

Research Article

Do Female and Male Dental Students Have Different Perspectives of Professional Activity in Their Offices?

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Abstract

Background: One of the concerns of dental students is the decision to pursue further studies in specialized programs or to work as general dentists. This study aimed to assess the interest of final-year dental students at Babol University of Medical Sciences in performing various treatments in a general dental practice in the future.

Methods: In this descriptive-analytical study, a questionnaire was distributed among 100 final-year dental students at Babol University of Medical Sciences, inquiring about demographic characteristics, interest in performing various treatments in the future, and methods for acquiring more skills. Data were analyzed using SPSS software version 22 and statistical tests including T-Test, Chi-Square, and Mann-Whitney Test, with a significance level of $P < 0.05$.

Results: Female students showed a greater inclination toward continuing their education ($p=0.045$), while male students expressed more interest in establishing a general dental practice and performing specialized treatments in the future ($p=0.015$). Half of the students considered the general dental education adequate, and participation in private sector workshops was the most favored method for skill acquisition. Interest in pediatric dental procedures was higher among female students ($p=0.000$), while male students preferred surgical ($p=0.003$) and prosthetic treatments ($p=0.007$).

Conclusions: According to the study results, interest in various treatments depends on the different sex of the students. It is suggested to offer optional supplementary courses based on students' interests in their final semester to enhance skill acquisition.

Keywords: Dental Students, Motivation, Treatment, Education.

1. Introduction

Studies show that there is a direct relationship between the level of interest and success in each individual's field of activity [1]. People's interest in their career field makes them feel more respon-

sible and effective in this field, and in the medical field, they provide better health care to patients and improve the health level of the community [2]. In a study conducted on students entering the field of dentistry, high professional status and better income were

among the motivations for choosing this field [3]. Also, in studies conducted among dental students from different universities, a group of students were interested in continuing their studies in specialized fields, motivated by higher income, greater and better access to job conditions, and higher social status. At the same time, another group was not interested in continuing their studies in specialized fields due to fatigue from studying, the difficulty of the entrance exam for specialized fields, and the desire to start a career without interruption after graduation [4,5].

Moreover, it is seen that general dentists are interested in being able to perform scientific and up-to-date treatments that are demanded by patients with appropriate quality in their offices. According to the curriculum of general dentistry education, a group of treatments are included in the educational scope of this course, which are practically insufficient for the activities of offices in some cases and require a revision of the curriculum [6]. Currently, general dentists improve their capabilities by further studies and attending various workshops after graduation so that they can be responsive to their patients, but some of them may use social media to amplify information, which may not always be reliable [7]. Our aim of this study was to measure the interest of final-year dental students in performing various treatments in their future offices and to evaluate different methods of acquiring skills and, based on the results obtained, to be able to provide suggestions to the responsible authorities in the field of reforming the educational curriculum. We also wanted to assess whether there was a difference in the views of female and male students, or whether students who paid tuition had a different opinion than those who were in governmental program. It should be noted that the students in the study were the first group to be trained with the last curriculum.

2. Methods

The present descriptive-analytical study was conducted on 100 final-year dental students of Babol University of Medical Sciences in 2023 using the census sampling method after obtaining the ethics code (IR.MUBABOL.HRI.REC.1401.231) from the Research Ethics Committee. Data was collected using a researcher-made questionnaire, and several dental specialists in restorative dentistry, endodontics, periodontics, pediatric dentistry, pathology, orthodontics, oral and maxillofacial surgery, and prosthodontics confirmed the face validity of the questionnaire. Various dental treatments that could be performed in general dental offices were listed, and according to the educational curriculum, treatments that were taught in general courses were separated from treatments that were part of specialized courses. Also, by collecting field data from dentists, the most common methods of acquiring new skills were obtained and included in the questionnaire. The reliability of the questionnaire also was measured. Cronbach's alpha for specialized fields were 0.686 (oral medicine), 0.734 (orthodontics), 0.749 (restorative dentistry), 0.823 (periodontics), 0.836 (oral and

maxillofacial surgery), 0.849 (endodontics), 0.874 (prosthodontics), and 0.885 (pediatric dentistry). The questionnaire is available in supplementary material section. A list of students from different years was obtained from the Education Office of Babol University of Medical Sciences. The research questionnaire was provided to students in various situations, such as classrooms and clinical sections, and questionnaires were collected after completion. Students participated in the project if they agreed. More than 90 percent of last-year students participated in the project. The questionnaire was designed in different sections. The first part included demographic information such as age and sex and also how the individual entered the university (governmental program vs non-governmental program).

