The evaluation of the image of the culture profession within the scope of demensional gastronomy education: A research on students taking online education

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Highlights	Abstract
- Culinary - Gastronomy Education - Non-Formal Gastronomy Education **Article Info:** Research Article **Keywords:** Culinary, Gastronomy Education, Non-Formal Online Gastronomy Education	Many professions have emerged from the early ages to the present day. In this context, cooking is an ancient profession that has been done by people since ancient times. Especially in recent years, the importance of this profession has increased considerably and more preferred. People usually consider the image of that profession when choosing a profession. Because people's choosing a profession that is compatible with their personal characteristics will increase the efficiency of that profession. In this context, the value and image of a profession are the biggest factors in choosing the profession. When the literature is scanned, it is seen that image determination studies are mainly carried out on nursing and teaching professions. However, it is seen that there are not enough studies on the image of the culinary profession. The aim of this study is in online environment to measure the perceptions of the students who receive non-formal gastronomy education about the culinary profession. In order to achieve this aim, "Image Scale of Culinary Profession" has been developed. This scale consists of 14 items and 4 dimensions. These factors are; It was named as Professional Characteristics (5 items), Personal Characteristics (3 items), Competence (3 items) and Behavioral Characteristics (3 items). The average score that can be obtained from the test is 2.5, the top score is 5, and the base score is 1. The created questionnaire was applied to 391 participants who received gastronomy training in in online environment private education institutions. These data were analysed with SPSS and AMOS programs and subjected to validity and reliability tests. Then t-test was applied to the data. As a result of the test, very significant and positive results were obtained regarding the image of the culinary profession. In addition, it was determined that the image perception of the culinary profession differed according to the demographic characteristics of the students. In this context, it was concluded that the score of the Professional Traits dimension was 4.16, the Personal Traits score was 4.46, the Competencies score was 4.43, and the behavioral traits score was 4.15. The overall score average was found to be 4.28. The results show that the culinary profession has a very positive image for students who receive non-formal gastronomy education.

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1. Introduction

The entirety of the activities performed by a person according to the knowledge and skills gained as a result of specific education, the rules of which are determined by society and which have a material and spiritual return on the person is expressed as an occupation (Ensari & Alay, 2017). Occupation has been defined by the Turkish Language Association (2022) (TLA) as "a job with defined rules, based on systematic knowledge and skills acquired through a specific education, and performed with the aim of producing useful goods, providing services, and earning money in return". In this context, it has been observed that the preferred occupation has a great impact on the life of the individual (Sarıkaya & Khorshid, 2009). In addition, occupation is considered to be one of the most important tools for a person to define and express oneself (İlhan, 2008). The phenomenon of occupation includes all processes of the individual from nutrition to the acquisition of technical knowledge and skills (Bostan, Sarıoğlan & Deveci, 2021).

It has been observed that the occupations in the past emerged as a result of people living in communities. Therefore, people have dealt with different occupations in the process that evolved from classical society to modern society over time. Factors such as developments in the industry and technological innovations have shaped occupational needs and led occupations to have different qualities (Köksalan & Celkan, 2018). This differentiation has made it necessary for people to choose an occupation as well as help individuals in society to meet the needs of each other (İbiş, 2011). One of the most important factors in this preference is the image created by a specific occupation in society (Özveren et al., 2017). The sum of the perceptions that occupation creates in society is called the occupational image (Peregrin, 2009).

Determining the image of occupation is also very important for the person who prefers that occupation in terms of meeting his/her needs such as dignity, social status, and a sense of usefulness (Sarıkaya & Khorshid, 2009). The culinary profession has become a very popular occupation, especially after the 20th Century with the influence of famous chefs and the books they wrote (Giousmpasoglou et al., 2020). This has recently led many young people to dream of becoming chefs. It is very important to well examine the structure of this occupation in terms of supporting these dreams (Allen & Mac Con Iomaire, 2017). Nevertheless, it has been observed that the studies in the literature on determining occupational images have generally been carried out within the scope of occupations such as teaching and nursing (Çetin & Kızılırmak, 2012). On the other hand, the studies in the literature determining the status of the culinary profession directly are insufficient. In this context, the aim of this study is to determine the image of the culinary profession.

2. Literature

2.1. Non-Formal Gastronomy Training

It is difficult to make a clear definition of education, which starts with birth, continues throughout the entire life, and has various dimensions in cultural, individual, and social terms (Çokgezen & Erdene, 2015). On the other hand, education has been defined as the activities carried out to develop or change intellectual, physical, affective, and social abilities and movements in a planned or unplanned way (Akyüz, 2012). In TLA (2022), education is defined as "directly or indirectly helping children and young people to acquire the knowledge, skills, and understanding required to become part of the social life and to develop their personalities inside or outside the school". In this context, educational institutions carry out these activities through formal and non-formal educational activities with the aim of training a qualified labor force (Sarıoğlan et al, 2021: Sarıoğlan, 2018).

Non-formal education is a flexible education system outside of formal education, which is complementary to formal education and includes the disadvantaged groups who cannot benefit from formal education. As in formal education, non-formal education is carried out according to the basic principles and objectives of national education (Sarıoğlan & Özkaya 2021: Çokgezen & Erdene, 2015). Non-formal education is explained as a wide range of training programs, in which people with no formal education or who are at a level of formal education are included for purposes such as completing their incomplete education, learning

to read and write, acquiring an occupation, making use of their free time, acquiring a hobby, and improving themselves in their occupation (Çelik & Yeşilyurt, 2013). These training programs are carried out according to the requirements of society and in a target-oriented manner. A process is created by adhering to a specific plan to achieve the goal; and at the end of this process, the successful persons are awarded certificates (MEB, 2022). Institutions that carry out non-formal education activities offer complementary opportunities for students by using today's educational technologies. Technological or digital supplementary education activities given by institutions help the programs reach the desired targets more quickly and permanently. At the same time, depending on the development of technology, the use of technology in non-formal education activities is increasing and intensive efforts are made to ensure digital integration (Ersoy and Gürgen, 2021).

The e-learning method used by non-formal education institutions within the Ministry of National Education in their education programs meets the requirements of the digital age. Non-formal education activities, which are combined with computers, tablets, phones, mobile technologies, internet use, smart boards, distance education, online learning, synchronous or asynchronous lessons, e-books, videos, and augmented reality tools, are carried out effectively. , 2019; Topçu and Ersoy, 2020; MEB, 2020). With the rapid development of technology and the intense use of smart phones, we see that qualified and various applications specially produced for these phones have begun to be used in educational activities. Virtual classroom, e-learning, distance learning, blended learning, flipped learning on smart phones provide complementary benefits to the deficiencies of education and training used and offered in many non-formal education activities (Yaylak, 2020).

It is stated that hundreds of thousands of trainees and graduates have participated in non-formal education activities thanks to the culinary training provided by private education institutions in Turkey since 2010. It is known that the number and types of private education institutions have increased and they are in intense competition. For this reason, in order to raise awareness, stand out and increase their preferability, private education institutions; new generation educational technologies, state-of-the-art equipment, online courses for those who do not have time, simultaneously applicable content modules that eliminate time and space limitations, mobile technologies, etc. They carry out qualified or high-level non-formal education activities. For this reason, it is thought that the number of trainees receiving non-formal culinary training is increasing day by day and will continue to increase.

Widespread organizations that provide gastronomy training in Turkey are listed as Vocational Training Centers, Public Training Centers, Tourism Training Centers, and Open Education High Schools (Sarı, 2007). In addition, extensive gastronomy training can be provided through courses organized by organizations such as Maturation Institutes (MEB, 2022), Labor Training Courses conducted by İşkur (İşkur, 2022), and the training programs organized by the ministries, occupational organizations, enterprises, trade unions, and special education institutions (Sarıoğlan, 2018).

