

The Career Choice, Motivation and Future Expectations of Dental Students: A Mixed Method Analysis

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Abstract

Background

An insight into students' motivation and choice into entering and remaining in dental education is essential. The understanding of how choices are made will help universities in the planning of admission policies. The aim of this study was to evaluate the career choice and motivation into dental education by undergraduate dental students at the Faculty of Dentistry, Kuwait University.

Methods

A mixed-method design was employed, evaluating both quantitative and qualitative data. One hundred seventy-three questionnaires were distributed to all registered dental students, with a response rate of 85%. Seven focus groups were facilitated, and related data recorded and transcribed.

Results

The mother's influence was statistically significant in decision making. There was a statistically significant relationship between motivation to choose dentistry and personal decision. Qualitatively, major influencers were family and culture.

Conclusions

While students were confident in their choice of career; this confidence was not reflected until the more advanced clinical stages of their dental education.

Background

Diverse factors motivate dental students' career choices in dental education. These may be influenced by cultural and socioeconomic backgrounds, gender, professional prestige, and desire to help others. There seems to be greater emphasis on monetary incentives, such as income and financial security. It appears that issues such as 'individual orientated' factors, for instance, 'helping people,' may be of lower priority for dental students [1]. Medical students were reported to be more focused on 'individual orientated' factors, with the commercial element, prestige and job security being of lesser importance [2].

Previous studies found students attend dental schools to be independent, serve others, as well as the attraction of the psychomotor skill of the profession, the acquired social status and/or financial security; being upwardly socially mobile, and having a flexible work schedule [3]. In the current literature, factors such as financial stability and people-oriented work were also dominant themes among motivations [4].

In the last two decades, data from various countries show an unprecedented change in gender ratios in the workforce, with the rise in the number of female workers in several fields of the labor market; this particularly evident in the field of dentistry [5].

Females were found to choose dentistry because they believe they will be able to balance their personal and professional lives effectively as dentists [5]. They were also less concerned with the business component of a career and more concerned with the caring and people factors [6-8].

In the Middle East, the same region of this study, females in a Yemeni study indicated that they would choose dentistry because in this sector jobs were readily available, also citing the desire to improve the health of individuals and the community [9]; Jordanian women had similar desires namely "helping people" as the highest-rated reason [10].

The evaluation and understanding of students' reasons, primarily regional, for attending dental schools can be beneficial, since it may help health care policies, and to design appropriate and effective recruitment as well as setting entrance structures and requirements for schools [11]. Besides, an insight into students' motivation could assist in designing and evaluating of dental curricula, as well as enables productive communication between students and educators [1].

The dental education in Kuwait spans seven years, where four years are in pre-dental years are joint with medicine, enrolled in a BSc in Biomedical Sciences. The choice to do dentistry is made at the beginning of this BSc, and after completing the BSc, students start their dental years both preclinical and clinical.

This study aimed to evaluate the career choice and motivation into dental education by undergraduate dental students (the majority are females) at the Faculty of Dentistry, Kuwait University, to explore and analyze motivations for career choice. This would allow for insight and planning of university admission policies and provide insight into what students may need to understand about the career choices that they make before embarking on them.

Materials And Methods

Procedure

A protocol and a questionnaire were submitted for ethical approval to the Joint Committee for the Protection of Human Subjects in Research of the Health Science Center, Kuwait University, and approval was granted.

Subjects were recruited from students from all the stages of dental education. Participation was voluntary, and consent to participate formed part of the inclusion criteria.

A pre-test sample was randomly selected to complete the questionnaire to undergo validity and reliability, and following that, the questionnaire was further refined. This self-completed questionnaire then distributed to the study population, which included all students enrolled in the Faculty of Dentistry dental program from years 1-7 (n=173) after an explanation of the study by an independent member of staff who was not involved in the study. The students were assured anonymity and the absence of identifiable elements within the questionnaire. They were advised that their participation is voluntary and that their involvement or no involvement would have no implication on their education, in general.