In section A, willingness to continue education in a specialized field, inclination toward working as a general dentist, level of interest in dentistry, evaluation of general dentistry training course, and interest in performing specialized treatments were asked from students.

The section B of the questionnaire investigated the methods of acquiring specialized treatment skills, designed in four items, scoring from one to five as Likert scale. In this section, the mean score (ranging from one to five based on Likert scale) of the four intended methods and the highest and lowest-scoring methods selected by the students were reported.

The section C of the questionnaire was related to the student's level of interest in different future treatments in general dental clinics conducted by general dentists or those that nowadays are routinely performed in clinics, which included 65 five-score items (Likert scale) (the questionnaire can be accessed in the attachment).

Various treatments were categorized in different parts, and those in each specialized field were separated into general and specialized groups based on whether they were trained in the general course. The classification was according to the general dentistry curriculum [8]. Eventually, the cumulative scores of treatments in each field were compared with others. Table 1 specifies which field each question is related to (for example restorative dentistry, orthodontics,...) and whether they are in the group of treatments taught in the general dentistry curriculum or whether they are specialized treatments. Treatments that overlap in different fields were placed in two or more groups.

The section C, which included 65 questions, had scores between one and five. The mean score of the 65 questions for each specialized field was reported as the level of interest (Table 1). The highest and lowest levels of interest in specialized treatments and specialized fields that students selected are presented.

Specialized Field	Specialized Treatment	General Treatment
Restorative Dentistry	1-6-7-8-10-11	2-3-4-5
Endodontics	27-28-29-30-31	23-24-25-26

Orthodontics	61-62	60
Pediatric Dentistry	39-40	32-33-34-35-36-37-38-42
Oral and Maxillofacial Surgery	31-51-57-59	42-43-44-49-50
Periodontics	51-57-58-59	52-53-54-55-56
Oral Medicine	41-45-46-63-64-65	47
Prosthodontics	7-8-10-11-22	9-12-13-14-15-16-17-18-19-20-21
Oral and Maxillofacial Radiology		48

Table 1: Types of Treatments Categorized by Field and Level

2.1. Statistical Analysis

Data was analyzed using SPSS software version 22. The descriptive statistics were presented as quantitative data using mean and standard deviation. The t-test and Chi-square test were utilized to investigate the intended relationships. The Mann-Whitney test and t-test were used to find the factors associated with the level of interest and assess the methods of achieving skills. Tests with p-values lower than 0.05 were considered statistically significant.

3. Results

The target group in this study was final year dental students who were trained with the new curriculum. More than 90% of the students participated in the study and care was taken to ensure that all questions were answered completely. This study examined 51 female and 49 male students (n = 100). Regarding the admission process into the School of Dentistry, 77 students were in governmental program (tuition-free), while 23 were in non-governmental program (tuition-paying). The students were between 23 and 34, with a mean age of 25.24 ± 2.4 .

Cronbach's alpha was used to confirm the reliability of the questionnaire questions, and it was over 0.686 for all questions. Since the questions were on a five-score scale, the mean score for each question was calculated.

The mean score for students' interest in continuing education in specialized fields was 2.8 ± 1.2 , and female students' interest in continuing education was higher than male students ($p = 0.045$). There was no significant difference between the students in the tuition-free and tuition-paying programs regarding this question.

In case of failure in entering the specialized programs for any reason, most students demonstrated a moderate to high willingness to

work as general dentists (mean score of 3.5 ± 1.02). The tendency in male students was higher than in female students; however, the difference was not statistically significant ($p = 0.43$). There was no significant difference between the students in the tuition-free and tuition-paying programs regarding this question.

Most students (71%) reported a moderate or higher interest in dentistry when selecting their major, which was higher in male students than in females; however, the difference was statistically insignificant ($p = 0.5$). There was no significant difference between the students in the tuition-free and tuition-paying programs regarding this question.

