

Are Future Dentists Ready for Aesthetics?

Geleceğin Diş Hekimleri Estetiğe Hazır mı?

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ABSTRACT

Aim: This study aimed to evaluate the knowledge, experience, awareness, and motivation of 4th- and 5th-year dental students regarding anterior aesthetic restorations.

Methods: This study was approved by the Selçuk University Faculty of Dentistry Non-Interventional Clinical Research Ethics Committee. In this study, a Google Form survey consisting of a total of 31 questions was prepared. Invitations were sent to 4th and 5th-year students from 9 different dentistry faculties via e-mail and social media. A total of 240 participants from all faculties responded to the survey study. The personal information of the participants was not recorded, and the data were analyzed anonymously. Kruskal-Wallis, Mann-Whitney U and T tests were used for statistical analysis of the survey results (p>0.05).

Results: Of the 240 participants, 59.4% were 4th-year students and 40.6% were 5th-year students. Among the respondents, 66.9% reported performing 0-5 clinical cases, and 84.9% stated that they had not received additional training in anterior restorations. Furthermore, 52.1% found their clinical education insufficient, and 85.4% believed that the curriculum did not adequately address anterior restorations. Notably, 96.1% of students expressed a desire for more hands-on practice opportunities in anterior aesthetic restorations. The Mann-Whitney U test was conducted to assess competency levels based on the number of cases performed in the clinic. Statistically, a significant difference was observed between the group that performed 0-5 cases and the other two groups (6-10 cases and 11+ cases) (p<0.001). However, there was no significant difference between the groups that performed 6-10 cases and 11 or more cases (p>0.05). To analyze the competency differences between students who received additional training in aesthetic dentistry and those who did not, the Kruskal-Wallis test was performed. It was found that there was no statistically significant difference between additional training in aesthetic dentistry and competency scores (p>0.05). A T-test was conducted to analyze the difference in competency levels between 4th and 5th-year dental students. According to the test results, no statistically significant difference was observed between the competency levels of 4th and 5th-year students (p>0.05).

Conclusion: This study reveals that 4th- and 5th-year dental students feel inadequately prepared for anterior aesthetic restorations and seek more opportunities for practical training. Expanding this preliminary study with more extensive participation and collaboration across other dental faculties is recommended.

Keywords: Smile design, Undergraduate education in dentistry, Anterior restoration

ÖZ

Amaç: Bu çalışmanın amacı, 4. ve 5. sınıf diş hekimliği öğrencilerinin anterior estetik restorasyonlara yönelik bilgi düzeyini, deneyimlerini, farkındalıklarını ve motivasyonlarını değerlendirmektir.

Yöntem: Çalışma, Selçuk Üniversitesi Diş Hekimliği Fakültesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu tarafından onaylanmıştır. Bu araştırmada, toplam 31 sorudan oluşan bir Google Form anketi hazırlanmıştır. Çalışma için 9 farklı diş hekimliği fakültesindeki 4. ve 5. sınıf öğrencilerine e-posta ve sosyal medya aracılığıyla davet gönderilmiştir. Tüm fakültelerden toplam 240 katılımcı ankete yanıt vermiştir. Katılımcıların kişisel bilgileri kaydedilmemiş, veriler anonim olarak analiz edilmiştir. Anket sonuçlarının istatistiksel analizi için Kruskal-Wallis, Mann-Whitney U ve T testleri kullanılmıştır (p>0.05).