Facilitated seven focus groups were later conducted in a room in the faculty. They were recorded (digital) and transcribed verbatim. The focus groups were conducted in an open conversational style. Approximately seven students per year volunteered to be part of a focus group interview. The intention was to gain insight, interpret, and recognize the influences on career choice of dentistry by Kuwaiti dental students. Again, they were made aware that their participation in focus groups was voluntary and written, and oral information regarding this part study was also provided.

Expert validity was carried out through group discussion among the researchers involved in the study. Focus group discussions were digitally recorded, and then professionally transcribed.

Data Analysis

A mixed-method design was employed in this study. Quantitative data analysis was conducted using SPSS software (SPSS version 20.0; SPSS Inc., Chicago, IL, USA) for statistical analysis and descriptive statistics of responses.

The qualitative part was performed by the principles of the constant comparative method of grounded theory (GT) (Charmaz 2014; Glaser & Strauss 1967; Strauss & Corbin 1998;) [12-14]. This is a systematic collecting and analyzing qualitative data, with the purpose of constructing models or theories that may explain psychosocial processes and how people act/react.

The transcripts were entered into a qualitative software package (NVivo 12 plus; QSR International, Melbourne, Australia), and coded continuously while reading through the transcripts. The NVivo software permits qualitative data to be managed and organized into various categories and themes. A coding framework was then made around the topic, and key themes were identified as the data analyzed.

Each participant in the focus group was assigned a number to protect their anonymity. All participants were Kuwaiti Dental Students. The facilitator (HZ) was not involved in any activities relating to the teaching and assessment of any of the participants.

The researchers checked the transcripts to approve the accuracy of transcriptions, and that adequate participant involvement has taken place. This was also to ensure limited input from the facilitator, allowing the capturing of rich, authentic data. Thematic analysis was made using the model described by Braun and Clarke [15] and was carried out by two members of the research (HZ and NH) team using deductive and inductive approaches.

Results

Quantitative Analysis

The total number of Dental students registered from years 1-7 at the Faculty of Dentistry, Kuwait University at the time of the study was 173. A total of 147 completed the questionnaire, a response rate of 85%. The age range was 18-24 years old, with an average age of 21 years. Ninety three percent of respondents were females. Using the Contingency coefficient analysis for the association between gender and decision to choose dentistry, no statistical significance was observed (Table 1). The option "don't know" was excluded from the calculation and treated as missing, since it does not show any agreement and may inflate the average (Table 1).

Regarding the respondents familial educational background influence on motivation, 86% had mothers with university degrees and 83% of fathers with university degrees; with only 1% of mothers being dentists and 17% of fathers being dentists.

When asked about their perception of what factor influenced their decision to select dentistry as a career; the personal decision predominated (75% of respondents agreed with this statement). Using the Contingency coefficient, a statistically significant relation between motivation to choose dentistry and personal decision was observed (Table 2).

In the quantitative data parents' influence played splitting roles between mothers and fathers' influences; 31% agreeing to the presence of fathers influence and 36% agreeing to the presence of mothers' influence. Relating the contingency coefficient to the father's and mother's influence and gender effects, only the mother's influence was found to be statistically significant in decision making (Table 3).

Factors such as the influence of relatives, family friends, family dentists, or persons within the dental field, teachers, and friends had a 10 to 25% role.

The motivators to go into the field of dentistry as reported the desire to help was their main factor, followed by; interest in dentistry, working independently, financial opportunities, professional reputation, prestigious job perception, academic interest, interest in a branch of medicine, reasonable working hours, job opportunities, while job security was the least factor (Figure 1). When asked why medicine was not chosen as a career path, only 37% agreed that medicine would have been a longer, more difficult career path. Seventy-four percent felt that a career in medicine would involve long working hours, and 71% felt that medicine would be a stressful career. 7% of respondents felt that they wanted medicine but did not enroll in medicine because they did not have the grades for it. Only 2% of respondents regretted their choice of dentistry.

