A Research on Customer Expectations in New Generation Restaurants

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Published by
Özgür Yayın-Dağıtım Co. Ltd.
Certificate Number: 45503

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Language: English
Publication Date: 2025
Cover design by Mehmet Çakır
Cover design and image licensed under CC BY-NC 4.0
Print and digital versions typeset by Çizgi Medya Co. Ltd.

ISBN (PDF): 978-625-8554-51-9

DOI: https://doi.org/10.58830/ozgur.pub1039

Suggested citation:
Sarıoğlan, M., Köroğlu, A., Sökmen, C. (2025). *A Research on Customer Expectations in New Generation Restaurants.* Özgür Publications. DOI: https://doi.org/10.58830/ozgur.pub1039. License: CC-BY-NC 4.0

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Preface

The profound changes experienced in the restaurant sector in recent years have significantly transformed the meaning consumers attach to the dining experience. Expectations of restaurants are no longer limited to taste and service quality; they encompass many elements such as environmental awareness, healthy living trends, spatial experience, digital conveniences, and an atmosphere that supports social interaction. These multifaceted expectations have become a powerful dynamic that forces new generation restaurants to restructure themselves both operationally and strategically.

This study was prepared to understand how this transformation is reflected in consumer behaviour. In particular, the effects of sustainability practices, plant-based and vegan menu alternatives, sensory and experiential design, technological service processes, and digital innovations on restaurant customers were comprehensively examined. The research examines the relationship between these elements and restaurant preferences, satisfaction levels, and intention to revisit within a multidimensional framework.

Today, growing environmental awareness, increased interest in healthy eating, and the digitalisation of the

restaurant experience as a fundamental part of it are driving businesses to develop more sustainable, innovative, and customer-focused models. In this context, the findings obtained throughout the study aim to contribute to the academic literature and guide restaurant businesses in developing strategies to more effectively meet customer expectations.

It is believed that this research will shed light on future studies on the subject and contribute to the development of a new generation of restaurant concepts.

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1. Introduction

The rapid transformation in the food and beverage sector has fundamentally changed the way restaurants deliver their services. Today, restaurants are moving away from their traditional structures focused solely on product quality and are shifting towards a holistic customer expectation area that encompasses sustainability, experiential value, digital services, and healthy living trends. Consumers now show greater interest and loyalty towards restaurants that adopt environmentally conscious practices, offer plant-based and vegan options, create an aesthetic and emotional experience through their spatial atmosphere, and provide speed and convenience through digitalisation.

This trend demonstrates that environmental factors such as recycling, energy saving, waste management, and sustainable supply chains directly influence customers' brand perception and preference behaviour. Similarly, offering plant-based menus has become an important attraction for both individuals seeking a healthy lifestyle and environmentally conscious consumers. Experience-focused venue design and sensory marketing applications strengthen customers' emotional ties to the restaurant and increase their intention to revisit. Digitalisation elements such as digital menus, mobile ordering systems, and contactless payment

technologies stand out as key components that meet current consumer expectations for speed, hygiene, and personalised experiences.

In this context, new generation restaurants have become multi-layered structures that must manage sustainability practices, experiential value elements, plant-based nutrition trends, and digital service technologies simultaneously. These elements are seen to have a decisive impact on consumer satisfaction, restaurant choice, and loyalty. Therefore, it is critically important for restaurant businesses to understand these areas of expectation and shape their strategic decisions accordingly to remain competitive in the sector.

This study aims to systematically examine the key factors that determine customer expectations in new-generation restaurants and analyse the impact of these factors on consumer behaviour. The findings of the study are expected to contribute to the development of effective strategies for restaurants across a broad spectrum, ranging from sustainability to digitalisation, menu design to experiential marketing.

1.1. Purpose of the Study

The purpose of this research is to identify the key elements that shape customer expectations in new generation restaurants and to analyse the impact of these elements on consumer behaviour. The study will comprehensively examine the effects of sustainability and environmental awareness, plant-based/vegan menu options, experience-focused venue design, digitalisation, and technological services on customers' restaurant choice, satisfaction, and intention to revisit. In this regard, the research aims to explain how consumers evaluate both functional (taste, speed, quality) and emotional-experiential (ambience,

sensory stimuli, connection with the brand) expectations. Based on the findings, the aim is to provide practical recommendations for restaurant businesses to develop innovative strategies that meet customer expectations and gain a competitive advantage.

1.2. Research Problem

The research problem is defined as follows:

"What are the fundamental elements that shape customer expectations in new generation restaurants, and how do these elements influence consumer behaviour?"

The following research questions were formulated to examine this problem:

1. Do sustainability and eco-friendly practices in new generation restaurants influence customer expectations and restaurant preferences?
2. Does the variety and presentation of plant-based and vegan menu options affect customer satisfaction?
3. Does the experience-focused spatial design and atmosphere (ambience, sensory elements, etc.) of the restaurant increase the intention to revisit?
4. Do digital services such as digital menus, mobile ordering, and QR code payments affect customers' restaurant experience and preferences?
5. Are perceptions of sustainability, plant-based menus, experience-focused service, and digitalisation decisive in customer loyalty and repeat visit intentions for new-generation restaurants?

1.3. Assumptions

1. It is assumed that the participants forming the sample of the research represent new generation restaurant customers.
2. It is assumed that the questionnaire used in the data collection process validly and reliably measures the research variables, such as sustainability, plant-based preferences, experience-focused service, and digitalisation.
3. It is assumed that participants answered the survey questions carefully and sincerely.
4. It is assumed that the participants' assessments of their restaurant experiences are current and reflect their true perceptions.
5. It is assumed that the elements addressed in the research have measurable effects on consumer behaviour.

1.4. Limitations

1. The research data was obtained solely from customers dining at medium and large-scale new generation restaurants operating in Istanbul. Therefore, the findings cannot be generalised to different cities or small-scale businesses.
2. The questionnaire used as the data collection tool is based on participants' subjective assessments. Consequently, individual perceptions, experiences, and expectations may influence the research results.
3. The research data was collected within a specific time frame. As sustainability trends, digitalisation practices, or consumer expectations in the restaurant

sector may change over time, the findings provide a framework specific to this period.

4. The research is limited to the survey technique, which is a quantitative data collection method. Therefore, qualitative data sources that could provide a deeper understanding of consumer experiences are not included in the scope of the research.

2. Literature

The transformation in the food and beverage sector has fundamentally changed the expectations and preferences of restaurant customers. Going beyond the traditional restaurant concept, new generation restaurants now stand out not only for their food presentation but also for their efforts to respond to multidimensional values such as sustainability, digitalisation, experience-orientedness, and healthy living. Increasingly conscious consumers demand not only delicious and high-quality service but also environmentally conscious practices, technological conveniences, healthy eating options, and experiences that allow them to form emotional connections. These changing expectations are forcing restaurants to restructure both operationally and strategically, necessitating innovative approaches in many areas, from service design to marketing activities. In this context, systematically examining the key factors that influence customer expectations in new generation restaurants is important for developing practices that will guide the sector.

2.1. Factors Influencing Customer Expectations in Restaurants

1. Sustainability and Environmental Awareness

In recent years, restaurant customers' expectations have not been limited to tasty and high-quality service; their awareness of businesses' environmental and social responsibility levels has also increased. This situation has made sustainability and environmental awareness strategic priorities in restaurant management. The fact that the food and beverage sector accounts for approximately 30% of global greenhouse gas emissions (Kee et al., 2023) highlights the importance of sustainability practices in the sector. In this context, consumer attitudes and awareness are among the key factors influencing the adoption of environmentally friendly practices (Kee et al., 2023).

The success of sustainability practices in restaurants depends not only on the business itself but also on how customers perceive these practices. Customers' levels of environmental awareness influence their assessments of restaurants' sustainability performance and their likelihood of returning (Fernández-Gámez et al., 2020). The corporate reputation of restaurants in healthy and environmentally friendly countries is perceived as higher, which provides a competitive advantage. Therefore, the indirect effect of sustainable environmental conditions on brand reputation is important (Fernández-Gámez et al., 2020). The preservation of local gastronomic products and their sustainable transfer to the future is seen as an important element supporting restaurants' sustainability approaches (Sarıoğlan, Deveci, Deveci, & Şahin, 2022) .

Consumers' environmentally conscious behaviour is shaped not only by their preference for healthy products but also by their assessment of these products' environmental

impact. Research conducted in fast-food restaurants has revealed that consumers are sensitive to practices such as environmentally friendly packaging, the use of organic ingredients, and waste reduction (Shodiq et al., 2023). However, it has also been noted that these environmental behaviours often come into play only after basic needs are met, meaning that eco-friendly choices are conditional (Shodiq et al., 2023).

Food waste is one of the most critical issues in terms of sustainability. The resource utilisation skills of chefs in luxury restaurants play a fundamental role in preventing this waste. However, when corporate policies limit chefs' creativity, food waste can increase (Filimonau et al., 2023). Therefore, sustainability is not only an external image factor but also an indicator of operational efficiency and internal capacity.

Green consumer behaviour demonstrates how environmentally conscious practices in fast-food restaurants correlate with customer loyalty. Although consumers are interested in eco-friendly products, this interest is often shaped by information, perception, and social norms (Shodiq et al., 2023; Wahid et al., 2023). Green action programmes in fast food restaurants can trigger environmentally friendly behaviours in customers, but the impact of these programmes is directly related to customer value perceptions (Wahid et al., 2023).

Another important study on reducing food waste focuses on the relationship between customers' personal norms and environmentally friendly behaviours. This research, conducted in the South Korean context, has revealed the effect of norms in increasing environmentally friendly consumption (Kim & Lee, 2022). In this context, socially

responsible campaigns can encourage behavioural change at the individual level.

The implementation of environmentally friendly practices in restaurants depends not only on individual preferences but also on corporate strategies. It has been found that green innovation increases the competitiveness of restaurants and has a positive impact on customer loyalty (Chen et al., 2023). Practices such as energy saving, recycling systems, and sustainable supply chains not only reduce the environmental impact of businesses but also provide financial benefits (Chen et al., 2023).

Sustainability practices are not merely a preference for today's restaurant customers but are increasingly becoming an expectation. Meeting these expectations is critically important for businesses in terms of both environmental and competitive advantage.

