

## Development of Green Kitchen Quality (G-KITCHQUAL) Scale

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### Abstract

The purpose of this study was to develop G-KITCHQUAL (Green Kitchen Quality) Measurement Model, which measures the direction of the relation between the customer expectations and environment-friendly kitchen applications of businesses as Quality Points. Also the purpose of this study to propose a model in the field of measuring the green quality in kitchens, which is currently an empty field in the relevant literature. When the scale was being developed, the existing and different international green certification standards and service quality models were examined and adapted to kitchens; and the environmental sensitivity of the kitchens were grouped under 22 statements and 7 dimensions. Reliability Analysis was applied to the data obtained after validity and understandability tests. The confirmation of the quality scores of the scale was realized by comparing the covering the expectation rates. The functionality of the model was tested in restaurant businesses that had Tourism Operation License in Bursa and their customers in December 2015. This study also revealed the fact that there were similarities and differences at various diensions between the customer expectations and the practices of the business in terms of Green Kitchen practices. Finding out the expectations of their customers on environmental sensitivity, businesses can compare their practices and the expectations, make their sensitivity on environmental issues visible in the eye of the customers and thus obtain a competition advantage. The G-KITCHQUAL, which was developed in this context, is the first study in that it makes visible the environmental sensitivity of commercial kitchens.

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## **INTRODUCTION**

The social, political and technological developments in the world and the environmental problems that appeared as a result of increasing consumption tendencies have become a common issue which was discussed by the whole world, mainly the western societies, to find solutions since 1980s. Assessment of business organizations which use natural resources as their inputs in terms of production methods and processes and the requirement for shaping these businesses have become one of the mostly debated issues in recent years. Environmentally-sensitive practices are also considered as the requirement of the social responsibility of business organizations (Karna, Hansen, & Juslin, 2003). Today's conscious consumers direct businesses towards green production with the purchase power they hold at hand. For the purpose of showing that they take the sensitivities and expectations of their customers into consideration, environmentally sensitive commercial kitchens must also be included in marketing strategies.

Green approaches bring several advantages for businesses like customer loyalty, remaining in the market, obtaining competition superiority (Misso, et al., 2013), decreasing costs and increasing profitability (Atay and Dilek, 2013). These advantages are the result of the customer loyalty.

The first condition of ensuring customer loyalty is to understand and cover their quality perceptions. As a result of this, positive opinions, continuous purchase demand and positive referencing behaviors develop in customers (Gracia, Bakker, & Grau, 2011). Measuring the demand of the customers in green sensitivity in kitchens will guide business organizations in defining the direction and priority of the efforts of them and motivate them. Similarly, making their environmental sensitivity visible for their customers is another important point for business organizations. In this context, setting the Green Kitchen standards and assessing the practices in a reliable manner are important needs both for business organizations and for food and beverage sector.

In this study, firstly, the literature was reviewed on sustainability in "Green Kitchen" practices both in conceptual terms and in terms of the production activities of businesses, and the "Green Kitchen" concept has been set forth. The "Green Kitchen Quality (Y-MUTKAL) Measurement Model" was developed in the study by analyzing the models in terms of Expectations, Quality, Service Quality concepts. The steps like how the questionnaire was formed, how the selection of the sampling was made, data collection and assessment details are given in the Method section of the study. In the Result section, the measurement results are given and interpreted in tables.

The aim of the present study was to develop the Green Kitchen Quality Measurement Model, which determine the direction of the relation between the expectations of the customers and the practices of environmentally sensitive kitchens as points, and recommend a measurement scale for the gap in the field of measuring the Green Quality in kitchens.

## **LITERARUTE REVIEW**

### **Green Kitchen**

The *sustainability* concept and the *green production concept* constitute the basis of the *green kitchen*. Green Kitchen takes the environmentally-sensitive practices as the basis in the production of food and beverages.

Sustainability may be summarized as the ability to cover the needs of today by not risking the needs of tomorrow (Yusof and Jamaludin, 2014: 502). When the sustainability concept is examined in terms of businesses, it may be defined as “*an economic relation established with the organic environment without damaging it and by ensuring its sustainability*” (Göğüş, Karakadılar and Apak, 2013:752). It is expected that the manufacturing companies that have the greatest share in environmental problems continue their activities with the responsibility on eliminating or decreasing these problems (Özkaya, 2010). Restaurant businesses, which are the actors and the producers in the food and beverage industry, cannot be held exempt from this responsibility. Adopting green production strategies and producing green products must be considered within the requirements of this responsibility; because, in this context, consumers who become conscious are directed towards environmentally sensitive movements, which is embodied as Green Kitchen here.

