



Evaluation of gastronomy education quality in Turkey in terms of faculty members

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ABSTRACT

An important part of the universities in Turkey has started to provide gastronomy education. In this study it was aimed to systematically analyze the scientific activities and the status of gastronomy-related specialization of the faculty members working in the areas of gastronomy. In the conclusion of the study it was determined that the number of faculty members have very high number of students attend, is inadequate, that a significant part of these academicians are specialized in fields unrelated to gastronomy and that the gastronomy-related scientific studies conducted by the academicians are few in quantitative terms.

1. Introduction

In line with the rising levels of culture and awareness all around the world, also the numbers of people specializing in certain areas have increased. In fact, the increased competition that is nowadays present in nearly all areas has directed people to seek very specific specialties instead of training or getting educated in a broader general area. This situation that is seen in numerous fields is also true for the general field of tourism. The field of tourism that used to enable specialization in the areas of tour guiding and hospitality management now offers opportunities to specialize also in the areas of recreation and gastronomy.

It is possible to say that the habit of eating out that depends upon the rising culture level and increasing income and number of employed people is effective in gastronomy becoming a more interesting field every day in Turkey and all around the world. The increase in the general number of employed people does not only increase the frequency of eating out due to the shortage of time, but also causes the expendable income of families to rise. Accordingly, this has started to become an effective cause in satisfying the need to eat through the purchase of a service. In addition, while the main purpose of eating is to meet a physiological need, today it is considered as an important matter that also serves the purpose of satisfying the individual's social needs. In other words, today people do not eat solely for nutrition, but also to meet their hedonic needs through experiencing good, varied and delicious food. Consequently, this transformation in the understanding of eating out and eating well has gone beyond the profession of cookery and caused cooking and serving food to be perceived as an art. Thus, gastronomy has become a field of high demand.

The fact that gastronomy has started to receive higher interest everyday caused many universities in Turkey to open gastronomy departments. Yet, it is still a disputed matter whether education at aimed level and with the required scientific depth can be provided despite the increase in the number of gastronomy departments throughout the country. In addition to the essential means of infrastructure and superstructure, the shortage in specialized academic staff are regarded as the most important problems. Furthermore, approaching the matter solely from the perspective of cooking also causes the importance attached to the matter to dwindle (Oney, 2016: 194). Correspondingly, in order for the people studying in gastronomy departments to meet the requirements of the sector the need for infrastructure, equipment, materials and last but not the least for the staff that would teach gastronomy should be met both in qualitative and quantitative terms. The most important problem concerning this in Turkey is the fact that while the attendance to gastronomy education provided by several universities is quite high, there is an important shortage in the faculty members that have the suitable qualities.

One of the most important elements in gastronomy education are the faculty members that give the lectures. This is due to the fact that even if the required infrastructure, materials and equipment are available, the shortage of faculty members to give the lectures, or their shortcomings in training and experience to give the lectures is considered to be a significant problem. As a matter of fact, in previously conducted studies Oney (2016): 194; Hegarty (2011); Ilhan, 2008; Santich (2007): 54; Scarpato (2002a): 9; Hegarty (2009): 13 the essentiality of faculty members having sufficient competency in terms of education, academic studies, sectoral experience and relations was also one of the most

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important topics emphasized upon. On the other hand, as gastronomy education is, by its nature, an application-heavy field of education, faculty members also need to have the adequate skills in application. However, the problem here is, due to the interdisciplinary structure of the field, the lack of a clear definition on what gastronomy covers and what it does not. Consequently, faculty members who have no interest in gastronomy, or those who have no competency concerning teaching in professional kitchens may be employed in universities' gastronomy departments. This situation negatively affects the quality of gastronomy education in Turkey. Because it is thought that provided education in this field by non-experts in the field of gastronomy will reduce the quality of gastronomy education. From this point, we find it important to evaluate the quality of the gastronomy education provided in Turkey in terms of faculty members in order to manifest the present status of gastronomy education in Turkey and to suggest ideas concerning the measures to be taken in the future. At the same time, the study results were seen as important in terms of explaining the reasons and/or results of other studies on gastronomy education to a certain extent.

2. Literature review

2.1. Gastronomy education in Turkey

Gastronomy focuses on what is consumed, the manner in which it is consumed and the reason why it is consumed (Ciftci, 2014: 41); and therefore affected by the theories of several sciences. It has started to be known in Turkey for the last 15 years, as in all around the world. Nevertheless, the rapid increase in gastronomy departments opened in Turkish universities also brought along a significant growth in the area. As a matter of fact, while there were only 5 gastronomy education departments in the country in 2010, this number increased to 28 in 2015, to 38 in 2017, 43 in 2018 and reached 63 in 2019. Similarly, while the quota of students admitted to gastronomy education was 300 throughout the country in 2010, this was raised to 1.424 in 2016, while the total of 4.184 students in 2017 reached 5.800 in 2019. Evaluating these numbers shows that in the last decade the number of gastronomy education departments increased by 1.260% and the allowed quotes increased by 1.395% in Turkey.

There are some reasons for the increase in the number of universities in Turkey that offer gastronomy education at bachelor level. First of all, within the process of Tourism and Hotel Management Colleges' transformation to Tourism Faculties, there have been changes not only in the structures, but also the names of the departments of these schools. For instance, departments that had been named Food and Beverage Management turned into either Gastronomy or Gastronomy and Culinary Arts departments in faculties (Tutuncu, 2019: 94–95). Another reason is that today, individuals want to be trained and specialized in more specific areas. Therefore, the tourism departments that used to attract high attention are today over shadowed by tour guiding and gastronomy departments.

