

Factors Affecting Decision-Making about Future Specialty among Dental Students in UQUENT, Makkah, KSA

Alhajaji A. J^{1*}, Alshamrani S. A¹, Altaf S. A¹, Salama R. I²

¹Dental intern at Faculty of Dentistry, Umm AlQura University Makkah, 8WCQ+4RM, Makkah al-Mukarramah 24382, Saudi Arabia

²Assistant professor of Dental Public Health, Faculty of Dentistry, Umm AlQura University Makkah, 8WCQ+4RM, Makkah al-Mukarramah 24382, Saudi Arabia

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*Corresponding author: Alhajaji A. J

Abstract

Background: Choosing the specialty considered a problem for many dental students. Multiple factors affect their future decision regarding their gender, clinical skills, desire or interest, and family or relative influence. Most of the previous studies reported that the most popular specialties chosen were orthodontics and oral maxillofacial surgery. Moreover, the importance of establishing a mentoring program that guides the dental students to make the right choice according to their own desire, to get more stable and life-long statistician. **Aim of the study:** identify the different influencing factors that affect future decision-making about dental specialties post-dental graduation. **Material and Methods:** This cross-sectional study was conducted at UQUENT in Makkah, KSA. The sample size collected from total population is 251 students, 51.2% from male students and 48.8% from female. The data will collect by using self-administration; structured survey included close ended questions. The data was entered and analysed by using multiple software programs. **Results:** we found that the private practice was the most preferable future practice plan among the dental students. In addition, the majority of dental students show great interest in restorative dentistry. The strongest influencing factor among the students was personal desire/interest, and the lowest was Influence of family or relative.

Keywords: Dental specialty, decision making factors, dental post graduates, specialties related factors.

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INTRODUCTION

In Saudi Arabia, there are ten dental specialties approved by the American dental association, with uneven distribution and not covering the demands [1]. Some previous studies tried to discover this area and found the main factor affecting dental student preference, in 2018, a cross-sectional study was conducted on 600 dental students and graduates from different universities in Riyadh, Saudi Arabia, through an online questionnaire. The results showed that 49% prefer international institutes for post-graduate education, while 25% were interested in continuing their post-graduation from national institutes. 66.81% of pre-clinicians agreed that future salary is the most important factor influence the determination of the future professional specialist, while 55.88% agreed that cost of living expenses are considered to be an influential factor in their decision making of the specialty. In comparison, 47.06% agreed that the location of the program is an influential factor in

determining the decision of the future specialist [2]. In the same year, a cross-sectional study was conducted among current students and recently graduated alumni at the University of Western Australia. The study provides the factors influencing specialization; most of the participants found to be deterring were financial, whilst the factors found to be the most motivating were altruistic factors [3]. Another cross sectional study was conducted at four dental colleges across Karachi on 218 students. The study showed that parental occupation had a significant influence on the decision to specialize as 82% of students who had parents from a professional background showed interest in pursuing specialization. 60% of students believed that they had received enough specialty exposure and encouragement from their institutions to decide on their post-graduate plans [4]. On the other hand, a study was performed on fifth-year dental students from different nationalities, 47% were Jordanians, 27% were Malaysians, 11% were from the Gulf States, 10% were from conflict zones in the Middle East, and 5% comprised students from other

nationalities. The study reported significant differences between different backgrounds students according to various socioeconomic statuses and countries and the most-reported factors were financial reasons and practice plans [5]. Other study at dental colleges in Haryana revealed that oral surgery was the most preferred choice (35.77%) and pedodontics was the least preferred subject (0.81%) [6]. Regarding the influencing factor, different studies were conducted to evaluate the factors affect the students career choice, prestige was the more prominent factor among males in addition to they were affected more than females by lifestyle and job description [7, 8]. In 2012, a study was conducted among four private dental institutions in India, the study found that economic and professional factors were the main influencing factors for students pursuing dentistry in India; however, there was a powerful effect from the students' family in their future decision making [9]. Other survey reported that enjoyment during working in the choosing career has the largest influencing effect on determining dental specialty despite age, gender, class year, and educational debt. Several factors contribute to post-dental pursuing, such as gender, interest in a specific field, knowledge of academic matters, having a parent in higher education, and educational experience [10]. A study was published in 2015 among ten graduating classes at Harvard Dental School, once in 2008 (for the Classes of 2007-11) and again in 2013 (for the Classes of 2012-16). Other study reported that, previous dental knowledge and experience were had a greater effect on students pursuing specialties rather than being a general dentist [11]. This provokes the need to study the factors that influence dental students' decision-making toward career specializing. The aim of the study is to identify the different influencing factors that affect future decision-making about dental careers and specialties after graduation from dental school. Study objectives include identifying the most and the least influencing factors, the most and the least preferred dentistry field among preclinical and clinical years dental students.

