



WELLNESS

Dentist Well-Being Survey Report



ADA Center for
Professional Success™

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Executive Summary

Key Findings

- More than 85 percent of active dentists were married in 2015 and 90 percent reported they were emotionally satisfied with their relationship.
- Most dentists (94%) engaged in some form of exercise in an average week. Male dentists age 40 years or older (96%) were most likely to report that they engaged in exercise during the week.
- Dentists rarely reported substance abuse. Although analgesics were used on a regular basis by 17 percent of dentists, opiates were used by fewer than two percent. These percentages were similar compared to reported regular use by dentists in the 2003 Dentist Well-Being Survey. Risk of drug addiction, assessed by CAGE substance abuse screening tool, was very low and indicated less than one percent at risk.
- Although only one-in-ten dentists were considered at high risk for alcoholism, nearly one-in-five (18%) of all practicing dentists felt that they should cut down on drinking. Feeling a lack of control at work and being unsatisfied with their dental practice were associated with higher risk for alcoholism.
- Over one-in-five dentists (22%) were determined to have a moderate level of depression and four percent had a high level of depression. Half of the dentists who scored a high level reported that they have not been diagnosed or have not considered themselves to have depression.
- The leading medical condition male dentists self-reported as diagnosed or that may apply to them was elevated cholesterol (28%), followed by heart disease (11%). Among female dentists, headache was the most common condition, followed by depression (13%). Overall time lost from work or recreation due to poor physical or mental health was small, less than 10 percent of dentists reported one or more days kept away from activities in the month prior to the survey.
- Overall, dentists reported conditions in themselves in similar proportion to those reported by dentists in the 2003 Dentist's Well-Being Survey. However, in 2015, a larger percentage reported diabetes (5% vs. 3%, respectively), and a smaller percentage of women reported premenstrual syndrome or premenstrual dysphoric disorder (9% vs. 15%, respectively).
- Nearly one-in-five dentists (19%) reported that they have experienced some type of harassment in a dental setting. Female dentists were twice as likely as male dentists to report harassment. Dentists who experienced harassment were less likely to want to be a dentist again if they re-lived their life, were more likely to experience severe stress at work and feel a lack of control in their work environment.
- About one-in-three dentists (32%) reported signs of hearing problems. Male dentists age 40 and older were more likely to report hearing problems (41%) compared to other gender and age groups. Few dentists (4%) reported using hearing protection.

- Three out of ten dentists (31%) reported moderate or severe pain or discomfort in the neck and a similar percentage (29%) reported pain or discomfort in the lower back. These two areas were most often associated with pain or discomfort and were associated with interference from work.

Considerations and Recommendations

The work of active dentists appears to be stressful with the potential to impact health. Dentists under age 40 were disproportionately affected by health effects of work – this age group was less likely to feel in control of their work environment, scored higher on a depression scale and was at higher risk of alcoholism compared to older dentists. Younger dentists may potentially benefit from additional support and education to improve their ability to cope with stress and to maintain positive psychological wellbeing.

About half of dentists, men as well as women, indicated it would be difficult for them to seek professional help because they think they should be able to solve their own problems. Dentists who responded this way were more likely to have hearing loss for which they did not seek evaluation or treatment, and score high on depression indicators while not reporting a diagnosis of depression and have undiagnosed chronic pain that interfered with work.

The health and well-being of female dentists was disproportionately affected by work compared to that of male dentists. Female dentists were more likely to report that they work at home more than a comfortable amount and had a higher level of daily stress at home than male dentists. Harassment appears to have a strong impact on satisfaction, feeling of control and general well-being of female dentists. Programs within dental practices that prevent harassment and promote gender equity in the workplace may improve the overall well-being of female dentists.

Introduction

Purpose

The ADA Health Policy Institute, in conjunction with the ADA Council on Dental Wellness Advisory Committee (DWAC), conducted the 2015 Dentist Well-Being Survey to study the various stresses which may affect dentists today. The 2015 Dentist Well-Being Survey report intends to describe job satisfaction, workload at home, medical conditions and addictions, workplace safety, effect of personal responsibilities on work, and effect of health on work. From these results, the ADA hopes to design more effective education programs for professionally active dentists.

Design

The 2015 Dentist Well-Being Survey was anonymous and initially mailed to a random sample of 7,475 professionally active licensed dentists including general practitioners and specialists. This report presents selected highlights of data from the 2015 Dentist Well-Being Survey and is not intended to be a comprehensive report of all possible analyses of survey data. The purpose of this data is descriptive. Differences between the groups presented in this report should not be considered statistically significant unless specifically identified as such. Unless otherwise indicated, results given in the report include all professionally active licensed dentists who responded to the survey.