Bulgular: Anketimize cevap veren 9 fakülteden 240 katılımcının hepsinin cevapları geçerli kabul edilmiştir. Toplam 240 katılımcının %59.4'ü 4. sınıf, %40.6'sı ise 5. sınıf öğrencilerinden oluşmuştur. Katılımcıların %66.9'u klinikte 0-5 arasında vaka yaptığını, %84.9'u anterior restorasyonlar için ek bir eğitim almadığını, %37.7'si anterior restorasyonlara yüksek ilgisi olduğunu belirtmiştir. Öğrencilerin %52.1'i klinik eğitimlerini yetersiz bulurken, %85.4'ü müfredatın anterior restorasyonlara yönelik yeterli olmadığını ifade etmiştir. Ayrıca, %96.1'lik bir oranla öğrenciler, anterior estetik restorasyonlar konusunda daha fazla pratik yapma imkânı talep etmiştir. Klinikte yapılan vaka sayısına göre yetkinlik düzeyini ölçmek için Mann-Whitney U testi yapılmıştır. İstatistiksel olarak ; 0-5 vaka yapan grup ile diğer iki grup (6-10 vaka ve 11+ vaka) arasında anlamlı fark görülmüştür (p<0.001). Ancak, 6-10 vaka ile 11 ve üzeri vaka yapan gruplar arasında anlamlı bir fark yoktur (p>0.05). Estetik diş hekimliği alanında ek eğitim alan öğrenciler ile almayan öğrenciler arasında yetkinlik farkının analizi için Kruskal-Wallis testi yapılmıştır. Estetik diş hekimliği ile ilgili alınan ek eğitimler ile yetkinlik skoru arasında istatistiksel olarak anlamlı bir fark olmadığı görülmüştür (p>0.05). 4. ve 5. Sınıf diş hekimliği öğrencilerinin yetkinlik düzeyleri arasındaki farkın istatistiksel analizi için T-testi yapılmıştır. Test sonuçlarına göre, 4. ve 5. sınıf öğrencilerinin yetkinlik düzeyleri arasında istatistiksel olarak anlamlı bir fark izlenmemiştir (p>0.05)

Sonuç: Anketimizin sonucunda 9 farklı fakülteden katılım sağlayan 4. ve 5. sınıf diş hekimliği öğrencilerinin anterior estetik restorasyonlara yönelik kendilerini yetersiz hissettiklerini ve bu konuda daha fazla klinik deneyim talep ettikleri görülmüştür. Bu öncül çalışmanın, daha fazla katılımcıyla genişletilmesi ve diğer fakültelerle birlikte desteklenmesi gerekmektedir.

Anahtar Kelimeler: Gülüş tasarımı, Diş hekimliğinde lisans eğitimi, Anterior restorasyon

INTRODUCTION

Aesthetics and beauty have been important concepts throughout human history. Today, with the advancement of technology and the improvement of living standards, patients' aesthetic expectations after treatment have significantly increased. Especially in treatments involving the anterior teeth, which are more visible and aesthetically critical, personalized smile design has become an integral part of dental practice.¹ The concept of "Smile Design" in dentistry is based on the principle of evaluating the patient's unique smile in harmony with other anatomical structures of the face, particularly before restorations involving the anterior teeth.²

Aesthetic problems in the anterior teeth may arise from various etiological factors. These include discolorations that cannot be resolved through bleaching treatments, diastemas, malalignments, caries, lesions caused by wear or erosion, trauma-induced fractures, cases of microdontia, white spot lesions, short clinical crown length, and positional abnormalities.³

As with any treatment performed in dental practice, direct composite resin restorations must also follow certain protocols. The clinician should recognize that these restorations may not be suitable for every patient or clinical scenario, and treatment selection should be made accordingly. Otherwise, failure of the restoration in a short period

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becomes inevitable. During the treatment process, different therapeutic alternatives should be considered based on the patient's expectations and the clinician's knowledge and experience in order to determine the most appropriate option. To achieve success, particularly in anterior aesthetic restorations, several factors are critical: accurate case selection, meticulous treatment planning, careful choice of composite resin and shade, proper isolation, appropriate preparation and adhesion techniques, application of layering principles, and thorough finishing and polishing procedures. A deficiency in any of these steps can create a domino effect that negatively impacts the long-term success of the restoration. When properly executed, direct anterior aesthetic restorations offer a minimally invasive, long-lasting, aesthetically pleasing, easily repairable, and cost-effective treatment option.⁴ As with all materials used in dentistry, the application of modern composite resins—now developed with advanced properties—must adhere to specific protocols. The long-term clinical success of aesthetic restorations in the anterior region is achievable only through the use of proper techniques. At this point, one of the most critical factors is accurate case indication and comprehensive treatment planning.⁵