Green production activities are the ones that are planned in the context of sustainable use of global resources to decrease the wastes and emissions, and to develop products, processes and services that require the use of less resources (Özçoban, 2010: 45-46). Green products are defined as the ones that do not damage the nature throughout their service lives with the substances in them, which is different from the traditionally equal products (Junior, et al., 2015: 100). In other words, green products are the outcomes that are produced with environment-friendly methods and contents without losing the benefits and quality. The only positive outcome of the realization of sustainable production strategies is not only the minimization of the effects on the environment. Business organizations also receive the return of their respect for the nature in economic terms as well.

The green activities of businesses are supported by motivations like staying in the market and having competition superiority (Misso, et al., 2013: 104) and by decreasing costs and increasing profitability (Atay and Dilek, 2013: 217). The applications of the businesses that are sensitive to the environment also serve to the purposes of the businesses as long as they are made visible to consumers. Consumers reward the businesses that are sensitive to the environment with the purchase power they hold at their hands.

Consumers who are sensitive to social and political issues approach the environmental-friendly practices with the same sensitivity (Ay and Ecevit, 2005: 259) and have a tendency towards spending more money on green products (Wong, Wan and Qi, 2015). Price is not influential on purchase decisions for the customers that have sensitivity for the environment (Azabagaoglu and Oraman, 2011). These customers also consider the Environmentally-sensitive practices as the social responsibilities of the businesses (Karna, Hansen, & Juslin, 2003). Right at this point, it has become necessary for the businesses to understand their customers and care for their expectations (Alinezhad Sarokolae, Taghizadeh and Ebrati, 2012). Especially about green applications, the demands of the customers, who consider themselves as the stakeholders of the businesses, on being cared for by the

business owners (Walker and Hanson, 1998) reinforce the importance of Environmentally-sensitive practices. The “Green Kitchen” concept has been defined in the context of the above-mentioned needs and requirements.

Physically, a kitchen is a place where food is stored, prepared, cooked, served and consumed at a certain amount and in a certain quality (Aktaş and Özdemir, 2012). The kitchen in food and beverage businesses is the place where the preliminary preparations of the food that will be cooked are made, and cooking and portioning processes are performed (Doğdubay and Saatçı, 2014). When the work-flow and process groups are considered in the kitchen, which is the place where production is realized, we see that there are several sections in the kitchen which are purchase section, storage section, preparation, cooking, washing the dishes and removal of the garbage (Aktaş and Özdemir, 2012). The kitchen is an important point in restaurant businesses because it is the area where raw or semi-processed foods are converted into end-product and where environmentally-sensitive activities are planned and realized.

A *Green Kitchen* is the one that plans and performs all the activities and processes of the food from supply to service steps within the concept of sensitivity to environment. It is based on the concept of increasing the efficiency in using the resources, decreasing the use of chemicals and wastes, which are main objectives, and planning all the production processes, the structure, equipment, suppliers, and tools.

The environmentally sensitive activities of the kitchens, which are the final points of the food sector, may be examined under the following headings; 1. Energy efficiency, 2. Saving water, 3. Decreasing chemical pollution, 4. Decreasing wastes and recycling, 5. Disposable materials, 6. Sustainable food, 7. Sustainable structure (GRA, 2014).

### **Expectations and Quality**

The *expectation concept* may be defined as the foresight of a person on the results of certain conditions and as the outcome of a phenomenon (Akyüzoğlu, 2008), and may vary according to the medium in which the individual lives, the cultural structure in which s/he has been raised, and the factors s/he cares for (Şebin, 2009). Satisfaction of the needs and expectations of a customer is important since it defines whether the product will stay in the market or not (Kotler, Bowen and Makens, 2010). Consumers, who are to make the assessment of the products on a basis of being beneficial or not, do not have the obligation of making payment for a product with which they will not be satisfied. In market conditions that change, develop and become harder in a constant manner, decreasing costs, increasing market shares, and having the competition superiority depend on ensuring customer loyalty. For this purpose, it is important to determine the expectations of customers.