The 2015 Dentist Well-Being Survey was similar in content and methodology to the 2003 Dentist Well-Being Survey and allows for general comparisons to identify changes in health and well-being of dentists, over a twelve-year period.

Methodology

Sample

The *2015 Dentist Health and Well-Being Survey* was initially mailed to 7,475 professionally active licensed dentists including those registered as general practitioners and specialists, ADA members and non-members in May 2015. Respondents were asked to return postcards at the same time as their completed surveys to indicate that they had returned the questionnaire. No names were associated with returned questionnaires so that responses would be completely anonymous. There was no identifying information of any sort on the returned questionnaire.

Three reminder postcards and two follow-up mailings were sent to dentists who did not respond to the initial mailing. Data collection ended in September 2015. A total of 2,122 surveys were received for a final adjusted response rate of 28%.

Data Cleaning

Two responses for one question, completely illegible responses and questions left blank where a skip pattern did not suggest that the question should have been unanswered, were coded as missing. Those who did not indicate dental practice as their primary occupation and those working primarily in a non-dental occupation were excluded from analysis. The final sample for analysis includes 2,016 active licensed dentists.

Data Weighting

After the completion of data collection and selection of eligible responses, post-stratification weights were generated so that the weighted case distribution of eligible survey respondents was as close as possible to that of the population of active dentists. Demographic variables with a potential to impact survey question responses were considered for calculating weights. The survey sample was compared to the annual census of dentists in terms of age group, gender, primary occupation and region. If the difference between the survey sample and population of active dentists was more than three percentage points, the variable was chosen to weight the data.

Male dentists over 40 years of age were over-represented in responses. Both male and female dentists under 40 years of age were under-represented in responses. Therefore, weights were defined by age and gender combination. Responses missing information on age or gender were assigned a weight of 1.0. Table 1 presents the weights calculated and assigned to each group.

Table 1: Weights Assigned to Survey Responses

Respondents	Assigned Weight
Male dentists under 40 years of age	1.81
Female dentists under 40 years of age	1.47
Male dentists 40 years of age or older	0.85
Female dentists 40 Years of age or older	1.05

Analysis

The statistical software RStudio 3.3.2 with the accompanying survey package was used to account for the post-stratification weight in the analysis and to calculate all descriptive statistics and appropriate measures of association in this report.

Percentages were calculated with the number of dentists who responded to the survey item as the denominator. All numbers and percentages shown are weighted responses, unless specified as an un-weighted total. Statistics calculated for categories with fewer than 30 responses are considered unreliable and are not shown.

Differences in the distribution of responses between groups were determined by Pearson’s chi-squared test. The chi-squared test assesses whether observations in more than one category, expressed in a contingency table, are independent of each other. For example, we can test whether dentists from different regions differ in the frequency with which they report that they are satisfied with their current primary practice. A statistically significant result would indicate that there is a relationship between satisfaction and the region where a dentist practices. Differences were considered statistically significant if the p-value of the chi-squared test was less than 0.05.

Differences in the mean of measurements in two categories were determined by t-test. A t-test is used to determine if two population means are equal. It is assumed that the samples are normally distributed (assumption of t-tests), that the samples are independent of each other (assumption of two sample t-tests), that the variances of the samples are equal and that the samples are unpaired. If the resulting p-value of the t-test was less than 0.05, the difference between the groups was considered significant.

Logistic regression using the maximum-likelihood method was used to determine association of a categorical outcome with an independent variable. Logistic regression assumes the observations are independent of each other and estimates the probability of an outcome in the presence of the independent variable. For example, we can estimate the odds of a dentist responding that he or she was harassed based on gender of the dentist. Odds ratios were calculated and determined to be significant if the p-value of the test was less than 0.05.

Results

Demographic characteristics

Key demographic characteristics for dentists participating in the survey, and from the United States population of professionally active licensed dentists (2015 census data), are provided in Table 2. Results of weighted responses are well-matched to the population of active licensed dentists and can be considered a representative sample of dentists for the purposes of describing the results of the health and well-being survey.

Professionally active licensed dentists were grouped into one of four groups based on their reported current primary occupation. The majority of dentists reported that they were in private practice (91%). A total of three percent of dentists were dental school faculty, four percent were employed in federal dental services, and two percent were in some other dental occupation.