2.2. Occupational Image and the Occupational Image of Culinary Profession

2.2.1. Occupational Image

Image is a word of French origin (Güneş, 2007) expressed as the impression that a certain person, institution, or group creates on others (Emiroğlu, 2001). In other words, image is an important element that determines how a person or phenomenon appears to others (Sabancıoğulları & Doğan, 2011). Nevertheless, image is not the best representation of elements such as the individual or occupation. Image has been defined as the correct and effective transfer of a specific situation (Harmancı, 2009).

Occupational image has a very important place in the career and social life of the individual (Peregrin, 2009). Material and moral aspects (Eren, 2006) related to the occupation of the person such as income status and working environment provide job satisfaction through reaction to these situations (Friday et al., 2003). In this way, an occupation also has psychological effects on the quality of life of the individual (Antonio et al., 2018). The image created by occupation in society significantly affects the professional performance of the person by determining the degree of satisfaction with the occupation (Çalışkan, 2005).

One of the factors in the successful continuation of the occupation is the image of that occupation (Bağçeci vd., 2013). Occupational image has been defined as the images of operations and their reflections (Taşkın & Sönmez, 2005). Occupational image is generally determined by factors such as personal characteristics, social status, occupational characteristics, and occupational preferability (Özgenel vd., 2019).

2.2.2. Culinary Profession and Its Occupational Image

Nutrition has been one of the most basic physiological needs of human beings from the beginning to the present. Therefore, the basis of the occupations related to eating and drinking dates back to prehistoric times (Boratav, 1980). People first performed hunting and gathering activities based on what nature offered (Haviland, 1994). According to the archaeological data, the first data on cooking by using fire date back to the Neolithic Age (Özgen, 2019). The invention of fire brought about certain changes and innovations in eating and drinking activities (Outram, 2007). In this period, moist-heat cooking techniques, as well as the smoking and dry heat cooking techniques, were used in durable pottery containers that could hold water (Özgen, 2019). Thus, people created a certain diet as a result of factors such as the flavor and nutritiousness of foods. In this order, people also developed new food preparation methods by treating food using different techniques and the trial and error method (Trüeb, 2020). As a result of these activities, restaurants emerged over time and the culinary profession continued to develop (De Rezende & De Avelar, 2011).

The Turkish Language Association (2022) defines the chef as "the person who has adopted cooking as an occupation." The first restaurants emerged in the 18th Century. In this context, some sources state that the acceptance of cooking as an occupation dates back to this period (Albala, 2013); however, some other sources mention that dishes used to be made by certain people in certain places and presented to customers as a consequence of the urbanization experienced in ancient times, and this was the first example of the culinary profession (Aksoy vd., 2016). Moreover, many organizations related to the culinary profession were established such as the "Chaine des Rotisseurs" and standards related to the culinary profession were determined and maintained (Gürsoy, 2013).

Recently, globalization trends have increased the importance of the tourism industry and the occupations affiliated with this industry. The culinary profession, which is responsible for the "preparation and cooking of food" in the tourism industry, has also become one of the most important occupations in this context (Harbalıoğlu & Ünal, 2014). In addition, chefs need to have many competencies today in addition to cooking competence such as hygiene and sanitation rules, temperature and humidity values, and delicious cooking knowledge and skills; and this has made the occupation even more important. In this context, the culinary profession has gradually become more preferred in society and a popular occupation that attracts interest (Yılmaz & Tanrıverdi, 2017). In addition to all these skills, chefs are perceived by society as moral persons following the entry and exit hours of the workplace, paying attention to their appearance, complying with hygiene and sanitation rules, adapting to innovations, and working under flexible working conditions; and this reveals the image of this occupation in society (Doğan & Yeşiltaş, 2017). With the influence of social media, positive image perceptions have emerged about the culinary profession (Chen et al., 2020). The image of the cook profession is a reference for how the cook is perceived by the society, as well as the effect of the cook on his own self. Therefore, it is very important for professionals. The fact that the social status of the profession has a high or rising value makes the profession more special and prestigious. In addition, high social status shapes the perceptions of individuals towards their profession in a positive way. It contributes to the conscious choice of the culinary profession, the positive development of the image of the profession, and the positive and valuable perception of the profession's image by the

society. The social reputation of the profession, namely its image, is considered as one of the most important factors in choosing that profession (Yılmaz & Tanrıverdi, 2017).

Nevertheless, this information is not sufficient to fully define the occupational image of the culinary profession. The present study aimed to reveal the image of the culinary profession. In this context, the "Image Scale of Culinary Profession" was administered to the students who were enrolled in non-formal gastronomy training. Thus, by revealing the general image of the culinary profession, contributions would be made to making more accurate decisions in the studies to be carried out in this field and the selection of the occupation.

The data obtained in the literature review on occupational image is very limited. The majority of the studies on occupational image are observed to be about the nursing occupation. In addition, there are no detailed studies on the image of the culinary profession.

The study titled "Chef's Competency as a Key Element in Food Tourism Success: A Literature Review", which was conducted by Mahfud et al., (2019) tried to determine the skills and abilities of successful chefs. For this purpose, 38 articles were reviewed. As a result of the review, the characteristics of successful chefs were listed under three main headings consisting of functional, core, and general competencies. As a result, the functional competencies of the chefs were listed as cooking skills, knowledge of flavor and food knowledge, and knowledge of serving. While core abilities were listed as concept knowledge, cleanliness, and job perception, general competencies were expressed as interpersonal, leadership, managerial, and motivational abilities.

The study titled "Professional Image Perceptions in First-year Nursing Students", which was conducted by Yılmaz (2019), aimed to measure the occupational perception of first-year nursing students. In this context, a determination form was presented to 105 students. According to the analyses, it was reported that the positive image of nursing was effective in the preference of students concerning the field of study.

In their study titled "Image of Nursing Profession as Perceived by Egyptian and Jordanian Undergraduate Male Nursing Students: A Comparative Study", Azza et al. (2015) compared the perceptions of Egyptian and Jordanian male undergraduate students towards nursing. In this context, a questionnaire was administered to 41 Egyptian and 100 Jordanian fourth-year male students of nursing. As a result, it was revealed by the students of both countries that the image of nursing in these countries as an occupation for the female had negative consequences.

Marinakou and Giousmpasoglou (2020) tried to determine the characteristics that chefs should have in their studies. In this context, a survey was conducted with 407 individuals. As a result, it was stated that chefs should have leadership and management characteristics. In addition, having operational competencies was emphasized to be important for chefs.

Ndirangu et al. (2021) conducted a study to determine the image of midwifery and nursing in East Africa. Within the scope of this study, 551 midwives and nurses were administered a survey in Uganda, Tanzania, and Kenya. As a result of the study, it was stated that nurses and midwives were respectable occupations. In addition, it was also among the results that nurses and midwives had characteristics such as rudeness, cruelness, and being a servant.

In their study, Suhairom et al. (2019) stated that there was a lack of guidance on quality chef competencies and tried to determine the chef competencies to eliminate the deficiency in this regard. Literature review and interview methods were used in their study titled "Quality Culinary Workforce Competencies For Sustainable Career Development Among Culinary Professionals". In this context, the characteristics that chefs should have were listed under the main headings of physical status, personal quality, self-perception, motivation status, technical skills, and non-technical skills.

As revealed in the review, studies on the characteristics of the culinary profession were included in the literature in general. The aforementioned studies on determining characteristics can only be used to make inferences about the image of the culinary profession.