“Quality” is the assessment of the products or services that are given (Işın, 2013). Parasuraman, Zeithaml and Berry (1985: 41-42) stated that *quality* was a difficult and uncertain concept like *goodness*, *luxury* and *value*, and associated it with expectations and performance (1985). The service quality, on the other hand, is the whole of the efforts spent to cover the needs and expectations of potential customers about a certain service (Gülmez and Dörtüol, 2009). In the light of the definition of the abovementioned concepts, success in service quality may only

be possible by determining, measuring and covering the expectations of customers. In other words, the expectations of customers determine the quality. The businesses that cover the expectations are defined as being of high quality.

For this reason, businesses have to determine the expectations of their target audience and potential customers in an accurate manner, and must have information on changing expectations and perceptions. The businesses that determine the expectations and quality perceptions of customers will decrease direct-indirect costs with accurate investment decisions and management strategies, ensure customer satisfaction and loyalty, and increase their competition power in the market. The basic problem here is how to measure the Green Quality in restaurant kitchens and how to make the quality visible. G-KITCHQUAL is a proposal for a model presented as a scale for such a need.

Many opinions and models have been proposed on measuring the service quality. Although G-KITCHQUAL has several sides that resemble SERVQUAL (Service Quality) and SERVPERF (Service Performance) models, it also has some different sides mainly being in the field of the method of collecting the data. The basic point in measuring the service quality in SERVQUAL model is a proximity between the quality perceptions of those who produce, and the expectation levels of those who receive these services. The model takes the gap between the expectations of customers and the quality perception of the businesses as the basis within 5 dimensions (Parasuraman, Zeithaml, & Berry, 1985). It is also understood in this model that there may be different service quality details for different service work. Cronin and Taylor proposed a Measurement Model that was based on the performance of the service producer instead of measuring the difference between the expectation and the perception in SERVPERF model. The service quality was associated with the perception levels of the performance of the business by customers. According to Cronin and Taylor, customer satisfaction is influenced by general service quality, and customer satisfaction affects the purchase decisions both alone and together with the service quality. The final purpose of the model is examining the relation among the service quality, customer satisfaction and purchase intention (Cronin and Taylor, 1992).

The basic logic if G-KITCQUAL has been established on determining the direction of the relation between commercial kitchen practices and customer expectations on environmental sensitivity.

### **Green Kitchen Quality Measurement Model**

When the Green Kitchen Quality Measurement statements were being formed, the basic approaches, standards, service quality and model frameworks of national and international green certification programs were examined.

Service Quality models have been mentioned above. Some of the important International Green Restaurant Certification programs are given below.

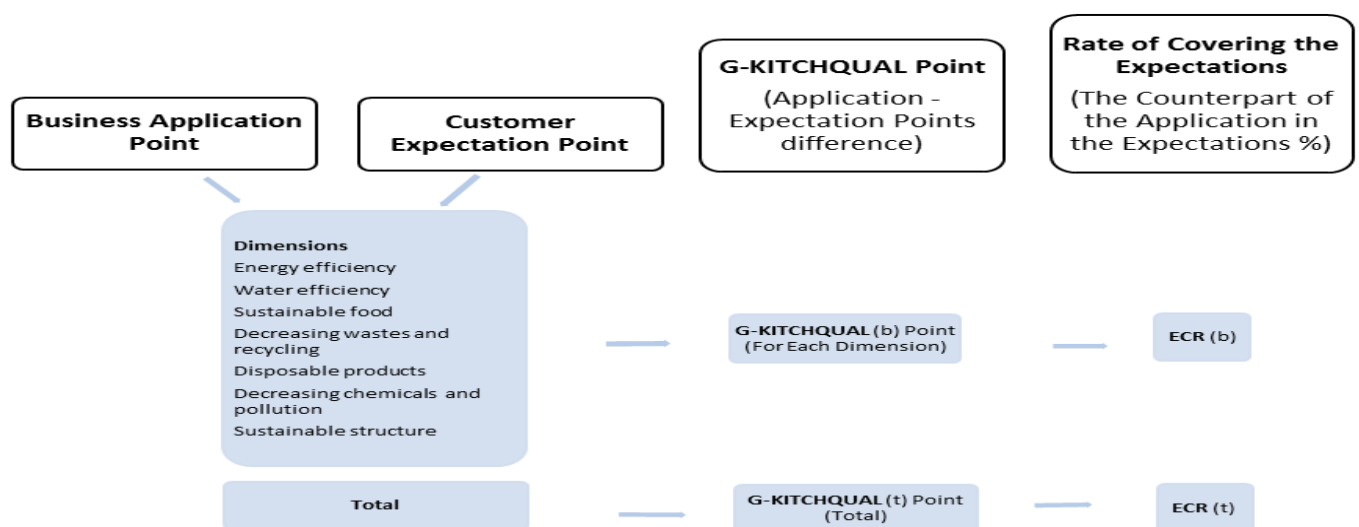
“Green Restaurant Association (GRA)” is an institution that deals with certification for over twenty years based in the USA. “Green Restaurant 4.0” ensures assessments for existing restaurants and food service industries, new structures and activities with a comprehensive and user-friendly method within 7 environmentalist categories of GRA (GRA, 2015).