Approximately half of the respondents deemed the general dentistry course training insufficient for independent working in the future (mean score of 2.48 ± 1.11). Male students gave higher scores to the adequacy of training in the School of Dentistry; however, there was no significant difference between them and the female students.

Students of the tuition-paying programs assigned higher scores to the adequacy of training (2.96 ± 1.06) compared with the students admitted through the tuition-free programs (2.34 ± 1.09), and the differences was statistically significant ($p = 0.008$).

The last question of section A asked the students to express their level of interest in performing treatments that were not included in their general dentistry courses in their future dental clinics. Most students demonstrated a moderate inclination to this issue, and male students were more inclined than females ($p = 0.016$); however, there was no significant difference between the students of the tuition-free and tuition-paying programs. Table 2 presents a summary of the answers in the Section A of the questionnaire.

n	Questions	Very Low	Low	Middle	High	Very High	Mean±SD	Mean±SD Female	Mean±SD Male	p Value *
1	What is your level of willingness to continue your education in specialized courses?	20	17	33	23	7	2.8±1.2	3.02±1.2	2.57±1.17	0.045**
2	In case of unwillingness to continue education or failure to enter the specialized course, how willing are you to engage in general dentistry?	4	10	35	34	17	3.5±1.02	3.43±0.98	3.57±1.06	0.433

3	To what extent has your level of interest in the field of dentistry influenced your choice of this field?	10	19	32	22	17	3.17±1.21	3.1±1.22	3.24±1.21	0.558
4	In your opinion, how sufficient is the education in the general dentistry course for your independent practice in the future?	25	21	40	9	5	2.48±1.11	2.39±1.13	2.57±1.09	0.344
5	If you work as a general dentist, to what extent will you perform specialized treatments that you did not learn during your studies?	6	28	40	21	5	2.91±0.96	2.69±0.99	3.14±0.89	0.016**
Mann-Whitney Test *•P < 0.05 **										

Table 2: Results Related to Questions about Interest in Field, Specialty, and Treatment

Section B of the questionnaire asked students to express their opinions about gaining skills for future specialized treatments. Participation in private practice workshops was the students' highest priority. Table 3 presents the students' answers and scores to each question.

n	Questions	Very Low	Low	Middle	High	Very High	Mean±SD	Mean±SD Female	Mean±SD Male	p Value *
1	Studying new books and articles	14	16	34	16	20	3.12±1.29	3.43±1.26	2.8±1.25	0.018**
2	Watching various films and online tutorials by instructors	1	9	22	31	37	3.94±1.02	4.08±1.03	3.8±1.00	0.117
3	Participating in conferences and refresher courses	9	15	33	22	21	3.31±1.22	3.61±1.26	3.00±1.09	0.009**
4	Participation in private practice workshops	3	5	14	26	52	4.19±1.05	4.24±1.03	4.14±1.08	0.625
Mann-Whitney Test *•P < 0.05										

Table 3: Results Related to Questions about Skill Acquisition Methods

In total, female students demonstrated a higher tendency toward gaining different skills in the future. The difference in studying new books and articles (p = 0.018) and participating in congresses and retraining workshops (p = 0.009) was significantly higher in the female group. There was no significant difference between the students of the governmental and non-governmental programs for different forms of achieving skills.

In the next step, the students were presented with a list of 65 treatments manageable in general dental clinics. They were asked to rate their level of interest in each treatment on a scale of one to five. (Likert scale).

The highest scores were simple composite restorations, complete maxillary and mandibular SRP, root canal of anterior teeth, and premolars, respectively. The lowest interest levels were expressed

for the wisdom tooth root canal, removal of oral soft tissue lesions, and apicoectomy.

Some treatments are included in the general dentistry curriculum, while others are not and can be presented through supplementary training. The first group was categorized as general treatments, and the latter as specialized treatments. The answers to questions of each general and specialized group for every specific field were calculated from the total 100 and then t-test was used. Chart 1 presents the level of interest in different fields based on students' gender (the scores are based on 100).

Overall, the level of interest in general treatments for both genders was higher than in specialized treatments; however, the level of interest in specialized treatments in male students was higher than in females by using t-test (p = 0.015) (Figure 1).

