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Job Satisfaction among Dentists by Specialty

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A B S T R A C T

Objectives: The aim of the present study was to assess the level of job satisfaction among specialist dentists according to their specialty.

Materials and Methods: In this cross-sectional study, 541 specialist dentists completed a validated job satisfaction questionnaire in a dentistry conference held in Tehran in the spring of 2023. The questionnaire consisted of 45 questions in 8 domains (37 questions on job satisfaction and 8 questions about occupational stress), indicating the level of satisfaction based on a 5-point Likert scale. The satisfaction level was determined by adding the weighted scores of each area. The mean job satisfaction score (out of 100) was reported based on demographic factors and specialty. Statistical analysis was conducted using t-test and ANOVA (alpha=0.05).

Results: The mean score of job satisfaction was 70±8 (out of 100). Male specialists, those working in the private sector, and those with lower stress scores had higher job satisfaction scores (P<0.05). Job satisfaction had a significant association with age (P=0.039) and work experience (P=0.048). Periodontists and orthodontists had the highest level of job satisfaction while endodontists and pediatric dentists had the lowest job satisfaction level (P<0.05).

Conclusion: The level of job satisfaction of dental specialists appeared to be related to individual and demographic determinants (gender, work experience, age, and workplace) and differed based on the type of specialty.

Keywords: Dentistry; Job Satisfaction; Specialization

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INTRODUCTION

Individuals' perspective on their occupation can be perceived as job satisfaction. People are more likely to have positive attitudes toward their jobs when they report high levels of job satisfaction. Tasks and responsibilities, interactions, incentives, and rewards all have complex interrelationships that contribute to job satisfaction [1]. A career's longevity may be affected by the level of job satisfaction. It might even inspire individuals to quit their job. The stress level and job satisfaction of dental specialists and general dentists have been an interesting research topic [2]. A previous study showed significant physical and psychological disorders that may be connected to job dissatisfaction in dental profession [3]. The general consensus in a society is that dentistry is a high-income and opulent manual profession, but it is actually demanding, stressful, and challenging [4]. Dentistry is considered a stressful occupation. The career of a dentist could end

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prematurely due to excessive stress [5]. For dentists, common stressors include financial issues, sensitive and anxious patients, work-related problems, unfavorable working conditions, and repetitive nature of the work [5]. Moreover, dentists face numerous occupational hazards, including infectious and orthopedic illnesses, which greatly affect their overall well-being. Limited work environment, distinct social dynamics between dentists and patients, involvement in personal and private issues, sensitive human connections, personal characteristics, and the feelings of both dentists and patients are only some of these exceptional situations [6]. The level of job satisfaction may be variable in different geographical locations. Therefore, some factors known as occupational aspects are taken into account in the evaluation of specific components involved in job satisfaction in the majority of surveys in this regard [7].

Various factors, including social reputation, position in society, work environment, and numerous other aspects of daily life, can affect job satisfaction of dentists. Happiness, motivation, creativity, and skills are all products of satisfaction. It is critical to understand the impact of environmental factors on job satisfaction of specialist dentists; however, information is limited on job satisfaction in different dental specialties [8].

Gaining a specialty degree in dentistry requires an additional 3 to 5 years of specific post-graduate education. There are 11 fields of specialty in dentistry in Iran: oral and maxillofacial medicine, orthodontics, periodontics, pediatric dentistry, prosthodontics, oral and maxillofacial radiology, oral and maxillofacial surgery, endodontics, dental public health, oral pathology, dental biomaterials, and restorative dentistry. To the best of the authors' knowledge, no comprehensive report is available on job satisfaction among dental specialists in Iran. Thus, the aim of the present study was to assess the level of job satisfaction among dental specialists in Iran based on some demographic characteristics and specialty.

MATERIALS AND METHODS

The Ethics Committee of Tehran University of Medical Sciences approved this study (IR.TUMS.VCR.REC.1395.734).

The study population included all specialists in the field of dentistry working in private and public clinics and health centers in Iran whose working license was registered in the Ministry of Health. The inclusion criteria were having a dental specialty degree from an Iranian dental school with at least 2 years of work experience in their field of specialty.

Four groups of specialties including oral and maxillofacial pathology, oral and maxillofacial medicine, dental biomaterials, and dental public health were excluded from the study because of their non-clinical nature or the fact that these specialists usually work as a general dentist.