LEAF (Leaders in Environmentally Accountable Foodservice) Criteria Version 2.0 is a certification program acting since 2009 in Canada on decreasing the effects of food and beverage service industry on the environment. It helps consumers to find businesses that are respectful to the environment. It aims to reveal sustainable food beverage industry standards and support businesses of any size with successful business practices and to provide information, tools and confidence about their effects on the environment. Increasing the conscious and support for businesses on *energy, water, decreasing wastes, from-the-field-to-the-table partnerships, and green restaurant industry* are among the other purposes of this institution (Leafme, 2015).

G-KITCHQUAL, on the other hand, is a measurement model that was formed to measure the environmental sensitivity applied in commercial kitchens as “Green Quality”. The model accepts customer expectations as the determinant of the quality. The things that are expected from business organizations that are active in different classes may vary. G-KITCHQUAL is also a measurement model that may be used as a data collection and assessment tool by restaurant businesses in supporting their Research & Development works.

G-KITCHQUAL compares the Customer Expectation Points that are collected under 7 dimensions, which were previously mentioned, on production practices that are sensitive to the environment with the application points given by the businesses to the same dimensions. In other words, the model asks questions about the same statements both to customers and to businesses for measurement, and reveals the difference between the expectations and practice. The model also establishes a directly-proportional relation with the proximity of the difference between customer expectations and business performance to positive values and quality. When the customer expectation points are subtracted from the business practice points, it is expected that the result is close to positive values. The scale also calculates the rate of covering the expectations of customers by the business practices (i.e. Expectation Cover Rate - ECR).

**Figure 1: G-KITCHQUAL Measurement Model**



## **The Developmental and Operational Processes of the Scale**

### *1. Definition of Green Kitchen Dimensions / Content Analysis:*

When the dimensions of the scale were being formed, the “Green Restaurant 4.0”, LEAF Criteria Version 2.0 and various international certification programs that were used for the same purpose were examined. When the titles and statements here were analyzed with the Content Analysis, it was observed that the businesses that perform environmentally sensitive production are grouped under 7 titles; which are *Saving Water, Energy Efficiency, Sustainable Food, Decreasing Wastes and Recycling, Disposable Materials, Decreasing Chemicals and Pollution, Sustainable Structure*. By considering the literature on kitchen production, management and equipment, these seven titles were accepted as seven dimensions of the scale.

### *2. Defining the Statements:*

2.1. *Focal Group / Validity Analysis:* A list consisting of the certification standards that were taken as reference in defining the abovementioned dimensions was sent to the focal group consisting of two academicians, two activists, two customers, and two business managers. The group was asked to mark the items they considered important in the list. The most frequently marked items were accepted as the statements of the relevant dimension.

2.2. *The Study Group/ Pretest / Understandability Test:* The statements were presented to the Study Group, which consisted of 50 participants, as a questionnaire and feedbacks were received on the relevance and understandability of the statements. Corrections were made on the understandability of the items after the feedbacks received.

### *3. The Analysis of the Data:*

The sampling of the study consisted of the managers and customers of the restaurant businesses with Tourism Operation License in Bursa in December 2015. In choosing the sampling group of the study, geographical proximity and the properties of business managers that had a vision of quality in their businesses. The questionnaires that were applied to the customers and businesses consisted of the same statements. The statements were formed in such a way that would reveal the customer expectations and the practice of the businesses. The data that were obtained from 386 customers and 21 business organizations were analyzed and the applicability of the scale was tested.