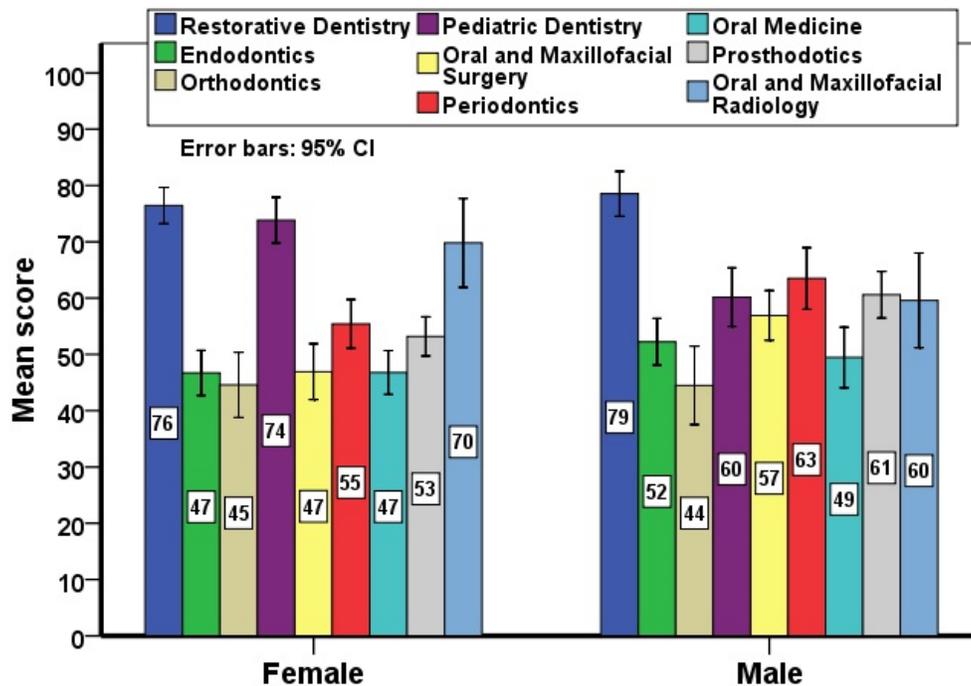


Figure 1: Level of Interest in Different Fields Based on Gender (t-test)

This issue was investigated separately in each field and except for orthodontics, oral diseases, and dental prostheses, in which specialized treatments were the top priority, in other fields, general treatments were more popular among students.

The students expressed that they were interested to perform restorative, pediatrics, and radiology treatments in their future clinics, and they were least interested in orthodontics, oral diseases, and endodontics.

Fields with the highest reported scores of interests included general restorative treatment, specialized restorative treatment, and general pediatric dentistry, respectively. The lowest scores were also reported for specialized endodontics, specialized pediatrics, and general orthodontics.

Regarding gender, female students had the highest tendency to perform general restorative treatments, general pediatric dentistry, and specialized restorative treatments. However, the priorities of male students included general restorative treatments, specialized restorative treatments, and specialized prosthetic treatments.

Female students were more interested in restorative, pediatrics, and radiology fields, whereas male students were more interested in restorative, periodontics, and dental prostheses.

It was noteworthy that female students' level of interest in performing pediatric treatments was significantly higher than males', and male students were more interested in specialized endodontics treatments, surgery, periodontics, and dental prostheses than female students.

The scores of answers to questions indicated no statistically significant difference between the students of tuition-free and tuition-paying programs.

4. Discussion

The study findings indicated a moderate tendency in students to continue their education in specialized programs, which was inconsistent with the results of Mahmoud HH, et al. in Iran, Sadeghi M, et al. in Rafsanjan, Gilavand A, et al. in Ahvaz, Puryer J, et al. in UK, and Xu C, et al. in China [4-6,9,10]. In all of those studies, more than three-quarters of participants expressed their interest in continuing their education in specialized courses. This difference in viewpoints may be due to different conditions and job benefits of general and specialized dentists in different time periods and locations, and/or a part of this difference may be due to the title of projects. Unlike other studies, the present research did not emphasize continuing education in specialized courses, and as it mainly focused on performing different treatments within the framework of general dentistry, possibly this issue has somewhat affected the responses to this question.

This study did not include specific questions regarding the students' preference to continue education. We investigated the students' tendency toward performing various treatments in general dentistry clinics, and the most popular treatments included restorative, pediatrics, and radiology, which were inconsistent with other studies that reported other fields as priorities in selecting specialized fields.

