



## Introduction

- Career satisfaction marks the level of job contentment and fulfillment. It affects well-being, job performance, and overall quality of life (Fernández-Salinerio et al, 2020).
- Despite high levels of overall job satisfaction among pediatric dentists (Bates et al, 2013), the question of how gender impacts career satisfaction has not been closely studied.

## Objective

The purpose of the study was to determine career satisfaction differences between male and female pediatric dentists.

## Materials & Methods

- A 65-item digital survey composed of questions related to demographics (n=8), practice characteristics (n=19) and career satisfaction (n=38) was modified from “Bates et al (2013)” to assess pediatric dentists’ career satisfaction.
- The survey was distributed via REDCap™ to active pediatric dentist members of the American Academy of Pediatric Dentistry (n=6352). Data were collected from 8/4/2021 to 9/14/2021 with three reminders sent out to non-respondents at two and four weeks..

### Statistical analysis

- Descriptive statistics were generated to summarize the data.
- Cross tabulation, chi-square test, Fisher’s exact test, Mann-Whitney U test, and general linear model (GLM) were used to determine the associations and significant factors impacting professional satisfaction between genders.
- The data were analyzed using SAS® System version 9.4 with a significance level of 0.05.

## Results

- 674 surveys returned (11% response rate); 8 respondents excluded due to missing or unclear gender, and 3 respondents for not responding 95% of questions. 663 subjects were included in the analysis (mean/median age=48.9±13.3/47.0 years, range=28-82 years, 52.9% males).
- Males were more likely than females to be older 53.4±13.9 vs. 43.7±10.4 years; p<0.001), White (88.1% vs, 71.2%; p<0.001), married (91.1% vs. 85.2%; p=0.018), have spouse/partner spend more time on common household tasks (50.5% vs. 12.1%; p<0.001), have children (86.2% vs. 73.4%; p<0.001), have higher number of children (2.8±1.4 vs. 2.1±0.8; p<0.001), graduate from pediatric dental residency earlier (22.5±15.0 vs. 13.3±10.3 years; p<0.001), and be owner/partner (63.4% vs. 50.6%; p=0.002) (not shown in table). No significant differences between the genders were found in community size, primary practice setting, and AAPD practice region (not shown in table).
- Male pediatric dentists tended to have significantly greater average or median number of patients treated per week than female pediatric dentists (126.5±82.7\120.0 vs. 110.2±67.4\100.0; p=0.012); no other significant differences in dental practice characteristics (e.g., hours worked per week; patient insurance status; support staff; time spent on patient care, practice management, operating room, and conscious sedation) were noted (not shown in table).
- Male pediatric dentists were more likely than female pediatric dentists to recommend a dentistry career to their children (77.4% vs. 64.4%; p<0001) and to recommend a career in pediatric dentistry to their children (77.2% vs. 68.5%; p=0.013), (not shown in table).
- Female pediatric dentists had significantly lower mean ranking career satisfaction score than that of male pediatric dentists (345.3\3.15±1.37 vs.316.0\2.91±1.45; p=0.024), (not shown in table).
- Female pediatric dentists were overall less satisfied in the job/professional satisfaction (p=0.001), income (p<0.001), professional time (p=0.001), delivery of care (p<0.001), practice management (p<0.001), staff (p=0.008), respect (p<0.001), and well-being (p<0.001). While male and female pediatric dentists typically agreed on the patient relations and Covid-19 impact, male pediatric dentists gained more satisfaction from having enough time for personal life (p<0.001) and non-impact of malpractice litigation on treatment decisions (p=0.021), (Table 1).
- Results of the final general linear regression model indicated that well-being, respect, patient relations, stress, delivery of care, home care, staff, and practice management were significant predictors of overall professional satisfaction controlling for gender and age (Table 2).