3. Methodology

3. 1. Research Pattern

Cookery profession image scale used in the research model; It is based on the assumption of the structure that will emerge as a result of explanatory factor analysis and confirmatory factor analysis, that it consists of professional characteristics, personal characteristics, competence and behavioral characteristics and the relationship between the scale and its sub-dimensions. Giving the research model as a priority is to facilitate the evaluation of the research findings and the presentation of the research outcome model. Therefore, the research model is presented in Figure 1.
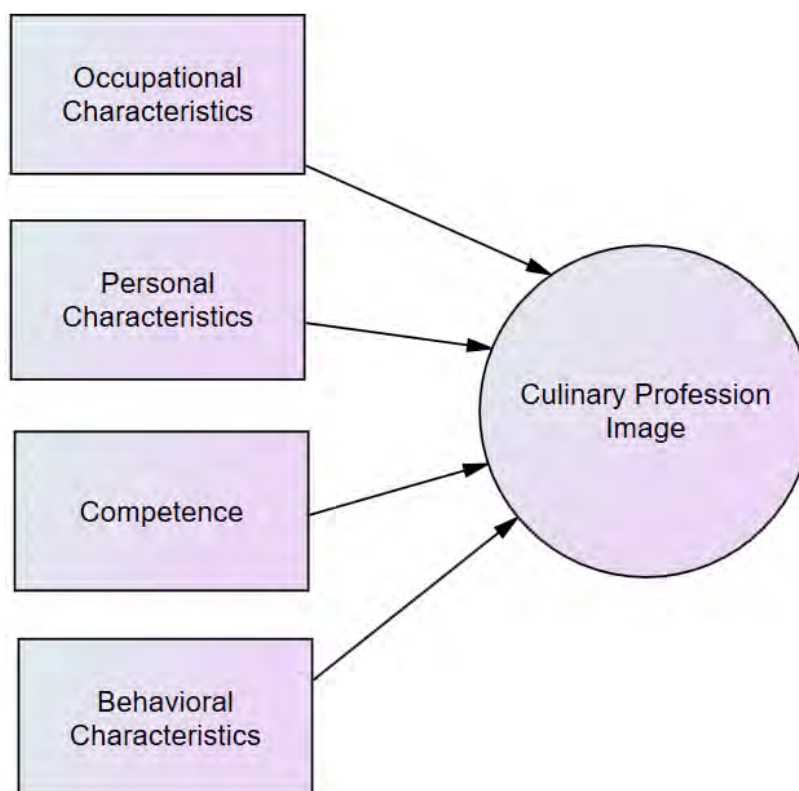
Figure 1. *Research Pattern*

3. 2. Research Hypotheses

The aim of the present study was to measure the image perceptions of students enrolled in non-formal gastronomy education in Turkey in online environment about the culinary profession. The following hypotheses were determined as a result of the literature review conducted in this context.

*H1: Students who receive non-formal gastronomy education have positive perceptions about the culinary profession.

*H2: There are significant relationships between demographic characteristics and the perceptions about the image of the culinary profession.

*H_{2a}: There are significant differences between the gender of the students and their perceptions about the image of the culinary profession.

*H_{2b}: There are significant differences between the ages of the students and their perceptions about the image of the culinary profession.

*H_{2c}: There are significant differences between the education levels of the students and their perceptions about the image of the culinary profession.

*H_{2d}: There are significant differences between the income status of the students and their perceptions about the image of the culinary profession.

*H_3: The Image Scale of Culinary Profession has significant relationships with its sub-dimensions.

*H_{3a}: The Image Scale of Culinary Profession has significant relationships with the occupational characteristics dimension.

*H_{3b}: The Image Scale of Culinary Profession has significant relationships with the personal characteristics dimension.

*H_{3c}: The Image Scale of Culinary Profession has significant relationships with the competence dimension.

*H_{3d}: The Image Scale of Culinary Profession has significant relationships with the behavioral characteristics dimension.

*H_4: There are significant relationships between the sub-dimensions of the Image Scale of Culinary Profession.

*H_{4a}: Image perceptions regarding personal characteristics have a significant positive effect on image perceptions regarding occupational characteristics.

*H_{4b}: Perceptions regarding the competence image have a significant positive effect on image perceptions regarding occupational characteristics.

*H_{4c}: Image perceptions regarding behavioral characteristics have a significant positive effect on image perceptions regarding occupational characteristics.

*H_{4d}: Perceptions regarding the competence image have a significant positive effect on image perceptions regarding personal characteristics.

*H_{4e}: Image Perceptions regarding behavioral characteristics have a significant positive effect on perceptions regarding the competence image.

*H_{4f}: Image perceptions regarding behavioral characteristics have a significant positive effect on image perceptions regarding personal characteristics.

3. 3. Population and Sample of the Research

The population of the study consisted of students enrolled in non-formal gastronomy training programs in online environment Turkey. Nevertheless, reaching the entire population constituted an important constraint in terms of cost and time. Therefore, the convenience sampling method was preferred and the study was limited to the students who were enrolled in gastronomy training programs offered in special education institutions providing in online environment gastronomy training in Istanbul, Ankara, İzmir,

Antalya, and Muğla. In this context, the "Image Scale of Culinary Profession" was developed and administered to 391 students.

3.   4. Scale Development Process

In the literature review, it was observed that there was no scale to determine the occupational image of the culinary profession. Therefore, it was aimed to develop the "Image Scale of Culinary Profession". First of all, the structural features of the scale to be developed were determined, which was one of the most important stages (Erkuş, 2012). Accordingly, the literature was reviewed and the boundaries of the subject were drawn. As a result of this review, the item pool was formed. It is very important to ensure that these items are compatible with the structure determined in the first stage (DeVellis, 2017). In addition, the material pool to be created is intended to be comprehensive. Therefore, it is expected that the item pool will be 3 to 4 times the targeted number of statements. Accordingly, an item pool consisting of 48 statements was created. The created item pool was submitted for expert opinion. During the expert opinion, the items are checked concerning issues such as the structure of the items, their compliance with grammar rules, and their scientificity (Atılgan, 2017). At this stage, the items that were requested to be eliminated from the scale were removed and the items were placed in the test in Likert-type in the form of "Strongly Disagree", "Disagree", "Undecided", "Agree", "Strongly Agree" to conduct a trial study. The form created was subjected to a pilot study and administered to a small group of 30 people. Aiken (1977) stated that 5% of the sample and Kline (1994) stated that twice the number of items was sufficient for the pilot study. In addition, Wolf (1988) stated that 30 participants were sufficient for the pilot study. In this context, the number of participants in the pilot study is sufficient. As a result of the analyses, the number of items was reduced to 14 and the test was prepared for the real procedure. These items were grouped under 4 dimensions (Occupational Characteristics, Personal Characteristics, Competence, and Behavioral Characteristics). The main scale created for the image of the cookery profession was created by taking the support of the relevant literature, theoretical background and expert opinions. In addition, the hierarchical process of reviewing the statements, ensuring the validity of the statements, testing the statements and finalizing the scale was adhered to. The 4 dimensions formed as a result of the pilot application were named. Dimensions; The information obtained as a result of the literature research, expert opinions, and the items collected under the dimension were named. It is assumed that the representation and explanatory quality of each dimension will be high.

After the real procedure, the data were analyzed. First of all, the scale was tested for validity. Accordingly, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were performed. The compliance of the data with EFA was determined by Kaiser-Mayer-Olkin (KMO) and Barlett's tests. Principal components analysis and Varimax vertical rotation methods were used during EFA. Next, the Pearson correlation between the factors was calculated. The data obtained from the EFA were tested through the CFA. In this context, chi-square values and fit indices were analyzed.