The history of gastronomy education in Turkey can be traced back to the year 2003. Having first started to be given in a foundation university in 2003, gastronomy education progressed quite slowly until the year 2010. Starting from 2010, gastronomy departments started to be opened in the tourism faculties, particularly in those of state faculties. The main purpose of gastronomy departments opened by various universities is to teach students that are interested in gastronomy in areas of culinary, food and beverage management and management of restaurants, coffees and bars management (Ekincek et al., 2017: 29). Under this main purpose, raising people that have command on topics such as menu planning, cost control, safe food production and preparation and portioning of sauces, soups, salads, desserts and other meals is included within the objectives of gastronomy education in Turkey as it is also set forth in the literature (Cheng et al., 2011: 17).

While gastronomy education given in Turkey is pretty comprehensive and has its own peculiar requirements, it became one of the areas

that attracts the interest of a great number of people. However, one of the greatest problems gastronomy education, which is known and provided not even for two decades in Turkey, is the rather lacking number of faculty members raised in the field of gastronomy and the inadequacy of the scientific studies peculiar to the field. Due to this reason, significant difficulties are experienced in terms of faculty members specialized in both theoretical and practical terms in the education presently carried out in universities' gastronomy departments.

The areas on which faculty members should have specialized in order to be able to teach in gastronomy departments is an important matter that is still in dispute. Oney (2006), Santich (2004), Hjalager (2002), Hjalager and Richards (2002) and Scarpato (2002b) suggests that, until the time when gastronomy's own theory is established, the tools and methods used in other disciplines should be utilized and, in that regard, the closest disciplines to gastronomy are tourism and hospitality. Accordingly, faculty members coming from the origin of tourism take an important part in gastronomy education both in Turkey and all around the world. On the other hand, Sanitch (2004: 11) states that several disciplines including tourism, sociology and food engineering that aim to raise experts that would work at international standards, that would be managers in food and beverage establishments and that would be knowledgeable about cuisine trends and culture can be incorporated. Drouard (2008: 264) also emphasized that gastronomy education should incorporate all fields that are related with human nutrition.

One of the important aspects of gastronomy education is that both the field and the educational content is application-oriented. Evaluating the content of gastronomy education carried out in Turkey, it can be observed that a significant part of it is based on practice. Also, it is doubtless that the acquired knowledge facilitates practice and provides insights on the reason of doing something and how to do it. Accordingly, both the theoretical and practical competencies of faculty members lecturing gastronomy education are important and constitute a whole when incorporated. Gorkem and Sevim (2016), Scarpato (2002a; 9) ve Hegarty (2009: 13) report that faculty members that lecture gastronomy should have adequate education on gastronomy and also have theoretical and practical experience. Gurdal (2002: 396–397), Zopiatis vd. (2014), Hertzman ve Stefanelli (2008) and Hertzman ve Ackerman (2010) states that the quality of education given in school is in parallel with the area-specific training and background of the faculty members providing the education. Gorkem and Sevim (2016: 978) also state that gastronomy is a discipline requiring aesthetical knowledge and skills along with food science, food preparation, nutrition and cooking methods; and therefore, that the lectures should be given by experienced faculty members that meet the requirements of the occupation. On the other hand, in studies conducted on the quality of the education given in the gastronomy departments of Turkey (Cankul, 2019; Ozdemir, 2017; Gorkem and Sevim, 2016; Oney, 2016; Akinci, 2015; Cemre & Yilmaz, 2010; Gorkem, 2004) it is reported that those who teach gastronomy are inadequate in terms of experience and training.

3. Material and methods

The purpose of the present study is to systematically analyze the scientific activities and state of specialization of the faculty members lecturing in bachelor level gastronomy education in Turkey. Among the other purposes of the study are to quantitatively assess the departments providing gastronomy education in Turkey, to set forth the extent on which gastronomy is regarded as a science and the sort of contributions that are made to the literature in Turkey. By these means, in the conclusion of the study it will be possible to draw a general framework concerning the quality of the gastronomy education in Turkey.

No sampling was used and all Gastronomy and Gastronomy and Culinary Arts departments operating in the universities in Turkey were included within the scope of the study. While there are two different names of the departments as stated above, they will be jointly referred to as Gastronomy departments for the purpose of this study. In line with the

main and secondary objectives of the study, at first the 2019 data of the Council of Higher Education (Yök Atlas, 2019) that carries out the duty of placing prospective students to undergraduate programs, and by utilizing these data the gastronomy departments of Turkey, the types of the universities they are affiliated to and their faculties were determined. Afterwards the tenured faculty members working in these departments were identified and their academic backgrounds were evaluated through content analysis. In the evaluation of the faculty members their educational backgrounds, written books or chapters, published national and international articles, declarations and projects included in their resumes available in the universities' web pages were taken as primary criteria. These criteria were then evaluated concerning their relation with gastronomy and only in quantitative terms.

