
Research Article

Do Consumers and Food Service Providers Share the Same Understanding of Traditional Food

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Citation: Ozilgen S (2016) Do Consumers and Food Service Providers Share the Same Understanding of Traditional Food. Food Nutr J 1: 104. DOI: 10.29011/2575-7091.100004

Received: 29 April, 2016; **Accepted:** 20 May, 2016; **Published:** 3 June, 2016

Abstract

Food service providers must be aware of consumer's expectations, and satisfy them while upgrading their business for continued success of the sector. In order to satisfy the consumer's expectations it is necessary for all the parties to share the same understanding of the common concepts. A case is presented here by referring to the traditional food service sector in Istanbul by examining the differences in "traditional food" definition, image, and practices among the consumers and food service providers. Discrepancies between the perceptions of consumers and the food service providers were observed on different aspects of traditional foods depending on the educational background of the service providers. The duality put the consumers in the blind spots of the food service providers since their expectations were not communicated right to the people in the food services.

Keywords

Consumer; Chef; Culinary education; Principal component analysis; Traditional foods

Introduction

The average ratio of the service industry accounts for over 50% of the Gross Domestic Products (GDP) in most countries, including developing countries. The food and beverage service sector makes noticeable contribution to the GDP of many nations [1-5]. The direct contribution of the tourism and travel services to global GDP was 9.8% of its total in 2015 [6]. Traditional foods still constitute a major part of the culinary culture especially in developing countries [7,8]. The statistics from different countries suggest that tasting local foods is one of the reasons for domestic and international tourists to visit particular destinations [9]. For example, each year more than one million national and international tourists visit the Eastern Black sea coast of Turkey to taste the traditional Akcaabat meatball [10]. Similarly, Gaziantep and Urfa, major cities in the southeastern region of Turkey, are very popular around the world for their traditional dishes [11]. In parallel with rapid growth in the food service sector,

consumers are becoming more demanding and selective. Consequently, the market is getting extremely competitive [12,13]. In such an environment, consumer satisfaction is essential for the success of the food service industry. New product formulations from traditional foods are subject to increased interest among the European consumers and essential for the survival of the food service sector. On the other hand, although both consumers and the food sector support innovations in traditional food products, substantial changes that damage the traditional nature of the products, such as new combinations of ingredients, drastic changes in shapes and textures decrease the consumer acceptance [14,15]. For example, innovations to improve the healthiness and safety of the products in traditional food products are well accepted by the consumers if the communication is done about the quality than about new food ingredients. Consumers are willing to pay more when their expectations from the foods are well satisfied [8]. Therefore, the parallelism in perceptions, image, expectations and attitudes towards foods between the consumers and the food providers is important in satisfying the consumers' expectations; hence, for the success of the food market [3,15-18]. The service achieves its purpose when the gap that exists between the perceptions of consumer and the

providers on a given service is negligible. The first step to minimizing that gap is making sure that consumers and service providers share the same understanding of the common concepts [3,13,14,17,18]; then continuous monitoring, analyzing and accurate interpretation of the consumer's expectations by the food service providers is needed to achieve the goal [12].

Recently, formal culinary education gained much importance all around the world. The number of chefs with formal culinary education working in the food market has been significantly increased. Current studies show that formal education creates a difference in different aspects of food production among the chefs [19]. There is extensive research in consumer's expectations from different types of foods in the literature [8]. On the other hand, the differences in expectations from the same food between the consumers and the food providers are not analyzed in the literature. The main purpose of this study was to identify the differences in definition and image of foods among consumers and food service providers, from different educational backgrounds, by applying principle component analysis. The food service sector encompasses a wide range of services and activities. In order to limit the scope of the study traditional food service was chosen as the case because of its noticeable share in the food service industry [7].

Material and Methods

Subjects and data collection

A structured questionnaire was designed to collect the data. Questions were modified from those of previous researchers and administered in Istanbul, Turkey [20-22]. The questionnaires were filled with face-to-face contact. Restaurants claiming to serve traditional foods, their chefs and their customers were chosen randomly as the venue and the subjects, respectively. All of the participants were the native tourists visiting Istanbul for the leisure purpose. Demographic characteristics were recorded based on the answers to questions regarding age, gender, and annual income. For the purpose of this study, chefs working in the food service sector who have a degree from the culinary program of the universities that covers comprehensive cultural food studies, science, tourism dining, marketing, and cooking practices were called "chefs from a culinary school". "Chefs in practice" were defined as cooks working in the food service sector who have had no prior formal culinary education. The survey was completed by 55 (9 female and 46 male) chefs with no culinary education, 30 (13 female and 17 male) chefs with culinary school education, and 139 (71 female and 68 male) consumers. In this study, the number of chefs with culinary education was less compared to that of the other group, since the culinary education has been given in Turkey during the last thirteen years.