Cronbach Alpha (CA) value was calculated to obtain information about the reliability of the scale. In the final stage, determinations were made about the image of the culinary profession by calculating the distance

of the results obtained by administering a one-sample t-test to the average value. These analyses were performed using the SPSS and Amos software. Findings related to these analyzes were indicated below.

4. Findings

In this part of the study, the findings obtained in the real procedure are included.

4.1. Findings Regarding Validity

In order to analyze the data collected regarding the scale, the scores should be addable and normally distributed (Özdamar, 2016). The data concerning this analysis were presented in Table 1.

Table 1. *Descriptive Statistical Values of the Culinary Profession Image Scale*

Frequency	391
Arithmetic Mean	4.2855
Standart Deviation	.37888
Smallest Score	3.21
Highest Score	5,00
Range	1.79
Skewness	-.395
Kurtosis	-.414
Median	4.3571
Kolmogrov Smirnov	.000
p	.000

As presented in Table 1, the kurtosis value of the data set was found to be -.414 and the skewness value was -.395. Since kurtosis and skewness values were between -1 and +1, the data in the scale were normally distributed (Çokluk, Şekercioğlu, & Büyüköztürk, 2012). As the data were normally distributed, factor analyses were performed.

In order to perform factor analysis, the KMO value should be higher than 0.60 and the Barlett test should provide significant results (Büyüköztürk, 2002). The test conducted for this purpose was presented in Table 3. In the tests, the KMO value was found to be .834 and the Barlett test also provided significant results. Therefore, the EFA was started. Factors, eigenvalues, and variances related to the EFA performed were presented in Table 2.

Table 2. *Obtained Eigenvalues as a Result of EFA and Amount of Explained Variance*

Factor	Eigenvalue	Variance	Stacked Sum
1	4,051	28,934	28,934
2	1,808	12,911	41,845
3	1,421	10,149	51,994
4	1,160	8,284	60,278

As presented in Table 2, the eigenvalue of the scale consisted of 4 factors greater than 1. These factors could explain 60.278% of the variance. The first factor explained 28.934% of the variance, the second factor explained 12.911%, the third factor explained 10.149%, and the fourth factor explained 8.284%.

Varimax vertical rotation method was used to determine the distribution of the items to the factors. The names of the factors and the distributions obtained as a result were as follows: Occupational Characteristics (5 items), Personal Characteristics (3 items), Competence (3 items), and Behavioral Characteristics (3

items). Image Scale of Culinary Profession consisted of 4 dimensions and 14 items. The data concerning the scale were presented in Table 3.

**Table 3.** *Culinary Profession Image Scale Item/Factor Loads*

Factors/Items	Factor Loads (AFA)	Skewness	Kurtosis
Occupational Characteristics			
Cooks is a profession that requires quality-control knowledge.	.734	-,493	-,493
Cooks is a profession that requires portion knowledge.	.731	-,584	-,584
Cooks are seen by society as educated people.	.729	-,368	-,368
Cooks have a positive image in society.	.694	-,590	-,590
Cooks are loved by the society.	.603	-,335	-,335
Personal Characteristics			
Cooks are people who abide by overtime	.815	-1,443	-1,443
Cooks are people who care about their hygiene.	.791	-,989	-,989
Cooks are exemplary people.	.743	-,822	-,822
Competence			
Cookery is a profession that requires product knowledge.	.816	-,825	-,825
Cookery is a profession that requires knowledge of storage and stock control.	.793	-,784	-,784
Cookery is a prestigious profession in society.	.624	-,831	-,831
Behavioral Characteristics			
Cooks are people who are open to innovation	.751	-,468	-,468
Cooks are creative people	.728	-,204	-,204
Cooks are empathetic people.	.713	-,470	-,470

*KMO: 0.834
*Barlett's Test: .000

Table 3 presented the item loads of the factors. Item loads of 0.30 and above are expressed as a positive measure (Kline, 1994). Accordingly, it was observed that loads of the items in the scale were appropriate.

Figure 2 presented the CFA model administered to verify the factor structure of the "Image Scale of Culinary Profession" consisting of 14 items and 4 factors.
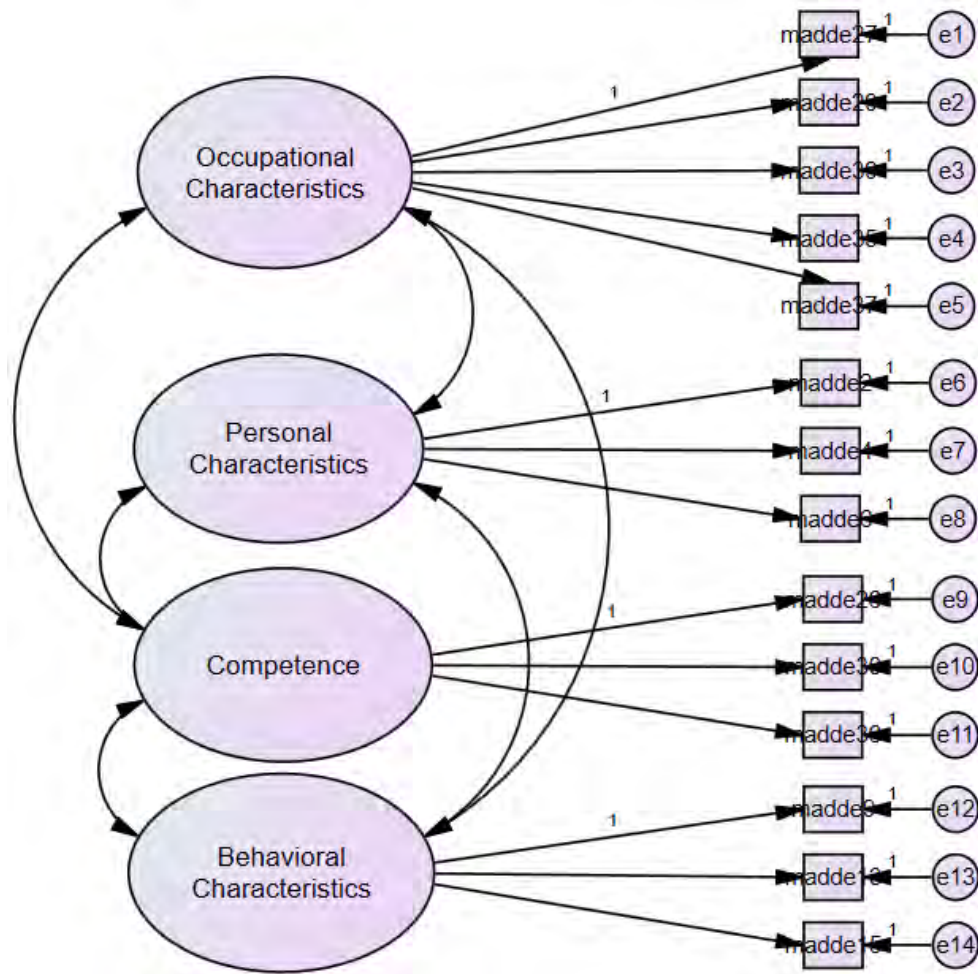
Figure 2. *Confirmatory Factor Analysis*

Factor values obtained from EFA, chi-square value, the ratio of this value to the degree of freedom, and model fit indices were examined. In this context, the df ratio of the chi-square value of the test was found to be (χ^2/df = 191.377/71 = 2.695), GFI (.937), AGFI (.906), CFI (912), RMR (0.26) and RMSEA (0.66). These rates are acceptable according to the fit indices (Barret, 2007; Byrne, Shavelson & Muthen, 1989; Jöreskog, 2004; Kline, 2011; Maydeu-Olivares & Garcia-Forero, 2010; Tabachnick & Fidell, 2007).