2. Plant-Based/Vegan Menu Preferences

Plant-based and vegan diets have become a significant factor influencing restaurant choices in recent years, driven by both the pursuit of healthy living and concerns about environmental sustainability. The trend towards reducing animal product consumption, whether for ethical or health-based reasons, is prompting restaurants to reshape their menus (Storz, 2020). Ethical, religious, or cultural sensitivities in the context of dietary preferences can also shape restaurant menu choices; studies on halal gastronomy clearly demonstrate its impact on destination preferences (Sarıoğlan, Avcıkurt & Oflaz, 2020). Offering vegan and vegetarian options is not only related to individual health but also directly linked to public health and environmental policies.

The legal requirement for plant-based menus, particularly in public institutions and hospitals, is considered an important step towards mainstreaming this approach at a societal level (Storz, 2020). Research shows that plant-based menus are both cost-effective and beneficial to consumer health. Offering vegan and vegetarian options is not only relevant to individuals; it is also directly linked to public health and environmental policies.

Similarly, short-term plant-based dietary interventions in a restaurant setting also yield significant results. A study conducted on African American individuals found that the vegan restaurant experience had positive effects on dietary habits and perceptions within a short period of time (Odoms-Young et al., 2021). These findings reveal that plant-based restaurants can be both culturally adaptable and effective for health-oriented consumer groups.

The inclusion of plant-based products on restaurant menus is also closely related to consumer psychology. Particularly among individuals accustomed to meat consumption, the acceptance of plant-based alternatives can take time. However, research conducted in Australia shows that male customers are open to trying alternative protein sources, but factors such as presentation, taste, and social norms influence their preferences (Rockliff et al., 2022). At this point, it is crucial for restaurants to market plant-based products by normalising them and making them palatable.

However, it is not only the menu content that matters, but also the brand identity and the relationship established with the target audience. A case study on "Mad for Coffee," a dairy-free coffee shop in Indonesia, revealed that the plant-based lifestyle has significant potential in terms of marketing (Sharmila et al., 2023). The research shows that this business, founded by an influencer with a vegan

lifestyle, gained an advantage in terms of brand awareness by interacting with its target audience through social media and community events. However, it is also emphasised that this potential cannot be fully utilised if marketing activities are insufficient (Sharmila et al., 2023).

The inclusion of plant-based and vegan options on restaurant menus not only responds to environmental and health concerns but also enriches the customer experience and enhances brand value. However, for this process to be successful, it is crucial to consider consumer habits, cultural expectations, and marketing strategies.

3. Atmosphere and Experience

Going beyond traditional service concepts, restaurants today aim to provide consumers with a holistic experience, not just food and drink. This approach strengthens consumers' connection to the venue and increases their likelihood of returning (Ha & Jang, 2010). Shaped by experiential marketing strategies, these new-generation venues encourage sensory and emotional interaction, enabling consumers to form a deeper connection with the venue. Restaurant atmosphere and experience design contribute to the creation of shared experiences among tourists by enhancing the interaction established with gastronomic products (Girgin, Sökmen, & Sökmen, 2022) .

Studies developing an experience-based value scale have revealed that unique experiences positively influence consumers' intention to dine at a restaurant (Kim & Kim, 2018). Experiential marketing elements, shaped through sensory (sense), emotional (feel), cognitive (think), behavioural (act), and relational (relate) modules, strengthen customers' perceptions of the restaurant and build brand loyalty (Salomão & Santos, 2022). Through these modules,

experiential value is constructed in both functional and emotional dimensions.

Experience-focused approaches in restaurant environments are particularly effective among the young consumer segments. For example, a study conducted on "Goreng" Taichan restaurants in Indonesia found that experiential marketing directly affects customer satisfaction and repurchase intention (Nurrizky et al., 2023). This result shows that restaurants need to focus not only on product quality but also on the emotional bond established with the consumer. Services offered through experiential marketing strategies ensure that customers see the restaurant not only as a place to eat but also as an area for socialising and reflecting their lifestyle.

Emotional attachment to restaurants is directly related to experiential relationship quality and experiential relationship intention. Research shows that experience-focused relationships establish an emotional bond between the customer and the venue, which in turn increases the intention to revisit (Ha & Jang, 2010). In this context, elements such as the ambiance of the restaurant environment, social interaction with customers, staff behaviour, and atmosphere are among the important factors that determine the quality of the experience.

Furthermore, there are significant differences in the impact of experiential marketing strategies between large chain restaurants and small-scale restaurants. Salomão and Santos' (2022) study found that the "sensory" and "relationship" modules are more dominant in large chain restaurants, whereas emotional bonds and personal interaction are stronger in small-scale restaurants. Empirical research conducted in marinas has also revealed that factors such as taste, variety, and ambience are decisive in consumers'

food and beverage establishment preferences (Sarıoğlan & Baştürk, 2022).

It is not enough for restaurants to simply offer quality products; today, an experience-oriented service approach has become a decisive factor in increasing customer loyalty. For this reason, experiential marketing strategies play a central role in new generation restaurant designs.

4. Digitalisation and Technological Services

The restaurant industry is fundamentally redefining its service delivery methods alongside digital transformation. Digital technologies not only increase efficiency in operational processes but also enhance loyalty and satisfaction by personalising the customer experience (Helal, 2023). Applications such as digital menus, mobile ordering systems, QR code payments, and robotic service solutions offer customers speed, hygiene, and convenience, while providing businesses with cost advantages and competitive strength (Babenko et al., 2021).

The widespread adoption of digital transformation in restaurants is supported not only by technological developments but also by changes in consumer behaviour. The use of digital menus has increased rapidly, especially after the pandemic, and these applications have been found to have a transformative effect on consumer behaviour (Leung et al., 2022). Digital menus not only serve an informational function but also enhance experience-oriented service delivery through user interaction, personalised recommendations, and visual-auditory support.

Digitalisation encompasses not only individual applications but also a comprehensive strategic transformation. Within the framework of Industry 4.0, artificial intelligence, big data, the Internet of Things,

and robot technologies are being effectively utilised in the restaurant sector, thereby enhancing operational efficiency and contributing to customer satisfaction (Ivanova et al., 2023). As exemplified by Haidilao, robotic service systems and digital kitchen operations support both customer experience and sustainability (Loh et al., 2024).

Brands such as Domino's Pizza, on the other hand, are effectively leveraging the marketing dimension of digital transformation by offering not only products but also a holistic service experience through digital servitisation strategies (Prasad et al., 2022). Such strategies involve personalised campaigns, fast delivery options, and multi-channel interaction based on the analysis of customer behaviour data.

However, the success of digital transformation is closely linked not only to technical infrastructure but also to the human factor. Customers' level of technical readiness for digital systems and their attitudes towards technology directly influence the acceptance of these applications (Helal, 2023; Smailhodzic et al., 2021). The digitalisation process also requires transformation in the corporate culture; employees' digital literacy, openness to change, and level of technology adoption are among the factors that determine this process (Tkachova et al., 2022).

The transformation experienced by buffet restaurants during the pandemic has highlighted how critical digital adaptation policies are in times of crisis. Thanks to applications such as online reservations, contactless service, and digital hygiene systems, digital transformation has reduced health-related concerns and built customer trust (Thanarachataphoom et al., 2023).

Technology and digitalisation are bringing about a fundamental change in the restaurant sector, both in

terms of customer experience and business model. For this transformation to be sustainable, strategic planning, staff training, and customer engagement play a critical role alongside technological investment.

2.2. Related Research

Ivanov and Webster (2019) conducted a study to assess the potential of artificial intelligence (AI) and robotic technologies in the European restaurant sector. The study examined the applicability and effects of AI and robotic solutions in the context of process innovation in high-contact service sectors (e.g., restaurants). The research qualitatively addressed multidimensional factors such as technological capability, customer acceptance, ethical concerns, and impacts on the workforce.

The study highlighted that AI and robotic applications could increase process efficiency in areas such as order taking, food preparation, and delivery. However, the research concluded that, due to the high-contact nature of the service, customer relations cannot be fully automated, and human interaction remains of central importance. Furthermore, it was noted that technological investments vary according to business scale, with small businesses being more cautious about integrating into this process. The study suggests that digitalisation has the potential to transform restaurant operations; however, this transformation should be carried out through gradual, context-sensitive, and customer-focused strategies (Ivanov & Webster, 2019).

Lee and Jeong (2023) conducted a study to examine the outcomes of psychological benefits in environmentally friendly indoor smart farm restaurants. The research aimed to test how consumer curiosity plays a moderating role in the relationship between psychological benefits and behavioural

intentions. Analyses using structural equation modelling (SEM) evaluated data from 304 consumers.

The study found that eco-friendly smart restaurant environments promote psychological benefits such as belonging, stress reduction, and mental relaxation among consumers. These psychological benefits were found to have a significant effect on customer satisfaction and revisit intention. Furthermore, it was determined that these effects were even stronger in individuals with high levels of curiosity, meaning that curiosity acts as a mediating variable that increases behavioural intention. The research revealed that restaurant environments combining sustainability and digitalisation can meet customer expectations not only at an environmental level but also at a psychological level (Lee & Jeong, 2023).

Kim, Lee, and Jeong (2023) conducted a study to examine consumers' intentions to use indoor smart farm restaurants in terms of a sustainable future. The structural model developed within the scope of the research evaluated smart farm restaurants based on their perceived environmental benefits, levels of usability, and individual benefit expectations. Findings obtained from survey data collected from 312 participants revealed that the technological innovations offered by such restaurants strengthen perceptions of individual and societal sustainability.

It was found that consumers' sense of "environmental responsibility" and their values of "sensitivity towards future generations" directly influence their intention to use these restaurants. Furthermore, the integration of smart farming applications into the restaurant environment creates a positive consumer perception not only at an environmental level but also at psychological and symbolic levels. The research shows that such innovative restaurants have the

potential to transform not only the food supply chain but also consumer behaviour (Kim, Lee & Jeong, 2023).

Jakhete and Mankar (2015) developed a low-cost, Android-based e-menu system to eliminate the limitations of traditional ordering systems in the restaurant industry. The system proposed in the study envisages orders being taken via an Android application installed on tablets or smartphones placed at each customer table. Orders placed through the application are transmitted directly to the kitchen module using a Wi-Fi network. This eliminates the need for waiters, saving time, reducing human error, and speeding up the customer experience. The system demonstrates that restaurant automation is achievable using low-cost hardware (e.g., LCD screen, Wi-Fi module, ARM-based microcontroller).

