fornell-Larcker Results*

Variables	1	2	3	4
FN	**0.862**			
LFPI	0.790	**0.990**		
FCM	0.851	0.869	**0.890**	
VS	0.818	0.813	0.880	**0.896**

Table 4. *HTMT Results*

Variables	1	2	3	4
FN	-			
LFPI	0.807			
FCM	0.873	0.895		
VS	0.863	0.841	0.915	-

Table 5. *Hypothesis Testing*

Relationship	Std. Beta	R^2	t-value	p-value	VIF	f^2	Q^2	Result
H_1 : FN --> VS	0.918	0.842	139.134	0.000**	1.000	0.345	0.562	Supported
H_2 : FN --> FCM	0.277	0.789	5.280	0.000**	4.676	0.056	0.514	Supported
H_3 : FN --> LFPI	0.091	0.766	2.107	0.035*	6.345	0.006	0.708	Supported
H_4 : VS --> FCM	0.627	0.789	12.469	0.000**	4.676	0.056	0.514	Supported
H_5 : VS --> LFPI	0.145	0.766	2.746	0.006**	6.345	0.006	0.708	Supported
H_6 : FCM --> LFPI	0.663	0.766	15.524	0.000**	6.345	0.006	0.708	Supported

Conclusion and Discussion

In this section of the study, the findings obtained as a result of the research are evaluated. Firstly, it was determined that FN positively affects VS. Tian et al. (2018) and Choi (2019) report that familiarity and knowledge about food can change tourists' negative attitudes and encourage them to seek variety in local food. Moreover, another study (Mascarello et al., 2020) emphasized that people with low levels of FN are more likely to choose to experience food types specific to different culinary cultures. However, studies in the literature (Choi, 2016; Cui et al., 2019; Cui et al., 2021; Lenglet, 2018) concluded that people with high FN tend to restrict their VS characteristics. Therefore, high levels of FN may negatively affect tourists' FCM. Another result of the study is that FN has a significant effect on tourists' FCM. Khanna and Bhagat (2021) found that FN significantly affects destination-specific ethnic food consumption intention of tourists visiting India's Jammu and Kashmir regions. A different study suggested that tourists with high levels of FN may reduce the tendency to consume local foods (Ji et al., 2016). However, Hsu et al. (2018) found that tourists with high levels of FN choose local foods more if they have a positive attitude. Therefore, it can be argued that a positive attitude towards local food can significantly affect FN.

Another notable finding of the study is that FN statistically affects LFPI. The results are similar to Sivrikaya and Pekerşen's (2020) and Hwang and Lin's (2010) findings. On the other hand, Kashif et al. (2021) found a positive relationship between the intention to purchase organic products and purchase behavior and reported that FN has a moderating effect between intention to purchase organic products and purchase behavior. Additionally, positive experiences with local food led to a decrease in FN, and thus tourists were more likely to purchase local food (Skuras et al., 2006). Hsu et al. (2018), who reached a finding that is different from the results of this study, concluded that tourists with high FN could reduce their LFPI. Therefore, the purchase decisions of tourists with low levels of FN are positively affected. The study also concluded that VS statistically affects FCM and LFPI. Supporting this finding, Mak et al. (2017) found that VS positively affects FCM. Furthermore, Legoherel et al. (2012) concluded that tourists who want to experience new flavors and tastes are more likely to purchase local foods. Thus, VS is important in influencing tourists' FCM and their decisions to purchase local food.

Finally, the study showed that FCM positively affects LFPI. Similar findings were observed in research by Kastenholz et al. (2016) and Sathiankomsorakrai et al. (2021). However, Madaleno et al. (2017), who reached a finding that is different from the results of this study, found that tourists' FCM has a negative effect on LFPI. Nevertheless, they revealed that only the cultural experience sub-dimension positively affected the LFPI. In addition, studies (Ahmad et al., 2019; Kim et al., 2009) found that physical motivations "escaping from routine," "gaining experience," "sensory appeal," and "health concerns" affect the local food purchase decision process. Therefore, it is understood that many motivational factors direct tourists to LFPI.

In line with the results emerging from this research, some recommendations for destination managers, restaurant operators, tourism industry stakeholders, and researchers are given in the context of this study:

- Destination managers can include information about local food and various visuals in promotional materials about destinations to reduce tourists' anxiety and worry levels.
- Using social media and billboards to encourage tourists' purchasing behavior toward local food could benefit restaurants and businesses.
- The different flavors and authenticity of the regions play an essential role in enhancing the destination image. Especially the diversity of cooking methods and foods prepared with different mixtures can effectively highlight the cuisine specific to the destination.
- In the menus of food establishments, it is important to emphasize the production and presentation of foods with high sensory appeal as well as the presentation of foods that are suitable for tourists' taste.
- By identifying the differences between the destination and creating effective marketing strategies by destination managers, tourists' intentions to purchase local foods specific to the region could be positively affected.
- Designing the physical structure, atmosphere, ambiance, and food served in restaurants to reflect their cultural characteristics can create a positive impression.
- Offering menus prepared in different languages in restaurants, ensuring adequate foreign language skills of employees, and taking health, hygiene, and safety precautions regarding food suggests that such precautions could reduce tourists' FN.
- The opportunity for tourists to have innovative gastronomic experiences during their travels can be brought to the forefront, and local food consumption can be increased.
- Stories about local food can also be used in terms of destination competition. In this context, it may make a difference to record stories about local food as a destination attraction factor.
- Researchers can create joint projects with sector stakeholders to identify food-related personality traits that affect tourists' FCM and determine the relationship between these variables and other variables.

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RESEARCH ARTICLE

Firm Size and Factors of Competitiveness in Micro Tourism Clusters: Ürgüp Case

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ABSTRACT
The aim of this article is to reveal the relationship between firm size and the factors affecting tourism firm competitiveness in micro tourism clusters. Firm level competitiveness is discussed in relation to industry level, and the factors affecting firm competitiveness are defined in parallel to tourism cluster competitiveness. Structural characteristics of the tourism industry and cluster scale are also discussed in theoretical discussions. The results reveal that micro and small firms have lower partnership rate, difficulty in global marketing, lower foreign tourist rate, lower membership rate in collective bodies, lower education level of entrepreneurs, put less emphasis on certification, participate less in tourism decision-making processes, and take fewer measures to protect the environment. Therefore, micro and small firms have weaker network connections and associating sustainability automatically with small scale is wrong. It is also revealed that economies of scope and diagonal clustering work negatively in relation to firm size. Thus, it seems contradictory to associate economies of scope and diagonal clustering at the same time in micro tourism clusters. Medium and large firms are more advantageous in terms of factors of competitiveness; however, micro and small firms contribute to complementarity and regional competitiveness more.

