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# The Perspective of Final Year Students at Faculty of Dentistry in Turkey on Dentistry Specialty Examination

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## Abstract

*Background:* The Dentistry Specialty Examination aims at selection of the students who will have specialization training in faculties of dentistry based on objective criteria. The present study aimed at establishing and evaluating the opinions and choices of the fifth year students from the Ondokuz Mayis University (OMU) Faculty of Dentistry and the factors involved. Methods: Study was conducted with the fifth year students of the Faculty of Dentistry at OMU between 2013 and 2014. The sample size was established as 96 students, by accessing 90% of the fifth year students. During the study, questionnaire forms with questions for the students' sociodemographic features and their opinions about the examination for specialty in dentistry were used to collect data. Additionally, the Beck Hopelessness Scale (BHS) was used to determine the future expectations of the students. *Results:* The majority of the students want to take the Dentistry Specialty Examination, whereas 69.9% have expressed that this exam was necessary. It was a difficult exam and the Basic Medical Sciences questions were particularly difficult. It was found that the Beck Hopelessness Scale score was lower in the students who wanted to take the specialty exam. The query based on the professional life expectancy revealed that the students with hope had the lowest hopelessness score, whereas the students without hope had the highest score. *Conclusion:* The students who are partially or completely hopeful about the profession have more positive thoughts about their future life compared to the hopeless students.

## Keywords

Dentistry, Specialty Examination

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## 1. Introduction

The Dentistry Specialty Examination (DSE) aims at selecting the students who will have specialization training in faculties of Dentistry based on objective criteria. In Turkey, DSE was first conducted in 2012. According to the results of a study conducted by the Turkish Dental Association (TDA) at the end of 2013, there are 45 dentistry faculties in Turkey that admit students, and all of these faculties provide specialization training [1]. The exam is carried out twice a year by the Student Selection and Placement Center affiliated with the Council of Higher Education and there are 2100-2300 applicants to the exam. There is one opening position for about 10 candidates in the exam [2].

The dental specialties require different scientific and artistic features. The rates of success and happiness in dental specialties may vary by the individual characteristics and

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expectations. People may have different feelings, opinions, desires, and interests. This difference applies to the selection of the profession, as well as the choice of specialty. In other words, each dentist has different perspective and expectation for every field [3].

With an important and reputable place in Turkish Dentistry education, OMU Faculty of Dentistry was founded in 1992. Our faculty has adopted a training model to introduce current issues in dentistry in an integrated way. This educational system requires students to actively participate in the education, and also allows problem-solving and continuous improvement.

In recent years, the students, particularly those who are in the fourth or fifth year, have an intensive preparation period to obtain dental specialization after graduation. There are many factors involved in the desire to take the specialty exam and the selection of the area of specialty. Among these, the particularly important factors include the students' families, the education received to date, the status of success, and the future expectations.

The present study aimed at establishing and evaluating the opinions and choices of the fifth year students from the Faculty of Dentistry, OMU and the factors involved.

## 2. Materials and Methods

This research was approved by the OMU Medical Research Ethics Commission. (ODM0.20.08/1347). The present study was conducted with the fifth year students of the Faculty of Dentistry at OMU between 2013 and 2014. The sample size was established as 96 students, by accessing 90 % of the fifth year students.

The protocol for this study was overviewed and approved by the Ethical Committee of OMU, Samsun, Turkey.

During the study, questionnaire forms with questions for the students' sociodemographic features and their opinions about the examination for specialty in dentistry were used to collect data. The questions for the specialty exam consisted of items such as desired specialty, competency for the branches, status of attending a training center, and resources used. The factors involved in the selection of the branches were classified as "not important," "no idea," "maybe," "most likely," "yes," and "absolutely," and evaluated with a score ranging from 0 to 4.