Other studies reported orthodontics and oral and maxillofacial surgery as the most favored specialized fields [5,9-11].

Tabari M, et al. conducted a study in the School of Dentistry, Babol University of Medical Sciences, and indicated that pediatrics, orthodontics, and restorative sections were successful in achieving their educational goals, which was consistent with the results of the present study [12].

The summary of these results shows that students are inclined to work in general dentistry clinics in fields that they have higher senses of capability and knowledge in, and specialized fields that are popular to continue are those less trained in general courses. In fact, continuing education in these fields is due to the tendency to acquire new knowledge and skill sets apart from general dentistry.

According to the results of our study, the tendency of female students to continue education in specialized fields was higher than males, which was inconsistent with Gilavand that reported no difference between the male and female students [4].

According to Puryer J, et al. women's tendency to continue education in a specialized field was lower than that of men, which was inconsistent with our study [10]. Other studies on this subject did not compare the results based on gender. The difference in results may be due to differences in cultural viewpoints and time conditions.

These differences in the male and female students' level of interest should be examined from a psychological perspective, but according to the results of our study, female students seem to be more concerned about acquiring sufficient skills before performing any treatment in their offices.

According to the findings of the present research, participants considered the training provided in general dentistry programs as moderately sufficient to work independently in the future, which was consistent with the result of Aghili H, et al. in Yazd. Although study participants in their study reported a moderate sense of competence, in some subjects the graduates felt a relatively strong need to learn more, which primarily included novel fields. It indicated that the curriculum of general dentistry did not sufficiently match the advances in dentistry and current requirements of society, emphasizing the need for revising the educational content [13].

Furthermore, according to McGleenon EL, et al. in England and Ireland, graduated dentists in complicated treatments felt weak and lacked sufficient confidence to perform these treatments independently [14]. In another study by Salmani A, et al. in Iran assessing the national dentistry curriculum, findings showed that a large percentage of students considered training provided in the general program insufficient, and merely one-third of the respondents reported that educational methods were suitable [15].

Moreover, based on Moeini G, et al. senior students of Tehran University of Medical Sciences believed that they lacked the required capability to perform dental implant surgery after graduation and were inclined to receive more practical training in this field [16]. As the advances in dental implant surgeries have rendered this

treatment a standard procedure in general dental clinics worldwide, there seems to be a need for additional practical training in this field and the general dentistry curriculum so that graduates can perform uncomplicated dental implant surgeries in their future clinics. Performing more extensive and complex dental implant surgeries, of course, requires higher levels of knowledge, abilities, and continuing education in the related specialized fields.

According to our findings, performing fixed prosthodontics was the top priority in the future, and orthodontics treatments were the least favored, which was somewhat consistent with a study by Ahangari Z, et al. in Iran. Based on the standpoints of the participants, practical and theoretical fixed prosthesis courses and practical orthodontics were the most and least efficient courses, respectively [17]. Usually, individuals are more inclined to perform treatments reported as most efficient since they consider their capability and self-confidence sufficient to work independently.

Generally, there was no difference between the answers of students from tuition-free and tuition-paying programs to various sections of the questionnaire, except in one item, where tuition-paying students gave higher scores for the adequacy of training in general dentistry courses, while the training courses for both groups of students were identical. However, there was one difference in the School of Dentistry between the groups; as there were fewer students in the groups of tuition-paying program, they were able to receive more training and treat more patients in practical courses, which may have affected their viewpoints regarding the adequacy of training. Meanwhile, besides the finding that most students were inclined to increase their treatment skills in private workshops, this issue may create an image that individuals consider the information they receive by paying high costs of higher value.

There was a statistically significant difference between male and female students in different areas, and since the training of male and female students was identical, this difference may be due to the different views of both sexes and different psychological and physical aspects in these groups.

Male students were less interested in continuing education in specialized programs and had a higher tendency to establish general dentistry clinics and also perform specialized treatments in their future general dental clinics. All the above-mentioned issues may be due to the effect of various socio-cultural factors on the individuals. In fact, the financial perspective in the current society may be bolder in male students. For the same reason, men are more interested in entering the job market faster and performing specialized treatments with higher incomes in their personal clinics. However, this issue may be psychologically related to men's higher self-confidence and boldness. This issue requires more specific psychological investigations, and reaching a definitive argument with such findings is impossible.