METHODOLOGY

This was comparative cross-sectional study which carried out to evaluate the dental career and the factors that affecting the future decision-making after graduation by using stratified random sample technique.

Sample size calculation

The sample size was calculated based on total population (350) and the calculated size was (184) from undergraduates' dental students, calculated by using an online sample size calculator (<https://www.calculator.net/sample-size-calculator.html>) [12], considering the confidence level at 95%, with an expected frequency of 50%. The final respondents were increased to reach 251 students, 130 of them were males and 124 were females.

Subjects' selection

The participants collected from Umm Al-Qura university, college of dentistry. The students divided according to the gender and the academic year and randomly selecting a proportional sample from each stratum. There are 12 stratum from where the sample selected randomly. The responses were from 2nd year female=20 male=22, 3rd year female=25 male=21, 4th year female=21 male=26, 5th year female=19 male=18(16%), 6th year female=18 male=15, and intern female=19 male=27. Dental students who study at Umm Al-Qura University, faculty of dentistry (2nd, 3rd, 4th, 5th, 6th, and intern) from both male and female section were included in the study while excluding the first-year student (preparatory year) as they are still not considered dental students.

Data collection

Data was collected by self-administered questionnaire; the questionnaire is composed of close-ended questions that were derived from previous studies in the same area [5, 7] with modifications to accommodate the aim of this study. The questionnaire is divided into two main parts: part one, contains questions related to the general information and demographic data of the participants such as (age, gender, marital status, and academic year). Part two including questions represent the career intentions and factors that supposed to be influence dental students in future decision-making about postdoctoral specialty choice.

Validity and reliability of the data

Before starting the study, the questionnaire was distributed first to 20 students to ensure the clarity of the questions, and then it modified according to the feedback. Questionnaire validity was tested by distributing it among 20 students from different dental years twice with one-week interval. Kappa test was used to compare the two answers 95%.

Ethical approval

Informed consent was obtained from the students before conducting the questionnaire. The ethical approval was obtained from the institutional review board IRB of Umm Al-Qura University before data collection

Statistical analysis

The data obtained from the questionnaire were entered and analyzed by using the Statistical Package for Social Sciences (SPSS) ver. 23 for Mac software. Frequencies were calculated for all the categories as well as the factors. Chi-square tests, One-way ANOVA, and multivariate analyses were used to compare between the different variables. The level of significance is set at 0.05.

RESULTS

The study was designed to compare between males and females dental students from different grades regarding the factors related to post graduation career chose. The distributed questionnaires were completed by n = 254 students, 51.2% of the respondents were males and 48.8% were females (Table 1).

Figure (1), illustrate the students’ future practice plan, where the students prefer join private practice by (41%) followed by public work by (30.4%), while only (19.1%) prefer academic sector.

The majority of dental students at the UQUDENT preferred the Restorative Dentistry specialty (14.3%) then Oral Maxillofacial Surgery (OMS) (12.1%) specialty above all other dental specialties, while Dental Biomaterials (1.9%) was least preferred specialty (Figure 2).

Table (2), demonstrate the relation between gender and the social related factors as there is no significant difference between males’ and females’ students regarding the medical life style, social and prestige factors. The most social influencing factors among the students with no significant difference between males and females were Lifestyle and job description (p = 0.39), and Financial reasons/motives (future income) (p =0.21) (Table 2).

Table (3), demonstrate the relation between gender and the personal related factors, there are significant differences between males and females in privileges factors as females’ students have great tendency for private practice and conducting a research than males (p = 0.034 and 0.001 respectively).