**Table 1.** Gender Differences in Job/Professional Satisfaction Responses

Statement	Male	Female	Statistical Significance
	Mean Ranks‡/ Mean ± SD	Mean Ranks‡/ Mean ± SD	
I am very pleased with my income.	356.8/4.07±0.96	299.8/3.78±0.99	<0.001**
My income compares favorably to that of other professionals. <i>Index: Income satisfaction (Cronbach's alpha=0.81)</i>	349.0/3.84±0.98	308.8/3.61±1.05	0.004*
	356.7/3.95±0.88	303.2/3.70±0.94	<0.001**
I have enough time to improve my clinical skills.	350.8/3.73±0.80	300.2/3.47±0.89	<0.001**
I have enough time to devote to my patients’ dental needs.	344.1/3.86±0.92	313.1/3.74±0.87	0.019*
I have very limited opportunity to discuss difficult cases with colleagues. <i>Index: Professional time (Cronbach's alpha=0.57)</i>	338.6/3.68±1.06	318.2/3.56±1.07	0.145
	354.1/3.76±0.69	306.2/3.59±0.68	0.001*
I am skilled at dealing with my patients' dental problems.	352.1/4.65±0.56	305.3/4.50±0.58	<0.001**
I am able to practice dentistry the way I want to. <i>Index: Delivery of care (Cronbach's alpha=0.45)</i>	345.1/4.11±0.90	313.2/3.93±1.00	0.022*
	354.9/4.38±0.58	305.3/4.21±0.65	<0.001**
I find my relationships with patients satisfying.	330.4/4.28±0.71	322.1/4.25±0.71	0.532
Relating to parents is very frustrating for me.	344.9/3.74±0.96	314.4/3.54±1.09	0.028*
I do NOT enjoy interacting with my patients.	321.9/4.38±0.75	337.9/4.45±0.72	0.228
The quality of interpersonal care I provide is very high. <i>Index: Patient relations (Cronbach's alpha=0.69)</i>	329.9/4.35±0.64	332.3/4.37±0.61	0.858
	337.7/4.19±0.56	324.5/4.15±0.56	0.371
I enjoy the business side of my practice.	357.3/2.84±1.13	300.2/2.48±1.11	<0.001**
I manage the business aspects of the office very well. <i>Index: Practice management (Cronbach's alpha=0.67)</i>	357.9/3.41±0.92	298.8/3.09±0.94	<0.001**
	362.9/3.12±0.89	295.0/2.79±0.88	<0.001**
The work performance of my auxiliaries is outstanding.	344.2/3.80±0.89	309.9/3.61±0.97	0.013*
The office staff works well together <i>Index: Staff (Cronbach's alpha=0.74)</i>	343.2/3.94±0.72	313.1/3.79±0.85	0.021*
	349.4/3.88±0.71	311.4/3.70±0.82	0.008*
I do NOT get the respect that I deserve.	360.2/3.88±1.15	297.0/3.49±1.19	<0.001**
I feel quite proud to be a dentist. <i>Index: Respect (Cronbach's alpha=0.48)</i>	331.7/4.24±0.79	328.0/4.25±0.74	0.785
	355.0/4.06±0.82	305.2/3.87±0.78	<0.001**
	<b>Mean Ranks‡/ Mean ± SD</b>	<b>Mean Ranks‡/Mean ± SD</b>	
Covid-19 has NEGATIVELY impacted my overall career satisfaction	339.7/3.29±1.22	317.9/3.15±1.19	0.132
Covid-19 has NEGATIVELY impacted my personal life. <i>Index: Covid-19 impact (Cronbach's alpha=0.67)</i>	333.8/2.79±1.18	324.7/2.72±1.13	0.520
	340.9/3.04±1.05	321.0/2.93±1.00	0.176
Dentistry has NEGATIVELY impacted my physical health.	356.4/3.40±1.25	299.7/3.02±1.19	<0.001**
Dentistry has NEGATIVELY impacted my mental well-being. <i>Index: Well-being (Cronbach's alpha=0.79)</i>	352.1/3.71±1.15	302.8/3.40±1.19	<0.001**
	360.5/3.56±1.10	299.0/3.21±1.07	<0.001**
Knowing what I know now, I would make the same decision to go into dentistry again.	356.9/3.99±1.17	300.7/3.65±1.21	<0.001**
Dentistry fulfills my career aspirations.	339.9/4.17±0.89	317.9/4.08±0.88	0.112
I wish I could drop my job to do something else.	348.5/3.82±1.17	307.1/3.57±1.19	0.004*
I appear more satisfied with my job than I really am.	343.3/3.05±1.12	316.0/2.88±1.18	0.058
I am very likely to change careers in the next 5 years.	334.6/4.09±1.23	321.6/4.05±1.18	0.341
Dentistry is the place where I can make my best contribution.	333.6/3.94±1.00	324.9/3.93±0.87	0.533
Overall, I am extremely satisfied with my career.	351.8/4.11±0.96	302.4/3.84±1.05	<0.001**
I feel trapped in my current position.	347.2/3.76±1.19	306.5/3.48±1.27	0.005*
If my child were interested in dentistry, I would encourage him/her to pursue dentistry. <i>Index: Overall professional satisfaction (Cronbach's alpha=0.91)</i>	357.5/3.82±1.13	294.6/3.46±1.15	<0.001**
	354.3/3.86±0.83	306.0/3.66±0.84	0.001*
<b>Single-item indicator statement:</b>			
I have high quality specialists to whom I can refer.	341.8/4.19±0.88	315.7/4.07±0.90	0.053
I have enough time available for my personal life.	258.5/3.57±1.07	297.1/3.19±1.14	<0.001**
Malpractice litigation has NOT affected my treatment decisions.	344.5/3.80±1.22	311.6/3.61±1.18	0.021*
Doing dentistry is very stressful for me.	342.6/3.16±1.10	315.7/2.99±1.08	0.060
*Significantly different at p<0.05; **Significantly different at p<0.001. ‡ Mean ranks are a summary statistic indicating the general trend of each compared group on an ordinal scale. Generally, higher and lower ranks indicate the propensities of group members to score higher or lower, respectively, on the scale.			
<b>Note:</b> Each question was worded: How much do you agree with the following statements? Response options ranged from 1=disagree strongly to 5=agree strongly.			