Subjects were informed of the purpose of the study, and their approval was required before presenting a questionnaire,

each questionnaire took approximately 15 minutes to administer.

The questionnaire comprised three sections. In the first section, there was a question to assess the definition of traditional foods. Five different statements were given to the participants and they were asked to mark the option that best defines the traditional foods. In the second section, six questions were used to evaluate the differences in the general image of traditional foods among the groups. The respondents were asked to indicate their agreements on each item on a 5-point Likert agreement scale, where 1 was used to mean "strongly disagree", 2 was to mean "disagree", 3 was "may be/somewhat agree", 4 was "agree", and 5 was "strongly agree". The third section of the questionnaire, food choice practice part, a list of thirty-six foods, compiled of both traditional and non-traditional foods, was given to the participants and they were asked to mark the foods, which they believed to be traditionally Turkish. For the purpose of the study, traditional foods listed on the official web-site of the Turkish Ministry of Culture and Tourism and in recent academic studies [23-25] were checked, and the ones that were common in those resources were selected for further consideration to limit the number of items. Widely consumed foods that are not a component of the traditional Turkish cuisine such as French fries were considered non-traditional. The purpose of the food choice practice part was to confirm whether the definition and the image of traditional foods among the groups obtained from the previous parts of the study were consistent with their practical traditional food selection.

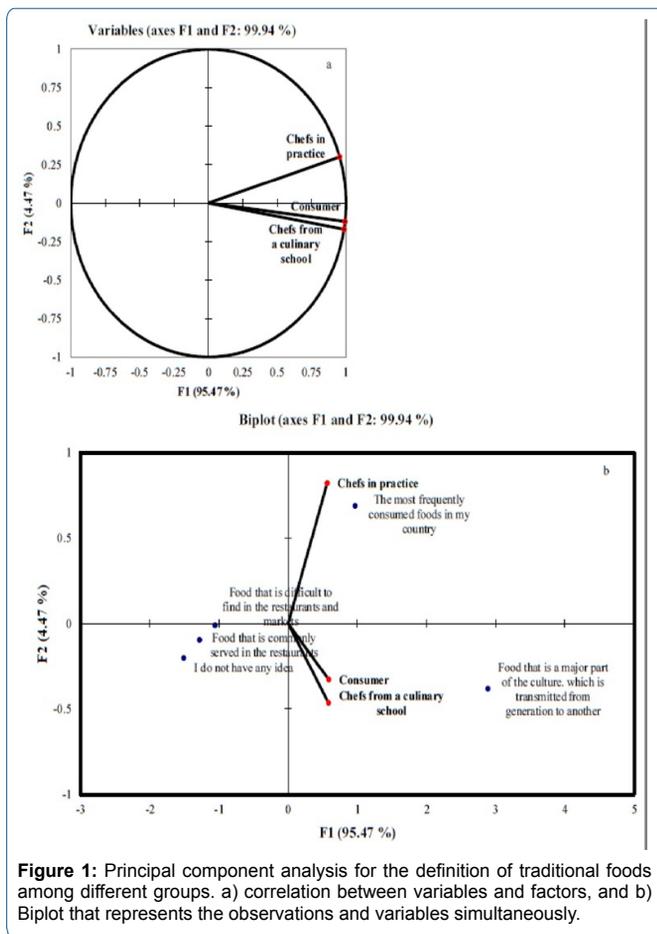
Data analysis

The chi-square test was applied to compare proportions, means, and frequencies. Differences were considered significant at $p < 0.05$.

Principle Component Analysis (PCA) was performed to visualize the results obtained from the groups pertaining to the definition and the general image of traditional foods (Figures 1 and 2). XLSTAT for Microsoft Excel was used for principal component analysis (Addinsoft SARL). Principal Component Analysis (PCA) is one of the most frequently used multivariate statistical methods and aims to analyze and visualize the observations and variables by compressing the size of the data set without loss of information. Principle components are computed as the linear combinations of the original variables. The first principle component represents the direction of maximum variation through the data; the second component represents the second greatest variance, and so on [26].