Qualitative Analysis

Three main themes were made from the qualitative data, which seemed to interrelate. The customary practice in qualitative research is to present direct quotations from the participants to illustrate these themes.

Theme 1: Influences on choice

The immediate family influences on career choice were the dominant feature *"Most of my family members encouraged me to choose it", "It wasn't my choice from the start. It was chosen for me."* *"My parents influenced my decision"*. There was also the perception that daughters or sons tend to keep their parents happy by the choice they made. *"My parents, they wanted me to be a dentist, so, I went for it."*

The advice that came from siblings, or cousins or distant family also had an influence, *"My cousin also as a 7th-year dentist student, she helped me to decide entering dentistry"*. Given the close culturally netted extending family ties in this region; the distant family involvement was not surprising. This was stronger if the parent or relative was within the profession *"I think they were many factors from parents, from a family that worked as dentists but in the end, I still think this is my choice and if I wanted anything else I would have chosen it."*

Parents' personal experiences through the generations also had some influence, *"my dad was very supportive of the choice because he always wanted to be a dentist, but his dad made him choose medicine, and it's that, so I guess my dad was living his dream with me"*.

While there were parents, siblings, cousins and relative influences, there were those who made their own personal choice *"No specific person has influenced me. My family and parents would just encourage in whatever field I would like to go to, and they were just supportive of whatever path I chose."* *"No, nothing influenced my decision; I just decided."*

It is difficult to ascertain if culture underpinned family and participants choice and this was the true determinant in choice. The authors are more inclined to believe that family influence in general is formed by cultural and acceptable norms, particularly for females, who formed the overwhelming number of students; at least 90% of the dental students were females. *"I agree, a female in our society has a lot of responsibilities, and the less working hours of a dentist compared to medical doctor usually contributed to my decision."*

Marriage and starting a family at a certain age is a very important culturally, particularly for females. *"Most my family influenced me especially my brother who is a physician.... wanted me to choose dentistry because in the future I want to start a family, the work hours are a lot easier than being a physician, so that made up my mind,"* However, some, particularly females were rebelling against these preconceived cultural norms, of what career is suitable for a male and that for a female *"I don't like feeling that I'm less because I'm a girl and therefore I have to go into dentistry as opposed to medicine which is a lot tougher and more difficult or you have to work longer, like don't get me wrong like comfort appears like I feel silly but like I don't know, I just don't like it when people say that it's better for me because I'm a girl."*

Some choices were logically based, on work-life balance, job security and financial status *"I think 90% of my decision making process is the logical aspect, merely for guaranteed employment and good financial status especially when I see my colleagues from high school struggling to get jobs while they are in the other specialties while someone who's in the medical field would instantly get the job."* The combination of financial, social (prestigious), lifestyle as well as helping others was also voiced in this investigation. *"I always knew I wanted to help people, so that was a big aspect and you know also if I get to help people and make money at the same time that's awesome"*. Other students felt that their choice was not influenced by social or financial reasons, but mainly, it was the idea of having flexible shorter hours *"What was in my mind was*

an easy lifestyle nothing financial and social aspects."The potential for job security and guaranteed employment also made dentistry an attractive choice for many. *"Quite specifically for dentistry, there is job security, so when you graduate, you can find a job easily, so that was a factor also."*

The dentist and how that influences shaping choice was also voiced by several participants *"I would go to my orthodontist every two months so I told them I was considering dentistry and he was very enthusiastic about it, and he just kept telling me."* And every time I would go to the clinic after that he was like, *"Hey my future colleague."* So, yeah, that was really nice." An interlay of influences was also visible in some of the comments that students made. *"So, definitely family, economic aspect of course, is important and can't be denied for sure and I guess personally as well because I also wanted to help people somehow".* However, there was also a sense of regret and dissatisfaction. *"It was chosen for me, but I'm trying to convince myself that maybe the financial status will be rewarded later on."*