Additionally, the Beck Hopelessness Scale (BHS) was used to determine the future expectations of the students. The hopelessness scale developed by Beck et al. [4] measures the future expectations of the individuals. Consisting of 20 items, this scale can be administered to adolescents and adults, and scored with 0-1 points. The options of the items are either "yes" or "no". "Yes" for 11 items and "no" for 9 items received a score of 1 point. "No" for questions 1, 3, 5, 6, 8, 10, 13, 15, and 19; and "yes" for questions 2, 4, 7, 9, 11, 12, 14, 16, 17, 18, and 20 are each scored 1 point. The point range that can be obtained from the scale is 0-20. A higher point value indicates a high level of hopelessness [5-8]. Studies conducted about the safety and validation of the scale for Turkey has established three factors as future expectation, motivation, and hope [9-11].

*Statistical Analysis*

The data were analyzed using the SPSS Software 17.0 package. The data from counting were expressed in numbers (%), whereas the data from measurements were expressed in mean ± standard deviation (X ± SD) and median (minimum-maximum). The numerical (%) values were compared using Pearson's chi-square and Yates Continuity corrected chi-square analyses. The data were checked for normal distribution with the Shapiro Wilk test, and the measurements that were not normally distributed were tested using the Mann-Whitney U-test, Bonferroni corrected Mann-Whitney U-test, and the Kruskal Wallis analyses of variance. The level of significance was considered to be $p < 0.05$ for all tests except the Bonferroni corrected Mann-Whitney U-test ($p < 0.01$).

## 3. Results

In the present study, which was conducted on fifth year dentistry students, 92 (95.8%) of the patients were Turkish citizens and 4 (4.2%) were foreign nationals, and all were single. The distribution of students by other sociodemographic features is presented in Table 1. The table suggests that the number of students between 21 and 24 years old age group is higher than those of others. When the educational status was analyzed, most of the fathers were high school graduates, whereas the mothers were elementary school graduates, and most of the fathers were government employees, whereas the mothers were unemployed. Most of the standards came from nuclear families.

The distribution of preferred specialties by gender and family income level is presented in Table 2. According to this table, 35.1% of the male students most frequently preferred Oral and Maxillofacial Surgery and 27.3% of the female students preferred Orthodontics. Based on the distribution by monthly income, the most frequently preferred specialty was Orthodontics in the range of $0-6000. The distribution of the preferred specialties by some important features in the branch selection is presented in Table 3. Liking the branch and lifestyle features have higher points for all branches; however, no statistically significant difference was found in the features for the selection of the branches ($p > 0.05$).

**Table 1.** Distribution of the students according to sociodemoghraphic features.

| Features | | Number (n) | % | p |
|---|---|---|---|---|
| Gender (n=96) | Male | 38 | 39.6 | > 0.05 |
| | Female | 58 | 60.4 | |
| Year (n=96) | 21-22 | 35 | 36.4 | |
| | 23-24 | 57 | 59.5 | < 0.001 |
| | 25-26 | 4 | 4.1 | |
| Educational status of father's (n=93) | Primary-Secondary school | 28 | 30.1 | |
| | High school | 21 | 22.6 | < 0.001 |
| | University-master's-doctorate | 44 | 47.3 | |
| Father's job (n=88) | Civil servant | 34 | 38.6 | |
| | Self-employed | 18 | 20.5 | < 0.05 |
| | Worker | 8 | 9.1 | |
| | Retired | 28 | 31.8 | |
| Educational status of mother's (n=94) | Primary-Secondary school | 51 | 54.3 | |
| | High school | 22 | 23.4 | < 0.001 |
| | University | 21 | 22.3 | |
| Mother's job (n=89) | Goverment employee | 19 | 21.3 | |
| | Self-employed | 3 | 3.4 | < 0.001 |
| | Worker | 8 | 9.0 | |
| | Housewife | 59 | 66.3 | |
| Family structure (n=96) | Nuclear family and/or extended family | 90 | 93.8 | < 0.001 |
| | Broken family | 6 | 6.2 | |
| Accommodation (n=96) | With his/her family | 21 | 21.9 | |
| | With his/her friends | 49 | 51.1 | < 0.001 |
| | Alone | 13 | 13.5 | |
| | Hostel | 13 | 13.5 | |
| Home town (n=96) | City center | 57 | 59.4 | |
| | County | 34 | 35.4 | < 0.001 |
| | Village | 5 | 5.2 | |
| Monthly income of the family (n=96) | < 1500 $ | 63 | 65.6 | |
| | 1500-3000 $ | 27 | 28.1 | < 0.001 |
| | > 3000 $ | 6 | 6.3 | |
| Financial sporter (n=96) | Family | 86 | 89.6 | < 0.001 |
| | Student loan | 10 | 10.4 | |