Table 2: Demographic Characteristics of Dentists Participating in the 2015 Dentist Well-Being Survey compared to All Professionally Active Licensed Dentists

	Respondents			Population of Professionally Active Licensed Dentists ¹	
	Number	Weighted Number	Percent ²	Number	Percent
All Dentists	2,016	2,016	100	191,777	100
Gender					
Male	1,522	1,432	72	136,085	72
Female	479	564	28	52,896	28
Missing	15	20	~	~	~
Age Group					
Under 40 years of age	290	474	24	47,365	25
40 years of age and older	1,696	1,507	76	144,412	75
Missing	30	35	~	~	~
Primary Occupation					
Private practice	1,860	1,838	91	168,543	88
Dental school faculty	55	53	3	4,741	3
Federal dental services	64	79	4	5,649	3
Other dental occupation	37	41	2	12,844	7
Region of Occupation					
New England	104	99	5	10,352	5
Middle Atlantic	277	265	13	29,346	15
East North Central	333	328	16	26,782	14
West North Central	129	134	7	11,348	6
South Atlantic	328	325	16	33,326	17
East South Central	99	95	5	9,032	5
West South Central	191	198	10	19,014	10
Mountain	145	153	8	13,476	7
Pacific	371	375	19	38,933	20
Missing	39	40	2	~	~

1. Weighted percentages are shown

2. Supply of Dentists in the U.S 2001-2015. American Dental Association, Health Policy Institute analysis of ADA master file

Relationship Status

Dentists were asked to report their current relationship status. As shown in Table 3, 84 percent of responding dentists were married. More than one-in-three dentists (37%) reported that they have been married more than once.

Compared to the 2014 U.S. population over age 15, dentists were more likely to be married and less likely to be divorced or separated. One-in-ten U.S. adults (10%) were divorced in 2014 and an additional two percent were separated from their spouse. Just under half of the U.S. population was married (49%) and 33 percent was classified as single, never married.¹

Table 3: Marital Status by Age and Gender

	Single, never married		Couple, married		Divorced or Separated or Widowed		Couple, unmarried	
	N	%	N	%	N	%	N	%
All Dentists	138	6.9	1,676	83.8	147	7.4	38	1.9
Age Group								
Dentists under 40 years of age	72	15.3	368	78.3	12	~	18	~
Dentists 40 years of age or older	64	4.3	1,286	85.6	132	8.8	20	~
Gender								
Male dentists	64	4.5	1,246	87.4	92	6.5	23	~
Female dentists	72	12.8	422	75.3	52	9.3	14	~

¹ U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Employment status

Responding dentists were asked how many hours per week they usually spend in their primary occupation. In total, 82 percent of dentists reported that they work full-time or at least 30 hours per week. Younger dentists and male dentists were more likely to work full-time than older dentists and female dentists. On average, full-time dentists worked 37 hours per week and part-time dentists worked 21 hours per week in their primary occupation.

There was no statistical difference between female and male dentists in terms of number of hours worked per week, with an average of 34 hours and 35 hours reported, respectively. Both female and male dentists worked about the same number of hours per week as the average U.S. nonagricultural worker. According to the Bureau of Labor Statistics, U.S. employees worked an average of 34.5 hours per week in 2015.²

Table 4: Full-time and Part-time Status, by Demographics and Status in Primary Practice

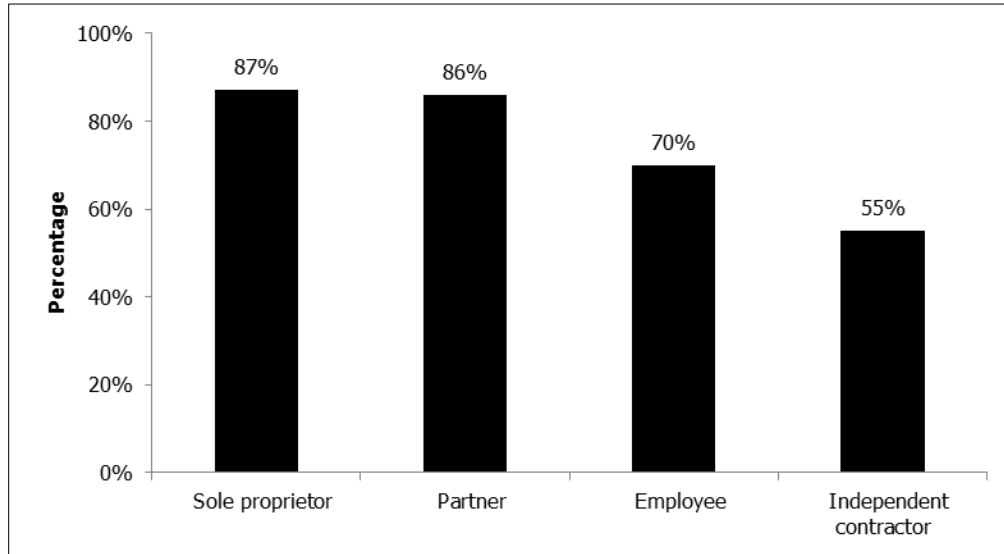
	Full-Time		Part-Time	
	Number	Percent ¹	Number	Percent ¹
All Dentists	1,627	82.0	347	18.0
Age Group				
Dentists under 40 years of age	436	92.2	37	7.8
Dentists 40 years of age or older	1,170	79.3	305	20.7
Gender				
Male dentists	1,168	83.0	237	17.0
Female dentists	450	81.0	106	19.0
Status in Primary Practice				
Sole proprietor	1,021	87.0	154	13.0
Partner	220	86.0	35	14.0
Employee	199	70.0	85	30.0
Independent contractor	47	55.0	39	45.0