Theme 2: Confidence in the choice made

There was some doubt among some students, in how confident in their choice, particularly among those still at the basic sciences and preclinical years. *"I still don't know, I'm still in the academic year, so I don't know if I made a good choice."* Perhaps not entering or starting the dental curriculum early may have increased the lack of confidence in the choice of dentistry as a career. *"I really don't know if I made the correct choice or not because we are still medical students, at this stage I would call myself a medical student, I have no exposure to dentistry at all, so, I don't know if I made the right choice."* What is also emerging among some students, that there was acceptance rather than confidence in choice, or indeed lack of confidence in the choice made. After studying with medicine for four years; some felt maybe they should have continued with medicine and completed medicine instead. *"Even now after four years I think it will be hard for us to let go off all this information, all this knowledge that we have acquired, it will all be somewhat useless. So, I think this whole situation is bad because we are getting attached to medicine and then having to let it go and do dentistry after four years."*

It seems that students were more confident in their choice as they moved passed the preclinical years. *"Yeah I love it I like drilling apparently and even more today because we're also shadowing 7th year. This might be a testament to early patient contact, even at the level of shadowing. "I think the CDC (Comprehensive Dental Care) is like the best thing they could ever come up with. The things I learned; we've only been there three times, and I feel like I've learned more than from any other lecture that we've taken."* There were students who were happy with having to learn their preclinical years similar to medicine and felt that this strengthened their learning. *"I also want to mention I still enjoy learning just general medical knowledge because I don't know I've always been fascinated by that. So, getting to do both of these things even if the exams are hard and I'm stressed out and sometimes, I really just enjoy the whole science of medicine in general."*

Several students experienced some difficulty in negotiating the thought process if they were confident about their choice. *"I think dental students have biased judgments because you know that you're already accepted into dentistry. There's no way that we change that so we've tried to convince ourselves more that dentistry is better than medicine. So, if we had some dental experience during the first four years, I think our judgment might be different."*

The 6th year, in particular, had a significant number among them who were not confident about their choice. For this particular batch, at entry, the regulations changed; as a result, many students who wanted to do medicine ended up in dentistry. The dental school entry traditionally required the highest GPA, particularly compared to medicine; for this batch, it was the other way round. While they enjoyed the preclinical years, they felt resentful being in this position compared to their counterparts *"I think I made the wrong career choice because the dental career is so stressful. I thought it was an easier lifestyle to take, but I regret it, it's not."* *"No, it wasn't for me, and I regret my choice, I should have defended my opinion back in that time. Dentistry doesn't fit me in all the aspects, doesn't fit my personality, and I really regret it."* One student expressed clear resentment *"No, I don't think that it's the correct decision; I feel if I were in medicine, I would have been doing better than now."* Stronger feeling of regret was to the extent that given the choice again, they will not choose dentistry. *"I would go to medicine."* *"I would go to medicine if I was allowed to shift after the 4th year."*

The thought process regarding their choice, their culture, family circumstances, and career aspiration, the thought process of weighing all potential career options, an interesting picture emerged. They feel that compared to career choices globally, the choices were limited to this cohort. *"I don't think we have that many options to begin with of what we are going to do, engineering or medicine and it's like choosing which one you would rather have, it's like choosing you don't have that many options, and they give you two options, and you pick the one that you think is least bad."*

Theme 3: Awareness of the program of study and choice:

The current method of selection and the length of study dentistry were clear as to how students feel about their choice. In weighing the options, the students narrative reflected one of two options, whether to study at home in Kuwait or to go to another country (the USA or Europe) to do dentistry. *"Yeah, I weighted between Kuwait and US, because my elder brother studied there, so, I thought that maybe I could go study with them or I could stay here in Kuwait, I had my two options open for me."* The reason seems to be not knowing enough or having clear career advice

regarding the study of dentistry. *"I didn't know that we will study pure medicine in the first four years; I didn't know that it was this difficult actually."*