In analyzing the data obtained in the study, the SPSS (Statistical Package for Social Sciences) statistical package program was used.

The Kaiser - Meyer - Olkin (KMO) Test was used to determine the adequacy of the data obtained from the sampling of the study. The value “0,904” that was obtained as a result of the analyses showed that the data were very suitable for Factor Analysis.

For Internal Consistency (reliability) test, the “Cronbach Alpha” value ( $\alpha$ ) was calculated as “0,939” (0,60-0,80 = good, 0,80-1,00 = high reliability). Reliability test is the measurement of the consistency of the statements that constitute the measurement tool among themselves (Ural and Kılıç, 2013).

The frequency distribution was made in order to reveal the profile of the businesses (activity period, capacity, etc.) and the customers (age, education, gender). With the help of the Cross Table, the percentages of the demographical properties on the answers were assessed.

The “Independent Sampling *t* test” and “One-Way Variance Analysis” were applied in order to determine whether the importance given to the dimensions by the customers and businesses vary according to demographical properties or not. The differences that were found were explained with the “Post-Hoc” Test for paired comparisons.

The “Correlation Analysis” was made use of in order to measure the relation between the expectations of the customers for environmentally-sensitive kitchen practices and the expectations for the businesses to have a certificate in this field.

The averages of the statements, dimensions and total values of the scores of the customers and business organizations were taken and compared. The comparisons were made between the same statements or dimensions.

By subtracting the customer points from the business points, the quality score was determined. The businesses that covered the expectations and even exceeded these expectations were accepted as quality. In other words, the statements, dimensions or total averages that were close to “0” and that gave “+” results were accepted as quality.

When the Expectation Cover Rate (ECR) in terms of the expectations of the customers was being calculated, the rate of the point of the business to the expectation point on a percent basis (%) was taken with the direct proportion method. The ECR was taken over the averages of the dimensions and the averages of the total points.

**FINDINGS**

*Demographical Findings*

**Table 1:** Demographical Properties of the Customers who Participated in the Questionnaire

		<b>n</b>	<b>Percentage</b>
<b>Gender</b>	Female	218	56,5
	Male	168	43,5
<b>Education</b>	Primary/Secondary School	6	1,6
	High School	84	21,8
	Assoc. Degree	47	12,2
	Undergraduate	164	42,5
	Postgraduate	64	16,6
	Doctorate	21	5,4
<b>Age</b>	20 and below	21	5,4
	Between 21-30	170	44
	Between 31-40	92	23,8
	Between 41-50	52	13,5
	51 and over	51	13,2



56,5% of those who participated in the study (218) were Female, and 43,5% of them (168) were Male. 42,5% of the participants had undergraduate degrees, 21,8% were High School graduates, 16,6% had postgraduate degrees, 5,4% of them had doctorate degrees and 1,6% were primary/secondary school graduates. 44% of the participants were between 21-30 ages, 23,8% were between 31-40 age, 13,5% were between 41-50 ages, 13,2% were 51 and over and 5,4% were 20 and below.

**Table 2:** Activity Periods of the Businesses

	Number of the Businesses	%
1 year and below	2	9,5
2-5 years	3	14,3
6-10 years	5	23,8
11-15 years	4	19,0
16 years and over	7	33,3

When the activity periods of the businesses were examined it was observed that there were 2 businesses with “1 year and below” activity period; 3 businesses in “between 2-5 years” range; 5 businesses in “between 6-10 years” range; 4 businesses in “between 11-15 years” range; 7 in “16 and over”.

**Table 3:** The Capacities of the Businesses

	Number of the Businesses	%
100 and below	2	9,5
Between 101-200	6	28,5
201 and over	13	62

In a question in which the capacities of the businesses were asked, it was determined that there were 2 restaurants with “100 and below” capacity; 6 restaurants with “between 101-200” capacity; and 13 restaurants with “201 and over” capacity.