Meanwhile, besides the fact that female students were more interested in continuing education in specialized programs, they showed a significantly higher tendency to methods of achieving

skills in the future (e.g., studying new books and articles, participating in congresses, and taking retraining courses) than males. Understanding the reason behind the difference between the two genders in the tendency to study and be present in academic environments requires additional social and psychological studies.

The inclination to perform different treatments in future general clinics indicated a significant difference between the genders. As the practical and theoretical training for male and female students is identical, the discrepancy is possibly due to differences in interests and abilities of the two genders. Moreover, a research has shown that although all students had a high interest in various fields, the amount of learning varied in different departments, which may be related to the teaching methods of professors or educational facilities [18].

The tendency to perform pediatric dental treatments was significantly higher in female students than in males, and male students demonstrated higher levels of interest in specialized fields, including surgery, periodontics, and prosthetics. This issue was broadly consistent with a study by Emrani R. et al. on active dentists in Tehran. In their study, male dentists performed more tooth extraction services, root canals, and prosthetic treatments and fewer pediatric services, scaling, and restorative treatments than women [19].

It seems that female students tend to establish emotional connections with children due to their maternal nature, therefore, they are more successful in treating children. Moreover, male students, due to their greater physical ability, feel more capable in demanding fields such as surgery and specialized root canal therapy.

Eventually, combining the findings of this project and comparing it with similar studies in the past indicates that training more capable graduates in the future requires a general revision in the general dentistry curriculum and paying more attention to the fields that have higher demands in the current society. Accurate investigation of the fields that fewer students are inclined to work in is also necessary. In case this lack of interest is due to weak abilities or lack of sufficient self-confidence, more and higher accuracy practical courses should be added to the curriculum. Meanwhile, it appears that with the increase in the number of dentistry students and its disaccord with the facilities of the dentistry schools in terms of working units and spaces, students do not have sufficient opportunities to achieve an adequate level of ability during their education and sense the need for gaining skills through different methods in future.

5. Conclusions

Our overall conclusion after completing this project was that many dental students are willing to perform a range of specialized dental treatments in their future practice, which is a response to patient demand. Since one of the reasons for the increase in dental student enrollment is the access of all segments of society to high quality dental treatments, and given that in many small towns there is no access to a specialized dentist, there is a need for general dentistry

graduates to have a higher ability in the field of various treatments. In addition, it is important to note that although this project was conducted in one of the country's dental schools, its results can be generalized to other schools to a large extent. However, given the differences in facilities and teaching methods in different schools, implementing this project on a larger scale could provide educational planners with a better picture of the state of dental education across the country.

Availability of Data and Materials

The datasets used and/or analyzed in the current study are available from the corresponding author upon reasonable request.

Ethics Approval and Consent to Participate

The provisions of the Declaration of Helsinki were adhered to, and written informed consent obtained from all participants. Considering these points, the code of ethics was obtained from the Health Research Institute of Babol University of Medical Sciences under the code IR.MUBABOL.HRI.REC.1401.231. <https://ethics.research.ac.ir/form/3lzhfxrqeav2uxwz.pdf>

Authors' Contribution

Abdinasab M. and Bijani F. designed the study; then, Bijani F. and Bijani A. wrote the search strategy and Abdinasab M. performed the literature search. Data acquisition were done by Abdinasab M. and then analyzed by Bijani A. The authors finally categorized the articles and prepared the manuscript. All authors contributed to the discussion, read, and approved the manuscript and agreed to be accountable for all aspects of the work.

Conflict of Interest

The authors declare no conflicts of interest.