Keywords: Firm size, Firm competitiveness, Tourism clusters, Micro tourism clusters, Ürgüp/ Cappadocia

Introduction

The factors affecting firm competitiveness have been studied by many researchers from various disciplines, including economics, strategic management, etc.; however, studies discussing firm-level competitiveness in relation to regional development perspective and the tourism industry's structural characteristics are rare. In this study, the factors affecting firm competitiveness are defined within the framework of theoretical discussions in the disciplines of management and regional planning and the structural characteristics of the tourism industry such as firm size, complementarity between firms, the role of local communities, and physical resources.

Firstly, the dominant firm size in the tourism industry is small (Buhalis, 2000; Buhalis & Main, 1998; Hall et al., 2007; Murphy, P. E., & Murphy, A. E, 2004; Perles Ribes et al., 2017; Thomas et al., 2011) and firm size has substantial impact on financial performance (Akben-Selcuk, 2016; Kallmuenzer & Peters, 2018); therefore, it is important to discuss firm competitiveness in relation to firm size. Secondly, the complementarity (Camison & Fores, 2015; Cunha, S. K. & Cunha, J. C., 2005; Porter, 1998) between firms is another important characteristic for the tourism industry. Due to complementarity between firms of different sizes in a tourism destination, agglomeration and networking, which are defined as clusters (Porter, 1990), are considered when defining the factors of firm competitiveness. In order to address firm competitiveness in relation to the environment in which firms operate, mainly in relation to industry-specific factors, the attributes[1] in Porter's diamond model, which creates "an environment that promotes clusters of competitive industries" (Porter, 1990: 86), are used as a framework to define and group factors of competitiveness. Thirdly, considering other structural characteristics of the tourism industry such as the role of local communities (Crouch & Ritchie, 1999; Michael, 2007; Murphy, 1985) and the importance of physical resources (Cunha, S. K. & Cunha, J. C., 2005; Hassan, 2000; Murphy, 1985) that create attractiveness, socio-cultural, political, and environmental aspects are also

[1] The attributes in the Diamond Model are "factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry, and government".

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considered when defining the factors of firm competitiveness for a sustainable development. Regarding the structural characteristics of the tourism industry, it is also discussed whether there are conceptual shortcomings when the cluster model is applied to the tourism industry.

Moreover, tourism is an important tool for ensuring local economic development through small size firms, specifically in micro-scale tourism destinations. If the dominant firm size in the tourism industry is small and the cluster model is based on agglomerations of firms in macro-scale and developed regions, then the question of whether the cluster model is also valid in micro-scale tourism destinations arises. The micro-cluster model (Michael, 2007), which tries to answer this scale debate and contributes to the tourism cluster competitiveness literature, is taken into account in this study.

The aim of this article is to reveal the relationship between firm size and the factors affecting tourism firm competitiveness in micro tourism clusters. In line with the purpose of this study, a field research method was used and Ürgüp was chosen as the research area. The reason for choosing it is that it is one of the important tourism centers of the Cappadocia destination, which is famous for natural fairy chimneys, underground cities, historical churches, and hot air balloon tours, and it was added to the UNESCO World Heritage List in 1985 based on natural and cultural criteria. Ürgüp has long been competitive in terms of tourist arrivals and overnight stays, the dominant firm size is micro and small, and it has micro tourism cluster characteristics.

This article is organized as follows: literature review, methodology, and conclusions sections. The literature review section consists of unit of analysis for firm competitiveness, micro tourism clusters, and factors affecting firm competitiveness. The methodology section consists of the sample, data collection, a description of measures, and results subsections.

Literature Review

Unit of Analysis for Firm Competitiveness

Competitiveness is defined by many authors in different ways. Cracolici et al. (2008: 328) state that "competitiveness is the expression of the qualitative and quantitative superiority of an actor (a firm, a region, etc.) over the set of real and potential competitors". Liargovas and Skandalis (2007: 4) state that "the term competitiveness describes the ability of firms and industries to stay competitive which, in turn, reflects their ability to improve or protect their position in relation to competitors which are active in the same market". According to Buhalis (2000: 12), competitiveness is "the effort and achievement of long-term profitability, above the average of the particular industry within which they operate, as well as above alternative investment opportunities in other industries".

Competitiveness is "a multidimensional and relative concept" (Ambastha & Momaya, 2004: 45) and different authors emphasize different levels and aspects. The relevant literature examines competitiveness along three different levels: competitiveness of nations (macro level) (Jovanović et al., 2014; Krstic et al., 2016; Kumar, S. et al, 2024; Porter, 1990), competitiveness of regions (meso level) (Kitson et al., 2004) or industry (Porter, 1980), and competitiveness of firms (micro level) (Barney, 1991; Porter, 1980; Wernerfelt, 1984). For example, Porter (1990: 77) asks "what a new theory must explain is why a nation provides a favorable home base for companies that compete internationally". Krugman (1994) criticizes Porter (1990) in that "competition takes place at the firm level and it is misleading and wrong to draw parallels between a nation and a company" (as cited in Alexandros & Metaxas, 2016: 66).

For firm level competitiveness, the field of strategic management has undergone a major shift in unit of analysis regarding the explanations of performance variation (Galbreath & Galvin, 2008; Hawawini et al., 2003): from industry-specific to firm-specific factors. According to Hawawini et al. (2003: 1), "the main reason for this shift is the inability of industrial organization tradition to provide a rigorous explanation for intra-industry heterogeneity in performance". Industry-specific factors are represented by Porter's (1980) five forces[2] model. Porter (1980) explained how exogenous industry-specific factors impact firms in a given industry. Porter (1980: 3) states that "the essence of formulating competitive strategy is relating a company to its environment"; "competition in an industry is rooted in its underlying economic structure and goes well beyond the behavior of current competitors". Porter (1998: 78) emphasizes that "what happens inside companies is important, but clusters reveal that the immediate business environment outside companies plays a vital role as well". On the other hand, firm-specific factors are presented in resource-based view of firms (RBV). Wernerfelt (1984) defined the term and explored the usefulness of analysing firms from the resource side. In parallel, Barney (1991: 101) states that "RBV holds that performance is driven by internal, not external factors and the numerous possible firm resources can be conveniently classified into three categories: physical capital resources, human capital resources, and organizational capital resources". There are other authors contributing to the debate on whether industry-specific (Hawawini et

[2] Five structural forces determine the performance potential of firms competing in a given industry. They are "rivalry among current competitors, threat of substitution, threat of new entry, bargaining power of suppliers, bargaining power of buyers."

al., 2003; Schmalensee, 1985) or firm-specific factors (Ambastha & Momaya, 2004; Camison & Fores, 2015; Mcgahan & Porter, 1997) are more important.