Furthermore, the most personal influencing factor among the students with no significant difference between males and females was Personal desire/interest (p =0.3). On the other hand, the least personal influencing factors with no significant effects of them, were the gender distribution in the specialty and the influence of family or relative factors (p-value = 0.73 and 0.72 respectively) (Table 3).

Table (4), showing the relation between different grades and the social related factors, there are significant difference between different academic years regarding the medical lifestyle as the intern students have great tendency to little on-call commitment, and enough time left for leisure activity. Also, the clinical years (4th, 5th, 6th, interns) prefer low stress level at work. The social orientation factors have a significant difference as health promotion is important to 4th year

and intern students (66% and 48.9%) respectively higher than the other academic years, but the amount of patient contact is an influencing factor to 4th year students only (p = 0.000). The Financial motives is a determining factor for future carrier among 5th (71.8%), 6th (60.8%), and intern students (61.7%).

Table (5), showing the relation between different grades and the personal related factors. The strongest influencing factor among the students with significant difference between academic years was personal desire/interest (p = 0.000), and the lowest was Influence of family or relative (p = 0.004) (Table 5).

In addition, A wide variety of caseload and ease of entry into the residency program consider as strong factors with 4th (48.9%) and 6th (42.2%) year students (Table 4, 5).

Table 1: Demographic Data

Variable	N (254)	%
Gender		
Male	130	51.2%
Female	124	48.8%
Marital Status		
Single	242	95.3%
married	12	4.7%
Academic year		
2nd	42	16.5%
3 rd	46	18.1%
4 th	47	18.5%
5 th	39	15.4%
6 th	33	13%
Interns	47	18.5%