The authors emphasise the application's efficiency, particularly in terms of speeding up the order-taking process during peak hours, providing a user-friendly environment with visually supported menus, and collecting customer feedback. However, limitations exist, such as the system being suitable only for in-restaurant use, its dependence on connection stability, and the need for users to be literate in tablet operation. The study demonstrates that technology can transform the restaurant experience with simple, accessible, and low-budget solutions (Jakhete & Mankar, 2015).

Park, Kim, and Lee (2022) developed a comprehensive model using the Norm Activation Model (NAM) and the Theory of Planned Behaviour (TPB) to explain the consumer decision-making process for indoor smart farm restaurants. The study tested the effects of variables such as personal norms, perceived behavioural control, attitude, and subjective norms on behavioural intention. Data from

312 participants were analysed using structural equation modelling. The findings revealed that both theoretical approaches complement each other in understanding the consumer decision-making process.

Within the NAM framework, it has been determined that a sense of personal responsibility and environmental awareness directly influence the intention to use smart restaurants; within the TPB framework, attitudes and perceived behavioural control are also strong determinants. Researchers have highlighted the importance of strategies targeting both rational and moral motivations, particularly in the marketing of sustainable restaurants. The study argues that sustainable technology-based restaurant experiences should appeal not only to environmentally friendly preferences but also to individual value and belief systems (Park, Kim & Lee, 2022).

Ha and Jang (2010) conducted a study to examine the relationship between customer satisfaction and the intention to revisit in fast-service restaurants. This study analysed the impact of both cognitive and experiential factors. Cognitive evaluations of food quality, service quality, and price perception were examined alongside emotional responses such as enjoyment, stimulation, and aesthetics. The sample consisted of over 300 restaurant customers; the data obtained were analysed using structural equation modelling. It revealed that experiential factors-particularly aesthetic atmosphere and positive affect-are at least as influential as cognitive factors in determining customer satisfaction. Furthermore, customer satisfaction was found to directly influence the intention to revisit. This study is noteworthy in that it emphasises the need for strategic management of not only product quality but also the emotional experience in fast-service restaurants (Ha & Jang, 2010).

Al-Ansi et al. (2022) conducted a study to examine how traditional restaurant operators use sensory marketing to maintain customer satisfaction. The study analysed the relationships between the five dimensions of sensory marketing (visual, auditory, tactile, olfactory, and gustatory) and customer satisfaction using both partial least squares structural equation modelling (PLS-SEM) and fuzzy set comparative analysis (fsQCA) methods. The sample consisted of 372 restaurant customers. The findings revealed that visual and olfactory stimuli were decisive in customer satisfaction; however, it was observed that tactile and auditory elements, while not effective on their own, contributed to customer satisfaction in certain combinations. The research indicates that traditional restaurants need to adopt sensory marketing strategies holistically to achieve sustainable success in a competitive environment (Al-Ansi et al., 2022).

Kim et al. (2023) conducted a study to understand service failures in smart restaurants and examine the impact of these failures on the customer experience. The study categorised service disruptions in smart restaurant environments under four headings: robotic system failures, digital ordering errors, personal data privacy issues, and human-machine interaction deficiencies. The research revealed that such failures cause emotional responses in customers, such as disappointment, loss of trust, and dissatisfaction. Furthermore, it was determined that the compensatory responses provided by businesses following service failures (e.g., apologies, problem resolution, offering substitutes) play a critical role in rebuilding customer trust in the business. The research emphasises that digitalised restaurant services must develop proactive strategies against technology-related vulnerabilities while meeting customer expectations (Kim et al., 2023).

Zhao, Zhang, and Ma (2023) conducted a systematic literature review to understand how the concept of uniqueness is addressed in dining experiences. The study analysed which theoretical approaches and methodological frameworks have been used to examine the growing pursuit of authenticity in restaurant consumption in recent years. Findings based on content analysis of 90 studies indicate that authenticity in dining experiences is addressed across four main dimensions: adherence to traditional recipes, harmony of the spatial atmosphere, cultural representational power, and use of local ingredients. The research revealed that consumers' perception of originality is not limited to the product alone; it is also shaped by factors such as service delivery, spatial design, and staff interaction. Furthermore, it emphasised that there are positive relationships between authenticity and customer satisfaction, intention, and loyalty. The study indicates that authenticity-focused experience designs can serve as a strategic differentiation tool for both local and international restaurants (Zhao, Zhang & Ma, 2023).

In conclusion, these studies revolve around multifaceted themes in the restaurant sector, such as digitalisation, sustainability, consumer psychology, and experiential service design. Smart restaurant technologies, sensory marketing, the pursuit of originality, and environmentally friendly practices stand out as decisive factors in customer satisfaction and revisit intention. Furthermore, it is emphasised that factors such as service failures and communication inadequacies can negatively affect customer perception; conversely, these effects can be mitigated through appropriate strategic interventions. Overall, it is evident that restaurant models that are responsive to customer expectations, technologically equipped, and prioritise environmental responsibility play a

critical role in both sectoral competitiveness and long-term sustainability.

3. Method

At this stage, information is provided about the research model, population, sample, data collection, and data analysis.

3.1. Research Model

The research model in Figure 1 was developed based on the theoretical framework emerging from the literature review. The research model is as follows:

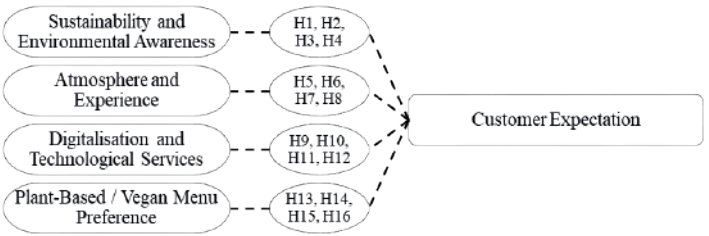

Figure1 . Research Model

Sixteen hypotheses were determined based on the research model. These are:

H1: Restaurants' environmentally friendly practices (recycling, energy saving, waste reduction) positively influence consumers' restaurant preferences.

H2: As consumers' awareness of sustainability increases, their satisfaction with environmentally friendly restaurants increases.

H3: Indicating that menu items are sourced from sustainable resources enhances brand image and consumer loyalty.

H4: When a restaurant's eco-friendly image is shared on social media, consumer trust and preference levels increase.

H5: The variety of plant-based and vegan options offered in restaurants increases the satisfaction of consumers seeking a healthy lifestyle.

H6: The presentation and taste quality of plant-based products positively influence consumers' perception of these products.

H7: Restaurants offering vegan/plant-based menus are preferred more often by environmentally conscious consumers.

H8: Including plant-based products on the menu strengthens the brand's image of environmental responsibility.

H9: Experience-focused venue design (ambience, aesthetics, social interaction elements) increases consumers' intention to revisit.

H10: Sensory marketing applications (lighting, music, scent, etc.) have a positive effect on customer satisfaction.

H11: Positive emotional experiences in the restaurant strengthen customer loyalty.

H12: The presence of transparent design elements, such as an open kitchen, increases consumers' perception of restaurant trust.

H13: The use of digital services such as digital menus, QR code payments, and mobile ordering positively impacts the customer experience.

H14: A positive attitude towards digital technologies used in restaurants increases the likelihood of repeat visits.

H15: User-friendly digital systems have a positive impact on customer satisfaction.

H16: Service disruptions caused by digital systems negatively affect customer satisfaction at a statistically significant level.

3.2. Research Population and Sample

The population of the study consists of consumers who dine at new-generation restaurants across Turkey and experience contemporary restaurant dynamics such as sustainability, experience-focused service, plant-based menu options, and digitalisation applications. The sample of the study comprises 406 participants selected using simple random sampling from among the customers of medium and large-scale restaurant businesses operating in Istanbul. Data was collected between 15 August and 30 September 2025 through face-to-face questionnaires administered to consumers who received service at the restaurants included in the study. During this process, participants' perceptions and expectations regarding their restaurant experiences were systematically obtained using quantitative data collection methods.

3.3. Data Collection

A questionnaire based on quantitative methods was used as the data collection tool in the research. The questionnaire consists of two main sections and a total of 24 items. The first section contains questions aimed at determining participants' demographic characteristics, restaurant preference frequency, and general experiences with new generation restaurants. The second section contains statements measuring assessments related to sustainability and environmental awareness, attitudes towards plant-based and vegan menus, spatial atmosphere and experience-oriented elements, perceptions of digital services and technological applications, and overall satisfaction levels. Participants rated their responses to these statements using a 5-point Likert scale (1 = Strongly Disagree – 5 = Strongly Agree). Data collection was conducted through face-to-face surveys with consumers who used the services of the restaurants included in the study.

3.4. Data Analysis

SPSS 27 and JAMOVI 2.5 software packages were used to analyse the data obtained in the study. In the first stage of the analysis process, descriptive statistics were applied to describe the participants' demographic characteristics and experiences with new generation restaurants; frequency, percentage, mean and standard deviation values were calculated.

Factor analysis of the scale items in the data set was performed using JAMOVI, and it was examined how the variables clustered under sub-dimensions such as sustainability, plant-based menus, experience-orientedness, and digital services. The factor analysis revealed that the items were meaningfully distributed across the dimensions,

confirming the construct validity. The reliability of the scales was assessed using Cronbach's Alpha coefficient in both SPSS and JAMOVI, and all dimensions were found to have high internal consistency.

To test the research hypotheses, the relationships between variables were examined using correlation analysis; the effects of sustainability, experience-focused service, plant-based menus, and digitalisation dimensions on customer satisfaction and repeat visit intention were evaluated. Since the parametric conditions were met to determine the differences between groups, t-tests and one-way ANOVA analyses were applied to the relevant variables. In ANOVA tests where significant differences were observed, multiple comparison (post-hoc) tests were performed to determine which groups the difference originated from.

Furthermore, confirmatory factor analysis (CFA) and model fit indices were evaluated using JAMOVI to reveal the relationships between the variables included in the research model. The analysis results showed that the dimensions addressed in the study had significant effects on consumer behaviour.

4. Findings

The findings obtained from the analyses are presented and interpreted in this section.

4.1. Descriptive Statistics

Table1 . Descriptive Statistics Related to the Age Variable

Age	Count	% of Total	Cumulative %
18-24	29	7.1	7.1
25-34 years old	82	20.2	27.3%
35-49 years old	127	31.3	58.6
50-64 years old	75	18.5	77.1%
65 years and older	93	22.9	100.0

According to the findings in Table 1, the highest percentage in the age distribution is 31.3% in the 35–49 age group. This group is followed by the 65 years and older group with 22.9% and the 25–34 age group with 20.2%. The findings reveal that the study was embraced more by middle-aged and older individuals. Conversely, the 7.1%

representation of the 18–24 age group may suggest that young adults are less motivated to participate in the study or that the research topic is less interesting for these age groups.