4. Results

According to the 2019 Handbook of Higher Education Programs and Quotas, there are a total of 64 universities providing gastronomy education in Turkey. For the 2019–2020 academic year, these 63 universities had a total open quota of 4,184 students; and a total of 4,065 students (97.2%) were placed within this total quota. While 37 (58.7%) of the universities included within the scope of the survey were state universities, the remaining 26 (41.3%) were foundation universities. While the total of 2,564 quota opened for gastronomy departments in state universities was filled completely (100.0%), 1,542 of the total 1,605 (96.1%) quota opened by foundation universities was filled. The remaining 3.9% quota in foundation universities were of either paid-education and/or of departments with 25.0% or 50.0% scholarship.

Due to the fact that faculty member-related information could not be found in 4 of the total 63 universities, these were excluded from the scope and the analyses were made on 35 state (59.3%) and 24 foundations (40.7%) universities. The entire 2,469 quota opened by the state universities included within the scope of the study was filled. On the other hand, 1,464 of the total 1,517 (96.5%) quotas opened by the foundation universities were occupied. While in one of the foundation universities gastronomy departments were available under three different educational units, in two of the state universities gastronomy departments were present under two different educational units. On the other hand, five different state universities provided gastronomy education in evening education.

While 73.0% of the total 37 gastronomy departments of state universities was affiliated to Tourism Faculties, 16.2% was affiliated to Applied Sciences Colleges, 5.4% was affiliated to Faculties of Fine Arts and another 5.4% was affiliated to Tourism and Hotel Management Colleges. In contrast to the case of state universities, more than half (59.3%) of the gastronomy departments in foundation universities was under Faculties of Fine arts, 29.6% was affiliated to Colleges of Applied Sciences, 7.4% was affiliated to Tourism Faculties and the remaining 3.7% was affiliated to Applied Management Sciences Colleges.

Within the period of time in which the study was carried out a total of 222 faculty members were working in the universities included in the scope. While a significant part (65.8%) of these faculty members had PhD degree, 18.5% of them were Associate Professors and 14% were Professor Doctors. After the evaluation it was observed that the titles of 4 faculty members (1.8%) were not mentioned. Evaluating the titles of faculty members in line with the status of the universities they work for showed that a total of 82 faculty members were working in foundation universities. While nearly three fourths (73.2%) of these faculty members were Doctors, 15.9% were Associate Professors and 11.0% were Professor Doctors. On the other hand, a total of 140 faculty members were working in the gastronomy departments of state universities. In a case that is similar to that in foundation universities, more than half of the faculty members working in state universities were Doctors (61.4%), while 22.9% were Associate Professors and 12.9% were Professor Doctors. No information concerning the titles of 2.8% of the faculty members working in state universities could be found. As of the year 2019 the

number of faculty members working in gastronomy departments in Turkey per student attending the departments was 0.06.

Evaluating the faculty members working in the gastronomy departments included within the scope of the study in terms of their bachelor, masters and doctoral degrees showed that the faculty members had specialized in very diverse areas (Table 1). The table presents the distribution of the faculty members working in gastronomy departments in Turkey in respect to their educational backgrounds. In terms of undergraduate programs, while 37.4% of the faculty members teaching gastronomy were graduates of Tourism Management Faculty, this was followed by Food Engineering/Food Technology/Food Hygiene (27.9%), Nutrition/Family Economy and Nutrition (6.3%), Business/Economics (4.1%), Veterinary (2.7%), Agriculture (2.3%), Molecular Biology and Genetics/Biology/Microbiology and Aquaculture (1.8%), Industrial Arts, Furniture and Interior Architecture/Landscape Architecture (1.4%), Political Sciences/International Relations/EU Studies, Chemical Engineering/Biochemistry (0.9%) and finally Public Relations and Advertising Faculties. A similar situation is valid for the master's and doctoral degrees of faculty members.

The distribution of the gastronomy-related academic studies of the faculty members working in the gastronomy departments in Turkey are presented in Table 2. Due to the fact that the academic studies of 13 of the faculty members could not be accessed, the studies of a total of 209 faculty members were taken into consideration. According to this, while three out of four faculty members (75.6%) did not publish a book or a chapter in a book concerning gastronomy, 16.7% published 1–3, 4.8% published 4–6 and 2.9% published 7–9 books or chapters concerning gastronomy. Nearly all of the faculty members (90.0%) either didn't conduct a project or did not take part in a project.

Examining the articles of the faculty members published in national and international journals showed that while 83.8% of them didn't have any article published in international journals, 65.5% of the did not have any article published in national journals. On the other hand, only 12.0% of the faculty members had articles published at international level and 18.7% of them had articles published at national level. There

Table 1
Distribution the faculty members working in the gastronomy departments included within the scope of the study in terms of their educational degrees.

Graduated Departments	Bachelor's Degree		Master's Degree		Ph.D.	
	f	%	f	%	f	%
Tourism Management	83	37.4	76	34.2	72	32.4
Food Engineering/Food Technology/Food Hygiene	62	27.9	58	26.1	60	27.0
Nutrition/Family Economics and Nutrition	14	6.3	14	6.3	14	6.3
Business Administration/Economy	9	4.1	14	6.3	13	5.9
Veterinary	6	2.7	5	2.3	5	2.3
Faculty of Agriculture	5	2.3	4	1.8	4	1.8
Molecular Biology and Genetics/Biology/Microbiology	4	1.8	5	2.3	5	2.3
Sea Food	4	1.8	3	1.4	3	1.4
Industrial Arts	3	1.4	3	1.4	2	0.9
Furniture and Interior/Landscape Architecture	3	1.4	2	0.9	3	1.4
Chemical Engineering/Biochemistry	2	0.9	3	1.4	5	2.3
Politic Science/International Relations/EU Studies	2	0.9	3	1.4	3	1.4
Public Relations and Advertising	1	0.5	3	1.4	4	1.8
Management and Organization	0	0.0	1	0.5	5	2.3
Gastronomy	0	0.0	2	0.9	3	1.4
Unspecified	13	5.9	13	5.9	11	5.0
Other	11	5.0	13	5.9	10	4.5
TOTAL	222	100.0	222	100.0	222	100.0

Table 2

The distribution of the gastronomy-related academic studies of the faculty members working in the gastronomy departments in Turkey.