**Table 2.** Distribution of specialty field preferred according to gender and monthly family income.

| Variables | Oral and Maxillofacial Radiology | | Oral and Maxillofacial Surgery | | Orthodontics | | Periodontology | | Pediatric Dentistry | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number (n) | % | Number (n) | % | Number (n) | % | Number (n) | % | Number (n) | % |
| Gender | | | | | | | | | | |
| Male (n=37) | 2 | 5.4 | 13 | 35.1 | 5 | 13.5 | 2 | 5.4 | 6 | 16.2 |
| Female (n=55) | 7 | 12.7 | 4 | 7.3 | 15 | 27.3 | 5 | 9.1 | 11 | 20 |
| Monthly income of the family | | | | | | | | | | |
| 0-3000 $ (n=60) | 8 | 13.3 | 12 | 20 | 13 | 21.7 | 2 | 3.3 | 11 | 18.3 |
| 3100-6000 $ (n=26) | 1 | 3.8 | 5 | 19.2 | 6 | 23.1 | 4 | 15,0 | 5 | 19.2 |
| 6100 $ and more (n=6) | - | - | - | - | 1 | 16.7 | 1 | 17 | 1 | 16.7 |
| Total (n=92) | 9 | 9.8 | 17 | 18.5 | 20 | 21.7 | 7 | 7.6 | 17 | 18.5 |

**Table 3.** Continue.

| Variables | Restorative Dentistry | | Endodontics | | Prosthodontics | | Other | | p |
|---|---|---|---|---|---|---|---|---|---|
| | Number (n) | % | Number (n) | % | Number (n) | % | Number (n) | % | |
| Gender | | | | | | | | | |
| Male (n=37) | 2 | 5.4 | 3 | 8.1 | - | - | 4 | 10.8 | > 0.05 |
| Female (n=55) | 4 | 7.3 | 3 | 5.5 | 2 | 3.6 | 4 | 7.3 | |
| Monthly income of the family | | | | | | | | | |
| 0-3000 $ (n=60) | 5 | 8.3 | 2 | 3.3 | 1 | 1.7 | 6 | 10 | |
| 3100-6000 $ (n=26) | | | 2 | 7.7 | 1 | 3.8 | 2 | 7.7 | > 0.05 |
| 6100 $ and more (n=6) | 1 | 16.7 | 2 | 33.3 | - | - | - | - | |
| Total (n=92) | 6 | 6.5 | 6 | 6.5 | 2 | 2.2 | 8 | 8.7 | |