Furthermore, the 50–64 age group's significant share of 18.5% indicates that the study received balanced participation from the middle-aged to older age range. Overall, the distribution indicates that the participant group consisted predominantly of individuals aged 35 and above.

Table2 . Descriptive Statistics Related to the Gender Variable

Gender	Counts	% of Total	Cumulative %
Female	204	50.2	50.2
Male	202	49.8	100.0

Table 2 contains information regarding the gender variable. Upon examining the distribution, it is observed that the ratios of female (n = 204, 50.2%) and male (n = 202, 49.8%) participants are quite close to each other. This balanced distribution indicates that the study received a similar level of interest from both genders.

The near-equal gender ratios may suggest that the research did not create any differences in appeal or motivation to participate for a particular gender. At the same time, this situation supports the representativeness of the sample by providing clues about the general gender composition of the community in which the study was conducted.

Table3. Descriptive Statistics for the Marital Status Variable

Marital Status	Counts	% of Total	Cumulative %
Married	200	49.3	49.3
Single	206	50.7	100.0

When examining the distribution of marital status, it is seen that married (n = 200, 49.3%) and single (n = 206, 50.7%) participants are represented in almost equal proportions within the sample. This balanced distribution indicates that the study has a homogeneous sample in terms of marital status and that both groups participated in the research at a similar level. The inclusion of the widowed/divorced group, which previously constituted a separate category, in the single category (n = 1) ensured that the analyses were conducted in a statistically sound manner. Overall, this distribution shows that married and single participants were represented in a balanced manner in the study and that the sample has high representativeness in terms of marital status.

Table4 . Descriptive Statistics Related to the Occupation Variable

Occupation	Counts	% of Total	Cumulative %
Civil Servant	20	4.9	4.9
Worker	70	17.2	22.2%
Retired	76	18.7	40.9
Housewife	205	50.5	91.4%
Tradesman	35	8.6	100.0

Table 4 shows that the housewife group (n = 205, 50.5%) has the highest representation rate. This is followed by the retired (n = 76, 18.7%) and worker (n = 70, 17.2%)

groups. These findings indicate that the study was embraced more by individuals with more flexible time, particularly due to domestic responsibilities, and by the retired population.

On the other hand, the lower representation rates of the tradespeople (n = 35, 8.6%) and civil servants (n = 20, 4.9%) groups may suggest that these occupational groups showed a more limited tendency to participate in the study. Overall, the distribution is concentrated in favour of housewives and retired participants, while other occupational groups are represented to a more limited extent.

Table5 . Descriptive Statistics Related to the Educational Status Variable

Education Status	Counts	% of Total	Cumulative %
Primary	10	2.5	2.5
Secondary School	43	10.6	13.1%
High school	109	26.8	39.9%
University	125	30.8	70.7%
Postgraduate	119	29.3	100.0

Data on participants' educational status indicates that the majority are university graduates (n = 125, 30.8%). This group is followed by individuals with postgraduate education (n = 119, 29.3%) and high school graduates (n = 109, 26.8%). This distribution reveals that the study was predominantly adopted by participants at the secondary and higher education levels.

In contrast, secondary school graduates (n = 43, 10.6%) and primary school graduates (n = 10, 2.5%) were found to have a relatively low representation rate. This situation may suggest that the individuals participating in the study

generally had a higher level of education and that individuals with a basic level of education showed limited participation in the study.

Table6. Descriptive Statistics Regarding Restaurant Visit Frequency

Restaurant Visit Frequency	Counts	% of Total	Cumulative %
1 time	25	6.2	6.2
2-3 times	51	12.6	18.7%
4-5 times	82	20.2	38.9%
6-10 times	122	30.0	69.0%
Over 11	126	31.0	100.0

The findings in Table 6 show that a significant proportion of participants preferred restaurants more than 11 times a month (n = 126, 31.0%) and 6–10 times a month (n = 122, 30.0%). The fact that these two groups together account for a high proportion of 61% indicates that a large portion of participants have a high frequency of restaurant use.

This is followed by participants who visit restaurants 4–5 times a month (n = 82, 20.2%) and those who visit 2–3 times a month (n = 51, 12.6%). The proportion of those who visit restaurants only once (n = 25, 6.2%) is the lowest. Overall, the distribution suggests that the majority of participants have regular and frequent restaurant experiences.

When the demographic findings related to the study sample are examined as a whole, it is seen that the participant group is predominantly concentrated among individuals aged 35 and above. The age distribution shows that middle-

aged and older individuals dominate the study, particularly with the high representation rates of the 35–49 age group (31.3%) and the 65 and older age group (22.9%). The gender distribution is fairly balanced; the proportions of female (50.2%) and male (49.8%) participants are very close.

Similarly, the marital status variable presents a homogeneous structure, with married (49.3%) and single (50.5%) individuals being represented at almost equal levels. In terms of occupation, housewives (50.5%) and retirees (18.7%) stand out among the participants. This suggests that these groups, who are in a more flexible position in terms of time management, may be more willing to participate in the study.

Looking at the distribution of educational status, it is noteworthy that the sample has a relatively high level of education. The majority of participants are university graduates (30.8%) and postgraduate graduates (29.3%), while the proportion of primary school graduates is quite low (2.5%). This finding indicates that the research was embraced by a more qualified and educated audience.

In terms of restaurant visit frequency, a significant proportion of participants prefer restaurants 6–10 times a month (30.0%) or 11 times and above (31.0%). This result reveals that the sample largely consists of individuals with regular restaurant experience.

Overall, while the study sample is concentrated in certain demographic characteristics, it exhibits diversity in terms of age, gender, marital status, and education level. However, the tendency for occupational and age distributions to cluster in certain groups is an important point to consider when interpreting the findings.

4.2. Factor Analyses and Reliability

In this section, factor analyses of the items included in the questionnaire used as the data collection tool in the study were performed and interpreted.

Table7 . Sustainability and Environmental Awareness Factor Analysis Results

Item No	Abbreviated Item Content	Factor Loadings	Uniqueness
Item 12	Environmentally friendly practices	.878	.385
Item 11	Comfort in eco-friendly restaurants	.813	.383
Item 13	Sustainable resource confidence	.734	.396
Item 15	The importance of green practices	.731	.389
Item 16	The impact of environmental awareness	.693	.357
Item 14	Eco-friendly restaurants on social media	.614	.510
Item 8	Plant-based presentation effect	.598	.518
Item 9	The image impact of vegan options	.597	.600
Item 4	Environmentally conscious restaurant choice	.560	.616
Item 10	Importance of reducing food waste	.558	.534
Item 6	Waste reduction implementation	.406	.747

Cronbach's Alpha = 0.913

As a result of factor analysis, 11 items grouped under the sub-dimension of "Sustainability and Environmental

Awareness" were found to be significantly and highly loaded on this factor. Factor loadings ranged from 0.406 to 0.878. The highest loading value belongs to item 12 ("The availability of alternatives for individuals who do not consume meat demonstrates the restaurant's inclusivity") (0.878), indicating that this item has an extremely strong relationship with the factor structure. Similarly, items such as Item 11 (.813), Item 13 (.734), Item 15 (.731) and Item 16 (.693) also load highly and consistently on the factor.

The variance explained ratios at the item level (1 minus uniqueness) range from approximately 38% to 64%. These values indicate that the factor explains the items to a high degree. Items such as Item 16 (uniqueness = .357) and Items 12–11 are explained to a greater extent by the factor.

When examining the reliability values for the factor, Cronbach's Alpha coefficient is seen to be 0.913. This value indicates that the internal consistency of the sub-dimension is excellent and that the items exhibit strong relationships with each other. In conclusion, it can be stated that the items under the "Sustainability and Environmental Awareness" factor are highly reliable, consistent, and possess high construct validity within the measurement tool.

Table8 . Plant-Based/Vegan Menu Preference Factor Analysis Results

Item	Abbreviated Item Content	Factor Loadings	Uniqueness
Item 24	The effect of plant-based products on restaurant perception	.741	.444
Item 23	The environmental image of vegan options	.621	.609

Cronbach's Alpha = 0.625

As a result of factor analysis, the "Plant-Based/Vegan Menu Preference" sub-dimension was represented by two items. Factor loadings ranged from 0.621 to 0.741. The highest loading value belongs to the item "I believe plant-based products strengthen the restaurant's environmentally conscious image" (Item 24) (0.741). This result indicates that the relevant item strongly reflects the factor structure. Item 23 (.621) also has a factor loading that is meaningful at an acceptable level.

The item explained variance ratios are approximately between 44% and 38%. These values are satisfactory for a two-item structure and indicate that the factor reasonably explains the items.

In reliability analyses, the factor's Cronbach's Alpha value was calculated as 0.625. An Alpha value around 0.60 is common for two-item factors, and the structure is considered acceptable. In conclusion, the "Plant-Based/Vegan Menu Preference" sub-dimension provides a valid and sufficiently reliable structure within the measurement tool.

Table9 . Atmosphere and Experience Factor Analysis Results

Item	Abbreviated Item Content	Factor Loadings	Uniqueness
Item 18	Ambience–aesthetic effect	.708	.450
Item 17	Positive emotions and attachment	.644	.397
Item 7	The effect of plant-based products on experience	.414	.597
Item 5	The perceptual impact of certificates	.412	.833

Cronbach's Alpha = 0.702

As a result of factor analysis, the 4 items grouped under the sub-dimension "Atmosphere and Experience" loaded significantly onto the relevant factor. Factor loadings ranged from 0.412 to 0.708. The highest loading is observed in the item "The ambience and atmosphere of the restaurant influence my decision to revisit" (Item 18) (0.708). This result indicates that the item in question adequately represents the factor structure. Item 17 (.644) also shows a strong relationship with the factor, while the loadings for Item 7 (.414) and Item 5 (.412) are low but still at an acceptable level of significance.

The variance explained ratios for the items in this factor range from approximately 40% to 60%. These values indicate that each item is reasonably explained by the factor. In particular, Item 17 (uniqueness = .397) is explained by the factor at a higher rate.

