

Original Research Article


# Dentistry as a career: Factors and Motivational Reasons - A Comparative questionnaire study of Students of Public and Private Schools in Saudi Arabia

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## Abstract

**Background:** Many studies have been done to find out the motivational factors in choosing dentistry as a career. Only few studies are carried in middle East countries like Saudi Arabia.

**Aims and Objectives:** To establish the motivational factors behind selecting a career in dentistry by students of both gender in public and private schools in Saudi Arabia.

**Materials and Methods:** An anonymous questionnaire was distributed to 398 students of both public and private dental schools in Saudi Arabia. Candidates were asked to score the influence of certain factors on their decision to choose dentistry as a career on a scale from 0 to 10 in order of increasing importance. The obtained data was statistically analysed by graph pad prism software.

**Results:** Comparison between males and females for the parameter which year of study showed that there was no significant difference (P=0.180). But there was a significant difference between public and private school for the parameter which year the students studied (P=0.030). There was significant difference between male and female for the parameter one or more of my relatives are dentist (P<0.05).

**Conclusion:** Within this study's limitations, three key factors determining were, one or more of my relatives is dentist, dentistry pays better than other job options available to me and which year student belongs to.

## Key words

Career, Dentistry, Factors, Motivation, Saudi Arabia.

## Introduction

Nowadays, there are numerous professional careers; therefore the choice of the right career plays a major role in moulding the student's future [1]. Motives for choosing a career are difficult to understand. Dentistry provides a wide range of career and business opportunities as a general practitioner as well as a specialist. A high level of academic performance is necessary for entry into a career as a dentist. However, less clearly defined are the factors that influence the choice of dentistry. Students who choose dentistry as a professional career demonstrate a wide range of motivational factors and since the dominant motivational factors may vary over time and between countries, seeking an understanding of current motivations to enter the dental health care workforce is critical to health care systems and may result in major changes for policies in dental education [2, 3].

According to study findings in Brazil which has the largest number of dentistry graduates in the world, it was found that the causes and motivation of the students in choosing the discipline is not fixed and has been influenced by environmental and internal factors [4-7].

To our best knowledge after searching the literature, no documented data is available that evaluates the motivational factors affecting the choice of dentistry in the students of public and private schools in Saudi Arabia and hence we carried this comparative questionnaire based study.

## Materials and methods

An anonymous questionnaire was distributed to 398 students of both public and private dental

schools in Saudi Arabia. The students were randomly selected by taking their consent on first come basis. The survey was created de novo by the authors, who reviewed the content with the research team and the statistician to ensure that questions were quantitative and reflected appropriate phrasing. The study was carried out from January 2017 to May 2017. The questionnaire was designed to maximise response rate and minimise missing data and therefore was kept brief. Candidates were asked to score the influence of certain factors on their decision to choose dentistry as a career on a scale from 0 to 10 in order of increasing importance. There was also opportunity for free comment. The data were manually entered and stored anonymously in electronic format as a Microsoft Excel 2010 file.

## Statistical Analysis

Data was analyzed by graph pad prism software. Data was summarized by Median  $\pm$  IQR (Inter Quartile Range) for score data and percentages for categorical data. The comparison between two groups was done by Mann Whitney U test for score data and chi-square test/Fisher's exact test for categorical data. All p-values less than 0.05 were considered as statistically significant.

## Results

Comparison between males and females for the parameter which year of study showed that there was no significant difference ( $P=0.180$ ). But there was a significant difference between public and private school for the parameter which year the students studied ( $P=0.030$ ; **Table - 1**).

There was no significant difference between male and female for the parameter was dentistry

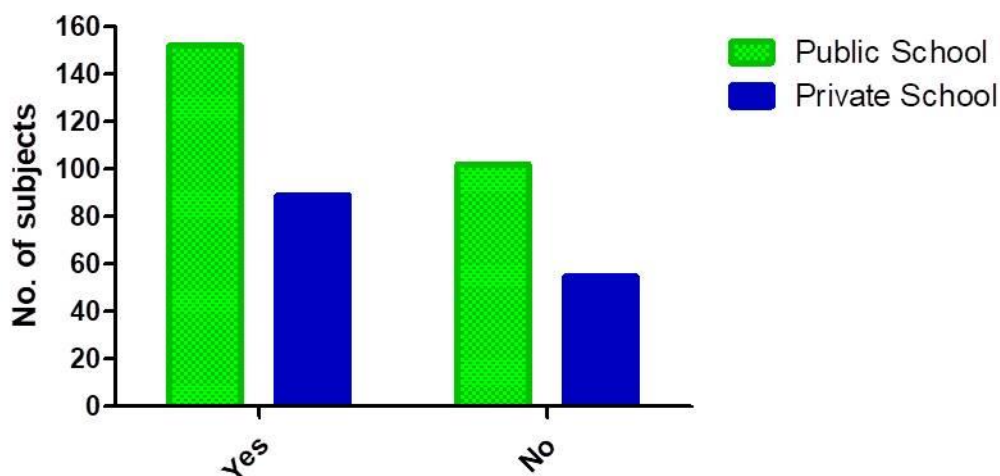
your first choice of career ( $P=0.305$ ) and there was also no significant difference between public and private school for the parameter was dentistry your first choice of career ( $P=0.749$ : **Graph - 1**).

