

Evaluation of Dental Students' Motives and Viewpoints on Their Career Choice in Ahvaz

Abdolreza Gilavand,^{1,*} Gholamhossein Barekat,¹ and Mohammad Hosseinpour¹

¹Department of Educational Administration, Ahvaz Branch, Islamic Azad University, Ahvaz, IR Iran

*Corresponding author: Abdolreza Gilavand, Department of Educational Administration, Ahvaz Branch, Islamic Azad University, Ahvaz, IR Iran. Tel: +98-9166423747, Fax: +61-33330794, E-mail: gilavanda@gmail.com

Received 2015 May 30; Revised 2015 July 8; Accepted 2015 July 12.

Abstract

Background: Changes in medical education system of country are the main policies of ministry of health. Thus, according to the inside incentives of this system along with other existing developments, this study was conducted to investigate the motivations to choose the field of study among dentistry students of Ahvaz Jundishapur university of medical sciences in March 2015.

Objectives: The aim of this study was to investigate the motivations for choosing the field of study among dental students of Ahvaz Jundishapur university of medical sciences (AJUMS).

Materials and Methods: This cross-sectional descriptive and analytic study was performed on 264 students of professional MD (medial doctorate) of dentistry in Ahvaz Jundishapur university of medical sciences. Sampling was conducted by the census method and a questionnaire distributed to all students of the dentistry college and nearly 118 students (45 males and 73 females) completed the questionnaires. Data were analyzed using descriptive statistics, frequency, the percent of frequency, and the Kolmogorov-Smirnov and Mann-Whitney U tests with SPSS software version 21.

Results: Results showed that having an independent office, earning high economic income and appropriate social status were the most important motivations for choosing this field of study among the students.

Conclusions: It seems that considering to a high rate of unemployment of university graduates and available restrictions of employment in the public and private organizations, applicants tend to enter the dental field because of the reliable and independent income and high social status which can be considered as the most important influential factors for choosing this field of study.

Keywords: Dentistry Students, Incentives, Choice of Discipline

1. Background

Motivation is the factor for many activities such as learning (1). Motivation gives power and direction to individuals (2). Educational motivation is a prerequisite to learning and it is a factor that helps the learner to maintain the continuity of learning. Undoubtedly, career choice is one of the most fundamental life decisions. By choosing a job, a person should spend more cost and time for his/her profession training, on the other hand, the conducted investigations have shown that after completing professional education, profession shift is possible usually in some courses rarely with high cost and time. So, choosing academic discipline should be done with high precise considerations (2). However, learners with stronger education incentive can do more educational activities and obtain more success (1). Several factors are involved in choosing the field of study and they can be divided into two external and internal groups. In most cases, internal factors are controllable by the person; however, the external factors are out of the individual control and indirectly in-

fluence human choices. For the external factors, we can mention family, educational environment, age groups, visual media, and socio-economic areas (3). The personality of individuals is one of the most effective factors in choosing their academic discipline (4). Among them, selecting academic disciplines and especially courses related to medical sciences should be done more carefully because they are relevant to human health, and also interest to profession is one of the preconditions for professional services with high quality to clients (4). In recent decades, more attention has been paid to the vital role of dental and medical disciplines in maintaining and promoting the health of all classes of people in different societies. And changes in political, social and economic improvements have a positive effect in promoting the status of health care workers in the society (5). The most important role of dentists is to improve the quality of dental care and provide health care services to all peoples in the society (6). Unfortunately, in our country it seems that a large part of stu-