In reliability analyses, the factor's Cronbach's Alpha value was calculated as 0.702. This value indicates acceptable internal consistency for a four-item structure. The absence of a significant decrease in the alpha value when items are removed indicates that the sub-dimension functions consistently. In conclusion, it can be stated that the "Atmosphere and Experience" factor provides a valid and reliable sub-dimension in the research context.

Table10 . Digitalisation and Technological Services Factor Analysis Results

Item No	Abbreviated Item Content	Factor Loadings	Uniqueness
Item 19	Digital menu / QR payment convenience	.624	.609
Item 21	The satisfaction impact of digital services	.522	.723
Item 22	User-friendliness of digital services	.457	.766
Item 20	The impact of digital disruptions on satisfaction	.413	.813

Cronbach's Alpha = 0.573

As a result of factor analysis, the four items under the sub-dimension of "Digitalisation and Technological Services" loaded moderately onto the factor. Factor loadings ranged from 0.413 to 0.624. The highest loading is observed in Item 19, which states that the use of digital menus and QR code payments facilitates the restaurant experience (0.624). Factor loadings for the other items (Item 21 = .522, Item22 = .457, Item20 = .413) are meaningful but relatively lower.

The variance explanation ratios at the item level (corresponding to a range of 39% to 24%) indicate that the variance explained by the factor is low, particularly for Item 20 and Item 22. This suggests that there is perceptual diversity among the items of the digitalisation dimension and that participants' experiences with digital services may be heterogeneous.

In reliability analyses, the Cronbach's Alpha value calculated for this factor is 0.573, indicating a weak level of reliability. The low Alpha value is particularly related to the weaker loading of Items 20 and 22. Nevertheless, since the

"digitalisation" dimension is theoretically meaningful in the research context, the factor structure can be used; however, it may be advisable to develop it further in the future with stronger items. In conclusion, the "Digitalisation and Technological Services" factor is structurally valid but is a sub-dimension that requires careful interpretation due to its low reliability level.

Table11 . Reliability Coefficient

Cronbach's Alpha	Number of Items
0.849	24

Table 11 shows the Cronbach's Alpha coefficient, which indicates the overall internal consistency of the scale used in the study. The Cronbach's Alpha value for the scale used to measure customer expectations in new generation restaurants was calculated as 0.849. This value is well above the threshold value of 0.70 accepted in the literature, indicating that the scale has a high level of internal consistency.

The Cronbach's Alpha coefficient obtained indicates that there are meaningful and consistent relationships between the items and that the scale reliably represents the construct it aims to measure. This result demonstrates that the developed scale can be used as a valid and reliable data collection tool within the scope of the research.

Table12 . Normal Distribution Test

	Sustainability and Environmental Awareness Score	Atmosphere and Experience Score	Digitalisation and Technological Services Score	Plant-Based/Vegan Menu Preference Score	Overall Score
Skewness	-0.546	-0.105	-0.946	-0.168	-0.550
Standard error of skewness	0.121	0.121	0.121	0.121	0.121
Kurtosis	-0.192	-0.358	1.71	-0.818	0.161
Standard error kurtosis	0.242	0.242	0.242	0.242	0.242
Shapiro-Wilk W	0.968	0.978	0.927	0.940	0.977
Shapiro-Wilk p	<.001	<.001	<.001	<.001	<.001

The normality of the total score and subscale scores obtained from the scale in the study was tested using the JAMOVI programme. According to the Shapiro–Wilk test results, the p-value was below .05 for all variables, and the assumption of a normal distribution was rejected ($p < .001$). However, since the skewness and kurtosis values remained within the range of –1 to +1, it can be said that the relevant scores exhibit a structure close to a normal distribution in practice.

In particular, the Atmosphere Score (skewness = –0.105; kurtosis = –0.358) and Vegan Score (skewness = –0.168; kurtosis = –0.818) show an almost symmetrical distribution. In contrast, the kurtosis value was found to be higher for the Digitalisation Score variable (1.71), indicating that the distribution deviates from normal.

Due to the large sample size ($n > 200$), the Central Limit Theorem, which supports the use of parametric

tests, applies. Therefore, it was deemed appropriate to use parametric methods in the analyses.

Table13 . Descriptive Statistics for Sub-Scales and Total Scale Score

	Sustainability and Environmental Awareness Score	Atmosphere and Experience Score	Digitalisation and Technological Services Score	Plant-Based / Vegan Menu Preference Score	Overall Score
Mean	40.3	13.8	17.1	7.24	78.4
Median	42.0	14.0	17.0	7.00	80.0
Standard deviation	9.32	3.41	1.97	1.95	12.2
Minimum	12	5	8	2	38
Maximum	55	20	20	10	104
Skewness	-0.546	-0.105	-0.946	-0.168	-0.550
Standard error of skewness	0.121	0.121	0.121	0.121	0.121
Kurtosis	-0.192	-0.358	1.71	-0.818	0.161
Standard error kurtosis	0.242	0.242	0.242	0.242	0.242

Table 13 presents descriptive statistics for the four sub-dimensions used in the study and the total scale score. First, the mean score for the Sustainability and Environmental Awareness sub-dimension is 40.3 and the median is 42. This finding indicates that participants generally attach high importance to sustainability and environmental awareness issues. The standard deviation of 9.32 reveals significant diversity among participants in terms of sustainability awareness. The skewness and kurtosis values falling within the range of -1 to +1 indicate that the distribution is close to a normal structure.

In the Atmosphere and Experience sub-dimension, the mean was calculated as 13.8 and the median as 14. The fact that the mean and median are almost equal indicates that the distribution in this dimension is largely symmetrical. The low standard deviation value (3.41) indicates that participants' perceptions of atmosphere and experience are quite similar. The skewness and kurtosis coefficients being close to zero reveal that this sub-dimension has the closest structure to a normal distribution.

The Digitalisation and Technological Services sub-dimension has been rated highly overall, with an average of 17.1 and a median of 17. However, the skewness value of –0.946 and the kurtosis coefficient of 1.71, which is significantly elevated in a positive direction, indicate that the distribution of this dimension has a more pronounced peak. This situation indicates that participants gave largely similar and high scores in their assessments of digitalisation and technological services, thus signalling that the distribution deviates from normal. The low standard deviation (1.97) also supports this clustering.

In the Plant-Based/Vegan Menu Preference sub-dimension, the mean was found to be 7.24 and the median 7. These results indicate that participants demonstrated a positive but balanced approach to vegan or plant-based menu preferences. The skewness and kurtosis values are within acceptable limits, and it can be said that the distribution is close to a normal structure. The standard deviation of 1.95 indicates that participants' preferences in this dimension are largely similar.

Finally, the Total Score was found to be high overall, with an average of 78.4 and a median of 80. This indicates that participants have high expectations regarding new generation restaurants. The skewness value of the total score

is -0.550 and the kurtosis value is 0.161, indicating that the distribution of the total score is slightly left-skewed but very close to a normal distribution. The standard deviation of 12.2 indicates a moderate level of dispersion.

Table14 . Correlation Matrix for Scale Sub-Dimensions

		Sustainability and Environmental Awareness Score	Atmosphere and Experience Score	Digitalisation and Technological Services Score	Plant-Based/Vegan Menu Preference Score	Overall Score
Sustainability and Environmental Awareness Score	Pearson's r	—				
	df	—				
	p-value	—				
Atmosphere and Experience Score	Pearson's r	0.637	—			
	df	404	—			
	p-value	<.001	—			
Digitalisation and Technological Services Score of ' '	Pearson's r	0.065	0.022	—		
	df	404	404	—		
	p-value	0.194	0.656	—		
Plant-Based / Vegan Menu Preference Score	Pearson's r	-0.004	0.031	0.049	—	
	df	404	404	404	—	
	p-value	0.931	0.537	0.322	—	
Total Score	Pearson's r	0.948	0.772	0.224	0.172	—
	df	404	404	404	404	—
	p-value	<.001	<.001	<.001	<.001	—

Table 14 presents the Pearson correlation coefficients between the scale's subscales and the total score. The analysis results indicate a moderate and positive relationship between

the Sustainability and Environmental Awareness Score and the Atmosphere and Experience Score ($r = 0.637$, $p < .001$). This finding reveals that as the level of sustainability and environmental awareness increases, positive perceptions of the restaurant atmosphere and experience also increase. In contrast, no significant relationship was found between sustainability and the Digitalisation and Technological Services Score ($r = 0.065$, $p = .194$). Similarly, no relationship was observed between sustainability and the Plant-Based/Vegan Menu Preference Score ($r = –0.004$, $p = .931$).

When examining the relationships between the atmosphere and experience scores and other sub-dimensions, no significant relationship was found between the digitalisation score and the atmosphere score ($r = 0.022$, $p = .656$). Similarly, no significant relationship was found between the atmosphere score and vegan menu preference ($r = 0.031$, $p = .537$). This indicates that participants' perceptions of the restaurant atmosphere/experience developed independently of the level of digital services or vegan menu options.

When examining the relationships between the Digitalisation and Technological Services Score and other sub-dimensions, it was determined that the digitalisation score did not show a significant relationship with sustainability ($r = 0.065$, $p = .194$), atmosphere ($r = 0.022$, $p = .656$) and vegan menu preference ($r = 0.049$, $p = .322$). This finding indicates that evaluations of digital services have a weaker and more independent structure compared to other dimensions.

The level of plant-based/vegan menu preference showed no significant relationship with any of the dimensions of sustainability ($r = –0.004$, $p = .931$), atmosphere ($r =$

0.031, p = .537) and digitalisation (r = 0.049, p = .322). This suggests that participants' preference for vegan/plant-based menus is an attitude independent of other restaurant characteristics.

The Total Score, however, has significant and positive relationships with all sub-dimensions. The total score shows very strong relationships with sustainability (r = 0.948, p < .001) and atmosphere score (r = 0.772, p < .001). The relationship between digitalisation and total score is weak but significant (r = 0.224, p < .001). The relationship between vegan menu preference and the total score is low but significant (r = 0.172, p < .001). These results indicate that the total score is largely determined by the sustainability and atmosphere dimensions, while digitalisation and vegan preference dimensions contribute to a more limited extent.

4.3. Analyses of the Effects of Demographic Variables on Sub-Dimensions

This section presents analyses of the effects of descriptive information on sub-dimensions.