**Table 2.** Significant Demographic and Practice Characteristics and Work Environment Factors Predicating Overall Professional Satisfaction Based on a Stepwise-Regression Analysis, Adjusted for Gender and Age

Variable	Beta <sup>1</sup> (SE)	Standardized Beta <sup>2</sup>	t-value	P-value
Well-being	1.92 (0.23)	0.282	8.33	<0.001
Respect	2.56 (0.33)	0.268	7.75	<0.001
Patient relations	2.84 (0.44)	0.210	6.51	<0.001
Stress	0.89 (0.22)	0.130	4.14	<0.001
Delivery of care	1.49 (0.38)	0.124	3.93	<0.001
Home care	0.64 (0.25)	0.066	2.55	0.011
Staff	0.61 (0.29)	0.060	2.12	0.035
Practice management	0.49 (0.23)	0.058	2.13	0.034
Note: SE=standard error. R2=0.663, Adjusted R2=0.657, F=103.74, p=<0.001				

## Conclusion

- Male pediatric dentists are more likely to recommend a career in pediatric dentistry to their children compared to female pediatric dentists.
- Overall, male pediatric dentists are more satisfied with their career than their female counterparts.
- Overall professional satisfaction is significantly associated with well-being, respect, patient relations, stress, delivery of care, home care, staff, and practice management.

## Limitations

- The study is limited to pediatric dentists in the US. Results may not correlate to other countries or other dental specialties.
- The 11% response rate may imply that the results are not representative of all pediatric dentists in the US.
- The study is cross-sectional, and causality cannot be established.

## References

1. Bates LF, Buehler AM, Boynton JR, Majewski RF, Inglehart MR. Pediatric dentists’ job satisfaction: results of a national survey. *Pediatr Dent.* 2013;35(4):343-50.
2. Fernández-Salinerio S, García Collantes Á, Rodríguez Cifuentes F, Topa G. Is Job Involvement Enough for Achieving Job Satisfaction? The Role of Skills Use and Group Identification. *Int J Environ Res Public Health.* 2020;17(12):4193.

## Acknowledgements

- University of Iowa Department of Pediatric Dentistry
- This work is supported by the Dr. Henry W. Fields, Jr. Graduate Student Support fund and the IOWA Pediatric Dentistry Excellence Fund.