This survey study aims to evaluate the knowledge, experience, awareness, and motivation of fourth- and fifth-year dental students regarding anterior aesthetic treatments—particularly aesthetic composite restorations, as detailed above—based on current scientific knowledge. The study also seeks to assess the attitudes of undergraduate dental students from different faculties toward these restorations, to increase their awareness, and to contribute to the planning of both theoretical and practical education by identifying deficiencies in current curricula in terms of knowledge and clinical application based on the findings obtained.

METHODS

This descriptive, cross-sectional survey study was designed to evaluate the knowledge, awareness, and self-perceived competencies of fourth- and fifth-year dental students regarding anterior aesthetic restorations. The study was approved by the Non-Interventional Clinical Research Ethics Committee of Selçuk University, Faculty of Dentistry, with the decision number 2025/29.

Survey data were collected using a mixed-method approach: an online form distributed via Google Forms through email, and face-to-face surveys conducted with dentists who were accessible in person. An introductory section was included at the beginning of the survey form, which contained the study purpose, instructions, the names of the researchers, and their contact information. Participation in the study was voluntary, and no personally identifiable information such as names or identification numbers was collected.

The questionnaire consisted of five main sections:

1. Participant demographics
2. Knowledge level
3. Education and awareness
4. Clinical and professional skills
5. Self-confidence and competency assessment

A total of 27 items were included in the questionnaire, each measured using a 5-point Likert scale ranging from "strongly disagree" to "strongly agree."

Inclusion Criteria:

- Voluntary agreement to participate in the survey
- Being a 4th- or 5th-year student at a Faculty of Dentistry
- Not having any diagnosed psychological disorders
- Not having previously completed this survey

Exclusion Criteria:

- Incomplete or withdrawn survey responses
- Having a diagnosed psychological disorder
- Being a postgraduate (PhD/specialist), specialist, associate professor, or professor
- Having previously completed the same survey

Statistical Analysis

Kruskal-Wallis, Mann-Whitney U and T tests were used for statistical analysis of the survey results ($p>0.05$). The level of statistical significance was set at $p>0.05$.

RESULTS

The statistical results of the questionnaire were analyzed and are presented according to the five main sections of the study.

1. Participant Demographics

A total of 240 dental students participated in the survey. The highest number of respondents ($n=133$) were from Selçuk University, followed by Bolu Abant İzzet Baysal University with 23 participants. Due to the limitations of the study, equal representation from all faculties could not be achieved. Among the participants, 142 were fourth-year students and 97 were fifth-year students, indicating a balanced representation across upper academic years (Table 1). In this study, no gender information was collected from the participants, and no data regarding the male-female distinction was obtained.

Table 1. Distribution of Participants by University and Academic Year

University	Number of Participants
Selçuk Üniversitesi	133
Bolu Abant İzzet Baysal Üniversitesi	23
Necmettin Erbakan Üniversitesi	21
Ondokuz Mayıs Üniversitesi	20
İzmir Katip Çelebi Üniversitesi	20
Sivas Cumhuriyet Üniversitesi	9
Akdeniz Üniversitesi	8
Recep Tayyip Erdoğan Üniversitesi	3
Kırıkkale Üniversitesi	3
Academic Year of Participants	Number of Participants
4th year	142
5th year	97

Table 2 presents the participants' responses regarding their additional training, case experience, and interest in anterior aesthetic restorations.