4.   2. Findings Regarding Reliability

Cronbach Alpha internal consistency coefficient (CA) value was calculated to measure the reliability of the test. As a result of the analysis, it was concluded that the value was .806. This coefficient should be above 0.70 (Seçer, 2015).

4.   3. Demographic Findings

Demographic findings related to the study were indicated in this part. Based on the data obtained, independent samples were analyzed by T-Test and ANOVA to test whether the perceptions about the occupational image of the culinary profession differed according to demographic characteristics. The distribution of the participants in the study according to their age was presented in Figure 3 . Among the

participants, 30% were between the ages of 19-25. The number of participants in this age group was 121. This group was followed by the participants who were aged 25.8% and younger.
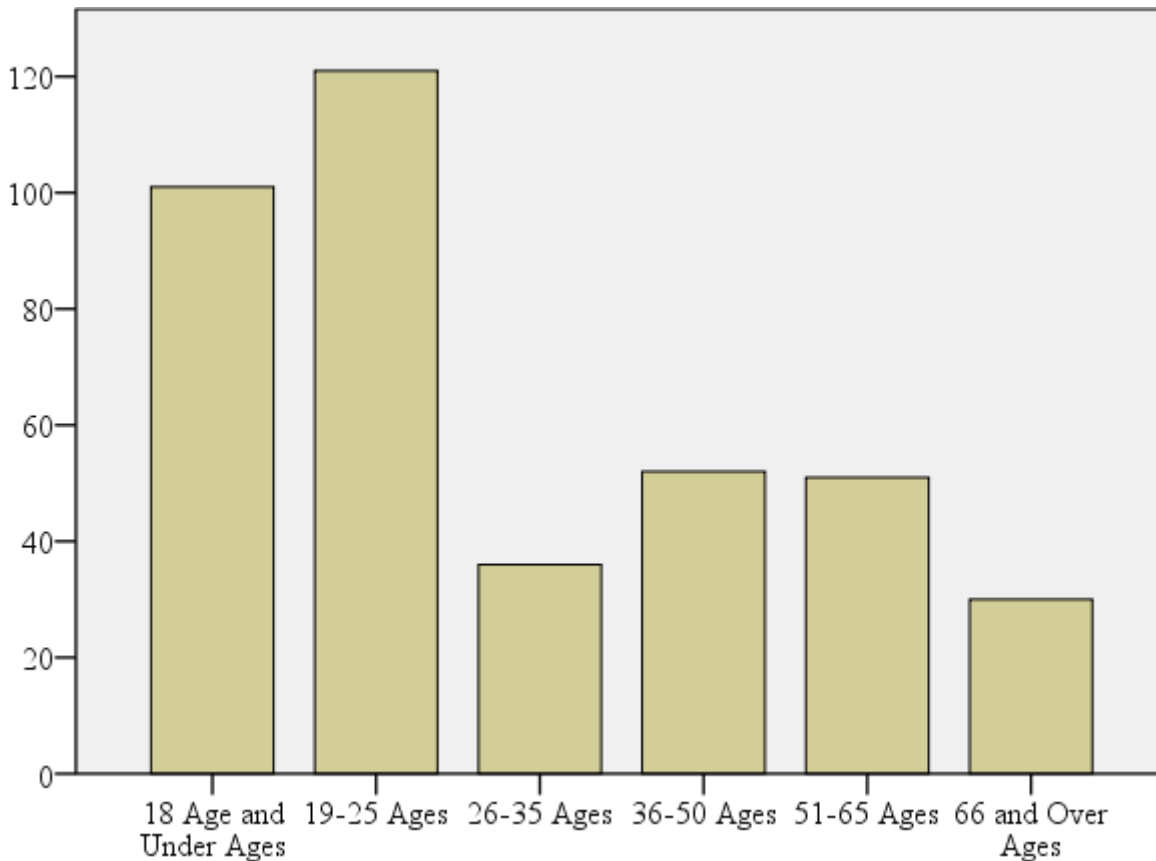
Figure 3. *Distribution of Participants by Age*

ANOVA was performed to test whether the occupational image of the culinary profession differed according to the age of the students. According to the analysis, it was observed that there was a significant difference between the age groups and occupational image perceptions of the students (F=6.1, p<0.05). According to the results of the Games-Howell test, which was conducted to determine the age groups differed in terms of their image related to the culinary profession, it was found that the image perceptions of the 26-35 age group (X=4.47) were higher compared to the 18-year-old and younger group (X= 4.25) and the 19-25-year-old group (X=4.17). In addition, the image perceptions of the 19-25-year-old group were significantly higher compared to the 26-35-year-old group and the 36-50-year-old group (X=4.44). Therefore, Hypothesis 2b was accepted.