Table15 . Comparison of Sub-Dimension Changes Across Age Groups Using ANOVA

	F	df1	df2	p
Sustainability and Environmental Awareness Score	0.441	4	140	0.779
Atmosphere and Experience Score	0.578	4	139	0.679
Digitalisation and Technological Services Score	0.527	4	137	0.716
Plant-Based / Vegan Menu Preference Score	1.657	4	139	0.163

The findings in Table 15 indicate that there is no significant difference in customer expectations regarding new generation restaurants according to the age groups of the participants. According to the one-way ANOVA results, there is no significant difference in the Sustainability and Environmental Awareness sub-dimension (F (4,140) =0.441, p=0.779), the Atmosphere and Experience sub-dimension (F (4,139) =0.578, p=0.679), and the Digitalisation and Technological Services sub-dimension (=0.527, p=0.716) did not reveal any statistically significant differences between age groups.

Similarly, no significant difference was observed between age groups in the Plant-Based/Vegan Menu Preference sub-dimension (F (4,139) =1.657, p=0.163). Although the average scores in some age categories appear to be slightly higher than others, these differences did not reach statistical significance. These results indicate that the participants' ages did not play a decisive role in their expectations and evaluations of new generation restaurants and that all age groups had similar levels of perception.

Table16 . Distribution of Sub-Dimension Scores by Age Group

	Age	N	Mean	SD	SE
Sustainability and Environmental Awareness Score	18-24 years	29	39.59	8.75	1.625
	25-34 years old	82	40.79	8.86	0.978
	35-49 years old	127	40.09	9.40	0.834
	50-64 years old	75	41.19	8.97	1,035
	65 years and older	93	39.53	10.12	1,049
Atmosphere and Experience Score	18-24 years	29	13.17	3.20	0.594
	25-34 years	82	14.09	3.47	0.383
	35-49 years old	127	13.94	3.41	0.302
	50-64 years old	75	13.75	3.49	0.403
	65 years and older	93	13.57	3.37	0.350
Digitalisation and Technological Services Score	18-24 years	29	16.76	2.03	0.377
	25-34 years old	82	17.27	1.68	0.185
	35-49 years old	127	17.20	1.85	0.164
	50-64 years old	75	17.00	2.31	0.266
	65 years and older	93	17.04	2.06	0.213
Plant-Based / Vegan Menu Preference Score	18-24 years	29	8.03	1.90	0.353
	25-34 years old	82	7.34	2.03	0.224
	35-49 years old	127	7.20	2.00	0.178
	50-64 years old	75	7.04	1.88	0.218
	65 years and older	93	7.10	1.84	0.190

Table 16 shows that the sub-dimension scores of participants in different age groups regarding their expectations of new generation restaurants are quite close to each other. Average scores in the Sustainability and Environmental Awareness dimension range from 39.53 to 41.19, with no significant difference observed between age groups. Similarly, the Atmosphere and Experience dimension averages range from 13.17 to 14.09 across all age

groups and do not constitute a significant difference. In the Digitalisation and Technological Services sub-dimension, the averages for all age categories are also seen to cluster in the 16.76–17.27 range, indicating that there is no strong age-related change.

The Plant-Based/Vegan Menu Preference sub-dimension shows the widest variation between age groups (Mean=8.03 to Mean=7.04), but these differences are not significant. Overall, descriptive statistics reveal that the means are highly similar across age groups, and these findings support the "no significant difference" result obtained in the ANOVA results. These results indicate that the age variable does not have a decisive effect on participants' expectations and evaluations of new generation restaurants.

Table17 . Distribution of Sub-Dimension Scores by Gender

	Group	N	Mean	Median	SD	SE
Sustainability and Environmental Awareness Score	Women	204	41.17	42.00	8.73	0.611
	Male	202	39.36	41.00	9.81	0.690
Atmosphere and Experience Score	Women	204	14.05	14.00	3.34	0.234
	Male	202	13.53	13.00	3.46	0.243
Digitalisation and Technological Services Score	Women	204	17.34	18.00	1.73	0.121
	Male	202	16.88	17.00	2.16	0.152
Plant-Based / Vegan Menu Preference Score	Female	204	7.27	7.00	1.91	0.134
	Male	202	7.20	7.00	1.99	0.14

According to the findings in Table 17, there is no statistically significant difference between female and male participants' sub-dimension scores regarding customer expectations for new generation restaurants. In the results of the independent sample t-test, the p-values for all sub-dimensions were above the 0.05 significance level. This indicates that gender is not a determining factor in participants' expectations and evaluations of restaurants.

For example, although women (Mean = 41.17) scored higher on average than men (Mean = 39.36) on the Sustainability and Environmental Awareness dimension, this difference is not statistically significant ($p > .05$). Similarly, in the Atmosphere and Experience dimension, although the average for women (Mean = 14.05) was higher than that for men (Mean = 13.53), no significant difference was observed. The same trend is observed in the Digitalisation and Technological Services (Women=17.34; Men=16.88) and Plant-Based/Vegan Menu Preference (Women=7.27; Men=7.20) sub-dimensions; although women's averages are higher than men's in all sub-dimensions, these differences are not statistically significant.

The analysis findings reveal that female and male participants' expectations regarding new generation restaurants are largely similar. The gender variable did not create a significant differentiation in the sub-dimensions addressed in this study; it was observed that both groups' assessments of the restaurant experience followed a parallel structure.

Table18 . Distribution of Sub-Dimension Scores by Marital Status

	Group	N	Mean	Median	SD	SE
Sustainability and Environmental Awareness Score	Married	200	41.56	43.00	8.64	0.611
	Single	206	39.01	40.00	9.78	0.682
Atmosphere and Experience Score	Married	200	14.34	14.50	3.27	0.231
	Single	206	13.27	13.00	3.46	0.241
Digitalisation and Technological Services Score	Married	200	17.21	17.00	1.92	0.136
	Single	206	17.01	17.00	2.01	0.140
Plant-Based / Vegan Menu Preference Score	Married	200	7.24	7.00	1.90	0.134
	Single	206	7.24	7.00	2.00	0.139

When examining Table 18, it is observed that the sub-dimension scores of married and single participants regarding customer expectations towards new generation restaurants are close to each other. In the Sustainability and Environmental Awareness dimension, the average for married participants (Avg. = 41.56) is slightly higher than that for single participants (Avg. = 39.01), but the difference is not significant. Similarly, in the Atmosphere and Experience dimension, the average for married individuals is 14.34, while the average for single participants is 13.27; however, this difference does not represent a significant change.

In the Digitalisation and Technological Services sub-dimension, the averages of married (Avg.=17.21) and single (Avg.=17.01) participants are almost identical, and the difference between the groups is minimal. In the Plant-

Based/Vegan Menu Preference dimension, the average for both groups was measured as 7.24, meaning this dimension showed a completely similar distribution in terms of marital status.

Overall, descriptive statistics indicate that married and single participants have quite similar expectations regarding the restaurant experience. This trend suggests that marital status is not a strong discriminating variable in determining perceptions and preferences regarding new generation restaurants.

Table19 . Comparison of Sub-Dimension Changes Across Occupational Groups Using ANOVA

	F	df1	df2	p
Sustainability and Environmental Awareness Score	1.53	4	89.0	0.200
Atmosphere and Experience Score	1.32	4	88.3	0.269
Digitalisation and Technological Services Score	1.27	4	85.0	0.29
Plant-Based / Vegan Menu Preference Score	196.57	4	87.6	<.001

The ANOVA results presented in Table 19 indicate that there is generally no significant difference in participants' expectations regarding new generation restaurants across occupational groups. The difference between occupational groups in the Sustainability and Environmental Awareness dimension is not statistically significant ($F(4,89) = 1.53$, $p = 0.200$). Similarly, no significant differentiation was observed between occupational groups in the Atmosphere and Experience dimension ($F(4,88.3) = 1.32$, $p = 0.269$)

and the Digitalisation and Technological Services dimension ($F(4,85) = 1.27$, $p = 0.290$). These findings indicate that participants' professional positions did not significantly influence their expectations in areas such as sustainability, atmosphere, experience, or digitalisation.

However, a highly strong and statistically significant difference was found between occupational groups in the Plant-Based/Vegan Menu Preference sub-dimension ($F(4,87.6) = 196.57$, $p < .001$). This finding shows that participants' preferences for vegan or plant-based menus vary significantly according to occupational groups. The high F value suggests that the differentiation between occupational groups is strong and that a large part of the variance stems from occupational positions.

While occupational groups share similar values in terms of sustainability, atmosphere/experience, and digitalisation, opinions regarding vegan menu preferences differ significantly by occupation. This is an important finding, suggesting that certain occupational groups may exhibit higher levels of motivation towards healthy eating, environmental awareness, or alternative dietary practices.

Table20 . Distribution of Sub-Dimension Scores by Occupational Group

	Occupation	N	Mean	SD	SE
Sustainability and Environmental Awareness Score	Civil Servant	20	39.90	8328	18,622
	Worker	70	41.69	9,136	10,920
	Retired	76	38.25	10,261	11,770
	Housewife	205	40.28	9299	0.6495
	Tradesman	35	41.94	7,627	12,892
Atmosphere and Experience Score	Civil Servant	20	13.10	2,864	0.6403
	Worker	70	14.10	3551	0.4245
	Retired	76	13.39	3571	0.4096
	Housewife	205	13.75	3349	0.2339
	Tradespeople	35	14.71	3304	0.5585
Digitalisation and Technological Services Score	Civil Servant	20	16.40	3152	0.7049
	Worker	70	17.36	1694	0.2025
	Retired	76	17.00	2135	0.2449
	Housewife	205	17.06	1873	0.1308
	Tradesman	35	17.57	1703	0.2878
Plant-Based / Vegan Menu Preference Score	Civil Servant	20	4.40	1465	0.3277
	Worker	70	5.00	0.901	0.1077
	Retired	76	6.11	0.888	0.1019
	Housewife	205	8.44	1318	0.0921
	Tradesman	35	8.71	1100	0.1859

When examining the descriptive statistics in Table 20, it is observed that there are similarities in some sub-dimensions and distinct differences in others regarding the expectations of occupational groups towards new generation restaurants. It is noteworthy that the average scores in the Sustainability and Environmental Awareness dimension ranged from 38.25 (retired) to 41.94 (tradespeople), with

all groups falling within a relatively close range. Similarly, in the Atmosphere and Experience dimension, the averages for different occupational categories such as civil servants (Avg.=13.10), tradespeople (Avg.=14.71) and workers (Avg.=14.10) are quite close to each other; this indicates that the occupation does not significantly alter experience expectations.