Micro Tourism Clusters

Porter (1998: 78) defines clusters as “geographic concentrations of interconnected companies and institutions in a particular field”, and states that "the enduring competitive advantages in a global economy lie increasingly in local things - knowledge, relationships, motivation - that distant rivals cannot match and rest on making more productive use of inputs, which require continual innovation”. Tourism clusters, in parallel, are a concentration of interconnected tourism companies and shaped by the structural characteristics of the tourism industry. Loukissas and Triantafyllopoulos (1997) state that “the tourism product is a conglomerate, an amalgam, a constellation of tangible and intangible elements” (as cited in Camison & Fores, 2015: 480). According to Porter (1998: 81), “in a typical tourism cluster, the quality of a visitor’s experience depends not only on the appeal of the primary attractions but also on the quality and efficiency of complementary businesses”. In parallel, according to Cunha, S. K. and Cunha, J. C., (2005: 52), “the parts of the agglomerate (tourism cluster) are generally effectively dependent on each other; a bad performance of one may compromise the success of the others”.

Studies that adapt Porter’s (1990) competitive advantage and cluster approach to the tourism industry are predominantly destination competitiveness models (Agustin et al., 2022; Burnaz & Ayyıldız, 2018; Cracolici et al., 2008; Crouch & Ritchie, 1999; Crouch, 2011; Cunha, S. K. & Cunha, J. C., 2005; Dwyer & Kim, 2003; Enright & Newton, 2004; Estevão & Ferreira, 2009; Font et al., 2023; Goffi & Cucculelli, 2014; Gooroochurn & Sugiyarto, 2005; González-Rodríguez et al., 2023; Hassan, 2000; Heath, 2002; Kayar & Kozak, 2010; Kim & Wicks, 2010; Kozak & Rimmington, 1999; Mazanec et al., 2007). In addition, there are some studies on the competitiveness of the tourism industry at the national level such as the Global Competitiveness Report (WEF, 2020) and World Competitiveness Ranking (IMD, 2022). However, the number of studies addressing firm-level competitiveness in the tourism industry (Aires et al., 2022; Camison & Fores, 2015; Kallmuenzer & Peters, 2018; Sharma et al, 2023; Tonny & Robert, 2023) and discussing cluster competitiveness in parallel with the tourism firm competitiveness are rare.

Although the cluster model, which is at the centre of competitiveness debates, can be applicable to the tourism industry, there are some authors who note that there are conceptual shortcomings in the cluster model when applied to tourism industry (Nordin, 2003; Novelli et al., 2006; Perles Ribes et al., 2017; Santos et al., 2008). In the model, the role of the communities and the physical resources are not discussed. It is also argued that Porter’s analysis is applicable to large-scale assessments of economic development, but not suitable for development of micro-environments (Gooroochurn & Sugiyarto, 2005; Michael, 2007; Michael & Hall, 2007).

In order to overcome this conceptual shortcomings and cluster scale debate, the concept of micro tourism clusters, which brings the role of tourism in influencing local growth in small scale environments, is regarded as an effective tool (Gooroochurn & Sugiyarto, 2005; Perles Ribes et al., 2017; Sigurðardóttir & Steinthorsson, 2018). Gooroochurn and Sugiyarto (2005: 33) define micro-tourism clusters as “concentrations of small firms in geographical proximity whose social and economic interests are tied to a single community, and as a development mechanism for small tourism destinations that enhances specialization and competitive advantage at the local level”. Hall et al. (2007: 144) relate “micro tourism cluster model to the concept of ‘diagonal clustering’ (Poon, 1994), where the providers of complementary services (Brandenburger & Nalebuff, 1997) facilitate the development of baskets of products or services to create unique segmented local markets, which consumers enjoy as a single entity”. According to Michael (2007: 26), “the clustering typology is expanded to recognize diagonal clustering to identify an increasing concentration of complementary (or symbiotic) firms. Each firm adds value to the activities of others, even though their products may be quite distinct and clearly belong to other industry classifications”. According to Hall et al. (2007: 144), “micro tourism clusters leverage not just the advantages of co-location, but generate further economies of scope that expand the breadth of the locality’s product offerings and the opportunities for industrial output”.

Factors Affecting Firm Competitiveness

According to Cracolici et al. (2008: 328), “the concept of competitiveness may seem easy to understand; but. . . the complexity of the concept comes into play when we try to define and measure it”. The complexity of the concept may come from the facts that some factors are unmeasurable, or their importance varies at different levels (macro-meso-micro) and within themselves. For the strategic management discipline, there are a large number of studies discussing the factors/determinants affecting firm competitiveness. One important study is by Capon et al. (1990), who provided a meta-analysis of results from 320 published studies relating environmental, strategic, and organizational factors to financial performance. Ambastha and Momaya (2004) reviewed the literature at the firm level in terms of competitiveness-related frameworks and models and classified the studies in the Asset-Processes-Performance framework. Liargovas and Skandalis (2007) examined the impact of key determinants of firm competitiveness by studying 102 Greek industrial firms and distinguished the explanatory variables as financial and non-financial drivers of firm competitiveness. Galbreath and Galvin (2008) studied 285 Australian firms and explored that in service firms, resources are found to be much more important to explain performance variation than in manufacturing firms. Camison and Fores (2015) examined the regional environment effect, the district effect and the strategic group effect and demonstrated that firms' capabilities are more important than environment effects and tangible resources. Akben-Selcuk (2016) investigated the factors affecting firm competitiveness in an emerging market. Kallmuenzer and Peters (2018) utilized the entrepreneurial orientation-performance relationship to investigate which kind of entrepreneurial behavior is important in order for rural tourism family firms to perform well. Stawasz (2019) identified the significance of selected determinants of the competitiveness of small, innovative enterprises operating in international markets that use business advice.