**Table 4.** Distribution of specialty field preferred according to the important characteristic in choosing the branch.

| Features | Oral and Maxillofacial Radiology | | Oral and Maxillofacial Surgery | | Orthodontics | | Periodontology | |
|---|---|---|---|---|---|---|---|---|
| | X±SD | Median (Min-Max) | X±SD | Median (Min-Max) | X±SD | Median (Min-Max) | X±SD | Median (Min-Max) |
| Period of assistantship | 1.33±1.66 | 0 (0-4) | 0.41±0.94 | 0 (0-3) | 0.65±0.99 | 0 (0-3) | 1.29±1.60 | 0 (0-3) |
| Interest in the field | 2.89±1.27 | 3 (0-4) | 3.24±1.30 | 1 (0-4) | 3.65±0.75 | 4 (1-4) | 3.57±0.53 | 4 (3-4) |
| Financial income | 2.22±1.20 | 2(0-4) | 2.94±1.20 | 2 (0-4) | 2.80±1.15 | 3 (0-4) | 3.14±0.69 | 3 (2-4) |
| Family's expectation | 1.44±1.42 | 1(0-4) | 1.94±1.39 | 3 (0-4) | 2.10±1.41 | 2 (0-4) | 2±1.53 | 2 (0-4) |
| Future of the department | 2.78±1.09 | 3(1-4) | 3.06±1.25 | 4 (0-4) | 3.10±0.97 | 3(1-4) | 3.29±0.76 | 3 (2-4) |
| Society's perspective | 1.89±1.36 | 2(0-4) | 2.53±1.28 | 5 (0-4) | 2.20±1.54 | 2.5 (0-4) | 2.86±0.69 | 3 (2-4) |
| Professor's influence | 2.11±1.27 | 2(0-4) | 1.88±1.27 | 6 (0-4) | 1.80±1.28 | 2 (0-4) | 1.43±1.51 | 1(0-3) |
| Professor's attitude | 2.22±1.20 | 2(0-4) | 2.06±1.20 | 7 (0-4) | 1.70±1.34 | 2 (0-4) | 1.57±1.40 | 1(0-3) |
| Treatment of patients | 2.89±0.60 | 3(2-4) | 2.88±1.05 | 8 (0-4) | 2.95±0.94 | 3 (0-4) | 2.43±1.13 | 3(0-3) |
| Malpractice lawsuit | 2.33±1.00 | 2(1-4) | 2.47±1.37 | 9 (0-4) | 2.10±1.02 | 2 (0-4) | 1.86±1.57 | 2(0-4) |
| Financial situation | 2.44±1.24 | 3(0-4) | 2.94±0.97 | 10 (0-4) | 2.60±1.10 | 3 (0-4) | 2.86±0.90 | 3 (1-4) |
| Doctor-Patient relationship | 2.89±0.60 | 3(2-4) | 2.88±0.99 | 11 (0-4) | 3.15±0.59 | 3(2-4) | 2.86±0.91 | 3(1-4) |
| Life style | 3.67±0.50 | 4(3-4) | 3.24±1.03 | 13 (0-4) | 3.40±0.82 | 4(1-4) | 3.71±0.49 | 4 (3-4) |
| Scientific research | 2.33±1.41 | 3(0-4) | 2.65±1.17 | 14 (0-4) | 2.40±0.88 | 2(1-4) | 3.00±0.82 | 3 (2-4) |
| Academic Career | 2.56±1.42 | 3(0-4) | 2.71±1.31 | 15 (0-4) | 2.10±1.29 | 3 (0-4) | 2.86±0.69 | 3 (2-4) |