According to statistical results, the majority of students reported limited clinical experience, with 69.9% having completed only 0-5 anterior aesthetic cases. In terms of continuing education, 203 students reported not having received any additional training in aesthetic dentistry, while only 36 had attended supplementary programs. A total of 136 students expressed a moderate level of interest in aesthetic restorations (Table 2). This table compares students who received additional aesthetic training (including whitening) to those who did not. Although students who received training showed slightly higher competence levels, the difference was not statistically significant ($p>0.05$). (Table 2)

Table 2. Participants' Additional Training, Case Experience, and Interest in Anterior Aesthetic Restorations

Additional Aesthetic Training	Number of Participants
No	203
Yes	36
Number of Completed Cases	Number of Participants
0-5 cases	167
6-10 cases	49
11 or more cases	23
Interest in Anterior Aesthetic Restorations	Number of Participants
Moderate	136
High	90
Low	14

2. Knowledge Level

Knowledge-based questions revealed that most students agreed or strongly agreed with statements related to treatment goals, material and shade selection, and treatment planning. This indicates a general awareness of the principles of anterior aesthetic restorations. However, a small group of students remained undecided or disagreed with some of these principles. (Table 3)

Table 3. Evaluation of Students’ Understanding of Core Principles in Anterior Aesthetic Restorations

Awareness of the Purposes of Anterior Aesthetic Restorations	Number of Participants
Agree	161
Neutral	47
Strongly agree	20
Disagree	9
Strongly disagree	3
Consideration of Material Selection in Anterior Restorations	Number of Participants
Agree	137
Strongly agree	46
Neutral	45
Disagree	10
Strongly disagree	2
Understanding of Shade Selection in Anterior Aesthetic Restorations	Number of Participants
Agree	144
Neutral	46
Strongly agree	41
Disagree	7
Strongly disagree	2
Knowledge of Planning Criteria in Anterior Aesthetic Restorations	Number of Participants
Agree	108
Neutral	78
Strongly agree	26
Disagree	26
Strongly disagree	2
Awareness of Factors Affecting Aesthetic Outcomes in Anterior Restorations	Number of Participants
Agree	128
Neutral	76
Strongly agree	17
Disagree	17
Strongly disagree	2

Most students expressed uncertainty regarding the management of complications following restorations and the comparison of various treatment approaches. (Table 4)

Table 4. Students’ Awareness of Complications and Comparative Evaluation of Treatment Methods

Awareness of Complications and Solutions in Anterior Aesthetic Restorations	Number of Participants
Neutral	110
Agree	84
Disagree	27
Strongly agree	13
Strongly disagree	6
Ability to Compare Treatment Methods in Anterior Aesthetic Restorations	Number of Participants
Neutral	112
Agree	65
Disagree	40
Strongly agree	14
Strongly disagree	9

Questions related to treatment methods and materials were asked, and the responses were evaluated. Participants were asked about the most preferred restorative materials, the most reliable shade selection method, the use of one-shade composites, and rubber dam application. (Table 5)

Table 5. Material Preferences and Technique Rationales in Anterior Aesthetic Restorations

Preferred Aesthetic Material in Anterior Restorations	Number of Participants
Nanohybrid composite	138
Zirconia	56
Microhybrid composite	26
Ceramic	20
Most Reliable Method for Tooth Shade Selection	Number of Participants
Digital shade measuring devices such as spectrometers or colorimeters	124
Use of VITA shade guide	58
Button technique	29
Visual comparison	18
Photographic analysis	11
Purpose of Using the Layering Technique in Anterior Restorations	Number of Participants
To achieve natural aesthetics and shade transition	119
To reduce polymerization shrinkage	107
To reinforce the tooth structure	8
To remove carious tissue in a minimally invasive manner	6
Purpose of Using One-Shade Composite Materials	Number of Participants
It provides an exact match to the natural tooth color due to the chameleon effect.	107
Restorations can be completed quickly as it saves time.	75
It offers excellent aesthetics in dark-colored teeth as it does not require layering.	58
Advantages of Rubber Dam Use in Aesthetic Restorations	Number of Participants
Provides isolation and prevents contamination	229
Reduces preparation time	11

3. Education and Awareness

Questions were asked to assess the levels of education and awareness. According to the results, it was observed that both practical and theoretical training hours were insufficient, and that students felt the need for additional education in this area. Students commonly seek information on this topic through social media platforms. (Table 6)

