



## CONGRESS PROCEEDING

# Evaluation of Specialization Preferences of Faculty of Dentistry Students

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## Abstract

**Purpose:** The aim of this study is to evaluate the post-graduation specialty education preferences of 3rd and 5th year dentistry students and the factors that motivate these preferences.

**Materials and Methods:** : This survey was applied to students of Selçuk University Faculty of Dentistry. A total of 207 students, 104 3rd grade and 103 5th grade students, participated in the study. Two different response types were used in the study: multiple choice and linear scale (1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree). Considering the literature on this subject, an 8-question survey form was prepared. The form was uploaded to the Google Surveys (Google Workplace, Google, USA) page, and the relevant form was emailed to dentistry school students. The survey questions remained accessible between December 2023 and January 2024.

**Results:** While 3rd graders are mostly undecided about whether their undergraduate education should focus on DSE (48.1%), 5th graders think that undergraduate education (62.1%) is not aimed at DSE. In both grades, the rate of those who find it necessary to attend private teaching institutions is high. When choosing a department, 3rd-grade students (29.8%) mostly prefer Orthodontics; 5th graders (32%) chose Oral and Maxillofacial Surgery. While the 5th-grade students said they would prefer a faculty different from their own for specialization training, most 3rd-grade students were undecided. However, both grades stated that the department was more effective in determining their training specialty preferences than the city and university.

**Conclusions:** Most dentistry students believe that training in specialization areas is necessary. Nda Clinical internship training is an effective parameter in post-graduation career planning. Oral and Maxillofacial Surgery and Orthodontics were our study's most preferred specialization departments. For both 3rd—and 5th-grade students, the department was more effective than the city and university in determining their specialization training preferences.

**Key words:** Dentistry students' choice; specialization in dentistry; undergraduate education in dentistry

## Introduction

An individual's career choice is an essential factor that affects the person's attitude, appearance, social relations, and future income level. <sup>1</sup> As in all professions, factors such as the country's level of development, socio-economic factors, and individual preferences influence the long-term career planning of health professionals. The literature reports that factors such as the desire to help people, flexible working conditions, and a comfortable working environment are effective in influencing people to choose dentistry as a career. <sup>2,3</sup> The first dentistry school in Turkey was officially established in 1933. The school of dentistry, affiliated with the faculty of Medicine when it was founded and offered a two-year education, was separated from the Faculty of Medicine in 1964. This school was transformed into the Istanbul University Faculty of Dentistry,

and the education period was determined as 5 years. <sup>1,4</sup>

Dentistry is a complex and comprehensive education that includes professional knowledge and clinical skills, values appropriate to the medical identity, and a master-apprentice relationship. <sup>5</sup> However, the knowledge and skills acquired during undergraduate education remain basic and are sometimes inadequate to provide diagnosis/treatment skills for advanced cases. Specialization training in dentistry plays a crucial role in meeting society's specific dental health needs when general dentistry education is inadequate. Specialization training in dentistry is an important training process for successfully managing clinical cases' diagnosis and treatment and ensuring patient satisfaction. It allows for specialization and further training in the care of specific patient groups. <sup>4,6</sup> In 2011, by the Ministry of Health and the Higher Education institution, eight different fields of study were determined as specialization branches

of dentistry: Oral, Dental and Maxillofacial Surgery, Oral, Dental and Maxillofacial Radiology, Pediatric Dentistry, Endodontics, Orthodontics, Periodontics, Prosthetic Dentistry, and Restorative Dentistry.<sup>7,8</sup>

Students who want to specialize must first pass a specific score in a foreign language exam. Students who pass the foreign language exam are eligible to take the dentistry specialization exam (DSE). According to the dentistry specialization regulation, DSE, a central exam based on competence and competition principles, consists of multiple-choice professional knowledge sections. According to the DSE results held in September and April, students who graduate from dentistry choose one of the eight principal departments of the dentistry faculties and start their specialization training. Specialization training lasts 3-4 years, depending on the department.<sup>6,9</sup>

As the number of dentistry faculties increases, the number of newly graduated dentists also increases. As a result, DSE's participation rate also increases yearly. Multiple choice exam requirements, increasing numbers of participants, and limited places for specialist training have made DSE highly competitive. As a result of this competitive environment, a new industry called "special courses for DSE" has emerged. Most students see special courses as a requirement for success in DSE. However, there needs to be more data on how dental students' career plans have changed, what factors motivate their career choices, and to what extent the education they receive in dental schools meets their needs. This study aimed to evaluate the post-graduation career preferences of 3rd and 5th-year students of Selçuk University Faculty of Dentistry, the specialization training preferences of students planning to take the DSE, and the factors that motivate these preferences.

## Methods

The survey study was approved by the Faculty of Dentistry Ethics Committee, Selçuk University (approval no:2024/53).

A total of 207 students, 104 of whom were in their 3rd year and 103 of whom were in their 5th year at Selçuk University, Faculty of Dentistry in 2023-2024, participated in this survey study. Two different response types were used in the study: multiple choice and linear scale (1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree). Considering the literature on this subject, an 8-question survey form was prepared. The form was uploaded to the Google Surveys (Google Workplace, Google, USA) page, and the relevant form was emailed to dentistry school students. The survey questions remained accessible between December 2023 and January 2024.