There was a significant difference between male and female for the parameter one or more of my relatives are dentist ( $P=0.036$ ). There was a significant difference between public and private school for the parameter one or more of my relatives are dentist ( $P=0.003$ : **Graph - 2**).

**Table - 1:** Comparison between public and private school for the parameter which year.

Which Year?	Public school	% of public school	Private school	% of private school	P-value
Level 1	10	3.94	4	2.78	0.030
Level 2	30	11.81	9	6.25	
Level 3	42	16.54	10	6.94	
Level 4	42	16.54	35	24.31	
Level 5	56	22.05	36	25.00	
Level 6	42	16.54	30	20.83	
Internship	32	12.60	20	13.89	
Total	254	100.00	144	100.00	

**Graph - 1:** Cluster bar diagram for the comparison between public and private school for the parameter was dentistry your first choice of career.



There was no significant difference between public and private school for the parameter one or more of my friends are dentist ( $P=0.483$ ) and there was no significant difference between public and private school for the parameter it is easy for dentist to find job ( $P=0.223$ ).

pays better than other job options available to me ( $P=0.013$ ; **Table - 2**).

There was significant difference between public and private school for the parameter dentistry

There was also a significant difference between male and female for the parameter dentistry pays better than other job options available to me ( $P=0.001$ : **Graph - 3**).

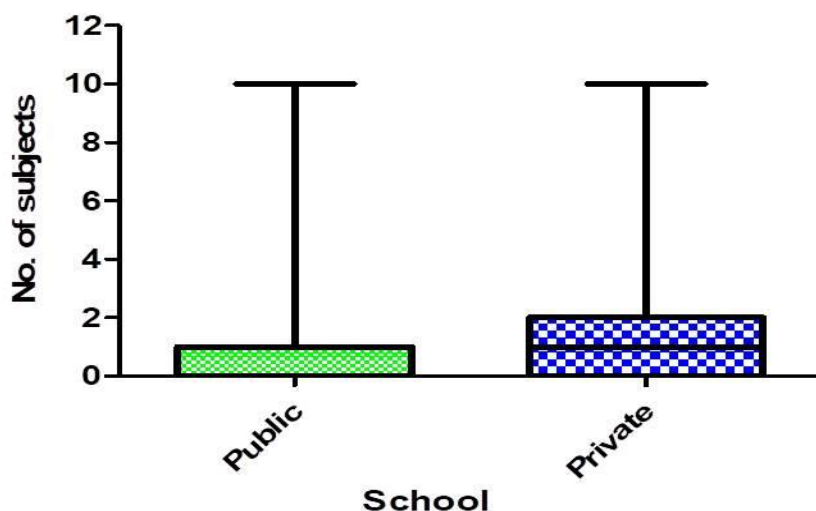
There was no significant difference between male and female for the parameter I want to be

self-employed ( $P=0.146$ ) and there was no significant difference between public and private school for the parameter I want to be self-employed ( $P=0.545$ ).

treat/help people or improve their appearance ( $P=0.875$ ) and there was no significant difference between public and private school for the parameter I want to treat/help people or improve their appearance ( $P=0.269$ ).

There was no significant difference between male and female for the parameter I want to

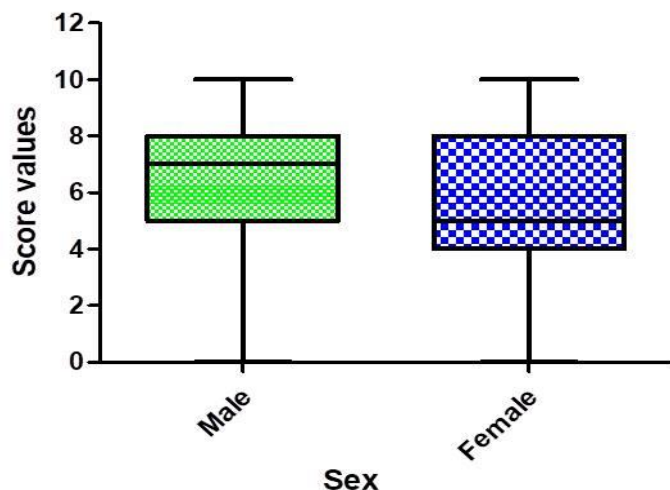
**Graph - 2:** Box-plot for the comparison between public and private school for the parameter one or more of my relatives is dentist.