**G-KITCHQUAL Points**

**Table 4:** G-KITCHQUAL and ECR Points

	$\bar{x}$		p	G-KITCHQUAL (b)	ECR (b)
	Business	Customer			
Energy efficiency	3,16	3,56	0,109	-0,41	88,6%
Saving water	2,25	3,90	<b>0,000</b>	-1,65	57,6%
Waste management	3,81	4,18	0,061	-0,37	91,1%
Disposable materials	2,21	3,65	<b>0,000</b>	-1,44	60,6%
Chemical decay	3,58	3,31	0,304	0,27	108,0%
Sustainable food	2,88	3,83	<b>0,000</b>	-0,95	75,1%
Sustainable structure	1,71	2,73	<b>0,001</b>	-1,02	62,8%

\*\*\* ECR (b): Expectancy Cover Rate (On a dimensional basis)

\*\*\* G-KITCHQUAL (b): G-KITCHQUAL point on a dimensional basis

- In Energy efficiency dimension, customer expectation average was measured as “3,56”; business applications average as “3,16”;
- Waste management dimension, customer expectation average was measured as “4,18”; business applications average as “3,81”;
- Decrease of chemical use dimension, customer expectation average was measured as “3,31”; business applications average as “3,58”.

In the light of these results, it was decided that the difference between the energy efficiency, waste management, decreasing chemical use dimensions and the customer expectations and business applications at a rate of “0,05” was not significant. In other words, it was observed that the businesses covered the expectations of the customers in these dimensions.

- In saving water dimension, customer expectation average was “3,90”; business applications average was “2,25”;
- In avoiding disposable materials dimension, customer expectation average was “3,65”; business applications average was “2,21”;
- In sustainable food dimension, customer expectation average was “3,83”; business applications average was “2,88”;
- In sustainable structure dimension, customer expectation average was “2,73”; business applications average was “1,71”.

In the light of these results, it was decided that the difference between the customer expectations in saving water, avoiding disposable materials, sustainable food, sustainable structure dimensions and the business practices was significant at a rate of “0,05” significance level. In other words, it was observed that the businesses could not cover the customer needs in these dimensions. The businesses must show more effort to cover the needs of the customers in these dimensions.

When the G-KITCHQUAL (b) results were examined, it was observed that the “Chemical decay” in businesses dimension, which received the “+0,27” value, were measured beyond the customer expectations. The lowest G-KITCHQUAL (b) quality point was determined in “Saving water” dimension with “-1,65”. This result shows that the practices of the businesses are much below the customer expectations in saving water dimension. The other G-KITCHQUAL (b) points were as follows; “Waste management” (-0,37), “Energy efficiency” (-0,41), “Sustainable food” (-0,95), “Sustainable structure” (-1,02) and “Disposable materials” (-1,44).

When the ECR(b) points were examined it was observed that the practices of the businesses on the use of chemicals were measured as being much over the customer expectations with “108%”. In addition to this, the

dimension in which the expectations were covered with the lowest value was saving water with “57,6%”. The waste management (%91,1), energy efficiency (%88,6), sustainable food (%75,1), sustainable structure (%62,8), disposable materials (%60,6) dimensions followed this.

**Table 5:** General Point Averages of Customer Expectations and Business Applications

	<b>n</b>	<b>x̄</b>	<b>s.d</b>	<b>p</b>	<b>G-KITCHQUAL (t)</b>	<b>ECR (t)</b>
<b>Business</b>	21	2,80	,56198	<b>0,000</b>	-0,7967	%77,9
<b>Customer</b>	386	3,59	,85255			

\*\*\* ECR(t): Expectation Cover Rate (Total)

\*\*\* G-KITCHQUAL (t): Total G-KITCHQUAL point

In environmentally-sensitive kitchen practices, the customer expectation level general average was measured as “3,59”; and the general average of the business practices was measured as “2,80”. The difference between the expectations and practices was statistically significant ( $p < 0,05$ ). The G-KITCHQUAL point of the restaurant businesses that had Tourism Operation License in Bursa, which is the study area, was measured as “-0,7967”; and the rate of covering the customer expectations (ECR(t)) was measured as “77,9%”.

For this reason, it is possible to claim that “there is a significant difference between the customer expectations and the business practices in environmentally-sensitive kitchen practices”.