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References

1. Nabizadeh, S., Hajian, S., Sheikhan, Z., & Rafiei, F. (2019). Prediction of academic achievement based on learning strategies and outcome expectations among medical students. *BMC medical education*, 19(1), 99.
2. Rostami-Moez, M., Mortazavi, Z., Najafivosough, R., Shahbazi, M., & Mortazavi, S. S. (2022). The relationship between the quality of clinical education and the students' interest in their field of study of rehabilitation faculty. *Horizon of Medical Education Development*, 13(1), 37-47.
3. SEYEDMAJIDI, M., JOODI, C. R., Khafri, S., & Jahanian, I. (2016). Evaluation of Motivations Relating to Academic Major choice among Medical and Dental Students at Babol University of Medical Sciences.
4. Gilavand, A. (2016). Comparison of Interest Rates of Pursuing a Specialty among Autonomous Campus with Dentistry

- Students of Ahvaz Jundishapur University of Medical Sciences. *Jundishapur Scientific Medical Journal*, 15(3), 347-354.
5. Sadeghi, M., & Bahgerian, A. (2013). Postgraduate aspiration in dental students at Rafsanjan University of medical sciences. *Journal of Rafsanjan University of Medical Sciences*, 12(2), 103-114.
 6. Xu, C., Gao, L., Zhang, S., Zhang, J., Li, C., Zhang, D., ... & Liu, J. (2022). Motivations and future plans of the final year students in a Chinese dental school. *BMC Medical Education*, 22(1), 90.
 7. Acosta, J. M., Detsomboonrat, P., Pisarnaturakit, P. P., & Urwannachotima, N. (2025). The use of social media on enhancing dental care and practice among dental professionals: cross-sectional survey study. *JMIR Formative Research*, 9(1), e66121.
 8. Razmi, Razavi, Larijani. National dental curriculum. 2018 Jan. Fourth Revision. (In Persian)
 9. MAHMOUD, H. H. (2001). EVALUATION OF INTEREST TO SPECIALITIES OF DENTISTRY IN STUDENTS OF FOUR DENTAL UNIVERSITY IN TEHRAN.
 10. Puryer, J., Kostova, V., & Kouznetsova, A. (2016). Final-year dental undergraduate attitudes towards specialisation. *Dentistry journal*, 4(3), 26.
 11. Siddiqui, M., Sultan, A., Mehta, A., & Juneja, A. (2022). Career intentions, choices, and motivation of undergraduate dental students toward dentistry. *Archives of Medicine and Health Sciences*, 10(1), 136-140.
 12. Tabari, M., Nourali, Z., Khafri, S., Gharekhani, S., & Jahanian, I. (2016). Evaluation of educational programs of pediatrics, orthodontics and restorative departments of babol dental school from the perspective of the students based on the CIPP model. *Caspian Journal of Dental Research*, 5(2), 8-16.
 13. Aghily, H., Navabe Azam, A. R., & Vaezi, A. A. (2006). AN EDUCATIONAL NEEDS ASSESSMENT FROM SOME ALUMNI OF YAZD DENTALSCHOOL. *The Journal of Medical Education and Development*, 1(1), 36-41.
 14. McGleenon, E. L., & Morison, S. (2021). Preparing dental students for independent practice: a scoping review of methods and trends in undergraduate clinical skills teaching in the UK and Ireland. *British dental journal*, 230(1), 39-45.
 15. Salmani, Arvin, Hooman Keshavarz, Majid Akbari, Mohammad Javad Kharrazifard, Shabnam Varmazyari, and Mohammad Reza Khami. "Evaluation of national dental curriculum in Iran using senior dental students' feedback." *BMC Oral Health* 23, no. 1 (2023): 45.
 16. Moeini, G., Ghazanfari, R., Habibzadeh, S., & Kharazifard, M. J. (2023). Knowledge and attitude in implant dentistry training courses amongst undergraduate dental students at Tehran University of Medical Sciences. *European Journal of Dental Education*, 27(2), 353-359.
 17. Ahangari, Z., Rahmani, M., Sohrabi, Z., & Kharazifard, M. J. (2010). Dental curriculum according to views of the graduates of dental schools of the country during the last 5 years.
 18. Amanat, D., Momeni Danaei, S., & Amanat, N. (2009). Evaluation of the students' attitude and satisfaction of educational situation in Shiraz dental school. *Journal of Dentistry*, 10(4), 356-360.
 19. Emrani, R., Katayoun, S., Hossein, H., & Edalat, M. (2022). Differences in the work pattern of male and female dentists in Tehran in 2021. *Ital J Gender-Specific Med*, 8(3), 143-146.

Attachment

The questionnaire used in this project

Dear Student,

This questionnaire has been designed to evaluate the Level of Interest towards Specialized Treatments among Dental Interns in Future. It is hoped that the results will be taken into consideration by the relevant authorities for future planning. The organizers of this project would like to express their gratitude in advance for your time and for completing this questionnaire.