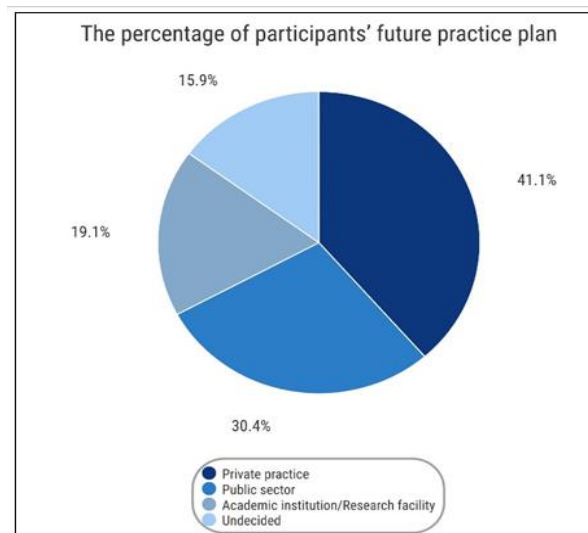


Figure 1: The percentage of participants’ future practice plan

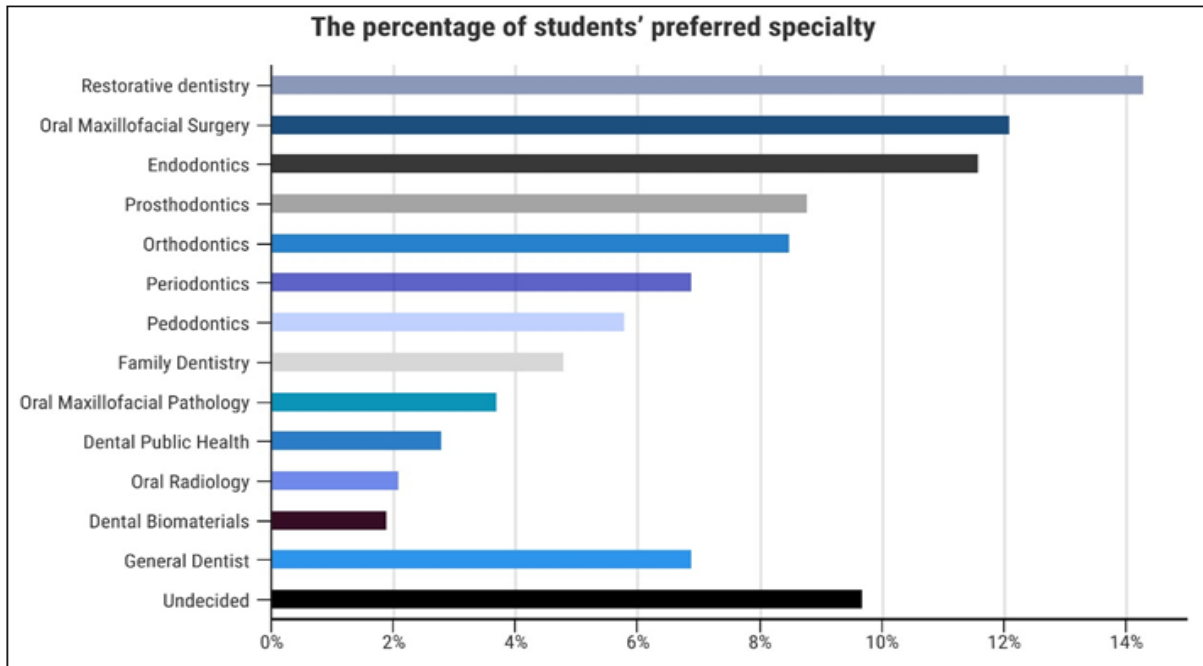


Figure 2: The percentages of the preferred specialties assigned by the participants

Table 2: The percentages of different social related influencing factors regarding the gender

Factor	Male			Female			P-Value
	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	
1Medical lifestyle							
Flexible working hours	15(11.5%)	64(49.2%)	51(39.2%)	14(11.3%)	51(41.1%)	9(47.6%)	0.39
Low stress level	23(17.7%)	47(36.2%)	60(46.2%)	29(23.4%)	44(35.5%)	51(41.1%)	0.5
Little on-call commitment	19(14.6%)	64(49.2%)	47(36.2%)	26(21%)	58(46.8%)	40(32.3%)	0.4
Enough time left for leisure activity	21(16.2%)	59(45.4%)	50(38.5%)	21(16.9%)	62(50%)	41(33.1%)	0.66
Easy compatibility with having a family	20(15.4%)	52(40%)	58(44.6%)	16(12.9%)	59(47.6%)	49(39.5%)	0.47
2Social orientation							
Interesting patient population	22(16.9%)	68(52.3%)	40(30.8%)	23(18.5%)	57(46%)	44(30.8%)	0.595
Amount of patient contact	28(21.5%)	57(43.8%)	45(34.6%)	27(21.8%)	57(46%)	40(32.3%)	0.92
Impotent in health promotion	16(12.3%)	62(47.7%)	52(40%)	21(16.9%)	59(47.6%)	44(35.5%)	0.53
3Prestige							
Financial reasons/motives (future income)	17(13.1%)	43(33.1%)	70(53.8%)	12(9.7%)	54(43.5%)	58(46.8%)	0.213
Reputation of specialty	24(18.5%)	59(45.4%)	47(36.2%)	21(16.9%)	64(51.6%)	39(31.5%)	0.61
Affordability of tuition fees	20(15.4%)	76(58.5%)	34(26.2%)	21(16.1%)	66(53.2%)	71(28%)	0.7
4Varied scope of practice							
Close relation with other specialties	33(25.4%)	65(50%)	32(24.6%)	24(19.4%)	58(46.8%)	42(33.9%)	0.22
A wide variety of caseload	20(15.4%)	70(53.8%)	40(30.8%)	21(16.9%)	62(50%)	41(33.1%)	0.83
A narrow variety of caseload	45(34.6%)	68(52.3%)	17(13.1%)	42(33.9%)	66(53.2%)	16(12.9%)	0.99

* Statistically significant

Table 3: The percentages of different personal related influencing factors regarding the gender