dents enter this field of study by entrance examination and usually top-ranking peoples choose this discipline regardless of their interests and talents. This study may cause problems for some of them. Therefore, investigating the motivations of dental students who are in the top list of the entrance exam is so important to choose this discipline (7), according to this fact, choice of discipline will have a process for each person and during the study, they should spend more cost and time to enter into the profession (8). The studies have shown that the students of dental discipline are in more favorable mood than other students because they do not have any concern about employment after graduation (9). The recent studies have shown that in addition to different motivations to enter to dental discipline, there are many factors such as gender, race, and education level of the parents that influence the students' motivation in choosing their field of study (10). According to studies conducted in Brazil by the most educated and qualified dental surgeons in the world, it was clear that the reasons and motivations of students are not fixed in this discipline and influenced by inside and environmental factors (11-13). Vavid Dastjerdi et al. investigated the motivations of medical and dental students of Shahid Beheshti university of medical sciences in choosing their academic discipline and results showed that the majority of dental students consider the high social status, and high income and the ability to self-employment as the most important influential factors for choosing this discipline (14). A study was conducted by Aghili et al. (15) in 2012 to determine the factors affecting the choice of discipline among dental students of Tehran University of Medical Sciences and Shahid Sadoughi in Yazd in 2012 - 2013. Another study was conducted by Kazemizadeh et al. in 2010 to determine the motivations to choose the discipline among medical and dental students of Rafsanjan university of medical sciences. The results of the above-mentioned studies showed that high professional and social status is the most important reason to choose this discipline (16). Also, another study was conducted by Amani et al. (17) in 2012 to determine the motivations for entering to dentistry discipline among first-year students of dental discipline of Ardabil university of medical sciences. Another study was conducted by Neamatollahi et al. in 2010 to determine the motivations and views of students in Mashhad University of Dental Science to choose their discipline. The results showed that the student's motivations in choosing their discipline include appropriate income, social status, job security and appropriate working time (7). Changes in the medical training system of the country are one of the major policies of ministry of health. So, more attention should be paid to inside motivations of this system along with other changes. The choice of field of study and job is one of the decisions made is affected by motivations, and is not similar among males and females. Meanwhile, in order to provide appropri-

ate context and background for employment in good jobs, it seems necessary to study and investigate the aptitudes and individual desires (18).

2. Objectives

The aim of this study was to investigate the motivations for choosing the field of study among dental students of Ahvaz Jundishapur university of medical sciences (AJUMS).

3. Materials and Methods

This descriptive-analytical and cross-sectional study was conducted to investigate the motivations for choosing the academic discipline among dentistry students of Jundishapur university of medical sciences (AJUMS) in March 2015. Statistical population consists of all 264 MD (medial doctorate) students of the university (157 females and 107 males). Sampling was conducted using the census method and researcher-made questionnaire distributed by all professors among all students and about 118 subjects have completed the questionnaire (45 males and 73 females) (Table 1). Data were collected using a questionnaire which was designed using the Neamatollahi et al. questionnaire. Validity and reliability of this questionnaire in the mentioned study have been proven with 0.87 Cronbach's alpha. The questions of this questionnaire is grading from 1 to 4 (7). The first part of the questionnaire consists of demographic information such as age, sex, the occupation of parents, type of admission quotas, education level of parents and students and the semester in which they are studying. The second part of the questionnaire is self-administered and is about student's motivation in choosing their academic discipline and contains 26 questions of 4 options with Likert spectrum (1 - 4 points). Moreover, to investigate the students' motivations, the questionnaire consists of very effective (four points), effective (three points), low effective (two points), with no effect (1 point). The highest point means the top priority, which was considered for choosing this field of study and the lowest point was considered as a tendency to select this field. Data were analyzed using descriptive statistics, frequency, frequency percent, average, the Kolmogorov-Smirnov and Mann-Whitney U tests with SPSS version 21 (SPSS21, Inc., Chicago, Illinois, USA). It should be noted that in this study, only students of dentistry discipline of dental university have been studied. The motivations underlying the field of study among the dentistry students of Campus have not been considered in this research (a former Arvand international unit). Meanwhile, needed moral considerations such as respondents' satisfactions and assuring them about the confidentiality of their information and also obtaining necessary permission from authorities of university and authorities of the college of dentistry school have not been observed in this study.

Table 1. Demographic Information^a

Variable	Values
Gender	
Male	45 (38.1)
Female	73 (61.9)
Total	118 (100.0)
Acceptance condition	
Free	94 (79.7)
Special 1	2 (1.7)
Special 2	6 (5.1)
Faculty Memmbers	7 (5.9)
No answer	9 (7.6)
Total	118 (100.0)
Local condition of students	
Yes	76 (64.4)
No	42 (35.6)
Total	118 (100.0)
Academic level, y	
1	59 (50.0)
3	15 (12.7)
4	18 (15.3)
5	15 (12.7)
6	8 (6.8)
No answer	3 (2.5)
Total	118 (100.0)
Age, y	
Under 20	50 (42.4)
21 - 25	61 (51.7)
26 - 30	7 (5.9)
Total	118 (100.0)

^aData are presented as No. (%).

