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The Psychological and Professional Impact of Reducing the Dental Specialty Examination from Twice to Once Annually on Dentists and Dental Students A Pilot Study

Mehmet Kutluhan Uçuk

mkucuk@biruni.edu.tr

Biruni University

Begüm Aycan

Biruni University

Metahir Uğur Marangoz

Biruni University

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Abstract

This pilot survey evaluated dentists' and dental students' perceptions of reducing the Dental Specialty Examination (DUS) in Turkey from twice to once annually. A total of 428 participants completed demographic items and multiple-choice/Likert-type questions addressing DUS experience, examination frequency, psychological burden, academic motivation, economic concerns and alternative career planning. Associations between categorical variables were analyzed using Pearson's chi-square test, and power analysis confirmed that the sample was sufficient for detecting moderate associations. Most participants perceived a once-annual examination schedule as a potential source of increased anxiety, stress, fear of failure, perceived competition and financial uncertainty. Previous DUS participation was associated with educational status, indicating that the examination becomes especially prominent after graduation. Low confidence in alternative career plans suggested that specialty training is regarded by many participants as a pathway to professional and economic security. These findings indicate that changes in examination frequency may have academic, psychological and socioeconomic consequences, and highlight the need for stronger career guidance, examination preparation support and psychological counseling services in dental education.

Introduction

Specialization in dentistry is becoming increasingly important both for improving the quality of clinical practice and for deepening professional competence. In Turkey, one of the principal determinants of this specialization pathway is the Dental Specialty Examination (DUS). Students' attitudes toward this examination are closely associated with their career goals, academic self-confidence, examination anxiety, and perceptions of dental specialty fields. From the perspective of motivation and professional expectations, students' attitudes may be shaped by a broad range of related factors [1]. It has been reported that uncertainty regarding career planning increases as future-related anxiety rises, whereas specialty training is perceived by many students as a career step that provides professional security [2].

In recent years, preparation for DUS has become increasingly intensive among dental students, and the examination has come to be regarded as an important component of professional future planning even before graduation. At the same time, the competitive nature of the examination, the workload required for preparation, and its influence on the balance between clinical and theoretical training are known to shape students' attitudes. Recent studies have reported a marked increase in the desire for specialty training among dental students, with a substantial proportion structuring their postgraduate career plans around specialization [3]. Uncertainty regarding career goals may adversely affect students' psychological well-being, and significant associations have been demonstrated between specialization plans and mental health indicators [4]. The limited number of specialty training positions and the growing number of candidates may create an intense competitive environment, thereby influencing students' perceptions of and motivation toward the examination [5].

Although the literature includes studies evaluating student attitudes toward specialty examinations in the health sciences, studies that comprehensively address the social, psychological, and academic effects of DUS specifically within dentistry remain limited. In this context, it is important to systematically examine students' motivations, anxieties, expectations, and perceptions regarding the examination process. Furthermore, the suspension of new admissions to doctoral programs further strengthens the necessity and value of the present study.

The aim of this study was to evaluate dental students' attitudes toward DUS within a multidimensional framework, to analyze the dynamics influencing their specialty preferences, and to provide evidence that may guide educational policy.

Results

A total of 428 individuals were included in the study. Regarding age distribution, 43.8% of the participants were aged 19–22 years, 37.5% were aged 23–26 years, and 18.7% were aged 26 years or older. First- to third-year students constituted 40.3% of the sample, fourth- to fifth-year students 17.1%, recent graduates 30.4%, and individuals who had graduated more than five years previously 12.2%. In terms of geographic distribution, 46.1% of participants were from the Marmara Region, 21.1% from the Black Sea Region, and 13.8% from the Central Anatolia Region.

Overall, 27.5% of participants reported having previously taken DUS, whereas 72.5% stated that they had not previously taken the examination.

A substantial proportion of participants expressed a negative view regarding the statement that reducing the number of examinations would benefit residency training by allowing research assistant appointments to occur at longer intervals, thereby improving adaptation, circulation, and supervisory control. Specifically, 41.5% strongly disagreed and 28.9% disagreed with this statement, whereas 20.7% reported being undecided.

A total of 85.0% of participants strongly agreed with the statement, "The DUS preparation process is highly stressful and difficult, and I think reducing it to once a year would increase my anxiety, stress, and apprehension," while 9.4% agreed.

Regarding the statement, "If the number of examinations is reduced, I will have more competitors, and this negatively affects my motivation to study," 72.1% of participants strongly agreed and 15.7% agreed.

The majority of participants expressed a negative view toward the statement, "If the examination is held once a year, I will not need to study more and will be able to complete the process in a single attempt." In total, 63.6% strongly disagreed and 26.3% disagreed.

For the statement, "If the number of examinations is reduced, the time I need to study for a single examination becomes much longer, and I think I may no longer want to pursue specialty training," 45.2% of participants strongly agreed, 24.6% agreed, and 18.0% were undecided.