Factor	Male			Female			P-Value
	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	
5Personal preferences							
Personal desire/interest	15(11.5%)	37(28.5%)	78(60%)	9(7.3%)	30(24.2%)	85(68.5%)	0.3
Lifestyle and job description	11(8.5%)	39(30%)	80(61.5%)	8(6.5%)	47(37.9%)	69(55.6%)	0.39
Inclination of specialty before entering dental school	30(23.1%)	62(47.7%)	38(29.2%)	27(21.8%)	67(54%)	30(24.2%)	0.56
Length of training required	31(23.8%)	57(43.8%)	42(32.3%)	18(14.5%)	54(43.5%)	52(41.9%)	0.1
Gender distribution in the specialty	49(37.7%)	67(51%)	14(10.8%)	50(40.3%)	58(46.8%)	16(12.9%)	0.72
Geographical location of work	24(18.5%)	60(46.5%)	46(35.4%)	26(21%)	54(43.5%)	44(35.5%)	0.86
6Privileges	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	
Opportunity to conduct research	47(36.2%)	57(43.8%)	26(20%)	29(23.4%)	56(45.2%)	39(31.5%)	0.034*
Opportunity for private practice	31(23.8%)	38(29.2%)	61(46.9%)	15(12.1%)	63(50.8%)	46(37.1%)	0.001*
Ease of entry into the residency programme of the specialty	21(16.2%)	56(43.1%)	53(40.8%)	17(13.7%)	58(46.8%)	48(38.7%)	0.67
7Others` influence	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	
Influence from a mentor	31(23.8%)	67(51.5%)	32(24.6%)	31(25%)	59(47.6%)	34(27.4%)	0.81
Influence of family or relative	48(36.9%)	60(46.2%)	22(16.9%)	41(33.1%)	58(46.8%)	25(20.2%)	0.73
Other people`s perception of the job	37(28.5%)	64(49.2%)	29(22.3%)	40(32.3%)	64(51.6%)	20(16.1%)	0.44
8Others` Factors	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	
Low risk of litigation	36(27.7%)	79(60.8%)	15(11.5%)	28(22.6%)	70(56.5%)	26(21%)	0.113
Technically challenging specialty	17(13.1%)	84(64.6%)	29(22.3%)	21(16.9%)	80(64.5%)	23(18.5%)	0.59
Positive influence during the posting in the specialty	13(10%)	83(63.8%)	34(26.2%)	20(16.1%)	65(52.4%)	39(31.5%)	0.14

* Statistically significant

Table 4: The percentages of different social influencing factors regarding the academic grade

Factor	2 nd year			3 rd year			4 th year			5 th year			6 th year			interns			P-Value
	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	WEAK N(%)	MOD N(%)	STRONG N(%)	
1Medical lifestyle																			
Flexible working hours	7(16.7%)	18(42.9%)	17(40.5%)	6(13%)	26(56.5%)	14(30.4%)	2(4.3%)	21(44.7%)	24(51.1%)	7(17.9%)	13(33.3%)	19(48.7%)	5(15.2%)	15(45.5%)	13(39.4%)	2(4.3%)	22(46.8%)	23(48.9%)	0.22
Low stress level	14(33.3%)	15(35.7%)	13(31%)	15(32.6%)	19(41.3%)	12(26.1%)	3(6.4%)	22(46.8%)	22(46.8%)	9(23.1%)	8(20.5%)	22(56.4%)	4(12.1%)	16(48.5%)	13(39.4%)	7(14.9%)	11(23.4%)	29(61.7%)	0.001*
Little on-call commitment	12(28.6%)	17(40.5%)	13(31%)	10(21.7%)	33(71.7%)	3(6.5%)	7(14.9%)	25(53.2%)	15(31.9%)	7(17.9%)	18(46.2%)	14(35.9%)	4(12.1%)	17(51.5%)	12(36.4%)	5(10.6%)	12(25.5%)	30(63.8%)	0*