ACADEMIC STUDIES	Num. of Studies	f	%	ACADEMIC STUDIES	Num. of Studies	f	%
Book/Book Chapter	0	158	75.6	Project	0	188	90.0
	1-3	35	16,7		1-3	17	8,1
	4-6	10	4.8		4-6	4	1,9
	7-9	6	2.9				
International Article	0	175	83.8	National Article	0	137	65.5
	1-3	25	12.0		1-3	39	18.7
	4-6	7	3.3		4-6	17	8.1
	7-9	2	0.9		7-9	6	2.9
International Conference Paper	0	170	81.3	National Conference Paper	0	139	66.5
	1-3	25	12.0		1-3	32	15.3
	4-6	6	2.9		4-6	15	7.2
	7-9	6	2.9		7-9	12	5.7
	10+	2	0,9		10+	11	5.3
TOTAL		209	100.0	TOTAL		209	100.0

were only 9 published articles on gastronomy. A similar case was also seen in conference papers. 81.3% of the faculty members had no international conference papers and 66.5% of them did not have any national conference papers. While the rate of faculty members who had more than 10 international conference papers was 0.9%, 5.3% of the faculty members had published more than 10 national conference papers.

The distribution of the academic studies belonging to the faculty members working in the gastronomy departments of state universities is presented in Table 3. Although there were a total of 140 faculty members working in state universities, the resumes of 10 of them could not be accessed and therefore only 130 faculty members were taken into consideration at this point. While 63.9% of the faculty members working in state universities did not publish any gastronomy-related book or chapters in such a book, 24.6% had published 1-3, 7.7% published 4-6 and only 3.8% published 7-9 books or chapters in books. According to this, average book and/or book chapter authorship rate of the faculty members working in state universities is 1.06. While a significant part of the faculty members working in state universities did not carry out any project (84.6%), 12.3% had 1-3 projects and 3.1% had between 4 and 6 projects. According to this, the average number of projects carried out by faculty members working in state universities was 0.36.

Evaluating the faculty members working in state universities in terms of the articles they had published in international and national journals showed that about three fourths of them (75.4%) did not have any article published in international journals and half of them (50.0%) did not have any articles published in national journals. While 18.5% of the faculty members in state universities had 1-3 articles published in international journals, 26.2% of them had articles published in national

journals. While there were no faculty members who published 10 or more international articles, 7.7% of the faculty members working in state universities had 10 or more articles published in national journals. The average rate of articles the faculty members had published in international journals was determined to be 0.45, while the average rate of articles that had been published in national journals was found out to be 2.45. A similar case was also seen in conference papers. 71.6% of the faculty members did not have any international conference papers concerning gastronomy, while 52.3% of them did not have any national conference papers. While the rate of the faculty members who had 1 to 3 international conference papers was 18.5%, the rate of those who had 1 to 3 national conference papers was 20.7%. The rate of the faculty members who had 10 or more international declarations was only 1.5%, and only 8.5% had national conference papers. While international conference papers authorship of faculty members working in state universities was determined to be 1.00, national conference papers authorship rate was found out to be 2.86.

The distribution of the academic studies belonging to the faculty members working in the gastronomy departments of foundation universities is presented in Table 4. Although there were a total of 82 faculty members working in foundation universities, the resumes of 3 of them could not be accessed and therefore only 79 faculty members were taken into consideration at this point. While 94.9% of the faculty members working in the gastronomy departments of foundation universities did not have book or book chapter published, 3.8% had 1-3 and only 1.3% had 4-6 books or chapters published. Book/book chapter authorship rate per faculty member was calculated to be 0.13.

While almost none of the faculty members (98.7%) had conducted

Table 3

The distribution of the academic studies belonging to the faculty members working in the gastronomy departments of state universities.

ACADEMIC STUDIES	Num. of Studies	f	%	ACADEMIC STUDIES	Num. of Studies	f	%
Book/Book Chapter	0	83	63.9	Project	0	110	84.6
	1-3	32	24.6		1-3	16	12.3
	4-6	10	7.7		4-6	4	3.1
	7-9	5	3.8				
\bar{x}	1.06			\bar{x}	0.36		
International Article	0	98	75.4	National Article	0	65	50.0
	1-3	24	18.5		1-3	34	26.2
	4-6	6	4.6		4-6	16	12.3
	7-9	2	1.5		7-9	5	3.8
	10+	0		10+	10	7.7	
\bar{x}	0.45			\bar{x}	2.45		
International Conference Paper	0	93	71.6	National Conference Paper	0	68	52.3
	1-3	24	18.5		1-3	27	20.7
	4-6	5	3.8		4-6	13	10.0
	7-9	6	4.6		7-9	11	8.5
	10+	2	1.5		10+	11	8.5
\bar{x}	1.00			\bar{x}	2.96		
TOTAL		130	100.0	TOTAL		130	100.0

Table 4

The distribution of the academic studies belonging to the faculty members working in the gastronomy departments of foundation universities.