The distribution of the participants in the study according to their educational status was presented in **Figure 4** . Accordingly, 55.2% of the participants had high school and higher degrees. In this context, 29.2% of the participants had received high school education and 28.1% had received associate degrees education.
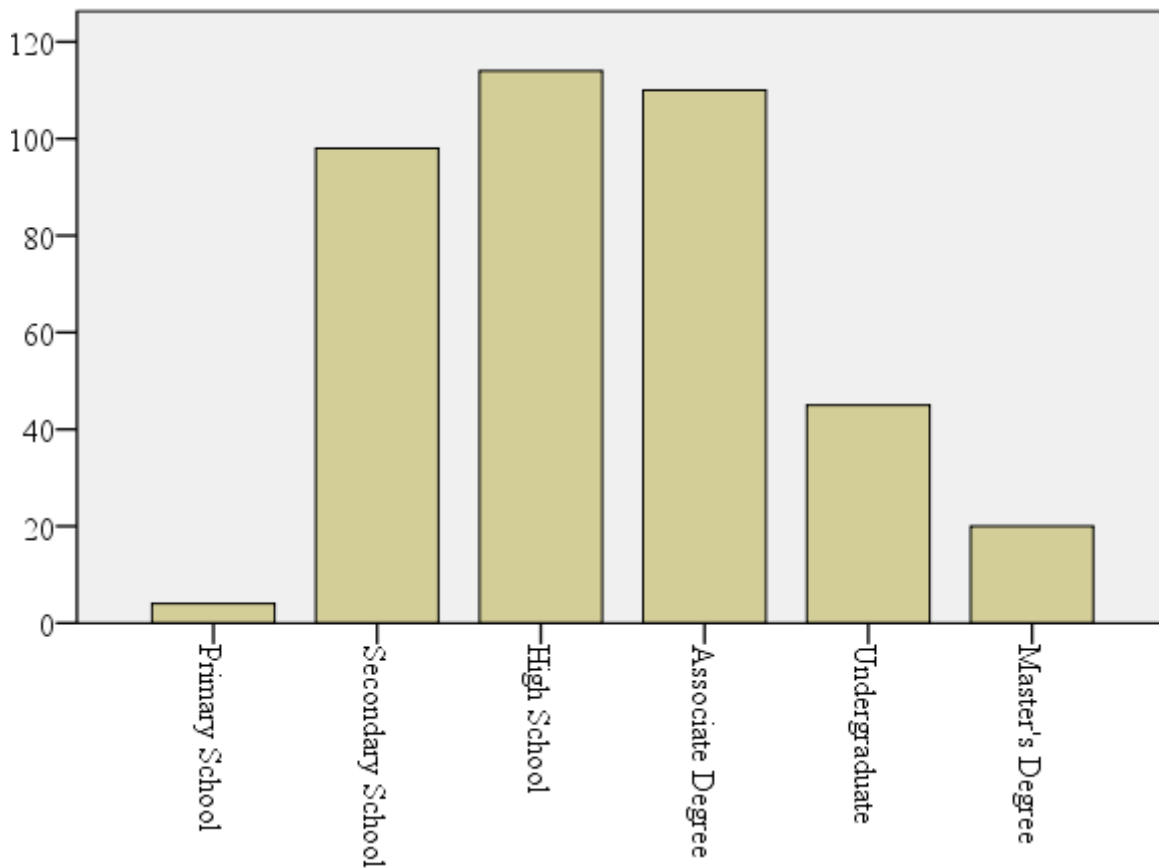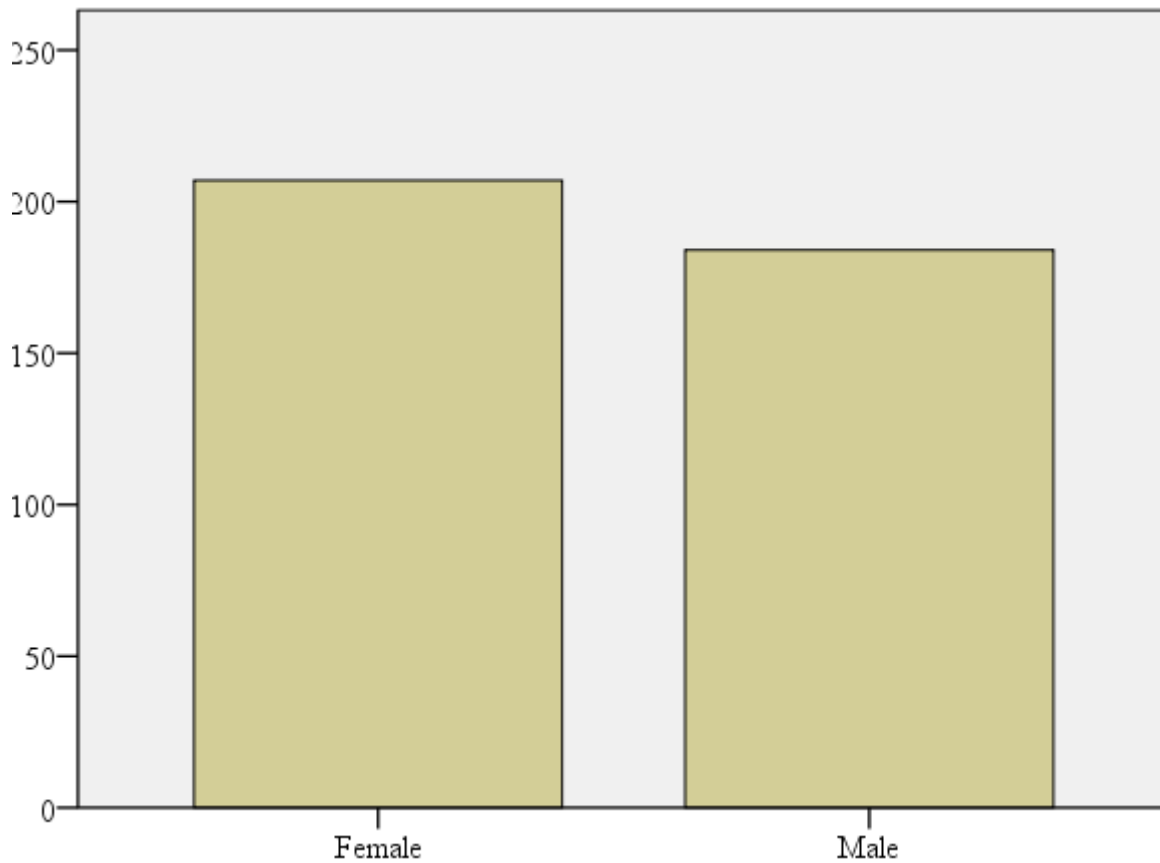
Figure 4. *Distribution of Participants by Educational Status*

ANOVA was performed to determine whether there was a change in the perceptions of students about the image of the culinary profession according to their educational status. According to the analysis, it was observed that there was a significant difference between the education level of the students and their image perceptions regarding the culinary profession (F=15.37, p<0.05). According to the results of the Games-Howell test, which was conducted to determine the education level of the students differed in terms of the occupational image of the culinary profession, it was determined that primary school graduates (X=4.63) had a more positive perception regarding the occupational image of the culinary profession compared to the students with an associate degree (X= 4.16), undergraduate (4.01) and graduate (X= 4.22) degrees. Secondary school graduates (X=4.26) had a more positive perception compared to the students with associate and undergraduate degrees, and high school graduate students (X=4.45) had a more positive perception of the occupational image of the culinary profession compared to the students with associate and undergraduate degrees. In this context, Hypothesis 2c was accepted.

As presented in **Figure 5** the gender distribution of the participants was almost equal. Among the participants, 52.9% were male and 47.1% were female.
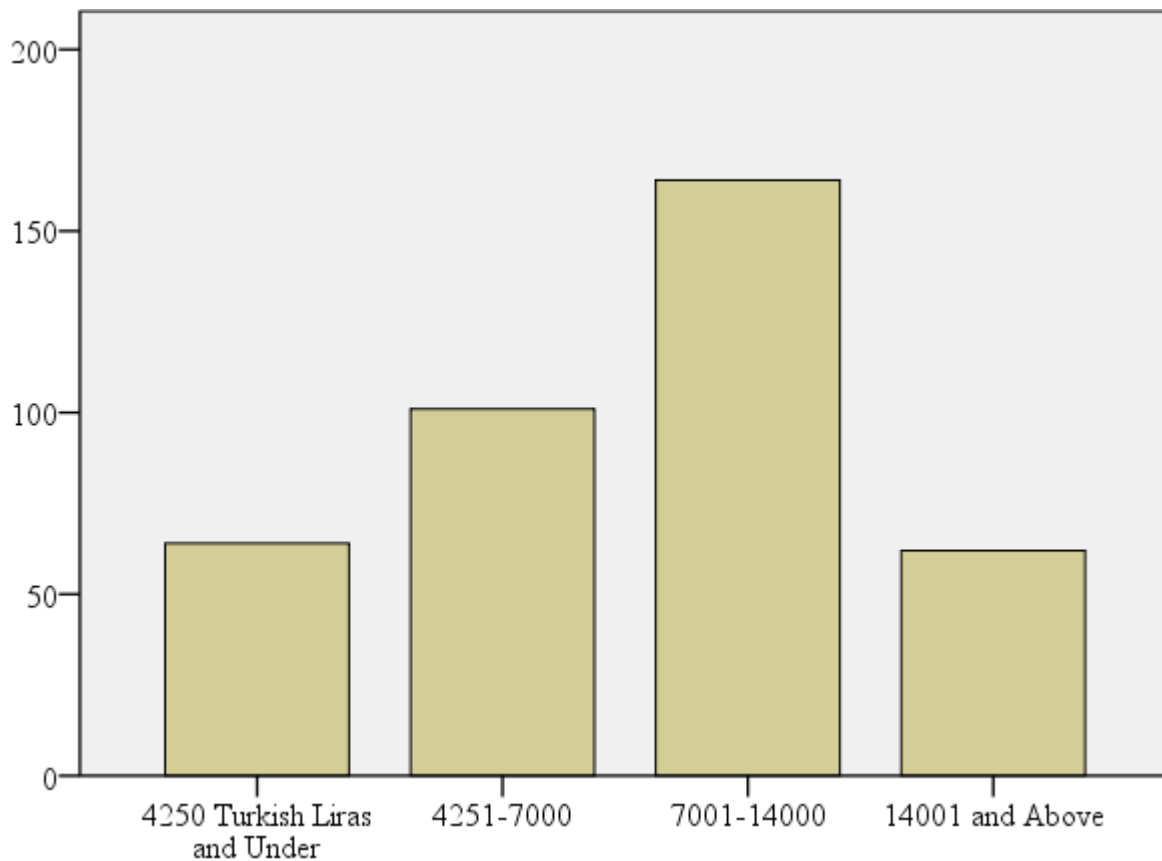
Figure 5. *Distribution of Participants by Gender*