Only 3rd—and 5th-grade Selçuk University Faculty of Dentistry students were included in this survey study. Students who did not want to answer the survey questions were excluded from the study. Each student responded to only one survey form. The questions asked in the survey are shown in Tables 1 and 2.

## Results

The responses and rates of 3rd and 5th-grade students to the survey questions prepared with a linear scale are shown in Tables 1 and 2. While 72.1% of 3rd-grade students are considering speciality education, 6.8% are not considering specialization. In addition, 21.2% of them stated that they were undecided. In 5th grade students, 62.1% are considering specialization, 9.7% are not considering specialization. 28.2% of them indicated that they were undecided. When these rates are taken into consideration, it can be said that the majority of students in both periods want to receive specialization training after graduation.

While the 3rd-grade students are mostly undecided about undergraduate education being DSE-oriented (48.1%), the 5th-grade

students mostly think that undergraduate education is not DSE-oriented (62.1%).

The rate of those who find it necessary to go to private teaching institutions is high in both grades (grade 3: 59.6%; grade 5: 64.1%). The undecided rates are pretty close to each other (grade 3: 23.1%; grade 5: 22.3%).

In terms of department preference, while the 3rd-grade students mostly preferred Orthodontics with a rate of 29.8%, this was followed by Oral and Maxillofacial Surgery with 22.1%. In the 5th-grade students, Oral and Maxillofacial Surgery was the most preferred, with a rate of 32% (Table 3).

When asked whether they would prefer their faculty or another faculty for specialization training, the majority of the 3rd-grade students stated that they were undecided (47.1%–51%). In contrast, the 5th-grade students mainly said that they would prefer a faculty different from their own (55.3%–70.9%).

When we investigated to what extent the city, university, and departments affect the choice of specialization education, it was seen that the department was at the forefront in the choice of both 3rd-grade (%78.8) and 5th-grade (%80.6) students.

## Discussion

This survey study aimed to evaluate the post-graduation career preferences of 3rd and 5th-year students of Selçuk University Faculty of Dentistry, the specialization training preferences of students planning to take the DSE, and the factors that motivate these preferences.

Today, in parallel with the increasing number of dentistry faculties, the number of newly graduated dentists is also increasing every year. Due to the rising student quotas in faculties that have been providing education and training for many years and the clinical order that is not fully established in many newly opened faculties, it is anticipated that the demand for specialization training will increase compared to previous years.

Dentists' social and professional expectations, higher income expectations, the ability to work more freely, motivation of career ambition, desire to help people more, and a particular interest in dentistry are important factors affecting career choices after graduation.<sup>10-13</sup> The literature includes various studies examining the necessity of specialization in dentistry.<sup>3,4,14,15</sup> In their research, Fidele et al. reported that 81% of dentists need specialization, while Puryer and Patel showed this rate to be 71%.<sup>14,15</sup> In our study, this rate was 72% in 3rd and 62% in 5th grades. While the study's 3rd-grade results parallel these studies, this rate was lower in the 5th grade. The high demand for specialization training in dentistry may be related to the perception that general dentistry's income and status are lower in society compared to specialty areas.<sup>16</sup> In addition, there may be different reasons for the desire for specialization education, which was observed at a lower rate in the 5th grade in our study. These reasons may include the long and challenging process of undergraduate education, the desire to achieve financial independence quickly, decreased motivation due to exam anxiety, and the fact that the department choice has not been made yet.

When the results of this survey research are examined, it is noteworthy that 5th-year students have a high rate of choosing faculty other than their own for their specialty training. This result can relate to the students receiving clinical internship training while answering the survey questions. Having their first positive/negative experiences with patients and clinical procedures in their faculty and their already intense and stressful internship periods may cause students to want to go somewhere different from their environment. Another reason for this result may be that they want to experience theoretical and practical training in other faculties.

One of the striking results of the study is the different department preferences of 3rd and 5th-grade students for their specialization training. 3rd grade students who did not receive clinical

**Table 1.** The responses and rates of 3rd-grade students to the survey questions prepared with a linear scale

	QUESTIONS	EVALUATION				
		1 (Strongly Disagre)	2 (Disagree)	3 (Undecided)	4 (Agree)	5 (Strongly Agree)
1	I am thinking of specializing in Dentistry.	1 (%1)	6 (%5.8)	22 (%21.2)	47 (%45.2)	28 (%26.9)
2	The undergraduate education at the faculty is aimed at the specialization exam.	8 (%7.7)	29 (%27.9)	50 (%48.1)	17 (%16.8)	0 (%0)
3	I must go to a private teaching institution for the specialization exam.	5 (%4.8)	13 (%12.5)	24 (%23.1)	28 (%26.9)	34 (%32.7)
4	I am considering choosing my faculty for specialization training in Dentistry.	6 (%5.8)	15 (%14.4)	49 (%47.1)	28 (%26.9)	6 (%5.8)
5	I am considering choosing different faculties for specialization training in Dentistry.	1 (%1)	10 (%9.6)	53 (%51)	32 (%30.8)	8 (%7.7)
6	The university is at the forefront of my choice of specialization training in dentistry.	2 (%1.9)	20 (%19.2)	44 (%42.3)	30 (%28.8)	8 (%7.7)
7	The department is at the forefront of my choice of specialization training in dentistry.	1 (%1)	2 (%1.9)	19 (%18.3)	49 (%47.1)	33 (%31.7)
8	The city is at the forefront of my choice of specialization training in dentistry.	6 (%5.8)	18 (%17.3)	30 (%28.8)	38 (%36.5)	12 (%11.5)