Regarding the statement, "I cannot work outside while preparing for the examination, and this causes financial loss. If the number of examinations is reduced, I am concerned that I will remain unemployed for a longer period," 75.2% of participants strongly agreed and 18.5% agreed.

In response to the statement, "My reason for taking the specialty examination is to attain the status of specialist, because without professional specialization there will be no material, moral, or hierarchical return," 52.2% of participants strongly agreed and 28.8% agreed.

For the statement, "Even if the examination is held once a year, I can still achieve a sufficient score and make a preference with good preparation," 33.8% of participants were undecided, 26.3% strongly disagreed, and 23.9% disagreed.

Regarding the statement, "Because the number of examinations is reduced, the fear of studying and failing stresses me and prevents me from focusing on the examination," 67.3% of participants strongly agreed and 23.5% agreed.

Most participants expressed a negative view toward the statement, "The number of examinations is not important; I always have another plan and can still continue my life comfortably." In total, 45.7% strongly disagreed, 27.9% disagreed, and 19.7% were undecided.

The analyses examined variations in students' attitudes toward DUS according to year of study, age, and geographic region.

A considerable proportion of students appeared to place DUS at the center of their career planning; however, intense competition and uncertainty related to the examination were also observed to constitute a psychological burden.

Discussion

Of the 428 participants included in the study, 43.7% were aged 19–22 years. When age groups and participants' regions were evaluated together, participation from the Central Anatolia Region was higher than expected in the 19–22 age group, whereas the 26 years and older group was more prominent among participants from the Marmara Region. This distribution is valuable in that the study included participants from different age and regional groups.

A legislative regulation was introduced regarding the reduction of DUS from twice to once annually [6]. Following subsequent feedback, a stay of execution was issued, and a decision was published indicating that the examination would continue to be held twice a year [7]. This process raised questions about how candidates would be affected academically, psychologically, and professionally if the examination were again administered only once annually. The suspension of new admissions to doctoral programs [8] has further increased the importance of DUS for dentists seeking to develop themselves within a specific department. The increasing number of graduates, the relatively unchanged number of available

positions, and the emergence of lower rankings despite higher net scores compared with previous years [9] indicate that gaining admission to specialty training is becoming increasingly difficult.

In the present study, a significant association was found between educational status and previous participation in DUS. The response indicating previous DUS participation was higher than expected among recent graduates and participants who had graduated more than five years earlier, whereas the response indicating no previous participation was more prominent among first- to third-year students. This finding suggests that DUS experience becomes particularly important after graduation and that the examination is perceived as a decisive stage in career planning.

Factors influencing students' orientation toward specialty fields include stress levels, the influence of role models, and the educational environment in which they are trained. Within the career resources model, environmental career resources constitute a second main dimension, and social career support is considered an important resource in explaining career stress. Strong support from students' surroundings during their career development processes may enhance career success and reduce career stress [10]. In this context, the present study suggests that confidence in alternative career plans may be more limited among individuals who have previously taken DUS. Indeed, a significant association was found between DUS participation status and the statement, "The number of examinations is not important; I always have another plan." The higher-than-expected frequency of "strongly disagree" responses among participants with DUS experience suggests that DUS may occupy a more central position in professional future planning among individuals who have experienced the examination.

Similarly, previous studies have reported that specialty training is perceived by students as a pathway that provides career security [2, 11, 3]. Institutional educational approaches and schools of thought, faculty attitudes, examinations, and examination formats may influence student performance through pressure and motivation [12]. More frequent examinations may improve student performance, while repeated exposure to content and regular feedback may contribute to consolidation of learning [13]. In the present study, a significant association was also found between the belief that one could achieve an adequate score with good preparation even if the examination were held once annually and responses regarding the presence of an alternative plan. This indicates that attitudes toward examination frequency are related not only to academic preparation but also to perceived professional security and alternative career planning.

In an era in which examinations may be regarded as a demanding endeavor requiring substantial effort, factors such as students' existing problems, financial difficulties, course load, and a challenging curriculum may contribute to increased stress during examination periods, in addition to the inherent stress of preparation itself. It has also been reported that students who are required to work because of financial pressures often work night shifts as examinations approach or during examination periods and experience insufficient sleep. This may adversely affect both examination performance and general health [14].

The findings of the present study also demonstrate that anxiety regarding a reduction in examination frequency is multidimensional. A significant association was found between the perception that DUS preparation is stressful and that reducing the examination to once annually would increase anxiety, stress, and apprehension, and the perception that an increased number of competitors would negatively affect motivation to study. Similarly, among participants who reported that the reduced number of examinations increased their fear of studying and failing, concerns about facing more competitors and reduced motivation were more pronounced. These findings suggest that administering the examination once annually is not necessarily perceived as relieving by some participants; rather, it may be perceived as a factor that increases the risk of failure and competitive pressure.