Age: -----

Gender: -----

The admission process into the School of Dentistry:

Tuition-free Tuition-paying International

A)

1. What is your level of willingness to continue your education in specialized courses?

Very Low Low Middle High Very High

2. In case of unwillingness to continue education or failure to enter the specialized course, how willing are you to engage in general dentistry?

Very Low Low Middle High Very High

3. To what extent has your level of interest in the field of dentistry influenced your choice of this field?

Very Low Low Middle High Very High

4. In your opinion, how sufficient is the education in the general dentistry course for your independent practice in the future?

Very Low Low Middle High Very High

5. If you work as a general dentist, to what extent will you perform specialized treatments that you did not learn during your studies?

Very Low Low Middle High Very High

B) If you are interested in pursuing specialized treatments, which of the following methods do you consider most suitable for acquiring skills? (Please rate each item from 1 to 5.)

N		1	2	3	4	5
1	Studying new books and articles					
2	Watching various films and online tutorials by instructors					
3	Participating in conferences and refresher courses					
4	Participation in private practice workshops					

C) Regarding your level of interest in various treatments in your future general dental practice, please rate each item from 1 to 5.

N		1	2	3	4	5
1	Bleaching					
2	Simple amalgam restoration					
3	Complex amalgam restoration					
4	Simple composite restoration					
5	Complex Anterior and Posterior composite restoration Composite veneer					
6	Smile design and Complex esthetic restoration					
7	Ceramic laminate veneers					
8	Posterior ceramic restoration (Inlay, Onlay, Endocrown)					
9	PFM crown					
10	Ceramic crown					
11	Implant crown					
12	Custom-made post and core					
13	Prefabricated post and core					
14	Fixed bridge					
15	Cobalt-Chromium removable partial dentures					
16	Acrylic removable partial denture					
17	Complete denture					
18	Immediate Dentures					
19	Single arch denture					
20	Night guard					
21	Denture Reline and Rebase					
22	Implant-supported removable dentures					
23	Root canal treatment with hand instruments					
24	Root canal treatment with rotary instruments					
25	Root canal treatment of anterior teeth and premolars					
26	Root canal treatment of posterior teeth					
27	Root Canal Treatment on a Wisdom Tooth					
28	Curved and calcified root canals treatment					
29	Root canal retreatment					
30	Open apex root canal and specific cases treatment					
31	Apicoectomy					

32	Simple pediatric dental restorations					
33	Oral hygiene education and fluoride treatment for children					
34	Fissure sealant					
35	Primary Tooth Pulpotomy					
36	Primary Tooth Pulpectomy					
37	Extraction of primary teeth					
38	Stainless steel crowns					
39	Outpatient Treatment for Children with Behavioral Problems					
40	Anesthesia Treatment in Specialized Centers for Children					
41	Anesthesia Treatment in Specialized Centers for Adults					
42	Management of Traumatic Dental Injuries to children primary and permanent dentition					
43	Management of Traumatic Dental Injuries to adult permanent dentition					
44	Management of Traumatic Dental Injuries to intra oral soft tissue					
45	Soft Tissue Biopsy for Diagnostic and Therapeutic Procedures					
46	Removal of oral soft tissue lesions (including Epulis, Fibroma, Mucocele)					
47	Drug Treatment for Oral Mucosal Lesion like Candida.					
48	Intraoral diagnostic radiography (Bitewing, Periapical, Occlusal)					
49	Surgical extraction of Non-Restorable Teeth					
50	Surgical extraction of impacted and semi- impacted Teeth					
51	Dental implant surgery					
52	Complete maxillary and mandibular SRP					
53	Dental prophylaxis and oral hygiene education					
54	Frenectomy					
55	Periodontal flap surgery					
56	Crown lengthening surgery					
57	Sinus lift surgery					
58	Gum Tissue Graft Surgery					
59	Dental Bone Grafting					
60	Preventative and Removable Orthodontic Treatment					
61	Fixed orthodontic treatment					
62	Serial extraction for space management					
63	Beauty Treatments Such as Gel and Filler Injections					
64	Use of Lasers for cosmetic Purposes					
65	Use of Lasers for Therapeutic Purposes					

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