ACADEMIC STUDIES	Num. of Studies	f	%	ACADEMIC STUDIES	Num. of Studies	f	%
Book	0	75	94.9	Project	0	78	98.7
Book Chapter	1-3	3	3.8		1-3	1	1.3
	4-6	1	1.3		4-6	0	
\bar{x}	0,13			\bar{x}	0,01		
International Research	0	77	97.4	National Research	0	72	91.1
	1-3	1	1.3		1-3	5	6.3
	4-6	1	1.3		4-6	1	1.3
	7-9	0			7-9	1	1.3
\bar{x}	0,08			\bar{x}	0,30		
International Conference Paper	0	77	97.4	National Conference Paper	0	71	89.8
	1-3	1	1.3		1-3	5	6.3
	4-6	1	1.3		4-6	2	2.6
	7-9	0			7-9	1	1.3
\bar{x}	0,06			\bar{x}	0,30		
TOTAL		79	100.0	TOTAL		79	100.0

any project concerning gastronomy, only 1.3% of them had 1 to 3 projects. Evaluating faculty members in terms of their articles and conference paper showed that 97.4% of them did not have any article or paper published. The rates for faculty members that had published 1-3 and 4-6 declarations and articles are both 1.3%. While the international declaration authorship rate per faculty member was determined to be 0.08, international article authorship was 0.06. 91.1% of the faculty members did not have any national articles and 89.9% did not publish any declaration. While 6.3% had published 1 to 3 articles and declarations at national level, 1.3% had published 7 to 9 articles and declarations. Both article and declaration publication rate of faculty members at national level is 0.30.

When distribution of the faculty members working in gastronomy departments in Turkey in terms of their titles and their studies conducted on gastronomy, more than three fourths of Doctor faculty members (79.9%), more than half of Associate Professor faculty members (63.4%) and a significant part of Professors (73.2%) did not publish any books and or book chapters. While 14.5% of Doctor faculty members had published between 1 to 3 books, the same was true for 26.9% of Associate Professors and 13.3% of Professors. The maximum number of published books/book chapters throughout all the titles is 7. Examining the matter in terms of the articles published in international and national journals showed that 89.9% of faculty members with the title Doctor did not have any articles published in international journals while 73.9% did not have any articles published in national journals, which was also similar in terms of Professor titled faculty members; 80.0% of them did not publish any article at international level and 66.8% of them did not have any articles published at national level. While 21.9% of Associate Professor had published 1 to 3 international or national articles, 65.9% of them did not have any international articles and 51.2% of them did not have any national articles.

Evaluating faculty members in terms of their declarations showed that 87.0% of Doctor faculty members did not have any international declarations and 73.9% of them did not have any national declarations. Similarly, more than half of Associate Professors did not have any international (68.4%) and national (51.2%) declarations published, while 73.2% of Professors did not have any international conference paper 66.8% of them did not have any national conference paper. It was determined that the highest number of conference papers made either at national or international level by faculty members with all three titles was 1-3. Finally, evaluating faculty members in terms of the gastronomy related projects they have carried out showed that 93.5% of Doctors, 80.5% of Associate Professors and 86.7% of Professors did not carry out any gastronomy related project through their careers.

5. Conclusion

In line with the rapidly increasing behavior of eating out, both the interest shown to the field of gastronomy and the number of students planning to study gastronomy increase. Accordingly, the number of educational institutions that offer gastronomy education manifested a significant increase particularly in the recent years. These developments taking place in gastronomy and the interest shown to the field brought along a need for departments providing gastronomy education at undergraduate level. While the number of gastronomy departments have rapidly increased in a short period of time particularly in Turkey, the areas of specialty of the faculty members working in these departments and gastronomy-related scientific studies conducted in Turkey have become a current issue. Accordingly, in the present study it was aimed to set forth the area-specific backgrounds of faculty members, as one of the most important quality indicators of education, and the relevance of their scientific studies with gastronomy.

According to the 2019 Handbook of Higher Education Programs and Quotas, there are a total of 64 universities providing gastronomy education in Turkey. Findings of the study show that in an important part of the state universities in Turkey gastronomy departments are opened under Tourism Faculties, while most of the departments in foundation universities opened under the Faculties of Fine Arts. With the consideration of both philosophical and cultural aspects of gastronomy departments, it can be said that this is a correct approach.