The students' reflection on the issue of dental curriculum not starting till the end of the 4th year, after completing the Bachelor in Medical Science with medical students, having the same curriculum in Anatomy, physiology, biochemistry, etc.". Not surprisingly, some felt that they should have been allowed to choose at the stage when they completed the four years rather than earlier. *"I think that it would be better if students were able to choose dentistry or medicine after year 4. I think it would be better because they would study and see for the first four years and they would be older also, their thinking would be much more different. So, I think many of the students would change their minds at year 4."* *"I totally agree with number 3 I'm really afraid that all the knowledge we gained will go to waste, so I might choose medicine because I feel that I've come too far in medicine."*

Many students felt a sense of unfairness, that they have to study 7 years to become dentist, while their counterpart who study abroad would do it in less time and potentially have more time within dentistry than them. *"I think seven years are too long for dentistry. Like we see our college graduates from other universities before us, and they get more experience in dentistry because we have four years of medicine. So, we only get three years of dentistry while other students get approximately five years. So, they gain more experience than us, and this upsets me."*

Some had mixed feelings about the length of the seven years curriculum. *"I have mixed feelings like I want to start my career earlier and have more experience in what I would be doing in the future yet I'm happy that I gained this medical knowledge that I enjoyed plus I can use it in my daily life plus the bachelor of medical sciences is a bonus for us in which we can continue higher masters or Ph.D. and maybe we can leave the dental field in the future I don't know."*

The not knowing beforehand of having to study with medicine for four years before starting the dental curriculum has had its toll on some students, consequently regretting their choice. *"Me too, I didn't know how was the process exactly, I just feel like I am wasting my time maybe if I knew, maybe wouldn't be studying dentistry maybe I would have gone outside anywhere but not here because this is too much."* The curriculum of the four years with medical students is believed by the students to be very detailed for what they are going to end up doing as dentists. *"I think the university itself specifically the health sciences are very good, but at the 4 years in terms of dentistry it's too detailed for a dentist, you should have a background because if anything happens to the patient you can deal with but not to this point, the amount of physiology for example."*

The role of pre-college orientation or career advice seems to be lacking with most of the students, and they did not feel that they were giving enough career advice. *"My high school didn't do orientations or something like that for us, I just searched on the internet and asked a few of my friends, and so they helped me to choose this faculty."* *I agree totally with what he said; no one ever mentioned anything about careers when we were in high school."* Many students relied on social media for their search to help choose their career choice. *"I think the schools now, they don't give you an insight in majors you are interested in whether it is subjects or like a visit to a place, for example, this is where social media played a role or like the internet as a general. I looked up; I searched what like being a dentist or a lawyer or any other career path."* *In Instagram, I followed some doctors, some dentist especially when I entered this career like I want to know more because in high school, in my 18 years before I entered, I didn't have any information about dentistry."*

Some schools approach seems to orient their students with a view of specifically going abroad to study. *"Yeah, they were like, "Study abroad, and if you are going to be a doctor even if you are going into a medical field, be a doctor and not a dentist." Rather than that, it was nothing really positive."*

The scenario was more or less similar for both public and private schools in that both provided limited career advice or orientation *"I was in a public school, and we didn't get anyone from any university. So, it was useless impacting my career choice."*

There were also sentiments for the need for curriculum reform. *"Somebody should please change the curriculum and remove the first four years seriously like they're still there if you have to. Yesterday I was at the conference, and I saw that guy, and he was surprised that I studied cardiovascular, and GI and renal and he was, "You studied GI! You studied renal, why you don't need it." "I think I agree that it should be re-evaluated."*

The students felt the length of curriculum would have been a deciding factor in their decision or choice, if they were aware of what was involved in studying dentistry in comparison, with other universities. *"If I knew that I was going to study such great detail in medicine such as renal or reproduction I maybe wouldn't have entered dentistry because I'm already studying so much detail in medicine. So, if I knew that beforehand so maybe I would have changed my decision."*

Discussion

The study aimed to explore the motivators for a career in dentistry in the hope of creating a deeper understanding of the influences on college candidates when making their career choices at a young age. It was also to provide an insight into what factors play in a young persons' career

choice so that it can be addressed. This is to ensure that students who enroll in dental programs are eventually happy with their career choice and play a significant role in being a more productive satisfied workforce. This information may help in the strategic planning of the educational programs that would ultimately have an impact on the national workforce.