4. Results

From a total of 118 dental MD (medidal doctorate) students, approximately 118 students completed the questionnaire and among them 45 cases (61.9%) were females and 73 (38.1%) were males. Seventy-six cases (64.4%) were native students of Khuzestan Province and 42 cases (35.6%) were non-native students. Also, 94 cases (79.7%) entered the university using free quotes and 8 cases (6.8%) with graduation and 7 (5.1%) were the children of university faculty members. Nine people (7.6%) had not selected any quotas in the questionnaire. Furthermore, 50 cases (42.4%) were under 20 years old, 61 (51.7%) were between 21 and 25 years old and 7 (5.9%) were between 26 and 30 years old. Moreover, 59 cases (50%) were in first year of study, 15 (12.7%) were in third year, 18 (15.3%) were in the fourth year and 15 cases (12.7%) were in the fifth year and 8 (6.8%) were in the sixth year and 3 cases (2.5%) had no response. To prioritize motivational factors and based on questions that were asked with multiple-choice questions, each factor was measured by the average of related questions. According to the obtained average for each factor which is a number between 1 and 4, the highest point is considered as the first priority to select this discipline and the lowest point is considered as the least important factor to select this field. The obtained results of this prioritization are shown in Table 2.

According to the Table 2 which included 12 motivational factors to select dentistry discipline, the most important motivation to choose dentistry discipline was to have an independent office with an average of 3.40, followed by earning high economic income with an average 3.16 and appropriate social status with an average 3.09 were in second and third priorities of the students to choose dentistry discipline. The next priorities of the studied participants in this study were attractiveness of dentistry career (2.71), rank in the university entrance exam (2.62), one's always dream (2.55), helping others (2.58), studies in specialties (2.33), successful marriage (2.09), interest in

Table 2. Motivational Factors to Select Dentistry Discipline^a

Priority	The Motivation of Choice of Discipline	Average Point From Number 4
1	Having an independent office	3.4 ± 0.75
2	Obtaining high economic income	3.16 ± 0.81
3	Appropriate social status	3.09 ± 0.83
4	Attractiveness of dental career	2.71 ± 0.60
5	Appropriate job status	2.68 ± 0.66
6	Rating in entrance exam	2.62 ± 1.13
7	Helping others	2.55 ± 1.03
8	Constant desire of person	2.55 ± 1.06
9	Studies in specialties	2.33 ± 1.07
10	Successful marriage	2.09 ± 1.11
11	Interest in dental research	1.79 ± 0.92
12	Others recommendations and previous background	1.67 ± 0.60

^aData are presented as mean ± SD.

Table 3. Comparing the Effective Factors to Select Dentistry Discipline Among Students^{a,b,c}

Effective Factors	Girl	Boy	P Value
Constant desire of person	2.69 ± 0.92	2.47 ± 1.13	0.30
Others recommendations and previous background	1.68 ± 0.59	1.67 ± 0.61	0.87
Job attractions of dental career	2.61 ± 0.62	2.77 ± 0.58	0.13
Earning high economic income	3.38 ± 0.78	3.03 ± 0.80	0.01
Appropriate job opportunity	2.74 ± 0.66	2.63 ± 0.66	0.40
Having an independent office	3.42 ± 0.75	3.38 ± 0.76	0.77
Studies in specialties	2.33 ± 1.00	2.33 ± 1.12	0.94
Interest in dental research	1.69 ± 0.95	1.86 ± 0.90	0.20
Appropriate social status	3.07 ± 0.99	3.10 ± 0.72	0.67
Helping others	2.53 ± 1.06	2.56 ± 1.01	0.92
Rating in entrance examination	2.61 ± 1.10	2.62 ± 1.15	0.95
Successful marriage	2.53 ± 1.16	1.80 ± 0.99	0.00

^aDentistry university with the separation of sex (boy and girl).

^bData are presented as mean ± SD.

^cP values less than 0.05 are considered as significant.

research in the field of dentistry (1.79) and other's recommendations and previous background (1.67). Having an independent office among girls and boys was the most important motivations and earning high economic income among boys and appropriate social status among girls were the second most important motivations in choosing the field of study. Comparing the motivations between boys and girls using the Kolmogorov-Smirnov normality test, non-parametric and Mann-Whitney tests showed a significant difference between them in terms of high economic income and successful marriage. High economic income and successful marriage had a higher degree of importance by boys. Other components are marked in Table 2 in order of preference.