Dentists who only worked in universities as a faculty member were also excluded from the study. Based on the Cochrane table and according to the number of study variables, the minimum study sample size was calculated to be 384, who were selected by convenience sampling method among dentists participating in an Iranian annual dental congress held in Tehran in 2023. Those who accepted the invitation and gave their verbal consent were asked to complete the study questionnaire. Finally, 541 questionnaires were completed.

The questionnaire used in this study was adopted from a previous study where a standardized survey was carried out to evaluate job satisfaction of general and specialist dentists [9].

Nine experts evaluated the questionnaire, including a psychologist, a pediatric dentist, six specialists in dental public health, and one epidemiologist. The final questionnaire was filled out by 30 dentists, and its reliability was assessed using the Cronbach's alpha coefficient, yielding a result of 0.85. The kappa coefficient was 0.81.

The job satisfaction questionnaire, consisting of 37 items, encompassed the following areas: income, feeling of empathy, altruism (ethics), characteristics of the work environment, relationship with fellow clinicians, staff, and patients, executive duties, skills and competencies, motivations for selecting a specialty, and stress (Table 1). Responses to each question were structured using a 5-point

Table 1. Domains of the questionnaire on job satisfaction

Domain	Definition	Number of questions
1. Income	Average amount earned by the specialist dentist	1
2. Altruism, social respect, ethics	Willingness to do things that bring advantage to others, feeling pleasure, morals	6
3. Skills, ability	The ability to apply what has been learned	6
4. Work environment characteristics	Characteristics of the work environment	13
5. Executive responsibilities	A duty to effectively complete a job	3
6. Relationship with colleagues and staff	Experiencing the joy of the dental profession, alongside interactions with fellow staff and colleagues	3
7. Reasons for choosing specialty	The primary motivations for pursuing education to become a specialist	6
8. Stress score	The mean score derived from the eight items in the stress section of the questionnaire (0 to 100)	8

Likert scale: strongly agree, agree, neutral, disagree, and strongly disagree.

The questionnaire had a sub-section about the demographic information of participants.

The level of job satisfaction was assessed by the weighted total scores derived from the responses normalized to a scale of 0 to 100. Eight inquiries pertained to workplace stress, and their total scores were evaluated on a scale from 0 to 100. Statistical analysis was carried out using SPSS version 25 (SPSS Inc., IL, USA). T-test and ANOVA were utilized for the analysis of the data. P values<0.05 were deemed statistically significant.

RESULTS

A total of 566 questionnaires were returned but after elimination of incomplete questionnaires, data from 541 questionnaires were entered in the final analysis. Study participants included 313 male and 228 female specialist dentists. The mean age of the participants was 38.5±2.7 years, and the mean years of experience as a specialist was 7.8 years (range 2 to 36 years).

Table 2 shows the mean job satisfaction score in 8 domains and definitions among 541 dental specialists. According to the results, the mean total job satisfaction score was 70±10 (males: 71.5, females: 67) out of 100 and the mean total stress score of the participants was 62.4 out of 100.

The majority of the participants (80%) worked in the private sector and almost 6% worked in both private and public sectors.

Statistically significant differences were found in job satisfaction according to gender, years of experience, age, and work place (P<0.05). Job satisfaction was significantly higher in males (P=0.023). Job satisfaction score increased by age (P=0.039) and years of experience (P=0.041) It was also higher in dentists who worked in the private sector (P=0.048).

Table 3 shows job satisfaction and occupational stress among specialist dentists according to their specialty. Specialists in the field of periodontology had the highest job satisfaction score (79.5), followed by orthodontists (77.2), and the lowest job satisfaction score belonged to endodontists (50.8) followed by pediatric dentists (54.9).

DISCUSSION

This study was conducted to assess the level of job satisfaction of Iranian specialist dentists.

The results of the present study showed an upper intermediate level of job satisfaction among specialist dentists according to their specialty. The study results also showed significant differences according to age, work experience, gender, type of specialty, and work place among specialist dentists.

The findings indicated that private sector specialists were more satisfied with their jobs than their counterparts who worked in public sector. This can be explained by the fact that dentists working in the private sector have more flexible schedules and higher levels of

Table 2. Job satisfaction and stress scores among specialist dentists according to their demographics (n=541)