**Table 6:** Analysis of the Relation between the Environmental Sensitivity and the Expectations of Having Certificates/Licenses

	<b>x̄</b>	<b>s.d.</b>	<b>Expectation of Certificates/Licenses</b>	<b>Expectation on Environmental Sensitivity</b>
<b>Expectation of Certificates/Licenses</b>	4,27	0,986	1	,682**
<b>Expectation on Environmental Sensitivity</b>	3,64	0,85003	,682**	1

\*\*Correlation is significant at the 0.01 level (2-tailed)

It was determined that there is a positive ( $r=0,682$ ) relation between the expectation level of a business for having an “Environmental Sensitivity Certificate” and the “Environmentally-Sensitive kitchen practices expectation level”, and that an increase in one of these components brought an increase in the other one; and it was also determined that this positive relation is statistically significant at “0,01” level.

**RESULT AND RECOMMENDATIONS**

In this study, environmentally sensitive kitchen practices were defined and detailed under the concept of “Green Kitchen”, and have been presented as a measurement model. With the data obtained from Bursa for December 2015, the applicability of G-KITCHQUAL was tested, and it was observed that it worked. The quality points were checked with ECR and it was determined that there was a consistency between them. G-KITCHQUAL is an idea, a recommendation suggested with the “Green Kitchen” concept. It aims to enable commercial kitchens to make their environmental sensitivity become visible. The model is open for positive and negative criticisms, and may be improved with constructive criticisms. During the course of the study, it was observed that there is a need for G-

KITCHQUAL based on the interest of the customers in the topic and the study. The positive relation between the expectations of the customers on sensitivity for the environment and the expectations of them in terms of showing the sensitivity with certificate is the proof for this need. This model is the first step to attract attention on the model and respond to such a need.

The G-KITCHQUAL point of the restaurant businesses that had Tourism Operation License in Bursa was found to be “-0,7967”; and the Expectancy Cover Rate (ECR) was found as “77,9%”. When the fact that the customer expectations are determinant in service quality is considered, it is observed that the abovementioned businesses have a quality rate of “-0,7967” in general average. These rates are the quality points given by today’s customers with their environmental conscious, sensitivity and expectations. The expectation levels of the customers who develop a better environmental conscious and sensitivity will also increase.

Restaurant and kitchen practices must be dealt with in the context of environmental sensitivity approach. Future studies might deal with supply, storage, production and service processes of food and beverage businesses in the context of “Green Kitchen” concept. The variety in the information that will be provided in this context will provide the sector with guiding data and will pose the basis of forming a standard for Green Kitchen Certification works. By so-doing, the answer might be given to the need of providing and auditing a certificate in this field. In addition, future studies might focus on each region and even on each city with “Local Green Kitchen” studies and contribute to the formation of a Sustainable Menu Map of Turkey.

The state must guide restaurants, which are the production businesses, on environmentally-sensitive practices with audits and encouragements. The regulations must be made to prevent legal gaps and abuses like “*greenwashing*” (the type of environmental sensitivity that has not been reflected in real life). The necessary legal regulations must be made in order to make NGOs that act with environmental sensitivity to contribute to the auditing function. The people must be informed with Public Spots and Educational Curricula and must be encouraged to purchase the products of businesses that have green practices.

Businesses must consider the production practices that are sensitive to the environment as an institutional and social responsibility, and make their efforts on this topic become visible to make use of the benefits of Green Practices. The suppliers must also be encouraged by the businesses with their purchase power for environmentally-sensitive practices.

Consumers must be more sensitive in protecting the natural environment and in the effects of production on the environment, and reflect their sensitivity to their purchase behaviors. The direction and the level of the demand will shape and guide the supply.