The factors that affect firm competitiveness and can be defined in parallel with cluster competitiveness in the literature are as follows: innovation (Aires et al., 2022; Ambastha & Momaya, 2004; Camison & Fores, 2015; Cracolici et al., 2008; Eraydın & Armatlı Köroğlu, 2005, 2007; Hing at al., 2023; Hjalager, 2010; Kallmuenzer & Peters, 2018; Nordin, 2003; Novelli et al., 2006; Poon, 2003; Porter, 1990, 1998; Stawasz, 2019), agglomeration of firms (Cunha, S. K. & Cunha, J. C., 2005; Estevão & Ferreira, 2009; Kachniewska, 2013; Kim & Wicks, 2010; Nordin, 2003; Perles Ribes et al., 2017; Porter, 1990), being connected to local/global/community networks (Albrecht, 2013; Armatlı Köroğlu, 2013; Armatli Köroğlu & Özelçi Eceral, 2017; Baggio et al., 2011; Camison & Fores, 2015; Dredge, 2006; Eraydın & Armatlı Köroğlu, 2005; Erkus-Öztürk, 2009; Erkus-Öztürk & Eraydın, 2010; Erkuş-Öztürk, 2011; Gibson & Lynch, 2007; Iorio & Corsale, 2014; Lynch & Morrison, 2007; Maldonado-Erazo et al., 2020; Polenske, 2004; Poon, 1990; Porter, 1990; Tolkach et al., 2013; Urano & Nóbrega, 2020; Wilkinson & March, 2009), efficiency/productivity (Ambastha & Momaya, 2004; Porter, 1990, 1998), economies of scale (Capon et al., 1990; Koçak, 2018; Marshall, 1920; Porter, 1980; 1998), economies of scope (Hall et al., 2007; Koçak, 2018; Poon, 1990), cooperation (Armatlı Köroğlu, 2011; Baggio et al., 2011; Brandenburger & Nalebuff, 1997; Camison & Fores, 2015; Erkuş-Öztürk, 2011; Graci, 2013; Lynch & Morrison, 2007; Michael, 2007; Polenske, 2004; Porter, 1990, 1998; Schmitz, 1999), collaboration (Baggio, 2011; Camison & Fores, 2015; Colarič-Jakše & Ambrož, 2015; Graci, 2013; Gray & Wood, 1991; Hall, 2009; Jamal & Getz, 1995; Kaku, 1997; Kumar & Dissel, 1996; Polenske, 2004; Scott et al., 2009:17), partnership (Hall, 2009; Polenske, 2004), human capital resources (Barney, 1991; Becker, 1964; Camison & Fores, 2015; Chaston & Mangles, 1987), physical capital resources (Barney, 1991; Williamson, 1975), organizational capital resources (Barney, 1991; Capon et al., 1990; Liargovas & Skandalis, 2007), marketing, advertising (Ambastha & Momaya, 2004; Buhalis, 2000; Camison & Fores, 2015; Capon et al., 1990; Küçükaslan & Ersoy, 2007; Tonny & Robert, 2023), quality of service or products (Ambastha & Momaya, 2004; Camison & Fores, 2015; Capon et al., 1990; Küçükaslan & Ersoy, 2007), using information technologies/technology/big data (Ambastha & Momaya, 2004; Banwet et al, 2003; Buhalis, 2000; Buhalis & Main, 1998; Camarinha-Matos et al., 2010; Camison & Fores, 2015; Papatheodorou, 2004; Porter, 1998; Poon, 2003; Ross, et al, 1996; Sharma et al, 2023; Thomas et al., 2011).

For the tourism industry socio-cultural, political and environmental aspects such as capacity building (Albrecht, 2013; Burgos & Mertens, 2017; Camison & Fores, 2015; Erkuş-Öztürk, 2011; Karacaoğlu et al., 2016; Kim & Wicks, 2010; Porter, 1990, 1998; Tolkach et al., 2013; Yordam & Düşmezkalender, 2019), diversification of economic activities (Karacaoglu et al., 2016; Murphy, 1985), participation (Burgos & Mertens, 2017; Iorio & Corsale, 2014; Karacaoğlu et al., 2016; Li, Lai, & Feng, 2007; Maldonado-Erazo et al., 2020; Murphy, 1985; Okazaki, 2008; Othman et al., 2013; Tolkach et al., 2013; Tosun, 2000; Urano & Nóbrega, 2020; Yanes et al., 2019; Yordam & Düşmezkalender, 2019) relations with collective bodies (Camison & Fores, 2015; Erkuş-Öztürk & Terhorst, 2011; Papatheodorou, 2004; Porter, 1998), preservation of environmental resources (Butler, 1980; Durán-Román et al., 2021; Goffi & Cucculelli, 2014; Graci, 2013; Hassan, 2000; Heath, 2002; Li, Lai, & Feng, 2007; Maldonado-Erazo et al., 2020; Tolkach et al., 2013; Urano & Nóbrega, 2020; Yordam & Düşmezkalender, 2019) are also discussed for competitiveness and sustainable regional development.

Methodology

Sample

In this article, the statistical universe is defined as accommodation establishments in Nevşehir Province, which has been one of the most competitive tourism clusters in Türkiye. Nevşehir Province ranks 7th (3,780,329) in annual overnight stay and 9th (25,314) in bed capacity among the 81 provinces of Türkiye (Republic of Türkiye Culture and Tourism Ministry, 2019). While more competitive provinces in Türkiye predominantly provide services in sea-sand-sun and urban tourism, Nevşehir Province provides services in culture, nature, and faith tourism.

Among the districts of Nevşehir Province, the central district ranks first and Ürgüp District ranks second in terms of overnight stay and total bed capacity for 2019 (Table 1). Because this article is based on small firms and micro tourism clusters whose social

Table 1. *Tourism Potential of Districts of Nevşehir Province*

Districts	Population (2021)	Bed Capacity (2019)	Annual Overnight Stay (2019)
Province Centre	153,117	8,468	1,310,183
Ürgüp	36,361	7,694	1,264,802

and economic interests are tied to a single community, Nevsehir central district is eliminated, since its population is too large to represent community characteristics.[3]

Data Collection

A questionnaire was prepared for the field study and was conducted with the senior managers or entrepreneurs of accommodation establishments for a total of 14 days in October and November 2021. A total of 62 firms were contacted; 47 firms agreed to participate and 2 firm surveys were deemed invalid due to incomplete answers to the questions (Table 2).