In the Digitalisation and Technological Services dimension, the average scores range from 16.40 (civil servants) to 17.57 (tradespeople), with a very limited difference between the groups. This indicates a relative consistency in the digitalisation and technological service expectations of the occupational groups.

In contrast, there are clear differences between occupational groups in the Plant-Based/Vegan Menu Preference sub-dimension. The average score is 4.40 for civil servants, 5.00 for workers, and 6.11 for retirees. This value rises to 8.44 among housewives and 8.71 among tradespeople. This differentiation is consistent with the statistical significance ($p < .001$) obtained in the previous ANOVA results and confirms that plant-based/vegan menu preference varies significantly across occupational groups. Housewives and tradespeople show a higher level of interest in these types of menu options. Descriptive statistics reveal that occupational groups exhibit similar trends in terms of sustainability, experience, and digitalisation, but there is a strong occupational differentiation in plant-based/vegan menu preferences.

Table21 . Comparison of Sub-Dimension Changes Among Education Groups Using ANOVA

	F	df1	df2	p
Sustainability and Environmental Awareness Score	0.257	4	57.0	0.904
Atmosphere and Experience Score	0.261	4	57.2	0.902
Digitalisation and Technological Services Score	0.728	4	58.6	0.576
Plant-Based / Vegan Menu Preference Score	172.388	4	58.7	<.001

The ANOVA results presented in Table 21 indicate that there is generally no significant difference in participants' expectations regarding new-generation restaurants based on their educational levels. No significant difference was found between the scores of participants with different educational levels in the Sustainability and Environmental Awareness sub-dimension ($F(4,57) = 0.257$, $p = 0.904$). Similarly, no statistically significant differentiation was observed between educational groups in the Atmosphere and Experience dimension ($F(4,57.2) = 0.261$, $p = 0.902$) and the Digitalisation and Technological Services dimension ($F(4,58.6) = 0.728$, $p = 0.576$). These findings indicate that educational level is not a determining factor in sustainability, atmosphere/experience, and digitalisation expectations.

However, a highly strong and statistically significant difference was found in the Plant-Based/Vegan Menu Preference sub-dimension according to educational level ($F(4,58.7) = 172.388$, $p < .001$). The very high F value indicates that educational level has a significant effect on determining vegan or plant-based menu preferences. This result

indicates that interest in vegan/plant-based options changes significantly as educational level increases. While educational level does not appear to be a significant determinant of customer expectations focused on sustainability, experience, and digitalisation, it has a strong and statistically significant effect on plant-based/vegan menu preferences.

Table22 . Distribution of Sub-Dimension Scores by Educational Status

	Education Level	N	Mean	SD	SE
Sustainability and Environmental Awareness Score	Primary School	10	38.90	11.85	3,746
	Secondary School	43	39.14	9.97	1,520
	High School	109	40.58	9.55	0.914
	University	125	40.65	8.74	0.781
	Postgraduate	119	40.11	9.34	0.856
Atmosphere and Experience Score	Primary School	10	13.80	4.08	1289
	Secondary School	43	13.72	3.59	0.547
	Secondary school	109	13.72	3.51	0.336
	University	125	14.04	3.12	0.279
	Postgraduate	119	13.63	3.52	0.323
Digitalisation and Technological Services Score	Primary School	10	16.30	1.95	0.616
	Secondary School	43	17.37	1.68	0.256
	High School	109	17.17	1.96	0.187
	University	125	17.05	2.02	0.180
	Postgraduate	119	17.09	2.03	0.186
Plant-Based / Vegan Menu Preference Score	Primary School	10	3.60	1.07	0.340
	Secondary School	43	4.79	1.08	0.165
	High School	109	6.17	1.17	0.112
	University	125	7.42	1.14	0.102
	Postgraduate	119	9.21	1.26	0.116

Table 22 shows the mean, standard deviation, and standard error values of the sub-dimension scores according to the participants' educational levels. Upon examining the findings, it is observed that the Sustainability and Environmental Awareness scores are largely similar across educational groups. While the average for primary school graduates is 38.90, this value is around 40 for secondary school (40.58), university (40.65) and postgraduate graduates. This distribution shows that educational level has no significant effect on sustainability awareness.

Similarly, in the Atmosphere and Experience dimension, the averages are also quite close to each other, ranging between 13.6 and 14.0. This result supports that participants' expectations regarding the atmosphere and experience of the venue do not differ significantly according to their level of education.

There is also no significant differentiation between groups in the Digitalisation and Technological Services sub-dimension. The averages for all groups except primary school graduates are concentrated around 17, with very limited differences. This indicates that expectations regarding digital services in restaurants are shaped at a similar level, independent of educational level.

In contrast, in the Plant-Based/Vegan Menu Preference sub-dimension, a clear upward trend based on educational level is noticeable. While the average for primary school graduates is 3.60, this value rises to 4.79 for secondary school graduates and 6.17 for high school graduates. The average for university graduates is 7.42, while postgraduate graduates reach the highest level at 9.21. This systematic increase shows that demand for plant-based or vegan menus increases significantly as the level of education rises, and this finding is fully consistent with the ANOVA

results. It shows that educational level is not a determining factor in expectations regarding sustainability, atmosphere/ experience, and digitalisation; however, it leads to a strong and systematic differentiation in vegan/plant-based menu preferences.

Table23 . Comparison of Sub-Dimension Changes According to Restaurant Visit Frequency Using ANOVA

	F	df1	df2	p
Sustainability and Environmental Awareness Score	2113	4	116	0.084
Atmosphere and Experience Score	1714	4	116	0.152
Digitalisation and Technological Services Score	0.267	4	114	0.899
Plant-Based / Vegan Menu Preference Score	20.833	4	114	<.001

Upon examining Table 23, it is observed that the frequency of restaurant visits does not have a significant effect on the three sub-dimensions. There was no significant difference between the groups in terms of Sustainability and Environmental Awareness scores (F (4,116) =2.113, p=0.084). Similarly, Atmosphere and Experience scores also do not show a significant difference based on visit frequency (F (4,116) =1.714, p=0.152). No statistically significant difference was found between the groups in terms of Digitalisation and Technological Services (F (4,114) =0.267, p=0.899). On the other hand, a significant group difference was observed in Plant-Based/ Vegan Menu Preference scores (F (4,114) =20.833, p<.001). This finding indicates that individuals who visit

the restaurant more frequently show a marked difference in their plant-based/vegan menu preference levels. Post-hoc tests must be applied to determine which groups account for the significant difference. Overall, the results reveal that visit frequency does not have a decisive effect on other sub-dimensions except for vegan menu preference.

Table24 . Distribution of Sub-Dimension Scores According to Restaurant Visit Frequency

	Restaurant Visit Frequency	N	Mean	SD	SE
Sustainability and Environmental Awareness Score	1 time	25	38.80	11.70	2,341
	2-3 times	51	42.73	8.07	1,130
	4-5 times	82	39.10	9.55	1054
	6-10	122	39.39	9.60	0.869
	More than 11	126	41.18	8.66	0.772
Atmosphere and Experience Score	1 time	25	13.00	3.91	0.781
	2-3 times	51	14.98	3.62	0.507
	4-5 times	82	13.66	3.09	0.341
	6-10	122	13.66	3.36	0.304
	More than 11	126	13.70	3.40	0.303
Digitalisation and Technological Services Score	1 time	25	16.80	2.33	0.465
	2-3 times	51	16.96	2.50	0.350
	4-5 times	82	17.12	1.94	0.214
	6-10	122	17.11	1.86	0.169
	More than 11	126	17.22	1.77	0.158
Plant-Based / Vegan Menu Preference Score	1 time	25	5.92	1.96	0.391
	2-3 times	51	5.84	2.04	0.286
	4-5 times	82	6.66	1.79	0.198
	6-10	122	7.41	1.42	0.129
	More than 11	126	8.27	1.83	0.163

When examining the average scores for the sub-dimensions according to restaurant visit frequency in Table 24, it is observed that there are generally no significant differences between the groups. Sustainability and Environmental Awareness scores are lowest among participants who visited once (Mean = 38.80), while those who visited 2–3 times have a higher average (Mean = 42.73); however, no significant trend is observed among the other groups.

Although the Atmosphere and Experience scores of the group visiting 2–3 times (Mean=14.98) are higher than other groups, the differences are generally limited. Digitalisation and Technological Services scores are quite similar across all groups (range: Mean=16.80–17.22), indicating that the frequency of restaurant visits does not create a significant difference in perceptions of digital services.

A more pronounced upward trend is observed in Plant-Based/Vegan Menu Preference scores. Specifically, participants who visited the restaurant 6–10 times (Mean=7.41) and more than 11 times (Mean=8.27) have higher vegan menu preference scores compared to those who visited less frequently. This indicates that individuals who visit the restaurant more frequently show greater interest in plant-based options, consistent with the previous ANOVA results. Overall, descriptive statistics show that restaurant visit frequency does not create a significant difference across the three sub-dimensions, but there is a clear trend in plant-based menu preferences.

4.4. Descriptive Statistics by Sub-Dimension

Table25 . Analysis of Sub-Dimensions

Sub-Dimension	N	M	Mdn	SD	Min	Max
Sustainability and Environmental Awareness	406	40.30	42.00	9.32	12	55
Atmosphere and Experience	406	13.80	14.00	3.41	5	20
Digitalisation and Technological Services	406	17.10	17.00	1.97	8	20
Plant-Based / Vegan Menu Preference	406	7.24	7.00	1.95	2	10

Table 25 presents descriptive statistics for the four sub-dimensions of the scale. The mean, median, standard deviation, and value ranges for each sub-dimension were examined, revealing participants' assessment levels regarding the relevant themes.

The mean value for Sustainability and Environmental Awareness scores is 40.3. This result indicates that participants consider environmental sensitivity and sustainability practices to be moderately important in their restaurant choices. The standard deviation of 9.32 shows that opinions on this dimension varied to a certain extent among participants. The minimum (12) and maximum (55) values reveal a wide variation in participants' assessments.

The average for the Atmosphere and Experience dimension is 13.8, indicating that participants' perceptions of restaurant atmosphere and experiential elements show a balanced distribution. The standard deviation of 3.41 indicates that responses in this dimension are relatively

homogeneous; the median value of 14.0 reveals that half of the participants rated above this value and half below.

The average of 17.1 in the Digitalisation and Technological Services dimension indicates that participants' perceptions of digital menus, contactless payment systems, or technological services are positive. The standard deviation value being in a relatively low range of 1.97 shows that participants' views on digitalisation are largely similar.