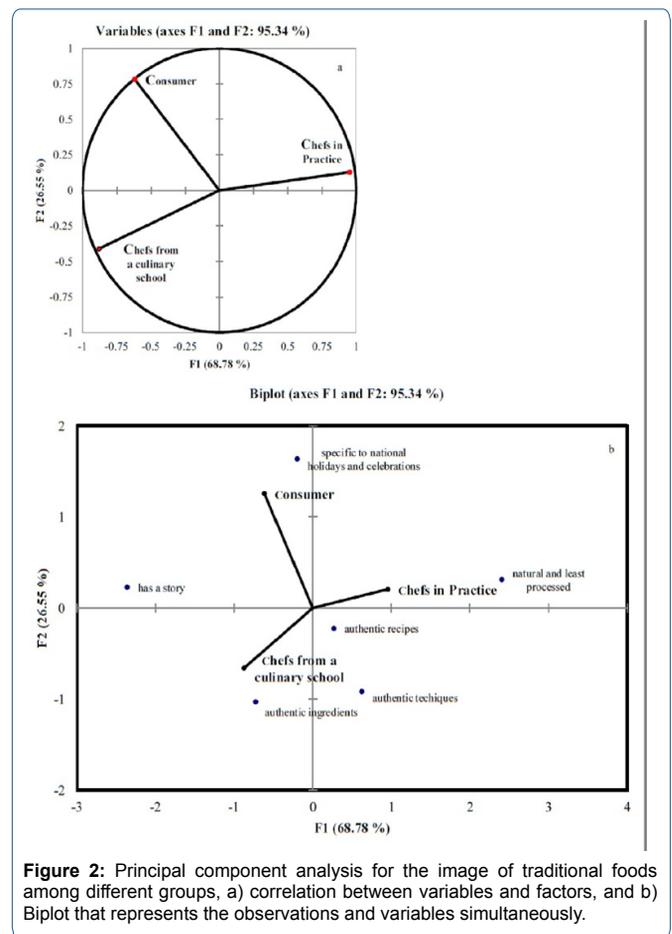
Results and Discussion

The PCA biplots together with the results from the statistical analysis were used to identify the traditional food image, definition and practices among consumers and food service providers with different educational backgrounds.



In the biplots (Figures 1 and 2) vectors represented the groups; consumers, chefs with culinary school education, and chefs with no culinary school education; and the points represented the variables given in tables 1 and 2. Vectors pointing in the same direction correspond to groups that had the same opinions about the definition or images of the traditional foods.

Figure 1, clearly states that the consumers and the chefs with culinary school education had similar responses for the definition of traditional foods. They primarily stated that traditional foods are a “major part of the culture, which is transmitted from one generation to another”. A relatively lower percentage (43.6%) of chefs with no culinary school education agreed with that definition. This observation was supported by the results obtained from the statistical analysis ($p=0.03$ and $p=0.04$) (Table 1). The chefs with no culinary education had an image of traditional foods as “the most frequently consumed foods in the country” (Figure 1 and table 1). This result was also supported by the traditional food selection practice of the groups since more chefs with no culinary school education; compared to the other groups; marked the “most frequently consumed foods” such as schnitzel, hamburger, steak, baked pasta, French fries as traditional foods ($p < 0.05$) (Table 3). Significant differences were observed on 28% of the items between chefs with no culinary school education and the chefs



with culinary school education, and on 39% of the items between chefs with no culinary school education and the consumers in marking the traditional foods among the list of both “traditional” and “non-traditional but highly consumed foods” (Table 3) ($p < 0.05$).

The PCA plots (Figure 2) clearly show the differences in the responses for the image of the traditional food among the groups since all the vectors are pointing in different directions. Consumers had an image of traditional foods as “specific to national holidays and celebrations” (Table 2 and figure 2). On the other hand, although the majority of chefs with culinary school education defined traditional foods as “a major part of the culture transmitted from one generation to another”, they did not primarily associate them with national holidays and celebrations (Table 2 and figure 2). Family traditions and celebrations are the natural link between the past and present generations [27]. Until recently, some dishes were cooked only on special occasions and on national holidays. But globalization and the use of gastronomy and the food service sector as powerful economic development sources forced traditional foods to become available everyday in most restaurants and touristic destinations [28-30]. Formal culinary education might be the reason for the disagreement among chefs with culinary school education on this statement [31]. Authenticity was primarily associated with traditional food