Enough time left for leisure activity	12(28.6%)	26(61.9%)	4(9.5%)	9(16.6%)	23(50%)	14(30.4%)	8(17%)	24(51.1%)	15(31.9%)	3(7.7%)	15(38.5%)	21(53.8%)	5(15.2%)	13(39.4%)	15(45.8%)	5(10.6%)	20(42.6%)	22(46.8%)	0.006*
Easy compatibility with having a family	10(23.8%)	17(40.5%)	15(35.7%)	6(13%)	28(60.9%)	12(26.1%)	4(8.5%)	22(46.8%)	21(44.7%)	7(17.9%)	11(28.2%)	21(53.8%)	6(18.2%)	11(33.3%)	16(48.8%)	3(6.4%)	22(46.8%)	22(46.8%)	0.053*
2. Social orientation	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	
Interesting patient population	8(19%)	20(47.6%)	14(33.3%)	6(13%)	24(52.2%)	16(34.8%)	6(12.8%)	24(51.1%)	17(36.2%)	9(23.1%)	20(51.3%)	10(25.6%)	7(21.2%)	15(45.5%)	11(33.3%)	9(19.1%)	22(46.8%)	16(34%)	0.972
Amount of patient contact	13(31%)	17(40.5%)	12(28.6%)	5(10.9%)	27(58.7%)	14(30.4%)	7(14.9%)	13(27.7%)	27(57.4%)	10(25.6%)	19(48.7%)	10(25.6%)	10(30.3%)	14(42.4%)	9(27.3%)	10(21.3%)	24(51.1%)	13(27.7%)	0.013*
Impotent in health promotion	9(21.4%)	24(57.1%)	9(21.4%)	6(13%)	24(52.2%)	16(34.8%)	2(4.3%)	14(29.8%)	31(66%)	9(23.1%)	20(51.3%)	10(25.6%)	9(27.3%)	17(51.5%)	7(21.2%)	2(4.3%)	22(46.8%)	23(48.9%)	0*
3. Prestige	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	
Financial reasons/motives (future income)	8(19%)	21(50%)	13(31%)	8(17.4%)	22(47.8%)	16(34.8%)	3(6.4%)	22(46.8%)	22(46.8%)	5(12.8%)	6(15.4%)	28(71.8%)	2(6.1%)	11(33.3%)	20(60.6%)	3(6.4%)	15(31.9%)	29(61.7%)	0.003*
Reputation of specialty	10(23.8%)	19(45.2%)	13(31%)	9(16.6%)	28(60.9%)	9(19.6%)	8(17%)	27(57.4%)	12(25.12%)	4(10.3%)	15(38.5%)	20(51.3%)	5(15.2%)	14(42.4%)	14(42.4%)	9(19.1%)	20(42.6%)	18(38.3%)	0.154
Affordability of tuition fees	12(28.6%)	23(54.8%)	7(16.7%)	6(13%)	32(69.6%)	8(17.4%)	3(6.4%)	26(55.3%)	7(16.7%)	9(23.1%)	16(41%)	14(35.9%)	4(12.1%)	19(57.6%)	10(30.3%)	7(14.9%)	26(55.3%)	14(29.8%)	0.051*
4. Varied scope of practice	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	

Close relation with other specialties	14(33.3%)	18(42.9%)	10(23.8%)	9(16.6%)	23(50%)	14(30.4%)	3(6.4%)	22(46.8%)	22(46.8%)	12(30.8%)	15(38.5%)	12(30.8%)	8(24.2%)	15(45.5%)	10(30.3%)	11(23.4%)	30(63.8%)	6(12.8%)	0.013*
A wide variety of caseload	10(23.8%)	22(52.4%)	10(23.8%)	5(10.9%)	31(67.4%)	10(21.7%)	3(6.4%)	21(44.7%)	23(48.9%)	10(25.6%)	18(46.2%)	11(28.2%)	6(18.2%)	13(39.4%)	14(42.2%)	7(14.9%)	27(57.4%)	13(27.7%)	0.032*
A narrow variety of caseload	17(40.5%)	22(52.4%)	3(7.1%)	13(28.3%)	31(67.4%)	2(4.3%)	13(27.7%)	23(48.9%)	11(23.4%)	13(33.3%)	18(46.2%)	8(20.5%)	15(45.5%)	14(42.4%)	4(12.1%)	16(34%)	26(55.3%)	5(10.6%)	0.118

* Statistically significant

Table 5: The percentages of different personal influencing factors regarding the academic grade