Findings of the study show that a significant part of the faculty members working in gastronomy departments of Turkey completed their undergraduate, masters and doctoral degrees under the fields of Tourism and Food and Nutrition. But, at the same time, there are also many faculty members that specialized in different areas (such as Veterinary, Molecular Biology and Genetics/Biology/Microbiology and Aquaculture, Industrial Arts, Furniture and Interior Architecture, Political Sciences, Public Relations and Advertising). Accordingly, the fact that faculty members that had been raised in areas unrelated with gastronomy are actually working in this department is an important problem concerning gastronomy education in Turkey. The fact that faculty members that are in no way related with gastronomy are actually working in gastronomy departments may also cause the formation of wrong and subpar curriculums unfit for the objectives of gastronomy education. Underlying this problem is the fact that there are no set criteria for the determination of the faculty members to be employed in gastronomy departments. Job postings made with the approval of the university management not being controlled and/or intervened by any senior authority may cause faculty members having no relation with the field of gastronomy to be employed and accordingly may cause the quality in gastronomy education to decrease. In order to prevent this, it is essential for the Council of Higher Education to carry out the

necessary monitoring on the academic postings. One may consider this to be natural due to the interdisciplinary structure of the field of gastronomy. However, the point that should be kept in mind is that gastronomy is expected to give culinary education to its students. The fact that faculty members that are in no way related with gastronomy are actually working in gastronomy departments may also cause the formation of wrong and subpar curriculums unfit for the objectives of gastronomy education. For instance, putting courses that include various techniques before giving courses on basic practices, or scheduling fundamental courses to be given in later years within the curriculum are cases frequently observed and damaging the quality of the overall gastronomy education. Therefore, it is essential to have faculty members that are experts on the field in the designing and implementing the gastronomy education to be provided in a university. Accordingly, bringing together the representatives of the sector and the few number of faculty members specialized in the field of gastronomy to form a commission would enable the formation of curriculums of gastronomy departments in a more accurate way. Students that are interested in other fields can be directed to their fields of interest. The most important objective of undergraduate education is not only to raise students in their respective fields, but also to help them make a good career plan, and ensure that they are brought together with their respective sectors until they graduate. That's why, it is believed that these faculty members will also be inadequate for guiding the students in planning their gastronomy careers after graduation. At this point, particularly the relationship between the university and the sector is one of the important factors that supports the education the students get. However, it is considered unlikely for faculty members that were not educated in gastronomy or any related areas to establish cooperation with the representatives of the sector. Similarly, it is believed that these faculty members will also be inadequate for guiding the students in planning their careers after graduation.

An important part of the faculty members did not receive education in a field related to gastronomy also reflects on the academic studies they set forth. The scientific studies conducted on gastronomy are of great importance for the field to be further recognized as a science. Gastronomy may only become a field of science with many more scientific studies to be carried out in future years, on top of the studies that are already conducted. The fact that an important part of the faculty members did not receive education in a field related to gastronomy also reflects on the academic studies they set forth. Evaluating the scientific works of faculty members from a general perspective showed that while a very significant part of the faculty members did not publish any academic paper about gastronomy. This does not only significantly affect the quality of gastronomy adversely, but also obstructs the field's development as a science. The results of the study revealed the current problems related to gastronomy education in Turkey in terms of faculty members. These results, the measures to be taken for the employment of faculty members in universities will contribute to the development of gastronomy education and the quality of gastronomy in Turkey. Based on the study, similar studies to be carried out in different countries may contribute to revealing the quality of gastronomy education in these countries. In this way, measures can be taken to increase the quality of gastronomy education in different countries, contribute to the literature and raise more qualified gastronomy students.

The present study has some limitations. The data assessed within the scope of the study are limited with the declarations of the faculty members. In addition, the fact that gastronomy education was evaluated solely in terms of faculty members presents another limitation in a holistic assessment of gastronomy education in Turkey. On the other hand, the evaluation made within the scope of the study concerning the scientific works published by faculty members can be reiterated in order to determine the change through the passing years. Again, in future studies, gastronomy education provided in Turkey can be evaluated through comparison with gastronomy education in other countries in order to provide suggestions concerning gastronomy education in

Turkey.

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Implications for gastronomy

In line with the rapidly increasing behavior of eating out, both the interest shown to the field of gastronomy and the number of students planning to study gastronomy increase. Accordingly, the number of educational institutions that offer gastronomy education manifested a significant increase particularly in the recent years. These developments taking place in gastronomy and the interest shown to the field brought along a need for departments providing gastronomy education at undergraduate level. While the number of gastronomy departments have rapidly increased in a short period of time particularly in Turkey, the areas of specialty of the faculty members working in these departments and gastronomy-related scientific studies conducted in Turkey have become a current issue. Accordingly, in the present study it was aimed to set forth the area-specific backgrounds of faculty members, as one of the most important quality indicators of education, and the relevance of their scientific studies with gastronomy.

One of the findings obtained in consequence of the study was the fact that while gastronomy education had been provided by a single university in 2003, the number of universities with gastronomy departments started to increase rapidly from 2010, and in 2019 reached 63. On the other hand, more than half of the universities taken into the scope of the study were state universities. This finding shows that gastronomy education is being given in one of every three universities in Turkey. One of the foundation universities in Turkey has three different gastronomy departments while two state universities have two gastronomy departments each. In addition, it is considered significant that 97.0% of the quota opened for all gastronomy departments throughout the country was filled. While the quotas opened by state universities were filled entirely, the quotas that weren't completely filled were those of paid foundation universities. This finding that is also in line with the literature shows that there is a very high demand in Turkey for gastronomy departments.

Findings of the study show that in an important part of the state universities in Turkey gastronomy departments are opened under Tourism Faculties, while most of the departments in foundation universities opened under the Faculties of Fine Arts. With the consideration of both philosophical and cultural aspects of gastronomy departments, it can be said that this is a correct approach. However, a significant part of the faculty members working in gastronomy departments of Turkey completed their undergraduate, masters and doctoral degrees under the fields of Tourism and Food and Nutrition. Several studies included in the literature emphasize that due to the multidimensional structure of gastronomy departments they have close relations with the areas of tourism and hospitality, and the gastronomy departments associated with culinary arts are mostly related with fine arts; and the present case of gastronomy education given in Turkey mostly corresponds with this.