**Table 3.** Continue.

| Features | Pediatric Dentistry | | Restorative Dentistry | | Endodontics | | Prosthodontics | |
|---|---|---|---|---|---|---|---|---|
| | X±SD | Median (Min-Max) | X±SD | Median (Min-Max) | X±SD | Median (Min-Max) | X±SD | Median (Min-Max) |
| Period of assistantship | 1.38±1.31 | 1 (0-3) | 0.40±0.89 | 0 (0-2) | 0.50±0.84 | 0 (0-2) | 1.50±2.12 | 1.5 (0-3) |
| Interest in the field | 3.69±0.48 | 4 (3-4) | 4.00±0.00 | 4 (-4) | 2.07±4.00 | 4 (0-4) | 4.00±0.00 | 4 (4-4) |
| Financial income | 2.27±1.16 | 3 (0-4) | 2.80±0.84 | 3 (2-4) | 1.33±1.63 | 1(0-4) | 2.50±0.71 | 2.5 (2-3) |
| Family's expectation | 1.73±1.33 | 2(0-4) | 0.40±0.89 | 0 (0-2) | 1.17±1.83 | 0(0-4) | 0.00±0.00 | 0 (0-0) |
| Future of the department | 3.33±0.62 | 3 (2-4) | 3.00±1.00 | 3(2-4) | 1.83±2.04 | 1.5 (0-4) | 3.50±0.71 | 3.5 (3-4) |
| Society's perspective | 2.33±1.05 | 2 (1-4) | 0.80±1.10 | 0 (0-2) | 1.17±1.33 | 1 (0-3) | 0.50±0.71 | 0.5 (0-1) |
| Professor's influence | 2.07±1.28 | 2(0-4) | 1.80±1.64 | 3 (0-3) | 1.17±1.47 | 0.5 (0-3) | 3.00±0.00 | 3 (3-3) |
| Professor's attitude | 2.20±1.42 | 2(0-4) | 1.80±1.64 | 3 (0-3) | 1.17±1.47 | 0.5 (0-3) | 2.50±0.71 | 2.5 (2-3) |
| Treatment of patients | 3.07±0.59 | 3(2-4) | 2.20±1.30 | 3 (0-3) | 2.17±1.33 | 3 (0-3) | 3.00±0.00 | 3 (3-3) |
| Malpractice lawsuit | 2.33±1.35 | 2(0-4) | 2.60±0.55 | 3 (2-3) | 2.17±1.47 | 2.5 (0-4) | 3.00±1.41 | 3 (2-4) |
| Financial situation | 2.27±1.10 | 3(0-4) | 3.20±0.45 | 3 (3-4) | 1.83±1.72 | 2 (0-4) | 3.00±0.00 | 3 (3-3) |
| Doctor-Patient relationship | 3.07±0.59 | 3(2-4) | 2.80±0.84 | 3(2-4) | 2.17±1.47 | 2.5 (0-4) | 3.00±0.00 | 3(3-3) |
| Life style | 3.13±1.06 | 3(1-4) | 3.40±0.89 | 4(2-4) | 2.67±1.75 | 3.5 (0-4) | 3.50±0.71 | 3.5 (3-4) |
| Scientific research | 2.33±0.90 | 2(1-4) | 2.60±0.89 | 2(2-4) | 2.17±1.33 | 3 (0-3) | 3.50±0.71 | 3.5 (3-4) |
| Academic Career | 2.73±0.80 | 3(2-4) | 2.40±1.82 | 3 (0-4) | 2.50±1.64 | 3 (0-4) | 3.00±0.00 | 3(3-3) |

The evaluation about the opinions of the students with and without a desire to take DSE on the specialization training in the faculty is presented in Table 4. According to this table, there was no statistically significant difference in the comparison of the education provided in the divisions between these two groups ($p > 0.05$). Nevertheless, "partially sufficient" was the most commonly marked option in the intra-division evaluations.

The general opinions of the students on DSE are presented in Table 5. The majority of the students want to take DSE, whereas 69.9% have expressed that this exam was necessary. The table shows that DSE is a difficult exam and the Basic Medical Sciences questions were particularly more difficult. Most of the students expressed their purpose of taking DSE to become a better dentist. While fifty-three point one percent of the students do not attend any private courses, there is no statistical difference in terms of the frequency of the aims of the standards attending courses ($p > 0.05$). Most of the students used DSE preparatory books for the DSE exam.

The distribution of the Beck Hopelessness Scale by some features is presented in Table 6. The hopelessness score was higher in males compared to females. It was also found that the hopelessness score was lower in the students who wanted to take the DSE specialty exam and were attending a training center for this purpose.

**Table 5.** Distribution of evaluation of follow specialties training in the faculty by the students who want to or don't want to take DSE.