**Table - 2:** The comparison between public and private school for the parameter dentistry pays better than other job options available to me.

School	N	Range	Median	IQR	P-value
Public	254	0 to 10	6	8 to 5	0.013
Private	144	0 to 10	5	8 to 4	

**Graph - 3:** The box-plot for the comparison between male and female for the parameter dentistry pays better than other job options available to me.



**Table - 3:** The comparison between male and female for the parameter other people encouraged me to become a dentist.

Sex	N	Range	Median	IQR	P-value
Male	199	0 to 10	7	10 to 4	0.039
Female	199	0 to 10	8	10 to 4	

There was no significant difference between public and private school for the parameter other people encouraged me to become a dentist (P=0.867).

There was no significant difference between male and female for the parameter I always wanted to become a dentist (P=0.365) and there was no significant difference between public and private school for the parameter I always wanted to become a dentist (P=0.443).

There was no significant difference between male and female for the parameter I can start to practice dentistry independently after graduation (P=0.842) and there was no significant difference between public and private school for the parameter I can start to practice dentistry independently after graduation (P=0.463).

There was no significant difference between male and female for the parameter I choose dentistry because I have art sense (P=0.111) and there was no significant difference between public and private school for the parameter I choose dentistry because I have art sense (P=0.454).

There was a significant difference between male and female for the parameter other people encouraged me to become a dentist (P=0.039;

**Table - 3).**

## Discussion

Research on student motivation for choosing dentistry as a career goes back many years. The findings, based on comparisons between universities, different classes at the same university and different demographically constituted classes, as well as comparisons over time, demonstrate a remarkable consistency.

Literature search regarding the reasons for choosing dentistry as a career revealed some data from USA, Israel, Australia, South Africa, UK, India but not much from middle east countries like Saudi Arabia [3-6].

A survey of 168 undergraduate dental students and applicants at Hadassah Faculty of Dental Medicine, Hebrew University, Jerusalem, Israel, indicated “professional standing” and “financial security” as the dominant influences. Factors such as an “opportunity to help people” and “manual skill required” were not considered important.

A survey of first year dental students attending the University of Sydney, and whose first choice was dentistry, ranked “a secure career” as the most important factor, followed by “an opportunity to help people” [9].

The varied priority of the “career” and “service” factors evident in the cited studies, together with the ordering reported in the present data, may be rooted in socio-economic perceptions of the dental profession. Such perceptions, if relevant, might vary both longitudinally and geographically and a standardised test instrument would help in the comparisons [7-9].

We found that the most significant factor influencing choosing dentistry as a career was 'one or more of my relatives is dentist'. The other two important factors were, dentistry pays better than other job options available to me and which year student belongs to.

Kabil, et al. found in their study highest responses in favour of the students "own will"

followed by family pressure as important factors in choosing dentistry [10].

The results presented are the first reported data for the Saudi Arabia on reasons for choosing dentistry as a career concentrating gender wise and public and private sectors. Further research could increase the sample surveyed by extending the study to the remaining dental schools in Saudi Arabia.

Scarbecz, et al. found that both male and female students rated the perceived financial factors and flexibility of dentists work time as important factor: the ability to set one's schedule, the ability to keep regular hours, the ability to have time for family [11].

Avramova, et al. in their study found that the majority of the students (73%) were self-motivated for choosing dentistry as a career; 61% of them did not have relatives in the medical profession; 43% chose dental medicine because it is a prestigious, humane and noble profession; 50% – for financial security; 59% – because of the independence that it provides [12].

Hallisey J, et al. found that reasons for choosing dentistry were perceived ease of employment, being self-employed, working regular hours, followed by an opportunity of good income, and the opportunity to help people. Having relatives or friends in the profession and lifelong ambition were the least important factors [13].

Gilavand A found that the important factor of motivation of students to choose field of study in Iranain and Foreign students include are high income and social prestige [7].

Jaiswal, et al. found that Desire to work in health care (84%), unable to enter medicine (79%) and independence of work (72%) were the top three influential factors [14].

Singh, et al. found that being self-employed (54%) and helping people (51%) as the top two factors for joining dentistry [15].

Rashmi, et al. found that job security, caring profession, flexibility, self-employment and prestigious profession were found to be important motivating and perception factors [6].

Understanding students' motives for choosing dentistry as a career may aid recruiters in designing appropriate and effective recruitment materials. It may also aid recruiters in providing students with a complete and accurate picture of the profession.

## **Conclusion**

Our study documents pioneer data regarding the motivational factors that might be involved in the choice of dentistry as a profession in Saudi Arabia public and private dental schools. We found that 'one or more of my relatives is dentist' to be most significant influencing factor. The research reported here may aid recruiters in crafting effective messages for attracting students to the dental profession, at a time when the demands for oral health care in the Saudi Arabia are increasing and the supply of dental health care professionals may be declining.

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