Dental education is a costly burden on the community, especially in countries where the educational expenses are government-supported or subsidized. The loss of any trained dentists to an eventual career outside of Dentistry after training is a substantial loss of resources and perhaps an opportunity for another candidate who may have had the potential of being a more productive member of the workforce.

The present study found that the majority of students enrolled in the Dental program at Kuwait University were females. This may be attributed to local, cultural influences that place preference for females to study in their home countries, as opposed to choosing to study Dentistry abroad. The option is available for entrants as the government sponsors students to study Dentistry in Western countries such as the United States and the United Kingdom if they gain admittance into such programs. This however, cannot be regarded as the main reason for the gender distribution reported. Published research and official government data have shown an unprecedented change in the last two decades – characterized by the rise in the number of female workers in several fields of the labor market worldwide. It is related to the expansion of schooling and female access to universities [16]. This change is visibly reflected in Dentistry [17].

The study found the influences on career choice to be family and cultural influences – with these two factors being somewhat inter-related. Being a member of the society, family advice and support must be heavily regarded, particularly those related to familial expectations for females for marriage with the related consequent responsibilities [8].

Studies conducted worldwide have also reported that lifestyle issues and role models were highlighted as prominent factors influencing medical students in their choice of career [18,19]. Dental School admissions, should perhaps consider that along with students, their immediate families – mothers and fathers, are provided with information on the career of dentistry and the career paths associated with the choice, which should help in making a more informed decision.

Another prominent influence that appeared in survey responses and focus group discussions is that of the financial and prestigious expectations associated with a career choice in Dentistry. This element of influence is not a contemporary one. Since the early 60s More and Kohn found that that of the multiple occupational motivations for dentistry, the prestige of the profession and financial earnings were commonly reported [20]. Continued research on the topic of motivations behind a career in Dentistry found that amongst both males and females, factors such as financial stability remained to be dominant themes [16]. In Malaysia, reports on the emerging dental workforce revolve around achieving professional goals with the desire for financial stability [21]. It seems that similar to medical student career choice intentions are complex with multiple modifiable and non-modifiable factors, financial reward and prestige ranked high [22]. Finances and prestige seem to resonate worldwide within both genders in association with the Dental profession. This information is of importance as it highlights the fact that when younger candidates and their parents embark into an introduction into Dentistry, they should be given insight into average income information associated with various specialties within the field. This information may help identify those who would make their career choice based on predicted income and give them a more realistic idea of what is expected after graduation.

Emerging from the narrative of the focus groups, that one particular influence on choice should be addressed. This relates to the structure of the program of study. Dental programs worldwide vary in length from five to eight years to obtain a general practice career in Dentistry. The content of programs and their integration with the Medical curricula within the university program seems to be associated with much frustration. Many students reported not to have realized the breakdown of the didactic programs, along with the timeline of the introduction to dental subjects, would have influenced their choice. It seems to have an impact on their feelings towards understanding their chosen specialty time invested in this choice made them unhappy with their choice.

Finally, the element of confidence in the choice made is essential, acting as a motivator, which sees students through difficult times during their study years, and enables them to accept their chosen career with greater satisfaction. The implication is that this results in fewer losses of dental graduates who decide not to work in the field after graduation. The financial impact of this loss in addition to the lost opportunities to others who did not get the opportunity is significant. The study found that students in the preclinical years had more doubt in their choice. This doubt reduces once students enter their clinical years. This highlights the impact of early patient contact, which can help ensure students' choices are met and identify those who are unhappy, particularly that their choice might have been influenced, and if realistically, they will be able to work in this field. This is quite relevant as our study reports that some females – who are increasing in percentage, felt as though their overall choices of study are limited. Within these limited options, they need to be given a chance to understand the nature of the career that they have accepted and make an informed decision early on whether they choose to continue with it.