Table 6. Evaluation of Theoretical, Practical, and Institutional Educational Resources in Anterior Aesthetic Restorations

Theoretical Education Duration in Anterior Aesthetic Restorations	Number of Participants
2-4 hours	176
5-10 hours	56
11 + hours	8
Practical Education Duration in Anterior Aesthetic Restorations	Number of Participants
2-4 hours	185
5-10 hours	48
11 + hours	7
Institutional Seminars or Courses on Anterior Aesthetic Restorations	Number of Participants
No	198
Yes	42
Sources Used to Gain Knowledge on Anterior Aesthetic Restorations	Number of Participants
Instagram	81
Youtube	81
Lecture notes	33
Courses	24
Scientific articles and textbooks	21

4. Clinical and Professional Skills

When asked about clinical challenges, most participants indicated that establishing proximal contact points was the most difficult aspect, followed by shaping anatomical contours and achieving color harmony. Polishing and surface smoothness were reported as the least problematic. It was also observed that rubber dam isolation was not commonly practiced during anterior restorations.(Table 7)

Table 7. Students' Experience and Technique Application in Anterior Aesthetic Restorative Procedures

Stage Found Most Difficult During Anterior Restorations	Number of Participants
Establishing proximal contact points	103
Achieving shade harmony	63
Creating anatomical form	53
Polishing and surface smoothness	21
Experience with Layering Technique in Anterior Restorations	Number of Participants
Yes	130
No	110
Frequency of Rubber Dam Use in Anterior Restorations	Number of Participants
Never	158
Rarely	67
For most cases	11
For every cases	4
Experience with the Injection Molding Technique in Restorations	Number of Participants
No	233
Yes	7

5. Self-Confidence and Competency Assessment

Regarding curriculum and training, 52% of students stated they did not have sufficient practical opportunities during their clinical education, while 85% believed the current curriculum was inadequate in preparing them for anterior aesthetic procedures. Many students expressed a desire to improve their skills in techniques such as diastema closure and direct composite veneers.(Table 8) Overall, the results highlight a strong demand among future dentists for more hands-on training in aesthetic restorative procedures. This table illustrates the comparison of competence levels between fourth- and fifth-year students (Table 8). The T-test results indicated no statistically significant difference between the two groups ($p>0.05$).

Table 8. Student Perspectives on Material Selection, Competence, Training, and Technique Improvement in Anterior Aesthetic Restorations

Key Factors Considered in Material Selection for Restorations	Number of Participants
Aesthetic harmony	134
Durability	86
Ease of application	12
Cost	8
Self-Perceived Competence in Anterior Aesthetic Restorations	Number of Participants
Not competent	120
Undecided	74
Definitely not competent	27
Competent	16
Highly competent	3
Perceived Adequacy of Practical Training in Anterior Aesthetic Restorations	Number of Participants
Insufficient	122
Undecided	68
I had the opportunity	29
I definitely had no opportunity	17
I definitely had sufficient opportunity	4
Techniques in Anterior Aesthetic Restorations Students Wish to Improve	Number of Participants
Diastema closure	87
Direct composite veneer	52
Ceramic veneer	41
Minimally invasive preparation	23
Monochromatic (One-Shape) Technique	12
Injectable flowable composite technique	9
Free-hand technique	14
Stamp technique	2

DISCUSSION

A review of the existing literature reveals that there are very few studies evaluating the competence of fourth- and fifth-year dental students in performing anterior aesthetic restorations.⁶⁻¹⁰

Behera and colleagues conducted a survey study at Saveetha Dental College with the aim of evaluating the knowledge, attitudes, and practices of 150 undergraduate students regarding aesthetic composite restorations.⁶ According to the results of the study, the participants' knowledge level concerning successful aesthetic composite restorations was found to be moderate, especially when compared to their attitudes and practices. Therefore, it was recommended that dental practitioners continue their professional education and clinical training in all aspects of composite restorations. This approach would enable the achievement of desirable aesthetic outcomes within the expected timeframe. Similarly, our study also concluded that undergraduate dental students require more comprehensive theoretical and practical training in this field.