	Responses (%)				p	
	Chefs in practice	Chefs from a culinary school	Consumer	Chefs in practice vs. Chefs from a culinary school	Chefs from a culinary schools vs. consumers	Chefs in practice vs. consumers
The most frequently consumed foods in my country	40	26.7	27.4	0.32	0.88	0.09
Food that is difficult to find in the restaurants and markets	9.1	3.3	6.5	0.58	0.80	0.74
Food that is commonly served in the restaurants	5.5	0	5	0.48	0.46	0.91
Food that is a major part of the culture, which is transmitted from one generation to another	43.6	70	60.4	0.03*	0.45	0.04*
I do not have any idea	1.8	0	0.7	0.76	0.4	0.90

Table 1: Responses for the question “which statement best defines the traditional foods” among different groups.

*significant difference at $p < 0.05$

Food	Positive responses (%)				p		
	Traditional to Turkey	Chefs from a culinary school (N=30)	Chefs in practice (N=55)	Consumers (N=139)	Chefs from a culinary school vs chefs in practice	Chefs from a culinary school vs consumers	Chefs in practice vs consumers
Tarhana soup	+ ^a	90	83.64	68.35	0.63	0.01*	0.012*
Tutmac soup	+	76.67	65.45	53.24	0.41	0.03*	0.16
Spinach soup	- ^b	10	20	10.79	0.38	0.84	0.14
Katmer	+	76.67	70.91	48.92	0.75	0.01*	0.01*
Tez pisti	+	33.33	40	17.27	0.7	0.08	0.0015*
Cold eggplant dish with olive-oil	+	73.33	69.09	62.59	0.36	0.87	0.49
Cold stuffed green pepper with olive-oil	+	66.67	54.55	43.88	0.57	0.94	0.19
Cold leaks with olive-oil	+	23.33	63.64	35.97	0.001*	0.26	0.0008*
Eggplant salad	+	26.67	38.18	36.69	0.41	0.98	0.41
Humus	+	43.33	43.64	42.45	0.84	0.9	0.99
Stuffed zucchini	+	66.67	54.55	43.88	0.39	0.04*	0.24
Green beans with meat	+	60	56.36	35.25	0.92	0.008*	0.003*
Poached egg with yogurt	+	70	70.91	53.23	0.88	0.14	0.036*
Sis kebab	+	56.67	50.91	46.04	0.78	0.65	0.78
Rice	+	56.67	69.09	46.76	0.36	0.43	0.87
Doner	+	53.33	72.73	47.48	0.12	0.7	0.003*
Fava	+	53.33	27.27	38.13	0.03*	0.2	0.18
Demir hindi syrup	+	53.33	29.09	35.97	0.048*	0.12	0.45
Compote	+	73.33	74.55	61.15	0.89	0.3	0.11
Simit - Turkish bagel	+	46.67	50.91	51.08	0.88	0.81	0.89
Benye	-	23.33	10.91	14.39	0.23	0.35	0.68
Sponge cake	-	3.33	5.45	0.72	0.92	0.79	0.12
Hosmerim	+	73.33	69.09	50.36	0.86	0.04*	0.02*
Profiterole	-	0	3.64	15.11	0.76	0.048*	0.047*
Schnitzel	-	0	16.55	1.44	0.046*	0.63	0.0002*
Steak	-	0	16.4	10.79	0.048*	0.035*	0.85
Fish in bread	+	33.33	30.91	15.82	0.98	0.049*	0.03*
Chicken with béchamel sauce	-	0	3.64	7.91	0.76	0.23	0.45
Soufflé	-	0	3.64	9.35	0.76	0.17	0.3
Sausages	-	0	5.45	2.16	0.49	0.96	0.58

Hamburger	-	0	21.82	9.35	0.015*	0.17	0.035*
Fried mussels	+	10	32.73	10.79	0.039*	0.84	0.0006*
Mashed potatoes	-	3.33	27.27	29.5	0.016*	0.006*	0.89
Baked pasta	-	2.33	21.82	19.42	0.037*	0.043*	0.85
French fries	-	3.33	23.64	8.63	0.035*	0.54	0.01*
Onion rings	-	0	7.27	7.19	0.33	0.28	0.77

Table 3: Traditionality of thirty-six foods and statistical comparison of the responses recorded in different groups.