Table 2. *Details of Sample Size*

Accommodation Establishments	number	ratio %
Total Number of Establishments	240	100.00
Establishments Contacted	62	25.83
Agreed to Participate in the Survey	47	19.58
Invalid Surveys	2	0.83
Valid Surveys	45	18.75

For comparative analysis, the accommodation establishments surveyed in Ürgüp District were grouped by firm size. In order to achieve this, the definitions in the literature were used. Buhalis and Main (1998: 198) state that “there is no international agreement on size ranges in defining small businesses in the tourism and hospitality industries”; however, there are two different variables in the literature to classify tourism establishments: number of employees and number of rooms.

For the first category, the European Commission uses the number of employees to determine the size of an enterprise, defining a micro-sized enterprise as employing fewer than 10 employees, a small-sized enterprise as employing fewer than 50 employees, and a medium-sized enterprise as employing fewer than 250 employees (European Commission, 2003). Kallmuenzer and Peters (2018), and Akbaba (2012) use the same range determined by the European Commission. Unlike the European Commission, Yuhanis et al. (2012: 171) define “a micro enterprise as employing fewer than 5 full-time employees, a small enterprise as employing 5 to 19 employees, and a medium enterprise as employing 20 to 50 employees”. Bressan and Pedrini (2020: 502) define “micro enterprises as employing 1-4 employees and small enterprises as employing 5-19 employees”. For the second category, there are studies that determine firm size according to the number of rooms. Buhalis and Main (1998: 198) define “SMEs as having less than 50 rooms and employing fewer than 10 people”. Aktaş (1997: 40) states that “hotels with less than 25 rooms are very small (micro) hotels, and hotels with 26-100 rooms are small hotels” (as cited in Kale, 2016: 161).

In this article, firm size categorization was determined based on the groupings made by Yuhanis et al. (2012) and Bressan and Pedrini (2020). The categorization developed by the European Commission is thought to be unsuitable for the tourism industry, since the dominant firm size in tourism is small. In addition, it is not suitable for the samples of this article since, when grouping the firms according to the European Commission’s classification, there are no firms classified as large size in the field research area. In addition, in the analysis of this article, medium and large-scale firms were analyzed as a single group, since dominant firm size in Ürgüp is micro and small size, and the number of medium and large-scale firms participating in the surveys was low. When grouping the firms surveyed in the field research area according to their sizes, 42.2% are micro enterprises, 35.6% are small enterprises, and 22.2% are medium and large enterprises.

This study was approved by the Ethics Committee of Gazi University (Date: 22.06.2021, No: 11)

[3] For example, in comparison, the population criteria for being a Cittaslow is lower than 50,000 residents (Cittaslow Organization, 2019).

Description of Measures

In this article, some important factors affecting firm competitiveness are defined within the framework of theoretical discussions in the disciplines of management and regional development. The factors of competitiveness are defined parallel to cluster, tourism cluster, and micro tourism cluster competitiveness. Considering the structural characteristics of the tourism industry such as complementarity between firms, dominant firm size, the role of local communities, and physical resources, socio-cultural, political, and environmental aspects are also discussed for firm competitiveness and sustainable development. In order to categorize the defined factors, the attributes in Porter's (1990) diamond model are used as a framework. Among a large list of factors affecting competitiveness, those selected for analysis are listed in Table 3.

Table 3. *The Structure of the Questionnaire*

Attributes	Factors	Determinants
Factor Conditions	Human Capital Resources	Education Level of Employee
		The Existence of Family Member Employee
	Physical Capital Resources	Measures to Protect the Environment
Demand Conditions	Demand Conditions	Ratio of Domestic/Foreign Tourists
Firm Structure, Strategy and Rivalry	Characteristics of Entrepreneur	Education Level of Entrepreneur
		Indigenousness of Entrepreneur
	Being Connected to Local/ Global/Community Networks	Membership of Collective Bodies such as NGOs, professional chambers, or local development cooperatives.
	Cooperation/ Collaboration	Total Number of Cooperation/Collaboration (Options in the Survey: Double Reservation and Directing the Tourist to a Familiar Establishment, Outsourcing, Lending Skilled Labor, Joint Promotion and Marketing, Joint Product Development)
	Partnership	Having A Partner
	Marketing	Challenges in Global Marketing
		Percentage of Visitors by Travel Agencies
	Quality of Service	Number of Certificates
	Innovation	Number and Kind of Innovations
	Diversification of Economic Activities	Having Additional Income Generating Activities Other than Tourism
Related and Supporting Industries	Agglomeration of Tourism Firms	Location of Suppliers (Same Province)
	Economies of Scope	Providing Complementary Tourism Products
Relations With Governmental Organizations	Capacity Building	Public Funding During Establishment
	Participation in Decision Making	Participation in Tourism Decision-Making Processes

While cluster model covers all sectors, some issues related to the tourism industry are highlighted in the model explanations. Porter (1998: 89) emphasizes "collective bodies for clusters consisting of many small and mid-size companies - such as tourism, apparel, and agriculture - to assume scale-sensitive functions". In addition, Porter (1998: 78) states that "many clusters include governmental and other institutions, such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations". Therefore, in this article, relations with collective bodies such as local development cooperatives, NGOs, professional chambers, and governmental organizations are taken into account when examining firm competitiveness.

In addition, economies of scale[4] and economies of scope[5] result in higher productivity and price advantage for firms. It is accepted that small firms are "failing to benefit from economies of scale and scope" (Papatheodorou, 2004: 223). In order to achieve economies of scale in the tourism industry, a mass tourist movement is needed through travel agencies/tour operators within the scope of package tours. To achieve economies of scope in the tourism industry, firms must simultaneously provide complementary tourism products such as accommodation, food and beverage, entertainment, rent a car, balloon tours, etc. to their visitors. In this article, while no comparison has been made in terms of economies of scale, the situation of benefiting from economies of scope is researched since it is regarded as the basis of micro tourism cluster model. To evaluate economies of scope, the survey participants were asked whether they provide any complementary tourism products to their visitors simultaneously.

[4] Economies of scale means that "the unit cost of a product (or the operation or function required to produce a product) decreases as the absolute volume of production per period increases" (Porter, 1980: 8).