| Specialties | Evaluation about the education | Total (n=90) | | Those who don't want to take DSE (n=11) | | Those who want to take DSE (n=79) | | |
|---|---|---|---|---|---|---|---|---|
| | | Number(n) | % | Number(n) | % | Number(n) | % | p |
| Oral and Maxillofacial Radiology | Sufficient | 29 | 100 | 3 | 10.3 | 26 | 89.7 | |
| | Partially Sufficient | 47 | 100 | 5 | 10.6 | 42 | 89.4 | > 0.05 |
| | Insufficient | 14 | 100 | 3 | 21.4 | 11 | 78.6 | |
| Oral and Maxillofacial Surgery | Sufficient | 26 | 100 | 2 | 7.7 | 24 | 92.3 | |
| | Partially Sufficient | 46 | 100 | 4 | 8.7 | 42 | 91.3 | > 0.05 |
| | Insufficient | 18 | 100 | 5 | 27.8 | 13 | 72.2 | |
| Orthodontics | Sufficient | 17 | 100 | 2 | 11.8 | 15 | 88.2 | |
| | Partially Sufficient | 37 | 100 | 4 | 10.8 | 33 | 89.2 | > 0.05 |
| | Insufficient | 36 | 100 | 5 | 13.9 | 31 | 86.1 | |
| Periodontology | Sufficient | 18 | 100 | 3 | 16.7 | 15 | 83.3 | |
| | Partially Sufficient | 50 | 100 | 5 | 10 | 45 | 90 | > 0.05 |
| | Insufficient | 22 | 100 | 3 | 13.6 | 19 | 86.4 | |
| Pediatric Dentistry | Sufficient | 25 | 100 | 3 | 12 | 22 | 88 | |
| | Partially Sufficient | 43 | 100 | 4 | 9.3 | 39 | 90.7 | > 0.05 |
| | Insufficient | 22 | 100 | 4 | 18.2 | 18 | 81.8 | |
| Restorative Dentistry | Sufficient | 13 | 100 | 3 | 23.1 | 10 | 76.9 | |
| | Partially Sufficient | 40 | 100 | 3 | 7.5 | 37 | 92.5 | > 0.05 |
| | Insufficient | 37 | 100 | 5 | 13.5 | 32 | 86.5 | |
| Endodontics | Sufficient | 15 | 100 | 2 | 13.3 | 13 | 86.7 | |
| | Partially Sufficient | 35 | 100 | 2 | 5.7 | 33 | 94.3 | > 0.05 |
| | Insufficient | 40 | 100 | 7 | 17.5 | 33 | 82.5 | |
| Prosthodontics | Sufficient | 13 | 100 | 1 | 7.7 | 12 | 92.3 | |
| | Partially Sufficient | 46 | 100 | 5 | 10.9 | 41 | 89.1 | > 0.05 |
| | Insufficient | 31 | 100 | 5 | 16.1 | 26 | 83.9 | |

**Table 6.** Distribution of thinking with regard to DSE.

| Thinking with regard DSE | | Number(n) | % | p |
|---|---|---|---|---|
| Those who want to take DSE (n=93) | No | 14 | 15.1 | < 0.001 |
| | Yes | 79 | 84.9 | |
| Views about DSE (n=93) | Necessary | 65 | 69.9 | < 0.001 |
| | Not sure | 26 | 28.0 | |
| | DSE unnecessary | 2 | 2.1 | |
| Level of difficulty in DSE (n=93) | Very difficult | 24 | 25.8 | < 0.05 |
| | Difficult | 43 | 46.2 | |
| | Manageable | 26 | 28.0 | |
| Difficulty of major (n=92) | Basic medical sciences | 89 | 96.7 | < 0.001 |
| | Clinical Sciences | 3 | 3.3 | |
| Reason for taking DSE (n=92) | Financial | 17 | 18.5 | < 0.001 |
| | Being a good dentist | 40 | 43.5 | |
| | Personal satisfaction | 13 | 14.1 | |
| | More than one | 22 | 23.9 | |
| Reason for taking attending private courses (n=96) | Motivation | 13 | 13.5 | > 0.05 |
| | Good education | 10 | 10.4 | |
| | Education in the faculty is insufficient | 17 | 17.7 | |
| | Other | 5 | 5.3 | |
| Sources chosen for DSE (n=80) | Books about DSE | 62 | 77.5 | < 0.001 |
| | Course notes | 11 | 13.8 | |
| | Notes taken at the family | 2 | 2.5 | |
| | A combination of various sources | 5 | 6.2 | |