As it can be seen in Table 3, there was a significant difference in two factors of obtaining high economic income and successful marriage between male and female students. The average of high economic income for males was 3.38 and for females was 3.03. Considering the difference in the average rates and a significant difference between the two groups, boys paid more attention to obtain income than girls, because men have more responsibility than women to provide the costs of living. So, in this study, this difference is so significant, and the high economic income can be considered as an influential factor in choosing the students' field of study. The second factor which was significant in this test was successful marriage. In this factor, boys with an average of 2.53 had a greater motivation than girls do with an average of 1.80. Other effective factors in selecting dentistry discipline were investigated by boys and girls in this study and they had the same importance. Although other factors between the two groups were dif-

ferent, this difference was not statistically significant at the 0.05 level of error.

5. Discussion

Having an independent office, earning high economic income and appropriate social status are the most important motivations in choosing the field of study among MD (medical doctorate) dental students in AJUMS, which is consistent with the results of the studies of (7, 16, 19-21). Among outer studies, Brand et al. (13) had two studies in 1992 and 1996 in Australia and they mentioned that having an independent office as the most important factor in choosing the dentistry discipline. Also, Crossley et al. (21) had done a research in 2002 in the UK on dentistry students, and they pointed out the appropriate income as one of the most important reasons for choosing this discipline and it is consistent with the results of the present study. In this study, male students feel more responsibility because they should respond to living costs. So, boys paid more attention to obtain economic income and from this view, it is consistent with the research of (6). In Iran, a study in 2012 was conducted by Dastjerdi et al. to investigate the motivations of medical and dental students of Shahid Beheshti university in choosing their field of study and it showed that the majority of dental students consider the high social status, and high income and the ability to self-employment as the most important influential factors for choosing this discipline and it is consistent with the results of the present study (14). A study was conducted by Neamatollahi et al. in 2010 to determine the motivations and views of students of dentistry uni-

versity of Mashhad about their choice of discipline. The results showed that the student's motivations from their choice of discipline include appropriate income, social status, job security and appropriate working time, which are consistent with the present study (7). A study was conducted by Kazemi et al. in 2010 in Rafsanjan to determine the motivations in choosing the field of study among medical and dental students of Rafsanjan university of medical sciences. The results showed that high professional status, and social position are the most important reasons to choose this academic discipline and it is consistent with the present research (16). In Ahvaz dentistry faculty, about 150 girls and 70 boys are studying in professional degree of dental discipline. The number of girl students has been growing faster than boys and thus this approach is true about most of medical and paramedical courses in Iran. Also, this issue is consistent with the findings of researchers in Denmark, Australia, America, France, Britain that they had studied the role of gender in choice of dental discipline and they concluded that the tendency of girls to select dental profession is growing (11, 22-24).

Gilavand et al. in 2014 conducted a study to investigate and compare the rate of depression and anxiety among native and non-native students of dentistry students of Jundishapur university of medical sciences and they reported the depression and anxiety of students in this discipline is in normal level and they consider one of the reasons of this issue is lack of concern for employment after graduating among dentistry students, which is consistent with this research (9). It seems that according to the high range of unemployment among university graduates and necessary restrictions on public employment organizations, the attention of applicants to enter the dentistry discipline as a reliable and independent occupation with good income special social prestige that was from past have been exceeded. Therefore, it can be concluded that in total, this study is consistent with more domestic and foreign researches, in this regard. This study is extracted from thesis of the MA thesis of educational administration of Islamic Azad university of Ahvaz.