*significant difference at p< 0.05

a - non traditional

b + traditional

Question	Chefs in practice	Chefs from a culinary school	Consumer	Chefs in practice vs. Chefs from a culinary school	p	Chefs in practice vs. consumers
	mean ± std	mean ± std	mean ± std			
Traditional foods are the natural and the least processed foods	3.65 ± 0.95	2.63 ± 1.40	2.96 ± 1.03	0.001*	0.15	<*100.0
Traditional foods are usually cooked in the national holidays and celebrations	3.49 ± 1.14	2.93 ± 1.33	3.36 ± 1.15	0.07	0.16	0.35
Authentic recipes are used to prepare traditional foods	3.48 ± 0.93	3.07 ± 1.03	3.03 ± 0.82	0.049*	0.95	0.001*
Authentic cooking techniques are used to prepare traditional foods	3.56 ± 0.96	3.28 ± 1.09	2.93 ± 0.84	0.26	0.046*	<*100.0
Authentic ingredients are used to prepare traditional foods	3.38 ± 0.95	3.32 ± 1.25	2.97 ± 0.88	0.92	0.12	0.009*
Every traditional food has its own story	3.35 ± 0.99	3.62 ± 0.86	3.32 ± 0.81	0.71	0.052	0.09

Table 2: General image of traditional foods in different groups. Responses expressed as mean scores on a scale of 1-5.

*significant difference at p<0.05.

image to some extent in this group (Figure 2). Chefs with no culinary school education seemed to associate traditional foods with natural and least processed foods (Figure 2). These observations were supported with the results of statistical analysis (Table 2).

Combining the results from PCA and statistical analysis it might be possible to conclude that:

- (1) Consumers perceive traditional food as “a major part of the culture transmitted from one generation to another, which are usually cooked during national holidays and specific celebrations”;
- (2) Chefs with culinary school education perceive traditional food as “a major part of the culture transmitted from generation to another, and have an authentic nature”;
- (3) Chefs with no culinary school education perceive traditional food as a “frequently consumed food in the country which are least processed and natural”.

In this study, although formal culinary education decreased the gap between the food service providers and the consumers, they did not completely share the same understandings of many aspects of traditional foods. The duality put the consumers in the blind spots of the food

services providers since their expectations were not fully communicated to the people in the food services. Incomplete understanding of consumers’ expectations and consumers’ relationship behavior is a potential strategic risk for service providers [32,33]. Disruption in consumer relationships and decline in the market share are the main consequences of inefficient consumer relationship management [32,34,35]. A striking example of this situation was observed as a decline in the market share of theme restaurants as the changes in consumers’ expectations from these restaurants, parallel to new market circumstances, were not confirmed by the service providers [33]. Similarly, Ross [36] stated the negative effects of improperly managed food services on the image of destination, overall tourist satisfaction and their intention to return. Therefore, the information obtained from this study can be used: (1) by the food service managers in various branches of the food service sector to understand if the consumers and food service providers share the same understanding of common concepts. Case-specific actions taken by the management may minimize the gap between the consumers and food service providers; (2) to innovate new food products for the food market. Innovation is an essential tool in survival of micro, small, and medium sized traditional food

markets when they match well with the expectations of consumers. For example, high acceptance rates found in the consumer study for a health innovation reducing the fat level of traditional dairy foods as far as the sensory attributes remain unchanged [15,37]; (3) by the government to improve traditional food awareness among chefs by supporting venues for training such as collective kitchens, and by offering certificate programs. Government may get help from the chefs in promoting tourism and food service sectors; (4) by researchers to design a further comprehensive work by expanding the research to the other parts of Turkey which has not been found among the cross-cultural studies carried out in different European countries [20-22,27,38].

Conclusion

The results of the study revealed that the perceptions and the expectations of consumers from food services were not completely understood by the food service providers since they did not share the same understandings of many aspects of traditional food. Gap between the consumers and the food service providers was observed on different aspects of traditional foods depending on the educational background of the food service providers. Food service providers must be aware of the consumer's expectations and satisfy them for the continuous success of the business. This research will contribute to new knowledge within the literature and help food service providers to better understand the need for continuous monitoring, analyzing and accurate interpretation of the consumer's expectations from the food service providers. Moreover, based on the analyses, it also became clear that formal culinary education resulted in differences between the food service providers.

The current study is limited to Istanbul, a big city in western coast of Turkey. Future complementary works need to be designed by expanding the research to different parts of Turkey and to the international consumers visiting Turkey.

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