This study has limitations; it is cross-sectional, evaluating the opinions of students studying Dentistry in Kuwait. Hence, generalizability might be affected as it does not take into account the students who study Dentistry abroad and then return to practice in Kuwait after graduation. They constitute a large part of the local workforce.

Another limitation was, although the professional language is English and entry requirement indicates a high level of English language proficiency, however, the spoken and command of the language might be Arabic for many students. That might have limited students' ability to reflect on their choices comfortably, with their daily spoken language.

Conclusions

The study found that the major influencers on student career choices were family and culture. Prestige and financial stability were also important factors. Overall, students were confident in their choice of career; however, this confidence was not reflected until the more advanced clinical stages of their dental education.

Declarations

Competing Interests

The authors declare no interest that may pose conflict with any party.

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Authors' Contribution

MK the principle author was involved in subject recruitment, data collection and analysis, and the writing of the manuscript. NH was involved in data analysis and writing of the manuscript. HA was involved in data collection. HZ was involved in data collection, analysis and writing of the manuscript. All authors have read and approved the final manuscript.

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Tables

Table 1 Using the Contingency coefficient analysis for the association between gender and decision to choose dentistry, no statistical significance was observed

	Personal decision				Total	P-Value
	Strongly agree	Agree	Disagree	Strongly Disagree		
Male	6 (50.0%)	5 (41.7%)	1 (8.3%)	0 (0.0%)	12 (100.0%)	0.451
Female	100 (75.2%)	27 (20.3%)	3 (2.3%)	3 (2.3%)	133 (100.0%)	
Missing	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)	
	108	32	4	3	147	
Total	(73.5%)	(21.8%)	(2.7%)	(2.0%)	(100.0%)	

P value < 0.05 statistically significant

Table 2 Motivation to choose dentistry and personal decision.

What motivated you to choose dentistry?	Personal decision				Total	P-Value
	Strongly agree	Agree	Disagree	Strongly Disagree		
Strongly agree	79 (82.3%)	14 (14.6%)	2 (2.1%)	1 (1.0%)	96 (100.0%)	*0.031
Agree	25 (58.1%)	16 (37.2%)	2 (4.7%)	0 (0.0%)	43 (100.0%)	
Disagree	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	
Total	104 (74.3%)	31 (22.1%)	4 (2.9%)	1 (0.7%)	140 (100.0%)	

*P value < 0.05 statistically significant.

Table 3 Relating the contingency coefficient to the father's and mother's influence and gender effects, only the mother's influence was found to be statistically significant in decision making

Gender	Father's influence				Total	P-Value	Mother's influence				Total	P-Value
	Strongly agree	Agree	Disagree	Strongly Disagree			Strongly agree	Agree	Disagree	Strongly Disagree		
Male	1 (9.1%)	3 (27.3%)	6 (54.5%)	1 (9.1%)	11 (100%)	0.198	1 (8.3%)	5 (41.7%)	6 (50%)	0 (0%)	12 (100%)	*0.02
Female	8 (6.7%)	33 (27.5%)	34 (28.3%)	45 (37.5%)	120 (100%)		9 (7.4%)	39 (32%)	34 (27.9%)	40 (32.8%)	122 (100%)	
Total	9 (6.9%)	36 (27.5%)	40 (30.5%)	46 (35.1%)	131 (100%)		10 (7.5%)	44 (32.8%)	40 (29.9%)	40 (29.9%)	134 (100%)	