[5] Economies of scope defines "the possibility of providing cost savings with the simultaneous production of different product groups by a single firm instead of each being produced by different specialized firms" (Poon, 2003: 136).

Results

The data obtained with the questionnaires is analyzed with the SPSS software. The numeric data is converted to categorical data and the relationship between firm size and defined determinants was examined with Chi-Square analysis. The groupings for converting numeric data into categorical data were defined as follows: if the cumulative percent value is below 27%, it is grouped as low, between 27% and 73% as medium, and above 73% as high. The results of the analysis are given in Table 4. When determining the significance of the relationship, it is accepted that there is a relationship in case of $p<0.05$, and there is no relationship in case of $p>0.05$.

Table 4. *Chi-Square Analysis*[6]

Determinants	Response	Micro Firm	Small Firm	Medium & Large Firm	Total	Chi-Square Analysis
		n %	n %	n %	n %	Chi-Square
Education Level of Employee	Low	3 15.8	7 43.8	2 20.0	12 26.7	
	Middle	8 42.1	4 25.0	4 40.0	16 35.6	- 3.835* 0.459
	High	8 42.1	5 31.3	4 40.0	17 37.8	
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Existence of Family Member Employee	No	8 42.1	6 37.5	6 60.0	20 44.4	
	Yes	11 57.9	10 62.5	4 40.0	25 55.6	
	Total	19 100.0	16 100.0	10 100.0	45 100.0	1.335 0.513
Measures to Protect the Environment	Low	7 36.8	1 6.3	0 0.0	8 17.8	
	Middle	9 47.4	12 75.0	1 10.0	22 48.9	
	High	3 15.8	3 18.8	9 90.0	15 33.3	24.6 0.0001
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
The Ratio of Domestic/F oreign Tourists[6]	Low	0 0.0	5 38.5	4 40.0	9 23.7	
	Middle	8 53.3	4 30.8	6 60.0	18 47.4	
	High	7 46.7	4 30.8	0 0.0	11 28.9	11.618 0.022
	Total	15 100.0	13 100.0	10 100.0	38 100.0	
Education Level of Entrepreneur	< High school	6 31.6	9 56.3	0 0.0	15 33.3	
	College<	13 68.4	7 43.8	10 100.0	30 66.7	. 8.808 0.012
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Indigenousness of Entrepreneur	Nevşehir	9 47.4	10 62.5	5 50.0	24 53.3	
	Other	10 52.6	6 37.5	5 50.0	21 46.7	
	Total	19 100.0	16 100.0	10 100.0	45 100.0	0.856 0.652
Membership in Collective Bodies	Yes	7 36.8	8 50.0	9 90.0	24 53.3	
	No	12 63.2	8 50.0	1 10.0	21 46.7	
	Total	19 100.0	16 100.0	10 100.0	45 100.0	- 7.549 0.023
Total Number of Cooperation/ Collaboration	Low	6 31.6	3 18.8	0 0.0	9 20.0	
	Middle	5 26.3	7 43.8	5 50.0	17 37.8	. 4.721 0.324
	High	8 42.1	6 37.5	5 50.0	19 42.2	
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Having a Partner	No	19 100.0	15 93.8	7 70.0	41 91.1	
	Yes	0 0.0	1 6.3	3 30.0	4 8.9	7.494* 0.026
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Challenges in Global Marketing	Yes	8 42.1	3 18.8	0 0.0	11 24.4	
	No	11 57.9	13 81.3	10 100.0	34 75.6	6.725* 0.026
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Visitors by Travel Agencies	Low	7 36.8	3 18.8	0 0.0	10 22.2	
	Middle	7 36.8	7 43.8	5 50.0	19 42.2	- 5 479* 0 251
	High	5 26.3	6 37.5	5 50.0	16 35.6	
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Number of Certificates	Middle	17 89.5	8 50.0	0 0.0	25 55.6	
	High	2 10.5	8 50.0	10 100.0	20 44.4	21.553 0.0001
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Additional Income-Generating Activities Other Than Tourism	Middle	12 63.2	9 56.3	6 60.0	27 60.0	
	High	7 36.8	7 43.8	4 40.0	18 40.0	0.173 0.917
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Location of Suppliers (Percentage of the Same Province)	Low	5 26.3	3 18.8	3 30.0	11 24.4	
	Middle	8 42.1	9 56.3	3 30.0	20 44.4	
	High	6 31.6	4 25.0	4 40.0	14 31.1	1.808* 0.810
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Providing Complementary	No	15 78.9	10 62.5	5 50.0	30 66.7	
	Yes	4 21.1	6 37.5	5 50.0	15 33.3	2.664 0.264
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Public Funding During Establishment	No	13 68.4	12 75.0	8 80.0	33 73.3	
	Yes	6 31.6	4 25.0	2 20.0	12 26.7	- 0.484 0.825
	Total	19 100.0	16 100.0	10 100.0	45 100.0	
Participation in Tourism Decision-Making Processes	No	16 84.2	8 50.0	1 10.0	25 55.6	
	Yes	3 15.8	8 50.0	9 90.0	20 44.4	- 14.923 0.0001
	Total	19 100.0	16 100.0	10 100.0	45 100.0	

*Monte Carlo Simulation

Subject groups were also asked about the number of innovations they have made in the last 10 years; however, they did not give a clear answer about the number of innovations, rather, they only gave information about the type. For this reason, whether there is a relationship between firm size and innovativeness could not be tested.

Chi-square analysis reveals that there is a relationship between firm size and determinants of “number of the certificates, having challenges in global marketing, having local/global partners, being a member of collective bodies such as NGOs, professional chambers or local development cooperatives, the ratio of domestic/foreign tourists visiting the establishment, education level of the entrepreneur, participating in decision-making processes, taking measures to protect the physical environment” ($p<0.05$); on the other hand, no relationship is found between firm size and the rest of the determinants ($p>0.05$) (Table.4). The results of this study are conceptualized in a firm size pyramid, with large and medium firms at the top of the pyramid and micro firms at the bottom (Figure.1). The number of micro firms are highest, and middle and large firms are least; however, middle and large firms are most advantageous in terms of factors of competitiveness.