**Table 7.** Distribution of Beck Hopelessness Scale according to some criteria features.

| Features | | Hopelessness Scale Scores | | |
|---|---|---|---|---|
| | | X±SD | Median (Min-Max) | p |
| Gender | Male | 6.46±4.46 | 6.00 (0-17) | < 0.05 |
| | Female | 4.43±3.98 | 3.00 (0-19) | |
| Repetition of class-training | No | 4.94±3.98 | 4.00 (0-17) | > 0.05 |
| | Yes | 6.80±5.43 | 7.00 (0-19) | |
| Financial supporter | Family | 5.18±4.27 | 4.00 (0-19) | > 0.05 |
| | Student loan | 5.78±4.52 | 5.00 (1-13) | |
| Desire for DSE | No | 7.57±4.60 | 8.00 (0-14) | < 0.05 |
| | Yes | 4.82±4.10 | 4.00 (0-19) | |
| Attending DSE courses | No | 6.19±4.50 | 6.00 (0-19) | < 0.05 |
| | Yes | 4.22±3.81 | 3.00 (0-17) | |
| The reason for taking DSE | Financial | 8.12±5.25 | 7.00 (0-17) | > 0.05 |
| | Being a good dentist | 4.83±4.36 | 3.50 (0-19) | |
| | Personal satisfaction | 3.77±3.65 | 2.00 (0-11) | |
| | More than one | 4.82±2.58 | 5.00 (1-9) | |
| Job expectations | Hopeful* | 3.86±3.21 | 2.50 (0-13) | < 0.01 * |
| | Partly hopeful$^{+}$ | 5.37±4.28 | 5.00 (0-19) | < 0.01 $^{+}$ |
| | Not hopeful * $^{+}$ | 13.17±1.83 | 13.00 (11-16) | |
| | No expectation | 7.50±0.71 | 7.50 (7-8) | |

* Not hopeful - hopeful ($p<0.01$) $^{+}$ Not hopeful - partly hopeful ($p<0.01$)

The query based on the professional life expectancy revealed that the students with hope had the lowest BHS score, whereas the students without hope had the highest score, and there was a statistical difference in the BHS scores between the hopeless students and hopeful students, and the hopeless students and partially hopeful students ($p < 0.01$).

## 4. Discussion

In Turkey, professionals were trained through only doctoral programs in the dentistry faculties until 2012. The Ministry of health introduced a specialty examination for various reasons, including the non-objectivity of the above mentioned system, the different criteria applied by each faculty, the variable quotas, and the non-acceptance of the specialty of the dentists with doctorates granted by the Ministry of Health [2]. The number of dentists each year has increased and as such, the limited personnel openings have increased the competition among the students. The present study is important due to its being the first to study the examination for specialty in dentistry in Turkey.

The current study established that males preferred the dentistry faculty more frequently than females preferred the dentistry faculty. The study by Bengmark et al. also reported similar results [12]. The students' fathers were university graduates or higher, and their mothers were secondary school graduates or lower; the fathers were mostly government employees, whereas the mothers were unemployed. The students were most frequently living with their friends and their expenses were covered by the parents, and most of the families had a monthly income < $1500.

The branches most preferred by the students who would take the DSE were orthodontics, oral and maxillofacial surgery, pedodontics, prosthesis, periodontology, oral diagnosis and radiology, endodontics and restorative dentistry, respectively. When analyzed the preferred branches, it was seen that the branches were mostly clinic. This result supports the statement of the students towards the reasons for preferring the specialization training as financial concerns or a professional career.

When considering the choice of specialty based on gender, males most frequently preferred oral and maxillofacial surgery compared to orthodontics for females, and these branches were followed by pedodontics for both genders. This result suggests that the branches with a heavy workload are less preferred by females. The reason for preferring pedodontics by both genders at a higher rate is the fact that the preventive dentistry has gained increasing importance within healthcare policy [13, 14].

When the choice of specialty based on the family monthly income is analyzed, the majority of the students with a monthly income ≤ $3000 preferred orthodontics. This result indicates that the students with a low socio-economic level desire to be specialists with a high financial return. Life style is an important factor in selecting oral and maxillofacial radiology, periodontology, and endodontics, whereas enjoying the branch of dentistry is more important than other factors for oral and maxillofacial surgery, orthodontics, pedodontics, restorative dentistry, and prosthetic dentistry. Several previous studies on professionalism in dentistry have also found that the interest, ability, and life expectations of the individual play a great role in the selection of the specialty [15, 16].

An evaluation of education related to the branches of

dentistry revealed that most of the students found the education in endodontics insufficient, and partially sufficient for all other branches. In the study by TDA, the students expressed that they did not receive adequate education in orthodontics, surgery, prosthesis, endodontics, and basic medical sciences, respectively, and they desired to have more knowledge in these branches. The most important reason for this is the fact that clinical education is more predominantly provided with the dentistry faculty in mind, and the content of the course schedule of the dentistry faculty was not restructured for the DSE exam [13].