The perceptions of students about the occupational image of the culinary profession according to their gender were analyzed with a single sample T-Test. According to the results of the analysis, the image perception scores of the female participants (Mean=4.36, SD=0.34) were found to be higher compared to the male participants (Mean=4.20, SD=0.40) t(363) =4.10, p<.001. In this context, Hypothesis 2a was accepted.

Data concerning the income status of the participants were presented in **Figure 6**. Accordingly, the vast majority of the participants had an income between 4251 and 14000 Turkish Liras.

Figure 6. *Distribution of Participants by Income Status*

ANOVA was performed to determine whether the perceptions of students about the image of the culinary profession differed significantly according to their income status (F=2.24, p=0.092). Hypothesis 2d was rejected.

4.4. Findings Regarding the Image of the Cooking Profession

While the highest mean score that could be obtained from the image scale used in the study was 5.00, the lowest mean was 1.00, and the mean score of the test is 2.50. Since the data in the scale were normally distributed, a one-sample t-test was administered to infer the image of the culinary profession by scoring the responses of the participants. The overall test and sub-tests were proportioned according to the mean score and the t-test was administered. Data concerning this analysis were presented in **Table 4**.

Tablo 4. *Results of the Single Sample T-Test*

	N	Arithmetic Mean	Standard Deviation	p	Average Difference	df	t
Occupational Characteristics	391	4,1657	,53947	,000	1,66573	390	61,056
Personal Characteristics	391	4,4646	,57818	,000	1,96462	390	67,190
Competence	391	4,4390	,52750	,000	1,93905	390	72,687
Behavioral Characteristics	391	4,1526	,53190	,000	1,65260	390	61,436
Overal Average	391	4,2855	,37888	,000	1,78553	390	93,187

* Norm value=3.50

A total of 391 data were used within the scope of the T test. The mean scores of each dimension in the scale were also calculated. In this context, it was concluded that the arithmetic mean was 4.16 for the Occupational Characteristics dimension, 4.46 for the Personal Characteristics dimension, 4.43 for the Competence dimension, and 4.15 for the Behavioral Characteristics dimension. The mean overall score was found to be 4.28. In the analysis, t statistical values were determined as 61.05 for Occupational Characteristics, 67.19 for Personal Characteristics, 72.68 for Competence, 61.43 for Behavioral Characteristics, and 93.18 for the Mean Overall Score. In addition, the significance value of the overall and sub-dimensions was .000, and the mean difference value was greater than 1. It was observed that the mean score of the mean overall scores and sub-dimensions was significantly different. In this context, Hypothesis 1 was accepted.

Factor total Pearson correlation coefficients were calculated for the construct validity of the scale. These coefficients were presented in **Table 5**.

Table 5. *Factor Correlation Values*

	Occupational Characteristics	Occupational Characteristics	Occupational Characteristics	Occupational Characteristics	Culinary Profession Image
Occupational Characteristics	1				
Personal Characteristics	.337	1			
Competence	.329	.320	1		
Behavioral Characteristics	**.393**	**.084**	.245	1	
Culinary Profession Image	**.835**	**.619**	**.644**	**.601**	1

As presented in **Table 5,** a positive relationship was observed between the factors. The value of the greatest relationship was .393 and it was between Occupational Characteristics and Behavioral Characteristics. The value of the smallest relationship was .084 and it was between Behavioral Characteristics and Personal Characteristics. Image of Culinary Profession had the greatest correlation of .835 with the Occupational Characteristics while it had the smallest correlation of .601 with Behavioral Characteristics.

The effect of image perceptions of the chefs regarding the occupational characteristics on the occupational image perceptions was observed through the simple regression test. Accordingly, it was observed that the image perception regarding the occupational characteristics explained 69% of the image perceptions regarding the culinary profession (corrected R^2= .697). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding occupational characteristics and the image regarding the culinary profession (β= .835, p= .000). Therefore, Hypothesis 3a was accepted.
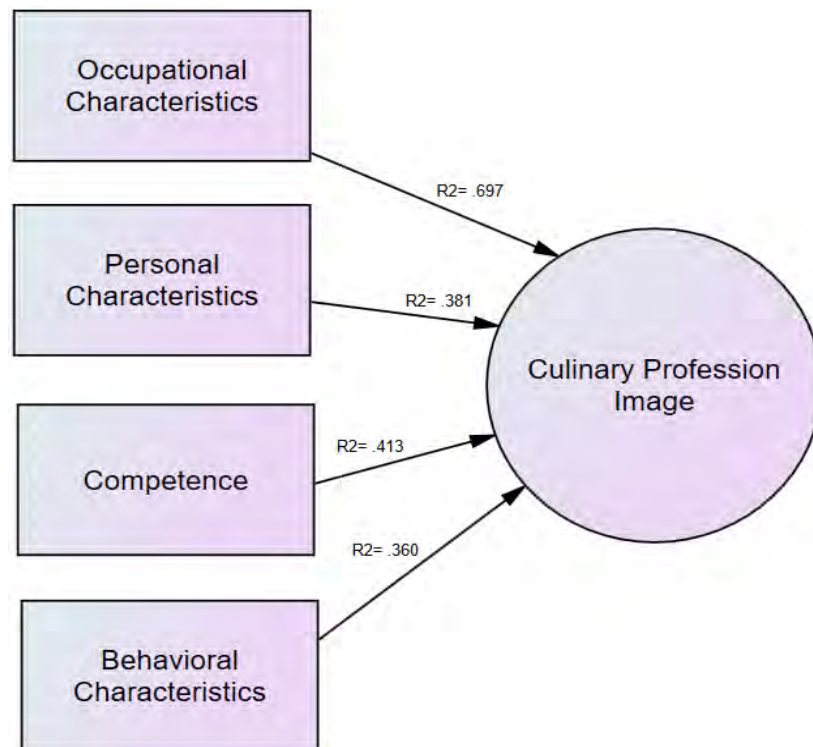
The effect of image perceptions of the chefs regarding the personal characteristics on the image of the culinary profession was observed through the simple regression test. Accordingly, it was observed that the image perception regarding personal characteristics explained 38% of the image perceptions regarding the culinary profession (corrected R^2= .381). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding personal characteristics

and the image perception regarding the culinary profession (β= .619, p= .000). Therefore, Hypothesis 3b was accepted.

The effect of image perceptions regarding the competence of the chefs on the occupational image was observed through the simple regression test. Accordingly, it was observed that the image perception regarding the competence of the chefs explained 41% of the image perceptions regarding the culinary profession (corrected R^2= .413). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding the competence of the chefs and the image perception regarding the culinary profession (β= .644, p= .000). Therefore, Hypothesis 3c was accepted.