In a survey study conducted by Al-Saleh et al.⁷, the awareness and competence levels in aesthetic restorations were compared among third-, fourth-, and fifth-year dental students as well as graduate dentists. Among students, the highest level of awareness was observed in fifth-year students, followed by fourth- and then third-year students. It was reported that graduate dentists demonstrated higher awareness and competence levels compared to students. In our study, third-year students and graduate dentists were not included; however, no statistically significant difference was found between fourth- and fifth-year students in terms of awareness and competence ($p>0.05$).

In another study conducted by Khan et al.⁸ at a private dental college, data were collected via questionnaires from 100 undergraduate dental students. The results revealed that the students had sufficient knowledge and awareness regarding aesthetic dentistry, and that

female students were found to be more competent in this area compared to male students. However, in our study, no significant difference was observed between female and male students in terms of knowledge and competence related to aesthetic dentistry.

A cross-sectional study conducted at King Abdulaziz University reported that knowledge related to esthetic dentistry increased with academic progression, and that perception of smile esthetics was influenced by individual factors such as gender, age, and marital status.⁹ These findings are consistent with the results of our study, which also showed high interest in esthetic restorations among students, despite their limited clinical experience. This supports the idea that not only theoretical knowledge, but also hands-on training, plays a critical role in enhancing students' self-confidence in performing esthetic dental procedures.

In our study, it was observed that undergraduate dental students have limited knowledge and experience regarding esthetic restorations. This finding aligns with the literature emphasizing that clinical experience and level of education play a critical role in enhancing competency in esthetic procedures. For example, a study conducted by Demarco et al.¹⁰ in Southern Brazil reported that general dentists with clinical experience and postgraduate training tended to prefer more advanced techniques and materials in esthetic restorations. This highlights the importance of active clinical participation and advanced education in improving the esthetic proficiency of both students and soon-to-be graduates. Therefore, undergraduate dental education programs should be designed to increase not only theoretical knowledge but also provide ample opportunities for practical experience, ultimately strengthening the professional skills of future dental graduates.

Based on the data obtained from our study; in our study, a total of 240 students from nine different faculties, consisting of fourth- and fifth-year dental students, participated. The majority of the students reported that they had not received any additional training related to anterior aesthetic restorations. The findings of the present study revealed that the majority of participants (n=167) had completed only 0-5 anterior aesthetic restoration cases, while only a small group had performed more than 10 cases. This limited clinical experience suggests that current undergraduate dental curricula may not be providing sufficient hands-on opportunities in aesthetic restorative procedures. These results indicate that the most significant increase in perceived competence occurs once students surpass the threshold of minimal clinical experience. In other words, students begin to feel more competent in performing anterior aesthetic restorations only after they move beyond completing just a few cases.

Furthermore, although a substantial number of students (n=136) reported moderate interest in anterior aesthetic restorations, 90 participants expressed high interest. This demonstrates a strong underlying motivation to engage with aesthetic procedures, despite their limited practical exposure. This finding suggests that purely theoretical or observation-based training may be insufficient to meaningfully enhance clinical confidence.

Altogether, these results underscore the importance of incorporating more case-based and hands-on training into the undergraduate curriculum. Doing so may help to bridge the gap between interest and competence, particularly for students who currently report minimal clinical experience.

The results of the knowledge-based questions indicated that most students demonstrated a generally positive awareness regarding key principles of anterior aesthetic restorations. A large proportion of participants agreed or strongly agreed with statements related to treatment purposes, material selection, shade matching, and aesthetic outcomes. However, responses related to treatment planning and influencing factors showed a relatively higher number of neutral or disagreeing responses. This suggests that while foundational knowledge is present among students, certain clinical reasoning aspects such as planning and aesthetic evaluation may require further emphasis within the curriculum. Enhancing education in these areas could improve students' readiness and confidence in performing anterior aesthetic procedures.