Despite the fact that an important part of the faculty members working in the gastronomy departments in Turkey had been educated in areas related with gastronomy, there are also many faculty members that specialized in different areas such as Business/Economics, Veterinary, Agriculture, System/Environmental Engineering, Health Institutions Management, Zootechnics, Molecular Biology and Genetics/Biology/Microbiology, Aqua products, Industrial Arts and Furniture and Interior Architecture/Landscape Architecture, Politic Sciences/International Relations/EU Studies, Chemical Engineering/Biochemistry and Public Relations and Advertising. Gastronomy departments' curriculums are predominantly based on applied courses, and the main goal of gastronomy education is to give culinary education with all its aspects.

Therefore, all of the courses given in gastronomy departments aim to render the students with the competency to work in professional cuisines. Accordingly, the fact that faculty members that had been raised in areas unrelated with gastronomy are actually working in this department is an important problem concerning gastronomy education in Turkey. Underlying this problem is the fact that there are no set criteria for the determination of the faculty members to be employed in gastronomy departments. Job postings made with the approval of the university management not being controlled and/or intervened by any senior authority may cause faculty members having no relation with the field of gastronomy to be employed and accordingly may cause the quality in gastronomy education to decrease. In order to prevent this, it is essential for the Council of Higher Education to carry out the necessary monitoring on the academic postings. One may consider this to be natural due to the interdisciplinary structure of the field of gastronomy. However, the point that should be kept in mind is that gastronomy is expected to give culinary education to its students. Students that are interested in other fields can be directed to their fields of interest.

According to the findings of the study, the average number of faculty members per gastronomy department is 3.5. While this number is 3.8 in state universities, in foundation universities it is 3.2. On the other hand, considering the total quotas opened jointly by both state and foundation universities for the educational year 2019–2020, there number of faculty members per student attending gastronomy departments is 0.06. Also taking into consideration the students that started gastronomy education before the educational year 2019–2020, it can be said that the number of faculty members per student is strikingly low. This is considered as one of the most important problems for the gastronomy departments in Turkey. Accordingly, the necessity of increasing the number of faculty members working in gastronomy departments in Turkey is clear.

The fact that faculty members that are in no way related with gastronomy are actually working in gastronomy departments may also cause the formation of wrong and subpar curriculums unfit for the objectives of gastronomy education. For instance, putting courses that include various techniques before giving courses on basic practices, or scheduling fundamental courses to be given in later years within the curriculum are cases frequently observed and damaging the quality of the overall gastronomy education. Therefore, it is essential to have faculty members that are experts on the field in the designing and implementing the gastronomy education to be provided in a university. Accordingly, bringing together the representatives of the sector and the few number of faculty members specialized in the field of gastronomy to form a commission would enable the formation of curriculums of gastronomy departments in a more accurate way. On the other hand, the most important objective of undergraduate education is not only to raise students in their respective fields, but also to help them make a good career plan, and ensure that they are brought together with their respective sectors until they graduate. At this point, particularly the relationship between the university and the sector is one of the important factors that supports the education the students get. However, it is considered unlikely for faculty members that were not educated in gastronomy or any related areas to establish cooperation with the representatives of the sector. Similarly, it is believed that these faculty members will also be inadequate for guiding the students in planning their careers after graduation.

The scientific studies conducted on gastronomy are of great importance for the field to be further recognized as a science. Gastronomy may only become a field of science with many more scientific studies to be carried out in future years, on top of the studies that are already conducted. The fact that an important part of the faculty members did not receive education in a field related to gastronomy also reflects on the academic studies they set forth. Evaluating the gastronomy-related studies of faculty members in consideration of the statuses of the universities they work in showed that although those that work in state universities conducted more studies than those in foundation

universities, in the end the studies were very inadequate in quantitative terms. As a matter of fact, more than half of the faculty members working in the gastronomy departments of state universities did not publish any book, book chapter or international articles and declarations. Considering the case from the aspect of all variables, it was determined that the Doctor faculty members were those that published the least studies. Similarly, more than half of Professor Doctors, who have the highest experience and knowledge, did not publish any project, book/chapter, international articles or declarations, while nearly half of them did not publish national articles or declarations. As for the faculty members working in foundation universities, on the other hand, they were determined to be very lacking in terms of the scientific works they published.

Evaluating the scientific works of faculty members from a general perspective showed that while a very significant part of the faculty members did not publish any international article, international declaration or projects related with gastronomy, again an important part of them did not publish any gastronomy-related books and/or book chapters and national articles or declarations. This does not only significantly affect the quality of gastronomy adversely, but also obstructs the field's development as a science. It is considered that university senior managements' encouragement of faculty members that are particularly educated in the related areas to produce more scientific works would negate this problem even if to a certain extent.

Author Statement

Albayrak Asli: Conceptualization, Methodology, Software, Data curation, Writing – original draft, Visualization, Investigation, Supervision, Software, Validation, Writing- Reviewing and Editing,

Declaration of competing interest

None.