The effect of image perceptions regarding the behavioral characteristics of the chefs on the occupational image of the culinary profession was observed through the simple regression test. Accordingly, it was observed that the image perception regarding behavioral characteristics explained 36% of the image perceptions regarding the culinary profession (corrected R^2= .360). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding the behavioral characteristics of the chefs and the image perceptions regarding the culinary profession (β= .601, p= .000). In this context, Hypothesis 3d was accepted.

The R^2 values obtained as a result of the tests were presented in **Figure 7** on the model

Figure 7. *R^2 Values According to the Result of Regression Analysis*

The effect of image perceptions regarding personal characteristics on the image perceptions regarding occupational characteristics was observed through the simple regression test. Accordingly, it was observed that the image perception regarding the personal characteristics of the chefs explained 11% of the image perceptions regarding the occupational characteristics (corrected R^2: .111). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding personal characteristics and the image perception regarding the occupational characteristics (β= .337, p=.000). In this context, Hypothesis 4a was accepted.

The effect of perceptions regarding the competence image on the image perceptions regarding occupational characteristics was observed through the simple regression test. Accordingly, it was observed that the perceptions regarding the competence image explained 10% of the image perceptions regarding the

occupational characteristics (corrected R^2:106). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the perceptions regarding the competence image and the image perception regarding the occupational characteristics (β= .329, p=.000). Therefore, Hypothesis 4b was accepted.

The effect of image perceptions regarding the behavioral characteristics of the chefs on the image perceptions regarding occupational characteristics was observed through the simple regression test. Accordingly, it was observed that the image perception regarding behavioral characteristics explained 15% of the image perceptions regarding occupational characteristics (corrected R^2: .152). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding behavioral characteristics and the image perception regarding the occupational characteristics (β= .393, p= .000). Based on these results, Hypothesis 4c was accepted.

The effect of perceptions regarding the competence image on the image perceptions regarding personal characteristics was observed through the simple regression test. Accordingly, it was observed that the perceptions regarding the competence image of the chefs explained 10% of the image perceptions regarding the occupational characteristics (corrected R^2: .100). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the perceptions regarding the competence image and the image perception regarding the personal characteristics (β= .320, p=.000). Therefore, Hypothesis 4d was accepted.

The effect of image perceptions regarding behavioral characteristics on the perceptions regarding the competence image was observed through the simple regression test. Accordingly, it was observed that the image perception regarding the behavioral characteristics of the chefs explained 6% of the perceptions regarding the competence image (corrected R^2: .058). According to the standardized regression coefficient (β), it was found that there was a positive significant relationship between the image regarding behavioral characteristics and perceptions regarding the competence image (β= .245, p=.000). Therefore, Hypothesis 4e was accepted.

The effect of image perceptions regarding behavioral characteristics on the image perceptions regarding occupational characteristics was observed through the simple regression test. In this test, the image perception regarding behavioral characteristics was not observed to sufficiently explain the image perception regarding personal characteristics, and no significant relationship was found. Hypothesis 4f was therefore rejected.

5. Discussion

The culinary profession has become an occupation that attracts attention from society with the influence of social media (Aldemir vd., 2020). Based on the interest aroused by this occupation, students prefer to receive training on this subject. Accordingly, the factors related to the occupation gain importance in terms of understanding the occupation (Can, 2021). Nevertheless, no studies have been conducted to determine the image of this occupation. Instead, there have been studies on the qualifications and characteristics that chefs should have and the ethics of the culinary profession. Unfortunately, these studies do not qualify as a direct source for the occupational image of the culinary profession.

As a result of the data obtained and the analyses made, the "The Image Scale of Culinary Profession" was developed consisting of 14 items and 4 dimensions. These dimensions were named Occupational Characteristics, Personal Characteristics, Competence, and Behavioral Characteristics. These dimensions have been mentioned many times in the literature regarding the characteristics of the culinary profession (Çetin & Şahin, 2018; Doğan & Yeşiltaş, 2017; İçigen & Geçgin, 2021; Kesici & Önçel, 2015).

Doğan and Yeşiltaş (2017) drew attention to the competencies of the chefs. In this context, it was pointed out that occupational characteristics, personal characteristics, and behavioral characteristics were related in terms of the formation of competencies. In addition, in the study conducted by Özgenel et al. (2019) to

determine the image of teaching, it was reported that there were significant relationships between personal characteristics and occupational characteristics. In this study, it was also concluded that there were positive and significant relationships between the characteristics of the professional image of the chefs. In this context, it was determined that the image perceptions regarding behavioral characteristics did not have a sufficient effect on image perception regarding personal characteristics alone.

The image of the culinary profession has recently increased considerably with the work of media elements on this subject (Aldemir et al., 2020), the books written by famous chefs, etc., and has become an occupation preferred by young people (Giousmpasoglou vd., 2020). Knowing the structural characteristics of this occupation will ensure that the choices made are more accurate (Allen & Mac Con Iomaire, 2017). The emphasis in the literature on the positive image of the culinary profession among students was tested in this context. The data obtained indicated that the students enrolled in non-formal gastronomy training were quite positive about the culinary profession. In addition, it was determined that the dimensions that constituted the occupational image of the culinary profession had significant interactions with each other and that the perception of the occupational image of the culinary profession varied according to demographic characteristics.

6.   Conclusion and Recommendations

Occupations are activities that have been carried out by people since the beginning of humanity to sustain their lives. Similarly, the number of these occupations has increased in history and people have started to choose the professions that express themselves best. In this context, one of the most important elements is the image of the occupation in society. The image of occupations is a very important factor in the choices of people regarding that occupation and their approach to it. The culinary profession is one of the oldest occupations of humanity. Nevertheless, there is no study in the literature to determine the image of the culinary profession. Therefore, first of all, the "Image Scale of Culinary Profession" has been developed within the scope of the study. The scale consists of 14 items and 4 dimensions. These factors are named Occupational Characteristics (5 items), Personal Characteristics (3 items), Competence (3 items), and Behavioral Characteristics (3 items). The mean score that could be obtained from the test is 2.5, the highest score is 5, and the base score is 1. The population of this study consisted of students enrolled in non-formal gastronomy training. Among this population, 391 students were selected using the convenience sampling method. These students were enrolled in gastronomy training in special education institutions offering gastronomy training in Istanbul, Ankara, İzmir, Antalya, and Muğla. The scale developed within the scope of the study was administered to this group. These data were tested for validity and reliability. Next, the t-test was performed on the data. As a result of the test, very significant and positive results were obtained concerning the image of the culinary profession. Accordingly, it was concluded that the Occupational Characteristics dimension had a score of 4.16, Personal Characteristics had a score of 4.46, Competencies had a score of 4.43, and Behavioral Characteristics had a score of 4.15. The mean overall score was found to be 4.28. Accordingly, it was observed that the image perceptions of the students enrolled in non-formal

gastronomy training about the culinary profession were quite positive. The analyzes indicated that the sub-dimensions of the scale also had a positive and significant relationship with each other.

In addition, the perception of the culinary profession varied according to the demographic characteristics of the students. In this context, the following conclusions were reached:

*Female students had a higher perception regarding the image of the culinary profession compared to male students.

*The image perceptions of the students in the 18-35 age group about the culinary profession were significantly higher compared to other age groups.

*As the level of education increased, there was a decrease in the image perception of the culinary profession.

Within the scope of this study, a scale was developed to determine the image of the culinary profession. It is thought that this scale will be used to measure the perceptions of different segments of society towards the image of the culinary profession in future studies. In this way, the deficiency related to this subject in the literature will also be eliminated. In addition, this study also contains important results on perceptions about the image of the culinary profession. In this way, more detailed information will be provided about this occupation to the persons concerned.

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