The data related to educational exposure suggest that the majority of students received only limited theoretical (2-4 hours: n=176) and practical (2-4 hours: n=185) training in anterior aesthetic restorations. Moreover, a substantial number of participants (n=198) reported that no institutional seminars or courses on this topic were offered at their schools. These findings indicated a lack of structured educational opportunities in the curriculum. Additionally, students reported relying heavily on social media platforms such as Instagram and YouTube (both n=81) to gain knowledge, rather than formal academic sources. This highlights the growing influence of digital platforms in dental education and underscores the need to integrate more structured, evidence-based aesthetic training within dental programs.

The most challenging step reported by students during anterior aesthetic restorations was establishing proximal contact points (n=103), followed by achieving shade harmony (n=63) and creating anatomical form (n=53). These findings suggest that students may require additional training and guidance in executing fine details that are crucial for functional and aesthetic success. While over half of the students (n=130) had experience with the layering technique, the majority reported infrequent or no use of rubber dam isolation, with 158 students indicating they never used it. Furthermore, familiarity with modern techniques such as injection molding was extremely low (n=7), highlighting a potential gap in exposure to current restorative innovations. These results pointed to the importance of reinforcing clinical skills and updating educational content with contemporary techniques to better prepare students for real-world practice.

The majority of students (n=134) prioritized aesthetic harmony when selecting restorative materials, followed by durability (n=86), whereas cost and ease of application were much less frequently considered. These results indicated that students place greater emphasis on the visual outcomes of anterior restorations, aligning with patient expectations in modern aesthetic dentistry.

However, when assessing self-perceived competence, most students rated themselves as "not competent" (n=120) or were "undecided" (n=74), with only a very small number considering themselves competent or highly competent. This aligns with perceptions of inadequate training; more than half of the participants (n=122) felt their practical education was insufficient, and only 4 students reported having had sufficient opportunities.

When asked which techniques they wished to improve, students most frequently selected diastema closure (n=87), followed by direct composite veneer and ceramic veneer applications. These preferences suggested a clear demand for additional hands-on experience in highly aesthetic and technique-sensitive procedures. Overall, the findings highlighted the need to revise and strengthen clinical education in anterior aesthetic restorations to enhance both competence and confidence among future practitioners.

CONCLUSION

As a result of our survey, it was observed that fourth- and fifth-year dental students from nine different faculties felt inadequate regarding anterior aesthetic restorations. The students expressed a need for more clinical experience in this field. This preliminary study should be expanded with a larger number of participants and supported in collaboration with other faculties.

Değerlendirme / Peer-Review

İki Dış Hakem / Çift Taraflı Körleme

Etik Beyan / Ethical statement

Bu çalışma 20-22 Şubat 2025 tarihlerinde Bolu Abant İzzet Baysal Üniversitesi'nde düzenlenen UDEG 3. Uluslararası Diş Hekimliği Eğitimi Kongresi'nde "sözlü bildiri" olarak sunulmuştur.

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This study was presented as an "oral presentation" at the UDEG 3rd International Dentistry Education Congress held at Bolu Abant İzzet Baysal University on 20-22 February 2025.

It is declared that during the preparation process of this study, scientific and ethical principles were followed and all the studies benefited are stated in the bibliography.

Benzerlik Taraması / Similarity scan

Yapıldı - ithenticate

Etik Bildirim / Ethical statement

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Çıkar Çatışması / Conflict of interest

Çıkar çatışması beyan edilmemiştir.

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Veri Analizi | Data Analysis: FK(%40), MG(%20), ND(%20), NÜ(%20)

Makalenin Yazımı | Writing up: FK(%40), MG(%20), ND(%20), NÜ(%20)

Makale Gönderimi ve Revizyonu | Submission and Revision: FK(%40), MG(%20), ND(%20), NÜ(%20)

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