Factor	2 nd year			3 rd year			4 th year			5 th year			6 th year			interns			P-Value
5. Personal preferences	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	
Personal desire/interest	9(21.4%)	16(38.1%)	17(40.5%)	6(13%)	21(45.7%)	19(41.3%)	2(4.3%)	13(27.7%)	32(68.1%)	5(12.8%)	6(15.4%)	28(71.8%)	0(0.0%)	5(15.2%)	28(84.8%)	2(4.3%)	6(12.8%)	39(83%)	0*
Lifestyle and job description	7(16.7%)	17(40.5%)	18(42.9%)	5(10.9%)	18(39.1%)	23(50%)	0(0%)	14(29.8%)	33(70.2%)	4(10.3%)	12(36.8%)	23(59%)	1(3%)	12(36.4%)	20(60.6%)	2(4.3%)	13(27.7%)	32(68.1%)	0.076
Inclination of specialty before entering dental school	12(28.6%)	17(40.5%)	13(31%)	9(19.6%)	27(58.7%)	10(21.7%)	5(10.6%)	24(51.1%)	18(38.3%)	8(20.5%)	19(48.7%)	12(30.8%)	8(24.2%)	19(57.6%)	6(18.2%)	15(31.9%)	23(48.9%)	9(19.1%)	0.235
Length of training required	11(26.2%)	16(38.1%)	15(35.7%)	3(6.5%)	31(67.4%)	12(26.1%)	3(6.4%)	18(38.3%)	26(55.3%)	11(28.2%)	18(46.2%)	10(25.6%)	10(30.3%)	9(27.3%)	14(42.4%)	11(23.4%)	19(40.4%)	17(36.2%)	0.001*
Gender distribution in the specialty	14(33.3%)	22(52.4%)	6(14.3%)	14(30.4%)	28(60.9%)	4(8.7%)	12(25.5%)	28(59.6%)	7(16.7%)	16(41%)	18(46.2%)	5(12.8%)	20(60.6%)	9(27.3%)	4(12.1%)	23(48.9%)	20(42.6%)	4(8.5%)	0.096
Geographical location of work	11(26.2%)	18(42.9%)	13(31%)	7(15.2%)	25(54.3%)	14(30.4%)	4(8.5%)	23(48.9%)	20(42.6%)	10(25.6%)	14(35.9%)	15(38.5%)	9(27.3%)	12(36.4%)	12(36.4%)	9(19.1%)	22(46.8%)	16(34%)	0.46

6. Privileges	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	
Opportunity to conduct research	13(31%)	22(52.4%)	7(16.7%)	11(23.9%)	25(54.3%)	10(21.7%)	10(21.3%)	22(46.8%)	15(31.9%)	15(38.5%)	12(30.8%)	12(30.8%)	13(39.4%)	11(33.3%)	9(27.3%)	14(29.8%)	21(44.7%)	12(25.5%)	0.39
Opportunity for private practice	13(31%)	22(52.4%)	7(16.7%)	9(19.6%)	18(39.1%)	19(41.3%)	4(8.5%)	15(31.9%)	28(59.6%)	8(20.5%)	16(41%)	15(38.5%)	1(3%)	15(45.5%)	17(51.5%)	11(23.4%)	15(31.9%)	21(44.7%)	0.005*
Ease of entry into the residency programme of the specialty	8(19%)	24(57.1%)	10(23.8%)	2(4.3%)	32(69.6%)	12(26.1%)	4(8.5%)	17(36.2%)	26(55.3%)	10(25.6%)	13(33.3%)	16(41%)	4(12.1%)	10(30.3%)	19(57.6%)	10(21.3%)	18(38.3%)	19(40.4%)	0*
7.Others' influence	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	
Influence from a mentor	12(28.6%)	19(45.2%)	11(26.2%)	9(19.6%)	27(58.7%)	10(21.7%)	6(12.8%)	22(46.8%)	19(40.4%)	14(35.9%)	17(43.6%)	8(20.5%)	10(30.3%)	13(39.4%)	10(30.3%)	11(23.4%)	28(59.6%)	8(7%)	0.13
Influence of family or relative	15(35.7%)	17(40.5%)	10(23.8%)	10(21.7%)	26(56.5%)	10(21.7%)	11(23.4%)	20(42.6%)	16(34%)	20(51.3%)	15(38.5%)	4(10.3%)	17(51.5%)	13(39.4%)	3(9.1%)	16(34%)	27(57.4%)	4(8.5%)	0.004*
Other people's perception of the job	13(31%)	18(42.9%)	11(26.2%)	8(17.4%)	31(67.4%)	7(15.2%)	10(21.3%)	27(57.4%)	10(21.3%)	14(35.9%)	17(43.6%)	8(20.5%)	17(51.5%)	10(30.3%)	6(18.2%)	15(31.9%)	25(53.2%)	7(14.9%)	0.058
8.Others' Factors	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	WEAKN(%)	MODN(%)	STRONGN(%)	
Low risk of litigation	8(19%)	25(59.5%)	9(21.4%)	9(19.6%)	32(69.6%)	5(10.9%)	9(19.1%)	27(57.4%)	11(23.4%)	15(38.5%)	17(43.6%)	7(17.9%)	15(45.5%)	14(42.4%)	4(12.1%)	8(17%)	34(72.3%)	5(10.6%)	0.021*
Technically challenging specialty	12(28.6%)	20(47.6%)	10(23.8%)	7(15.2%)	31(67.4%)	8(17.4%)	0(0%)	32(68.1%)	15(31.9%)	8(20.5%)	24(61.5%)	7(17.9%)	5(15.2%)	22(66.7%)	6(18.2%)	6(12.8%)	35(74.5%)	6(12.8%)	0.021*
Positive influence during the posting in the specialty	12(28.6%)	21(50%)	9(21.4%)	2(4.3%)	32(69.6%)	12(26.1%)	4(8.5%)	28(59.6%)	15(31.9%)	8(20.5%)	21(53.8%)	10(25.6%)	5(15.2%)	23(69.7%)	5(15.2%)	2(4.3%)	23(48.9%)	22(46.8%)	0.002*