**Table 2.** The responses and rates of 5th-grade students to the survey questions prepared with a linear scale

	QUESTIONS	EVALUATION				
		1 (Strongly Disagre)	2 (Disagree)	3 (Undecided)	4 (Agree)	5 (Strongly Agree)
1	I am thinking of specializing in Dentistry.	3 (%2.9)	7 (%6.8)	29 (%28.2)	40 (%38.8)	24 (%23.1)
2	The undergraduate education at the faculty is aimed at the specialization exam.	27 (%26.2)	37 (%35.9)	30 (%29.1)	8 (%7.8)	1 (%1)
3	I must go to a private teaching institution for the specialization exam.	4 (%3.9)	10 (%9.7)	23 (%22.3)	36 (%35)	30 (%29.1)
4	I am considering choosing my faculty for specialization training in Dentistry.	23 (%22.3)	34 (%33)	26 (%25.2)	17 (%16.5)	3 (%2.9)
5	I am considering choosing different faculties for specialization training in Dentistry.	3 (%2.9)	7 (%6.8)	20 (%19.4)	48 (%46.6)	25 (%24.3)
6	The university is at the forefront of my choice of specialization training in dentistry.	2 (%1.9)	13 (%12.6)	31 (%30.1)	38 (%36.9)	19 (%18.4)
7	The department is at the forefront of my choice of specialization training in dentistry.	1 (%1)	3 (%2.9)	16 (%15.5)	45 (%43.7)	38 (%36.9)
8	The city is at the forefront of my choice of specialization training in dentistry.	5 (%4.9)	25 (%24.3)	32 (%31.1)	28 (%27.2)	13 (%12.6)

**Table 3.** Departments and rates preferred by 3rd and 5th-grade students in specialization training

DEPARTMENTS	EVALUATION	
	3rd Grade	5th Grade
Oral, Dental and Maxillofacial Radiology	% 1.9	% 3.9
Oral, Dental and Maxillofacial Surgery	% 22.1	%32
Orthodontics	% 29.8	%14.6
Pedodontics	%5.3	%8.7
Periodontology	%14.4	%16.5
Endodontics	% 5.3	% 5.8
Restorative Dentistry	%8.7	%3.9
Prosthetic Dentistry	% 12.5	% 14.6

internship training preferred the Orthodontics Department to a great extent. In contrast, term five students who received clinical internship training in all departments preferred the Oral and Maxillofacial Surgery Department to a high extent. When we look at this result, clinical internship training is a very decisive factor in post-graduation career planning. In their study, Dere et al. reported that the most preferred specialization field was the Department of Oral and Maxillofacial Surgery, followed by the Department of Orthodontics.<sup>4</sup> These are the two most preferred specialization departments in our study, too. Two departments are preferred more because methods requiring advanced training, such as fixed orthodontic treatment and orthognathic surgical treatment, which are not included in undergraduate education, are included in postgraduate practical training; the prestige of the preferred specialization, its financial return and access to continuous professional development, and meeting aesthetic expectations.<sup>6</sup>

When asked which of the city, university, and department criteria is more effective in their choice of specialization education, students from both grades reported that the department is more important. Although all dentists have equal authority after undergraduate education, specialized doctors prefer to do more specific work. Considering this situation, it is quite understandable that students give more importance to their department choices when planning their academic and clinical careers.

Researching how dentistry students' career plans change and what factors motivate their career choices is an essential study area for undergraduate and graduate dentistry education. Given this information, we believe the study's results will broaden the perspective. However, there are some limitations to this survey study: The study was conducted only on 3rd and 5th-year students of Selçuk University Faculty of Dentistry. However, some of the 3rd and 5th-grade students studying at the faculty did not answer the survey questions. In addition, we believe that conducting the same survey study in faculties in different regions and cities of the country will improve the results of the research and provide a more comprehensive perspective.

## Conclusion

Most dentistry students believe that training in specialization areas is necessary. Clinical internship training is an effective parameter in post-graduation career planning. Oral and Maxillofacial Surgery and Orthodontics were our study's most preferred specialization departments. For both 3rd—and 5th-grade students, the department was more effective than the city and university in determining their specialization training preferences.

## Author Contributions

Conceptualization : All Authors  
Methodology : All Authors  
Investigation : All Authors

Data Curation : All Authors  
Writing Original Draft : All Authors  
Review/Editing : All Authors

## Conflict of Interest

The authors declare that they have no conflict of interest.

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