A significant association was also observed between the statement regarding inability to work while preparing for the examination and the resulting financial loss, and the statement that a reduction in examination frequency would create stress and difficulty focusing. This finding indicates that changes in the examination schedule do not produce solely academic consequences, but should also be evaluated together with economic concerns, work arrangements, concentration difficulties, and psychological burden.

The reduction of USMLE Step 1 from two sessions to one session, together with the implementation of assessment policies that are not centered on failure rather than score-based evaluation, has been considered to have potentially positive effects on student mental health. Broader discussions also exist regarding the general benefits of educational policy changes for student mental health [15]. Another study suggested that reducing the number of examinations from twice to once annually may decrease examination anxiety, improve overall mood, and contribute positively to academic performance [16]. However, the findings of the present study indicate that, in the specific context of DUS, reducing examination frequency is not perceived by all participants as a positive or relieving change. In particular, competition, fear of failure, financial loss, and low confidence in alternative career plans suggest that this change may constitute an additional source of stress for some candidates.

This study was conducted with fewer than 500 participants, which may limit the generalizability of the findings to the diversity of attitudes across different dental education institutions in Turkey. Nevertheless, the multicenter and broad participant profile is valuable for generating an overall understanding of the subject. In addition, the power analysis indicated that the current sample size was sufficient to evaluate moderate associations. However, larger samples may be required to detect small effect sizes more reliably.

Further studies using more in-depth and standardized measurement tools, with attention to cultural context and the educational system, are needed to understand the current dynamics of Turkish dental students' attitudes toward specialty examinations. It is expected that larger-scale studies, potentially supported by professional dental associations, will more reliably reveal nationwide trends and contribute meaningfully to future research.

Methods

The study protocol was approved by the Biruni University Ethics Committee (22.12.2025; Decision No: 2024-BÜAEK/16 – 01). All procedures involving human participants were performed in accordance with the Declaration of Helsinki and relevant institutional guidelines and regulations. This cross-sectional pilot survey included dentists and dental students in Turkey. Participants answered four demographic questions and ten multiple-choice/Likert-type questions regarding DUS. For each item, participants selected the single option that most closely reflected their view. The questionnaire evaluated previous DUS experience, perceptions of reducing examination frequency from twice to once annually, psychological burden, academic motivation, economic concerns and confidence in alternative career plans. The survey was administered anonymously, and no personally identifiable information was collected. Before accessing the survey questions, participants were informed about the aim and voluntary nature of the study and provided informed consent electronically. Participants who did not provide consent or who were not dentists or dental students were excluded.

Statistical analysis

The collected data were analyzed using SPSS software. Pearson's chi-square test was used to evaluate associations between categorical variables. The level of statistical significance was set at alpha = 0.05. Power analysis indicated that at least 250 participants were required to achieve 80% power for detecting moderate associations; the final sample of 428 participants was therefore considered sufficient for the primary analyses.

Inclusion criteria

Being a dentist in Turkey

Being a dental student in Turkey

Exclusion criteria

Refusal to provide consent or not being a member of the dental profession

Conclusions

Dental students' attitudes toward DUS reflect a multidimensional structure shaped by career expectations, psychological readiness, academic confidence, economic concerns, and perceptions of the examination system. The findings suggest that reducing DUS to once annually may be perceived not merely as an administrative change, but as a decision with direct consequences for students' professional futures.

Participants commonly believed that a lower examination frequency could increase stress, anxiety, perceived competition, fear of failure, and loss of motivation. Concerns regarding prolonged preparation, unemployment, and financial loss further indicate that a once-yearly examination may intensify psychological and economic burden rather than reduce pressure.

Specialty training was also perceived by many participants as a source of professional and economic security, particularly among those with previous DUS experience. Overall, these findings indicate that DUS-related attitudes should be evaluated together with career security, economic uncertainty, academic pressure, and psychological resilience. Future large-scale multicenter studies may help guide educational support systems and examination policies.

Declarations

Ethics approval

The study protocol was approved by the Biruni University Ethics Committee (22.12.2025; Decision No: 2024-BÜAEK/16 – 01). All procedures involving human participants were performed in accordance with the Declaration of Helsinki and relevant institutional guidelines and regulations.

Consent to participate

Participation was voluntary, and informed consent to participate was obtained electronically from all respondents before completion of the questionnaire. Before starting the survey, participants were provided with detailed information about the study. They were able to access the survey questions only after voluntarily agreeing to participate. Therefore, an additional consent form was not required, as all responses were provided by participants who had confirmed their voluntary consent

Additional information

Consent to publish

Not applicable. The manuscript does not contain any identifiable individual data, images, or personal clinical information requiring separate consent for publication.

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Author Contribution

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Data Availability

The anonymized dataset supporting the findings of this study is available from the corresponding author upon reasonable request, subject to ethical and institutional restrictions

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