* Statistically significant

DISCUSSIONS

This study was conducted among 254 dental students in UQUEDENT, Makkah, SA. The majority of respondents were from males more than females and from different undergraduate classes. The present study showed that the majority of dental students at UQUEDENT favored Restorative Dentistry as a specialty over all other dental specialties, this is can explained by the early involvement of the Restorative Dentistry in the curriculum starting from 3rd year. Some of previous studies had reported the Restorative Dentistry in the top of all dental specialties recommended by dental students [5, 8]. The Oral Maxillofacial Surgery (OMS) coming in the second place as the most desire dental specialties, this was contradictory with the previous studies which reported the Oral Maxillofacial Surgery as the first choice and Restorative Dentistry as the second choice [8, 12]. The academic specialties were the least preferred specialties reported in the present study, as Dental Biomaterials, Dental Public Health, Oral and Maxillofacial Pathology or Oral and Maxillofacial Radiology, this was similar to the results found in many previous studies [4, 8, 9, 11, 13].

The present study reported that females' students have more tendency to conducting a research and working in the private clinic rather than males. On other hands, other factors as medical lifestyle, social orientation, prestige, varied scope of practice and personal preferences showed the same level in both males and females. These results were contradictory with the results reported by Besselaar [14] who reported that males prefer research and more reproductive in research than females, this difference may explain by different sample age and ethnicity in the present study which play major role in research productivity.

Lifestyle and job description, having an interest, and future income were the most influencing factors among students with no significant difference between males and females. Some previous studies agreed that the future salary and personal desire are the most determining factors in choosing future career [2, 4, 5, 6, 8, 13]. On the other hand, gender distribution in the specialty and influence of the family were the least controlling factor with no significant difference between males and females, this was similar to the results of Kazi, F *et al.*, [4] who found that the lowest influencing factor among dental students was family expectations toward their future career.

The present study reveals that there is a significant difference in medical lifestyle between different academic years, as intern students tend to have less on-call involvement and lots of time left for leisure activity, in addition to the clinical academic years prefer a low degree of stress at work. This could be explained by the heavy involvement of the practical sessions in the curriculum of the clinical academic years. Health promotion is critical to 4th year and intern students, but

the amount of patient contact is an influencing factor for only 4th year students. Among 5th, 6th, and intern students, financial motivation is a deciding factor for future career choices. The 4th and 6th year students consider a wide variety of caseload is an important factor, as well as the ease of entry into the residency program.

Personal desire is the most powerful influencing factor among students in different academic years. Although most of the present study participants live with their families, the study found that the family influence was the least influencing factor, this was contradictory with the results reported by Amit Aggarwal *et al.*, [15] who found that the families have a fundamental role in making decisions in the students' lives, and the researcher justify the result by that most of Indian dental students live with their families.

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