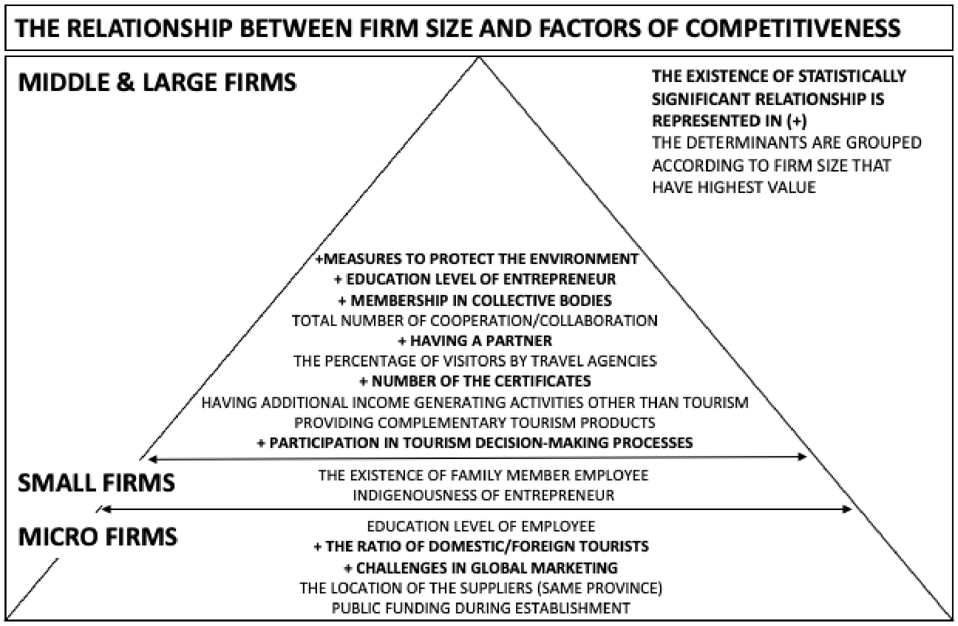

Figure 1. *The firm size pyramid for competitiveness*[7]

As in the analysis, the attributes defined in Porter’s diamond model are also used to discuss the results. The first findings based on factor conditions are human capital resources and physical capital resources. For human capital resources, no relationship is found between firm size and the education level of employees (vocational high school and above ratio) and the presence of family members in the establishment. The percentage of employing family members in medium and large firms is lower than in micro and small firms, but the difference is not significant. For physical capital resources, which are the most important resources that create attraction for tourism demand, it is revealed that micro and small firms give less importance to preservation of physical capital resources. Regardless of the level of environmental pollution created by accommodation establishments, it is revealed that the number of measures taken to protect the environment increases as firm size increases. The second finding based on demand conditions is about the characteristics of visitors. As firm size increases, the ratio of domestic/foreign tourists visiting the establishment decreases. Due to limitations in marketing, the target visitors for micro and small firms are mainly domestic tourists. This situation can be advantageous in crisis periods such as a global pandemic, when international borders are closed to international visitors.

The third finding is based on firm strategy and rivalry, and there are multiple factors to discuss. First, in terms of firm structure, the relationship between firm size and education level of the entrepreneur is revealed. The percentage of “college and above” is quite high in medium and large firms compared to micro and small firms. On the other hand, no relationship was found between indigenousness of the entrepreneur and firm size. Second, it is also revealed that micro and small firms predominantly have no partners, are not a part of hotel chains and do not use partnerships as a strategy for competitiveness. On the other hand, the

[6] The domestic / foreign tourists ratio data is based on 2019, the last normal period before the Covid pandemic. 7 firms established in 2020 and after, and did not answer this question.
[7] The intervals in the figure are divided symbolically.

percentage of having partners in medium and large firms is also limited (30%). It can be said that partnership is not a prevalent competitive strategy for firms in Ürgüp.

Third, the number of certificates in medium and large firms is higher than micro and small firms. Although micro and small firms attach importance to increasing service quality offered to their visitors and mostly charge higher nightly rates per room, they do not attach importance to getting certificates for measuring or documenting the quality of service provided, since it is regarded as requiring an expenditure of time and money. Medium and large firms attach importance to certification in order to increase institutionalization and service quality. After the Covid 19 pandemic, the safe tourism certificate became compulsory for accommodation establishments with more than 30 rooms, and sustainability certificates have gained importance among tourism establishments in Türkiye.

Fourth, as firm size decreases, the rate of experiencing difficulty in global marketing increases. Specifically micro firms have difficulty in global marketing; among medium and large firms, there is no firm that has difficulty in global marketing. Although there is a significant difference between firms of different sizes, micro firms are partially and small firms are predominantly integrated into the global market to a large extent due to widespread use of internet and digital platforms (social media, global reservation systems). On the other hand, sample firms complained about commissions paid to intermediary firms such as tour operators/travel agencies or global online reservation systems; however, they need them for marketing and local/global network connections. The difference between firms of different sizes in terms of the percentage of using tour operator/travel agency is not statistically significant; however, medium and large firms work with tour operators/travel agencies more since they have a higher bed capacity and their target customers are mainly foreign. Micro and small firms specifically use global reservation systems such as booking.com instead of travel agencies.

Fifth, although the difference is not statistically significant, medium and large firms cooperate/collaborate with other firms more than other sized firms. Overbooking and directing customer to a familiar establishment is the most common type of cooperation between firms. The practice of overbooking is not common in micro and small firms compared to medium and large firms. The reason for this is when they sell extra rooms, and when the reservations are not cancelled, they cannot offer alternative rooms to visitors. In addition, medium and large firms also cooperate/collaborate for participating in tourism fairs. Micro and small firms, on the other hand, predominantly do not attend tourism fairs. Sixth, there is relationship between firm size and being a member of collective bodies such as NGOs, professional chambers, local development cooperatives, or tourism infrastructure service associations. As the size of the firms increases, the status of being member of collective bodies increases. Membership in such bodies can contribute to the competitiveness of firms in many ways, such as joint learning, networking, marketing, etc.

Seventh, it is revealed that there is no relationship between firm size and providing a complementary tourism product, which represents economies of scope. In addition, it is also revealed that 77.8% of the accommodation establishments surveyed provide only room and bed and breakfast services; 85.3% of those providing bed and breakfast services are micro and small-sized firms. Accommodation establishments that offer bed and breakfast services bring consumers and complementary tourism service providers together and accommodation establishments that offer half board, full board, or all-inclusive services tend to meet the needs of visitors within a single facility. Therefore, small firms that offer bed and breakfast services contribute to complementary and diagonal clustering more. Consequently, although the difference is not significant, as the size of firm increases, benefiting from economies of scope increases; on the other hand, as firm size increases, contribution to diagonal clustering decreases. Thus, it is revealed that economies of scope and diagonal clustering work negatively in relation to firm size in micro tourism clusters.