References

- Akinci, Z., 2015. The evaluation of tourism education in vocational high schools: a focus group study. *Mediterr. J. Humanit.* 1, 43–59. <https://doi.org/10.13114/MJH.2015111367>.
- Cankul, D., 2019. Assessing the quality of gastronomy education: Turkey case. *Electron. J. Soc. Sci.* 18 (70), 986–1001. <https://doi.org/10.17755/esosder.491083>.
- Cemrek, F., Yilmaz, H., 2010. An application on measuring behaviour and opinion of tourism and hotel management and cookery department students about "cookery practice courses. *J. Soc. Sci.* 12 (2), 203–220. <http://hdl.handle.net/11630/3840>.
- Cheng, M., Ogbeide, A.C.G., Hamouz, L.F., 2011. The development of culinary arts and food science into a new academic discipline-culinology. *J. Culin. Sci. Technol.* 9 (1), 17–26. <https://doi.org/10.1080/15428052.2011.558461>.
- Drouard, A., 2008. Chefs, gourmets and fond of throat. In: Freedman, P. (Ed.), *Food-Tate of History* (N. Elhuseyni, Translate.) on. Oglak Pub, Istanbul, pp. 263–299.
- Ekincek, S., Gode, M.O., Oncel, S., Yolal, M., 2017. Gastronomy and a culinary arts education in Turkey; department head's perspective. *Studia UB BB Negotiva* 62 (1), 23–43.
- Gorkem, O., Sevim, B., 2016. Do we fall behind or hustle in gastronomy education? *Electron. J. Soc. Sci.* 15 (58), 977–988. <https://doi.org/10.17755/esosder.06573>.
- Gorkem, O., 2004. A Study of Determining the Problems of the Applied Cooking Techniques Education Given by Anatolian Hotel and Tourism Vocational High Schools. Master Thesis. Gazi University, Education Science Institute, Ankara.
- Gurdal, M., 2002. Structural analysis of vocational tourism education in Turkey, the quality of schooling and education-training-employment problems and solutions. In: *Tourism Education Conference*, pp. 391–400.
- Hegarty, J.A., 2011. Achieving excellence by means of critical reflection and cultural imagination in culinary arts and gastronomy. *Electron. J. Culin. Sci. Technol.* 9 (2), 55–65. <https://doi.org/10.1080/15428052.2011.580705>.
- Hegarty, J., 2009. How might gastronomy be a suitable discipline for testing the validity of different modern and postmodern claim about what may be called avant-garde? *J. Culin. Sci. Technol.* 7 (1), 1–18. <https://doi.org/10.1080/15428050902788295>.
- Hertzman, L.J., Ackerman, R., 2010. Evaluating quality in associate degree culinary arts programs. *Qual. Assur. Educ.* 18 (3), 209–226, 0968-4883.
- Hertzman, J.L., Stefanelli, J.M., 2008. Developing quality indicators for associate degree culinary arts programs: a survey of educators and industry chefs. *J. Qual. Assur. Hospit. Tourism* 9 (2), 135–158. <https://doi.org/10.1080/15280080802235466>.
- Hjalager, A.A., 2002. Typology of gastronomy tourism. In: Hjalager, M.A., Richards, G. (Eds.), *Tourism and Gastronomy*. Routledge, London, pp. 20–35, 2002.

- Hjalager, A., Richards, G., 2002. Still undigested: research issues. In: Hjalager, M.A., Richards, G. (Eds.), *Tourism and Gastronomy*. Routledge, London, pp. 224–234.
- Ilhan, A. Gastronomy in the world and Turkey. Antalya: 2. National Gastronomy Symposium. <http://www.tgyd.net/?Syf=5&Id=78129>.
- Oney, H., 2016. An evaluation on gastronomy education. *Selcuk Univ. J. Soc. Sci.* 35, 193–203.
- Ozdemir, Z., 2017. The Assessment of Expectations of Sector, Student, Instructor from Gastronomy and Culinary Arts Undergraduate Programs PhD Thesis. Gazi University Graduate School of Educational Sciences, Ankara.
- Santich, B., 2007. The study of gastronomy: a catalyst for cultural understanding. *Int. J. Humanit.* 5 (6), 53–58. <https://doi.org/10.18848/1447-9508/CGP/v05i06/42143>.
- Santich, B., 2004. The study of gastronomy and it's relevance to hospitality education and training. *Hosp. Manag.* 23 (1), 15–24. [https://doi.org/10.1016/S0278-4319\(03\)00069-0](https://doi.org/10.1016/S0278-4319(03)00069-0).
- Scarpato, R., 2002a. Gastronomy studies in search of hospitality. *J. Hospit. Tourism Manag.* 9 (2), 1–12.
- Scarpato, R., 2002b. Sustainable Gastronomy: as a tourist product. In: Hjalager, M.A., Richards, G. (Eds.), *Tourism and Gastronomy*. Routledge, London, pp. 132–150.
- Tutuncu, Ö., 2019. Mutual crafts and gastronomy in undergraduate studies, anatolia. *J. Tourism Res.* 30 (1), 93–97. <https://doi.org/10.17123/atad.580670>.
- Zopiatis, A., Theodosiou, P., Constanti, P., 2014. Quality and satisfaction with culinary education: evidence from Cyprus. *J. Hospit. Tourism Educ.* 26 (2), 87–98. <https://doi.org/10.1080/10963758.2014.900383>.