## REFERENCES

- Aktaş, A., & Özdemir, B. (2012). *Otel İşletmelerinde Mutfak Yönetimi*. Ankara: Detay Yayıncılık.
- Akyüzöğlü, D. (2008). "Anadolu öğretmen liselerini tercih eden öğrencilerin beklentileri ve bu beklentilerin gerçekleşme düzeyi". Yeditepe Üniversitesi Sosyal Bilimler Enstitüsü.
- Atay, L., & Dilek, S. E. (2013). Konaklama İşletmelerinde Yeşil Pazarlama Uygulamaları: Ibis Örneği. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 18(1), 203-219.
- Ay, C., & Ecevit, Z. (2005). Çevre Bilinçli Tüketiciler. *Akdeniz U.B.F. Dergisi*, 5(10), 238-26.
- Azabagaoglu, M., & Oraman, Y. (2011). Analysis of Customer Expectations after the Recession: Case of Food Sector. *Procedia Social and Behavioral Sciences*, 24, 229–236.
- Cronin, J. J., & Taylor, S. (1992, 2). Measuring Service Quality - A Reexamination And Extension. *Journal of Marketing*(56), s. 55-68.
- Doğdubay, M., & Saatçı, G. (2014). *Menü Mühendisliği*. Ankara: Detay Yayıncılık.
- Göğüş, G., Karakadılar, İ. S., & Apak, S. (2013). Innovation and sustainable growth measurement in hotel industry: A hierarchical decision making model. *Procedia - Social and Behavioral Sciences*, 99, 752-761.
- GRA. (2014, Ocak 15). *Green Restaurant Certification 4.0 Standards*. dinegreen.com: <http://dinegreen.com/standards/GRACompleteStandards.pdf>
- Gracia, E., Bakker, A. B., & Grau, R. M. (2011). Positive Emotions: The Connection between Customer Quality Evaluations and Loyalty. *Cornell Hospitality Quarterly*(52), s. 458–465.
- Gülmez, M., & Dörtüol, İ. T. (2009). *Açıklamalı Pazarlama Sözlüğü*. Ankara: Detay Yayıncılık.
- Işın, S. M. (2013). Hizmet Kalitesinin Servqual Yöntemi İle Ölçülmesi ve Perakende Sektöründe Bir Uygulama. Gazi Üniversitesi Sosyal Bilimler Enstitüsü.
- Junior, S. S., Silva, D. d., Gabriel, M. L., & Braga, W. R. (2015). The Effects of Environmental Concern on Purchase of Green Products in Retail. *Procedia - Social and Behavioral Sciences*, 170, 100.
- Karna, J., Hansen, E., & Juslin, H. (2003). Social Responsibility in Environmental Marketing Planning. *European Journal of Marketing*(37), s. 848-871.
- Kotler, P., Bowen, J. T., & Makens, J. C. (2010). *Marketing For Hospitality and Tourism*. USA: Pearson Education.
- Leafme. Mart 28, 2015, leafme.ca: <http://leafme.ca/mission-and-objectives/>
- Misso, R., Cesaretti, G., Marinelli, N., Viola, I., & Borrelli, I. (2013). "Corporate System" and Green Economy in Campania Region: A Collaborative Platform for the Excellences. *Procedia Technology* 8, 105.

- Özçoban, E. (2010). "Türkiye'de Turizm Endüstrisinde Sosyal Sorumluluk Kampanyaları: T.C Kültür ve Turizm Bakanlığı'nın Yeşil Yıldız Uygulaması ve Calista Otel Üzerine Ampirik Bir Çalışma". 45-46. Ankara: Ankara Üniversitesi.
- Özkaya, B. (2010). İşletmelerin Sosyal Sorumluluk Anlayışının Uzantısı Olarak Yeşil Pazarlama Bağlamında Yeşil Reklamlar. *Marmara Üniversitesi İletişim Fakültesi Dergisi*, 9(34), 247-258.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985, Ocak). A Conceptual Model of Service Quality and Its Implications for Future Research. *The Journal of Marketing*.
- Sarokolaee, A. M., Taghizadeh, V., & Ebrati, M. (2012). The Relationship between target costing and value-based pricing and presenting an aggregate model based on customers' expectations. *Procedia - Social and Behavioral Sciences*, 41, 74-83.
- Şebin, K. (2009). Erzurum kış sporları turizmi ile ilgili yöre halkının tutum ve beklentileri. *Marmara Üniversitesi Sağlık Bilimleri Enstitüsü*.
- Walker, R. H., & Hanson, D. J. (1998). Green Marketing and Green Places: A Taxonomy for the Destination Marketer. *Journal of Marketing Management*, 14(6), 623-639.
- Wong, I. A., Wan, Y. K., & Qi, S. (2015). Green events, value perceptions, and the role of consumer involvement in festival design and performance,. *Journal of Sustainable Tourism*, 23(2), 294-315.
- Yusof, Z. B., & Jamaludin, M. (2014). Barriers of Malaysian Green Hotels and Resorts. *Procedia - Social and Behavioral Sciences*(153), 501 – 509.