Eighth, one of the important factors for firm competitiveness is innovation capacity. As mentioned, the number of innovations developed by firms is not obtained, however, it has been observed that micro and small firms mainly focus on decorative improvements, product diversification, and better use of online reservation systems; on the other hand, medium and large firms additionally focus on using information technologies, improvements in management, having technologies that provide efficiency in services, the use of renewable energy resources, environmentally friendly practices, and recycling.

The fourth finding is based on relations with related and supporting industries. One of the factors affecting firm competitiveness is agglomeration economy. In this article, the relationship between firm size and the rate of supplying goods from the same district or province is evaluated and no relationship is found. In the Ürgüp case, it has been observed that all size firms get food and beverage materials and hygiene materials from the closest suppliers, and predominantly get furniture and textile products from other provinces. It is understood that all size firms benefit from externalities of agglomeration.

The fifth finding is based on relations with governmental organizations. There is no relationship between firm size and public funding during establishment; on the other hand, there is relationship between firm size and participating in decision-making processes. As firm size increases, the percentage of getting public funding during the establishment phase decreases, but the difference is not significant. As the firm size increases, the percentage of participating in tourism decision-making processes increases. Ürgüp District represents step 3 (informing) and step 4 (consulting) in Arnstein's (1969) ladder of citizen participation. Ürgüp Municipality and the Cappadocia Area Presidency organize sectoral meetings for tourism decision making, however, it has been stated by most of the firm's entrepreneurs/managers that their opinions are advisory and do not have to be taken into account. The reasons the entrepreneurs of micro and small firms participate less in tourism planning processes is beyond the scope of this article; however, reasons such as unequal power relations (Arnstein, 1969; Tosun, 2000), institutionalization of tourism development (Butler, 1980; Tosun, 2000: 627), willingness of people to participate (Murphy, 1985: 446), and legislative arrangements that limit the level of participation are also valid for the Ürgüp destination. The point that should be emphasized, according to the results of the analysis, is that micro firms in Ürgüp are predominantly excluded from decision-making processes.

Conclusions

The aim of this article is to reveal the relationship between firm size and factors affecting tourism firm competitiveness in micro tourism clusters. As a result of the analysis of the factors that affect firm competitiveness, which are defined and grouped within the framework of the attributes of Porter's (1990) diamond model, three main conclusions were reached.

Firstly, regarding networking, which is one of the most important factors for cluster competitiveness, it has been revealed that micro and small firms have weaker local/global network connections than medium and large firms since they have a lower partnership rate, difficulty in global marketing, have a lower membership rate in collective bodies, cooperate/collaborate with other firms less, and the ratio of foreign/domestic tourists visiting the establishment is lower. This study is different from previous studies since it is based on a micro tourism cluster which is mainly made up of SMEs; however, it is interesting to notice that this result is compatible with some studies (Erkuş-Öztürk, 2009) on macro-scale and sea-sand-sun-based tourism destinations.

Secondly, in discussing the conceptual shortcomings that arise in adapting the cluster approach to the tourism industry and in making a comparison according to firm size in terms of socio-cultural, political, and environmental aspects, it is revealed that micro and small firms place less importance on participation. In addition, they place less importance on environmental protection, recycling, or using renewable energy sources. Therefore, these results are in line with the argument that "associating sustainability with small scale is wrong" (Butler, 1999; Roberts & Tribe, 2008).

Thirdly, although the attributes defined in Porter's diamond model are used to define factors of firm competitiveness in this study, the question of whether the cluster model is valid for micro-scale tourism destinations is beyond the scope of this study. However, the aim is to discuss the concepts such as diagonal clustering and economies of scope, which are prominent in micro tourism cluster model, with firm size. Although there is no statistically significant relationship between firm size and economies of scope, it is revealed that economies of scope and diagonal clustering work negatively. Therefore, it seems contradictory to associate economies of scope and diagonal clustering at the same time, as in previous studies (Hall et al., 2007; Michael, 2007). To sum up, considering the factors affecting firm competitiveness in micro clusters, medium and large-sized firms located at the top of the firm-size pyramid (Figure 1) are more advantageous in terms of competitiveness; however, micro and small firms contribute to complementarity - diagonal clustering, and consequently to regional competitiveness more.

This article is limited, since it is not possible to consider all factors within a study. In this article, the important factors that affect firm competitiveness are discussed with a multidisciplinary and holistic approach. For future studies, there is a need for more research on the factors affecting firm competitiveness in collaboration with researchers from the disciplines of regional planning and strategic management.

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AIM AND SCOPE

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- Terrorism, safety and security in tourism
- Globalisation and tourism
- Future of tourism

EDITORIAL POLICIES AND PEER REVIEW PROCESS

Publication Policy

The subjects covered in the manuscripts submitted to the Journal for publication must be in accordance with the aim and scope of the Journal. The Journal gives priority to original research papers submitted for publication.

General Principles

Only those manuscripts approved by its every individual author and that were not published before in or sent to another journal, are accepted for evaluation.

Submitted manuscripts that pass preliminary control are scanned for plagiarism using iThenticate software. After plagiarism check, the eligible ones are evaluated by editor-in-chief for their originality, methodology, the importance of the subject covered and compliance with the journal scope.

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MANUSCRIPT SUBMISSION GUIDE

Language

The language of the journal is English.

Manuscript Organization

Description

Journal of Tourismology brings together research in all fields related to tourism and hospitality including hospitality management, tourism planning and policy, leisure and recreation, tourism sociology, tourism psychology. It includes both theoretical and applied research papers and provide information both for academia and practitioners in tourism & hospitality disciplines.

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Authors full names, affiliations, postal addresses, telephone numbers and email addresses must be written clearly on the cover page with the title of the article.

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A typical paper will not exceed 9.0000 words including tables and references. However, JoT also makes exceptions for extended papers who are able justify additional length.

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Section headings should be concise.

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Examples

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Reference to a website

Horwath HTL (2015). "Special Market Reports – Turkey". Retrieved from http://horwathhtl.com/files/2015/10/MR47_Turkey.pdf 11.05.2016

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