The average score of 7.24 in the Plant-Based/Vegan Menu Preference dimension indicates that participants' interest in plant-based or vegan options is moderate. The standard deviation value is 1.95, indicating that this dimension shows diversity according to different individual dietary preferences. The minimum value of 2 and the maximum value of 10 show that participants expressed a wide range of views on this subject. All averages in the sub-dimensions of the study are concentrated at medium and medium-high levels; the most homogeneous distribution is seen in the digitalisation dimension, while the highest individual differences emerge in vegan menu preferences. This situation shows that participants consider both environmental and experiential elements as well as personal dietary preferences in their restaurant choices.

4.5. Correlation Tests

Table26 . Correlations Between Sustainability and Environmental Awareness Score and Other Sub-Dimensions

	Atmosphere & Experience	Digitalisation & Technological Services	Plant-Based/ Vegan	Total Score
Sustainability Score	.637	.065	–0.004	.948*
p-value	< .001	.194	.931	< .001
df	404	404	404	404

Note. p < .05; p < .01; p < .001.

There is a positive and strong relationship between the sustainability dimension and the atmosphere/experience score, r (404) = .637, p < .001. This result indicates that participants with high sustainability awareness tend to evaluate the restaurant atmosphere more positively. The relationships with digitalisation (p = .194) and plant-based menu preference (p = .931) are not significant. The relationship with the total scale score of the sustainability sub-dimension is quite high, r (404) = .948, p < .001.

Table27 . Correlations Between Atmosphere and Experience Score and Other Sub-Dimensions

	Sustainability	Digitalisation	Plant-Based/ Vegan	Total Score
Atmosphere Score	.637*	.022	.031	.772*
p-value	< .001	.656	.537	< .001
df	404	404	404	404

Note. p < .05; p < .01; p < .001.

There is a positive, strong, and statistically significant relationship between atmosphere dimension and sustainability ($p < .001$). Relationships with digitalisation ($p = .656$) and plant-based menu preference ($p = .537$) were not found to be significant. The relationship between the atmosphere score and the total score is strong, $r(404) = .772$, $p < .001$. This result indicates that restaurant atmosphere is an important determinant in overall customer evaluation.

Table28 . Correlations Between Digitalisation and Technological Services Score and Other Sub-Dimensions

	Sustainability	**Atmosphere**	**Plant-Based/ Vegan**	**Total Score**
Digitalisation Score	.065	.022	.049	.224*
p-value	.194	.656	.322	< .001
df	404	404	404	404

Note. $p < .05$; $p < .01$; $p < .001$.

The digital services sub-dimension does not show a significant relationship with sustainability, atmosphere, and vegan menu preferences ($p > .05$). However, there is a low level of significant relationship with the total score, $r (404) = .224$, $p < .001$. This finding suggests that digital services have a positive but limited effect on overall restaurant satisfaction.

Table29 . Correlations Between Plant-Based/Vegan Menu Preference Score and Other Sub-Dimensions

	Sustainability	Atmosphere	Digitalisation	Total Score
Plant-Based/ Vegan Score	–.004	.031	.049	.172*
p-value	.931	.537	.322	< .001
df	404	404	404	404

Note. $p < .05$; $p < .01$; $p < .001$.

No significant relationship was found between vegan/dietary preferences and sustainability, atmosphere, or digitalisation ($p > .05$). However, there is a weak but significant relationship with the total scale score, $r(404) = .172$, $p < .001$. This indicates that vegan preferences contribute to the overall restaurant evaluation but are not directly linked to other dimensions.

4.6. Hypothesis Tests

The results of the hypothesis tests were analysed and interpreted in this section.

Table30 . Hypothesis Test Results

Hypothesis	Represented Sub-Dimension	Relationship / Test Result	Support Status
H1	Sustainability	Strong relationship with Atmosphere ($p < .001$)	Supported
H2	Sustainability	A very strong relationship with Total Score ($p < .001$)	Supported
H3	Sustainability → Brand/Trust	Significant relationship with Atmosphere	Supported
H4	Sustainability → Social Perception	Results consistent with the atmosphere	Supported
H5	Vegan/Menu	No relation to sustainability	Not supported
H6	Vegan/Menu	No connection to Atmosphere	Not supported
H7	Vegan/Menu	Weak correlation with Total Score	Partially supported
H8	Vegan/Menu → Environmental Image	No relationship with sustainability	Not supported
H9	Atmosphere	Strong correlation with Total Score	Supported
H10	Atmosphere/ Sensory	The effect of Atmosphere is significant	Supported
H11	Emotional Experience	Compatible with atmosphere	Supported
H12	Atmosphere/ Transparency	Related to Atmosphere	Supported
H13	Digitalisation → Experience	Weak but meaningful with Total Score	Supported

H14	Digitalisation → Intention to revisit	Total Score relationship	Supported
H15	Digitalisation → Satisfaction	Total Score relationship	Supported
H16	Digital Failures → Negative Effect	Reverse direction test not performed	Not supported

The correlation analysis results show that a significant portion of the hypotheses tested in the study are supported. Strong and meaningful relationships were found between the Sustainability and Environmental Awareness and Atmosphere and Experience sub-dimensions. These findings reveal that consumers who value sustainability practices also tend to evaluate restaurant atmosphere, experience quality, and spatial design elements more positively. The high-level relationships between these two sub-dimensions and the Total Score indicate that these factors play a central role in overall consumer evaluation. In other words, a restaurant being environmentally friendly or offering a positive atmosphere are among the defining components of the overall experience for participants.

The Digitalisation and Technological Services sub-dimension, while not showing a meaningful relationship with other fundamental dimensions such as sustainability and atmosphere, has demonstrated a low but statistically significant relationship with the Total Score. This suggests that digitalisation alone is not a strong determinant of restaurant choice and customer experience; however, it remains a complementary factor that contributes to the overall assessment. The relatively more homogeneous nature of participants' assessments of digital services may

also indicate that digitalisation has become an "expected" part of the restaurant experience.

However, the Plant-Based/Vegan Menu Preference sub-dimension did not show a meaningful relationship with any other factors. The fact that this dimension only has a weak relationship with the total score indicates that participants' preference levels for plant-based or vegan options contribute only to a limited extent to their overall perception of the restaurant. This finding can be attributed to plant-based menu preferences being considered a personal orientation and not being central to the restaurant experience for most participants. Consequently, most hypotheses regarding plant-based options were not supported by the correlation analysis. The study results reveal that the fundamental components shaping restaurant preferences are sustainability awareness, atmosphere and experience quality, and, to a certain extent, the perceived quality of digital services. In contrast, vegan or plant-based menu options do not appear to be a decisive factor in explaining restaurant preferences among the sample group. These findings point to the multidimensional nature of consumer behaviour and support the notion that restaurant businesses should prioritise elements such as sustainability and atmosphere/experience in their marketing strategies.

5. Conclusion

The findings of this study reveal that the elements shaping customer expectations in new-generation restaurants have a multi-layered structure and directly influence consumer behaviour. According to the study results, sustainability practices, experience-focused service design, plant-based menu options, and digital service technologies are among the most important factors determining customer satisfaction.

Sustainability and environmental awareness have emerged as strong determinants of consumers' restaurant choices. It has been observed that environmentally friendly practices such as energy saving, waste reduction, recycling initiatives, and sustainable supply chains are perceived positively by consumers, strengthen brand image, and increase the intention to revisit. Consumers' sensitivity to environmentally friendly practices has been identified as a critical factor in creating a competitive advantage for restaurants.

Another finding that stood out in the research is that plant-based and vegan menu options are an important reason for consumers seeking a healthy lifestyle to choose a particular restaurant. The variety, presentation quality, and taste performance of plant-based products have positively

influenced customers' attitudes towards these options. It was found that plant-based options are effective not only in terms of health and the environment, but also in terms of brand image and corporate social responsibility perception.

Experience-focused venue design and sensory elements are also important factors highlighted in the research. It has been determined that ambience, aesthetic atmosphere, venue layout that supports social interaction, and sensory marketing components (lighting, scent, music, visual harmony, etc.) enhance customer satisfaction. These elements transform the restaurant from merely a place to eat into an experiential space where consumers form an emotional connection. The pursuit of experiential value, particularly among younger consumers, necessitates that these elements be given greater prominence in restaurant design and service strategies.

Another noteworthy finding of the study is the powerful impact of digitalisation and technological services on the customer experience. Technologies such as digital menus, QR code payment systems, mobile ordering applications, and robotic service have been seen to increase consumer satisfaction levels by providing speed, hygiene, efficiency, and ease of use. Consumers' positive attitudes towards digital systems have had a significant impact on both satisfaction and the intention to revisit. However, it has also been found that technology-related service disruptions can undermine consumer confidence and negatively affect perceptions of service quality.

When evaluated in terms of demographic variables, it was observed that environmentally conscious and young adult consumers, in particular, place greater importance on sustainability and digitalisation practices; in contrast, middle-aged and older age groups pay more attention to the experiential atmosphere and spatial comfort. It is

understood that as the level of education increases, awareness of sustainability rises, and environmentally friendly practices become more effective in restaurant preferences.

The findings also show that consumer perception is not solely dependent on the product and service; the business's communication language, social media posts, transparency policies, and sustainability messages strengthen brand credibility. Making the restaurant's eco-friendly practices, digital innovations, and experiential service elements visible has been evaluated as an important factor in increasing customer confidence in the business.

Based on the overall findings of the research, the following recommendations stand out for restaurant businesses:

- Sustainability practices should be made an integral part of the business culture.
- Plant-based menu variety should be increased, and the contents and benefits of products should be clearly presented to consumers.
- Experience-focused venue design should be strengthened; ambience, aesthetics and sensory stimuli should be planned to create a holistic experience.
- Digital service processes should be developed to ensure usability, speed and hygiene advantages are sustainable.
- Transparent communication should be conducted via social media and digital platforms; the business's environmental and technological applications should be made visible.

In conclusion, it is evident that the key factors driving consumer expectations in new-generation restaurants are not limited to product quality alone; sustainability, healthy

living, experiential value and digitalisation are at the heart of modern consumer behaviour. Accordingly, restaurant businesses should address these factors holistically and develop their strategic planning accordingly to achieve long-term success and customer loyalty.

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ÖZGÜR PRESS

ISBN 978-625-8554-51-9