References

- Seif A. *Learning Psychology*. Iran: Doran Publication; 2010.
- Rice CD, Hayden WJ, Glaros AG, Thein DJ. Career changers: dentists who choose to leave private practice. *J Am Coll Dent*. 1997;**64**(1):20-6. [PubMed: 9130804]
- Payrovi N, Derakhshan F, Karimi T. Factors influencing the selection of study field in students of Qazvin University of Medical Sciences. *J Qazvin Univ Med Sci*. 2012;**16**(2):87-90.
- Porter SR, Umbach PD. COLLEGE MAJOR CHOICE: An Analysis of Person-Environment Fit. *Res High Educ*. 2006;**47**(4):429-49. doi: 10.1007/s11162-005-9002-3.
- Perrot LJ, Deloney LA, Hastings JK, Savell S, Savidge M. Measuring student motivation in health professions' colleges. *Adv Health Sci Educ Theory Pract*. 2001;**6**(3):193-203. [PubMed: 11709634]
- Hashemipour M. Dental students' motivation for entering dentistry in Kerman school of dentistry. *Iran J Med Educ*. 2006;**6**(1):109-15.
- Neamatollahi H, Mehrabkhani M, Ghafarpour S, Ghasemi A. Evaluation of Mashhad Dental School Students' Motives and Viewpoints on Their Career Choices in 2010. *J Mash Dent Sch*. 2014;**38**(1):71-84.
- Rice CD, Glaros AG, Shouman R, Hlavacek M. Career choice and occupational perception in accelerated option and traditional dental students. *J Dent Educ*. 1999;**63**(4):354-8. [PubMed: 10340060]
- Gilavand A, Espidkar F, Fakhri A. A comparative evaluation of depression and anxiety rate among native and non-native students of dentistry school at ahvaz jundishapur university of medical sciences. *Q Med Sci Res Center*. 2015;**6**(2):185-90.
- Sorori-Zanjani R, Tajkey J, Mazloomzade S, Jafari MR. University Entrance Motivations of Pharmacy Students of Zanjan Pharmacy School. *J Med Educ Dev*. 2009;**1**(1):29-35.
- Vigild M, Schwarz E. Characteristics and study motivation of Danish dental students in a longitudinal perspective. *Eur J Dent Educ*. 2001;**5**(3):127-33. [PubMed: 11520336]
- Morita MC, Haddad DE, Arajo ME. *Current profile and tendency of Brazilian dentists*. Maring: International Dental Press; 2010.
- Brand AA, Chikte UME, Thomas CJ. Choosing Dentistry as a career - A profile of entering students (1992) to the University of Sydney, Australia. *Aust Dentl J*. 1996;**41**(3):198-205. doi: 10.1111/j.1834-7819.1996.tb04856.x.
- Vahid Dastjerdi M, Mahdian M, Vahid Dastjerdi E, Namdari M. Study motives and career choices of Iranian medical and dental students. *Acta Med Iran*. 2012;**50**(6):417-24. [PubMed: 22837121]
- Aghili H, Taheri MS, Seraj B, Moslemi M. The main influencing motives for major university choices among first-year dental students of Shahid Sadoughi University of Medical Sciences and Tehran University of Medical Sciences. *J Med Educ Dev*. 2014;**9**(1):2-12.
- Kazemizadeh Z, Rezaeian M, Farnoodi M. Evaluation of Motivations for Choosing Field of Study Among Medical and Dental Students of Rafsanjan University of Medical Sciences. *J Rafsanjan Univ Med Sci*. 2011;**10**(4):279-88.
- Amani F, Keramati H, Farshad V. The motivation of dental students to enter the dental school Ardabil University of Medical Sciences. *CADUCEUS*. 2012;**2**(1):40-4.
- AmirAliAkbari S, Arfaei K, Fardanesh H, AlaviMajd H. Student motivation in choosing midwifery in Tehran university of medical sciences from 1384 to-1385. *Iran J Med Educ*. 2008;**7**(2):451-3.
- Memarpour M, Bazrafcan L, Mosavi E, Vossoghi M. Factors Influencing Dental Students' Choice of Discipline. *Iran J Med Educ*. 2013;**13**(4):260-9.
- Lynn R, Yamauchi H, Tachibana Y. Attitudes related to work of adolescents in the United Kingdom and Japan. *Psychol Rep*. 1991;**68**(2):403-10. doi:10.2466/pr0.1991.68.2.403. [PubMed: 1862172]
- Crossley ML, Mubarik A. A comparative investigation of dental and medical student's motivation towards career choice. *Br Dent J*. 2002;**193**(8):471-3. doi: 10.1038/sj.bdj.4801599.
- Mariño RJ, Morgan MV, Winning T, Thomson WM, Marshall RI, Gotjamanos T, et al. Sociodemographic backgrounds and career decisions of Australian and New Zealand dental students. *J Dent Educ*. 2006;**70**(2):169-78.
- Scarbecz M, Ross JA. Gender differences in first-year dental students' motivation to attend dental school. *J Dent Educ*. 2002;**66**(8):952-61. [PubMed: 12214843]
- Hennequin M, Tubert S, Devillers A, Muller M, Michalesco P, Peli JF, et al. Socio-economic and schooling status of dental undergraduates from six French universities. *Eur J Dent Educ*. 2002;**6**(3):95-103. [PubMed: 12269864]