*P value < 0.05 statistically significant

Figures

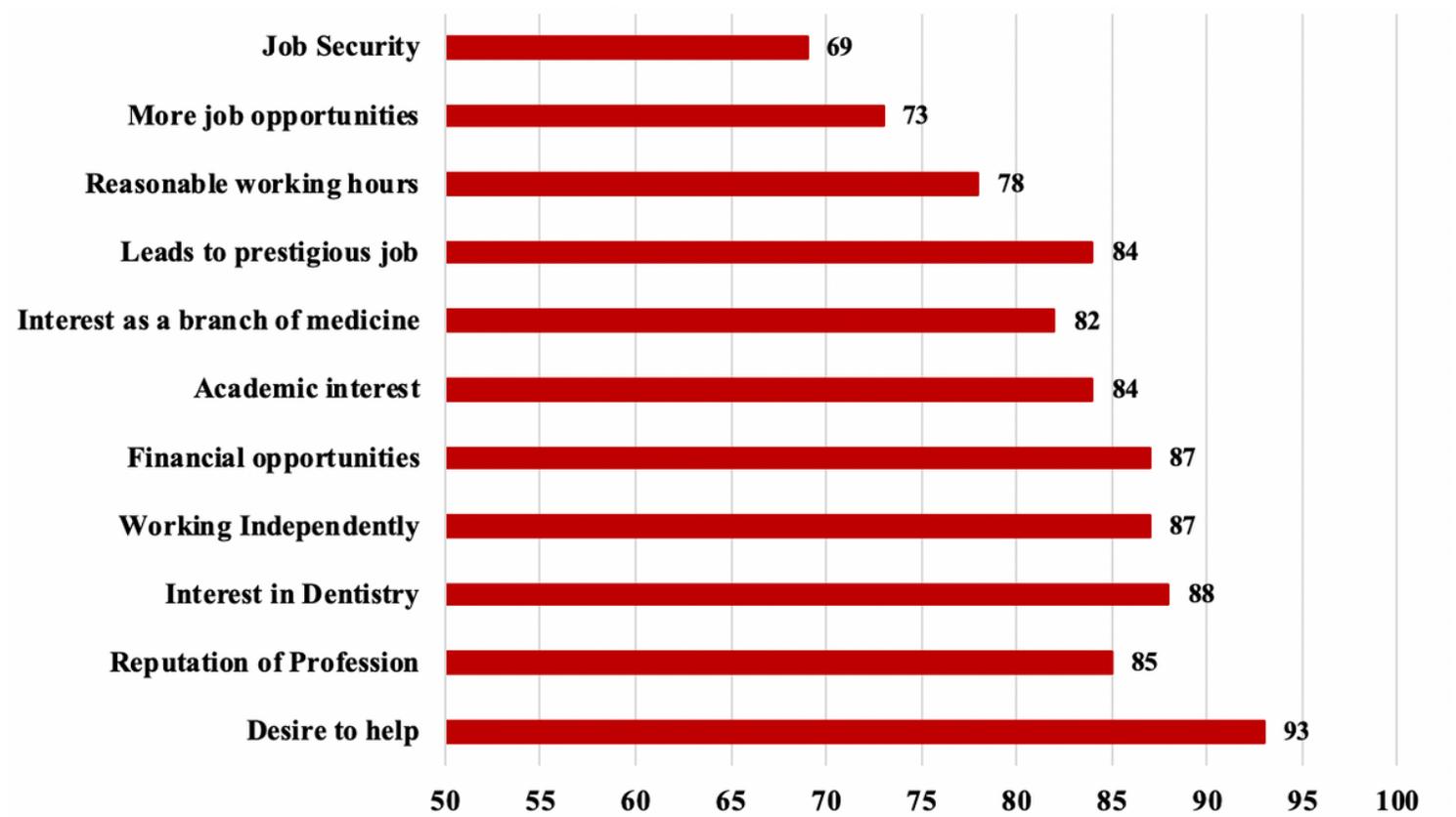


Figure 1

Response to the factors that motivated participants to choose dentistry