Variable	Subgroup	Number (%)	Mean score of job satisfaction (SD)	Mean score of occupational stress (SD)	P value*(job satisfaction)
Gender	Male	313 (57.8)	71.5 (±7.3)	59 (±7.1)	0.023
	Female	228 (42.2)	67 (±7.1)	68 (±8)	
Years of experience as a specialist	Less than 3	89 (16.4)	67 (±6.7)	59 (±6.3)	0.046
	3-6	151 (20)	69.6 (±6.8)	58.8 (±5.3)	
	7-9	95 (17.5)	71.9 (±7.4)	54.5 (±5.1)	
	10-14	119 (21.9)	72.8 (±7.5)	53.8 (±4.2)	
	15+	87 (16.1)	72.2 (±7.7)	52.1 (±4.3)	
Age (years)	Under 30	37 (6.8)	66 (±5.9)	65 (±6.8)	0.039
	30-35	95 (17.5)	67 (±6.1)	64 (±5.8)	
	36-40	117 (21.6)	68.8 (±8)	63 (±5.9)	
	41-45	112 (20.7)	70.9 (±7.1)	62.4 (±6.2)	
	46-50	108 (19.9)	74.8 (±8.3)	61.7 (±5.5)	
	50+	72 (13.1)	75.6 (±8.9)	60.3 (±5.6)	
Work place (as a dentist)	Public	76 (14)	63.2 (±6.7)	57.8 (±5.1)	0.048
	Private	434 (80.2)	71.9 (±8.1)	63.4 (±5.8)	
	Both	31(5.8)	68.1 (±6.8)	62.1 (±5.5)	

SD: Standard deviation; Level of significance=0.05, *ANOVA for age, work place and years of experience, t-test for gender.

Table 3. Job satisfaction and stress among specialist dentists by specialty (n=541)

Specialty	N(%)	Mean score of occupational stress (SD)	Mean score of job satisfaction (SD)	P value
1.Periodontology	68	54 (±6)	79.5 (±8.8)	0.031*
2.Orthodontics	51	52 (±4.3)	77.2 (±6.9)	
3.Oral and maxillofacial radiology	54	51 (±3.9)	75 (6.38)	
4.Oral and maxillofacial surgery	61	55 (±6.4)	70 (±6.1)	
5.Restorative dentistry	82	57 (±6.3)	68.3 (±5.9)	
6.Prosthodontics	59	63 (±9)	62.6 (4.9)	
7.Pediatric dentistry	87	65 (±9.8)	54.9 (±3.8)	
8.Endodontics	79	66 (±9.2)	50.8 (±4.8)	
Total	541	63.5 (±7.1)	70 (±6.6)	

SD: Standard deviation; *ANOVA, level of significance: 0.05.

A relevant study found that dentists employed in the public sector generally received fixed salaries, which typically lowered their level of job satisfaction [11].

Male dentists reported a notably higher level of job satisfaction. Results from various studies suggest that male dentists experience greater job satisfaction in their profession, largely due to the fact that female dentists often bear more responsibilities at home, potentially impacting their work. Moreover, dentistry is a field that necessitates physical capability, which tends to be lower in females. In line with the current study, other studies indicated that female dentists reported averagely lower career satisfaction scores than their male counterparts [12-15].

The findings of the present study showed that job satisfaction was related to age and years of work experience. Similar to our study, a Turkish

study showed that older dentists had higher job satisfaction levels [16]. Studying in the field of dentistry is not free in some countries and some dental students take out loans which must be repaid after graduation, which is considered as a stressor. Young dentists may experience higher levels of stress and lower levels of job satisfaction as a result of the pressure of a new workplace and lack of experience compared to their older colleagues [17].

The stress score displays the level of stress and work pressure. The quality of the provided service could be compromised by stress. Lower stress levels result in greater job satisfaction. Our study results were similar to those of a Korean study that revealed dentists who experienced high occupational stress had lower work ability scores [18].

According to the results of the present study, periodontists and orthodontists had the highest job satisfaction score while the lowest job satisfaction score belonged to endodontists and pediatric dentists. Obviously, the level of work pressure and level of stress among dental specialists are highly different from one specialty to another.

Factors such as social status, income, ability to work independently, creative and artistic nature of the career, altruism and psychological aspects of interest in dentistry have been reported as the most important factors influencing specialist's choice of career [18-21]. Personality traits should be considered as well; however, type of specialty can increase or decrease the level of stress among dentists [22].

One limitation of this study was the inability to assess the participants' psychological characteristics, as certain psychological factors could inadvertently influence the level of satisfaction. The authors recommend future studies to employ specialized questionnaires to evaluate personality types.

CONCLUSION

The findings of this study indicated that certain factors such as age, gender, work experience, workplace type, and specialty type affected job satisfaction, which should be taken into account to enhance job satisfaction among specialist dentists.

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CONFLICT OF INTEREST STATEMENT

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GENERATIVE AI IN SCIENTIFIC WRITING

None declared.

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