The vast majority of the students included in the study reported that DSE was necessary and they wanted to take the exam. This information corresponds to the opinion that DSE produces equal opportunity. Additionally, it demonstrates the reaction against the style of placement in specialties prior to DSE. The opinions about the unjust practices and partiality in assistant selection prior to DSE may be a factor involved in this [2].

The vast majority of the students included in the study reported that the DSE was difficult and the basic medical sciences portion in particular was more difficult. The report of the previous study indicated that the education provided in the basic medical sciences is insufficient, and therefore, the fact that more knowledge is required may be an indicator of this [17]. The thought that DSE is a difficult exam is consistent with the high level of concern expressed by fifth year students about the DSE. Additionally, the opening in the specialty training determined by DSE being limited for the demand is one of the reasons increasing such concern. According to the results of the April 2012 DSE, the number of dentist applicant was 2080; however, the number of candidates placed in a specialty program was only 223 [2]. The purpose of the students taking the DSE is primarily to become a better dentist, followed by economic reasons and moral satisfaction, respectively. Approximately 24% of the students stated that they took the DSE for several reasons. Considering the perspective that moving education in any specialty program to an improved level will positively contribute to the individual in moral and material means, it may be considered normal that the students have marked multiple options. The previous studies emphasized the importance of continuing education in dentistry through specialty training [3, 15].

Forty-six point nine percent of the students were attending a training center for DSE. The purpose of the students for attending a DSE training center may be listed as the insufficient education in the faculty, the training center being a source of motivation, and the better education in the training center. In the study by TDA, 65.8% of the students reported that the theoretical knowledge provided in some departments was insufficient and 63.5% reported that there was a lack of general medical knowledge [1]. This result may be due to the fact that the education provided in the dentistry faculty is not for the specialty examination; furthermore, students believe they can obtain more intensive knowledge in a shorter period in the training center.

Students preferred DSE preparatory books at a rate of 78%, whereas 13.8% used training center notes, and 2.5% used faculty course notes. The students used the DSE books as the most reliable resource while preparing for the exam. A previous study found that 75% of the students preferred course books to access the information [2]. This suggests that school notes and course books are not frequently used for DSE preparation and the course books are not for DSE, and confirm that the students prefer working through the brief notes due to the abundance of subjects for study.

When distribution of BHS administered to evaluate the future hopes of the students is analyzed, males had a higher score than females. Female students had greater future hopes compared to male students [18]. A previous study that was conducted with university students in Turkey, also achieved similar results. Hopelessness is a negative cognitive assessment in which life events are perceived negatively [19]. Due to the obligations placed on men, who are perceived as the head of the family in Turkish society, it is understandable that the male students have less hope.

The BHS score of the students who wanted to take the DSE was significantly lower than those who did not want, and the score of the students who were attending a DSE training center was significantly lower than those who did not. This suggests that the students who have a purpose for the future and make efforts towards this purpose are more hopeful than the others. It reveals that the most common concern of the senior students determining their future life is due to economic reasons. The effect of socio-economic level on hopelessness has been presented in studies conducted on this matter at home and abroad [20-24].

When analyzed based on the professional life expectancy, the hopeless students had the highest BHS score, followed by the students without expectations, the partially hopeful students, and hopeful students, respectively. There was no difference in the scores of the students without any life expectations and the hopeless students. The previous studies have found that the successful students are more hopeful [18].

Therefore, it may be considered normal that the students who are partially or completely hopeful about the profession have more positive thoughts about their future life compared to the hopeless students.

In conclusion, dentistry students prefer branches that are

considered comfortable and have a high financial return. It is seen that the students use other training institutions and tools during the exam preparation, due to the fact that the education provided in the faculty is not prepared for the examination content. Therefore, the education provided in the dentistry faculties should be reviewed. On the other hand, DSE preparation is a long and difficult process; however, it is of great importance for the education of dentistry professionals because of offering an equal opportunity to the students in all dentistry faculties.

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