1. Percent of each category in full time or part time status.

Dentists in private practice were grouped into four groups by their reported current status in primary practice: sole proprietors (i.e., the only owner of a dental practice), partners, employees (on salary, commission, percentage or associate basis), and independent contractors. Dentists who were sole proprietors or partners were more likely than dentists of other statuses to work full-time. Just over one-half of independent contractors (55%) reported that they worked full-time in primary practice (Figure 1).

² Source: U.S. Bureau of Labor Statistics, Data Viewer available at: <http://www.bls.gov/data/> accessed on December 5, 2016

Figure 1: Percentage of Full-time Dentists by Current Status in Private Practice

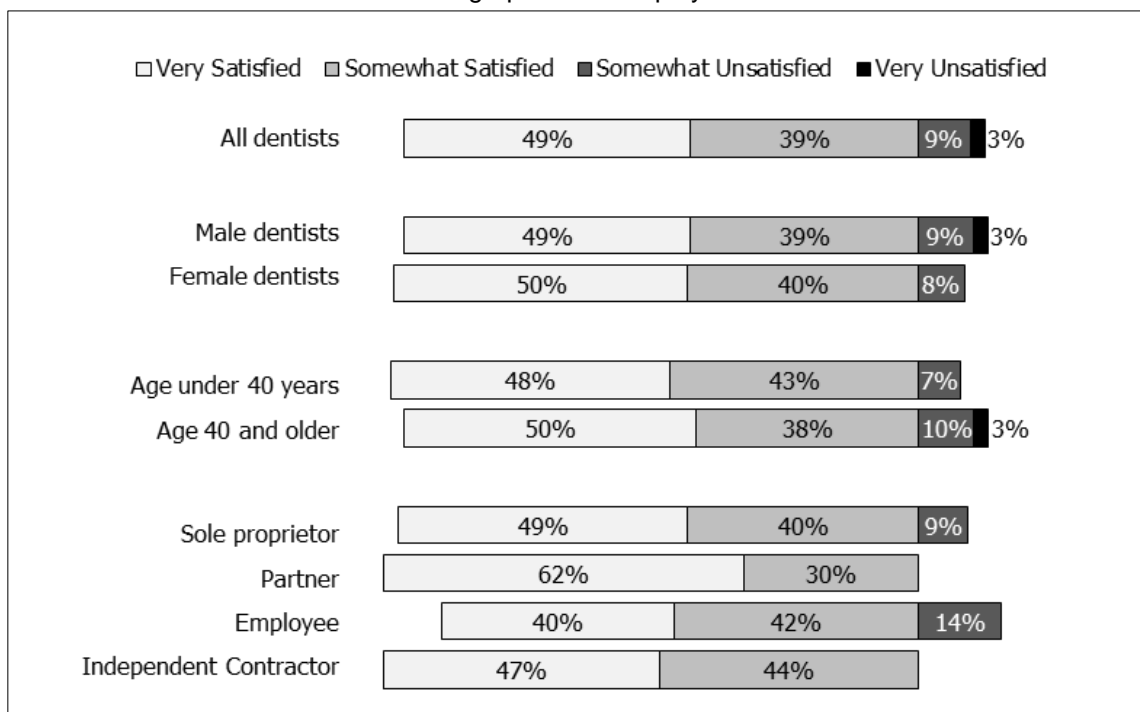


Job Satisfaction

Dentists were asked how satisfied they were with their current primary practice. Of those dentists who were in private practice and responded to this question, almost half (49%) were very satisfied with their current primary practice and 11 percent were somewhat unsatisfied or very unsatisfied with their current primary practice (Figure 2).

Female dentists 40 years of age or older were more likely than male dentists 40 years and older to report that they were very satisfied with their current primary practice. Average number of hours worked did not impact dentists level of satisfaction with their current primary practice. Of part-time dentists, 54 percent were very satisfied with their current primary practice. Of dentists who worked 30 hours or more per week, 48.1 percent were very satisfied with their current primary practice.

Figure 2: Percent of Dentists who Indicated Satisfaction with Current Primary Practice, by Demographic and Employment

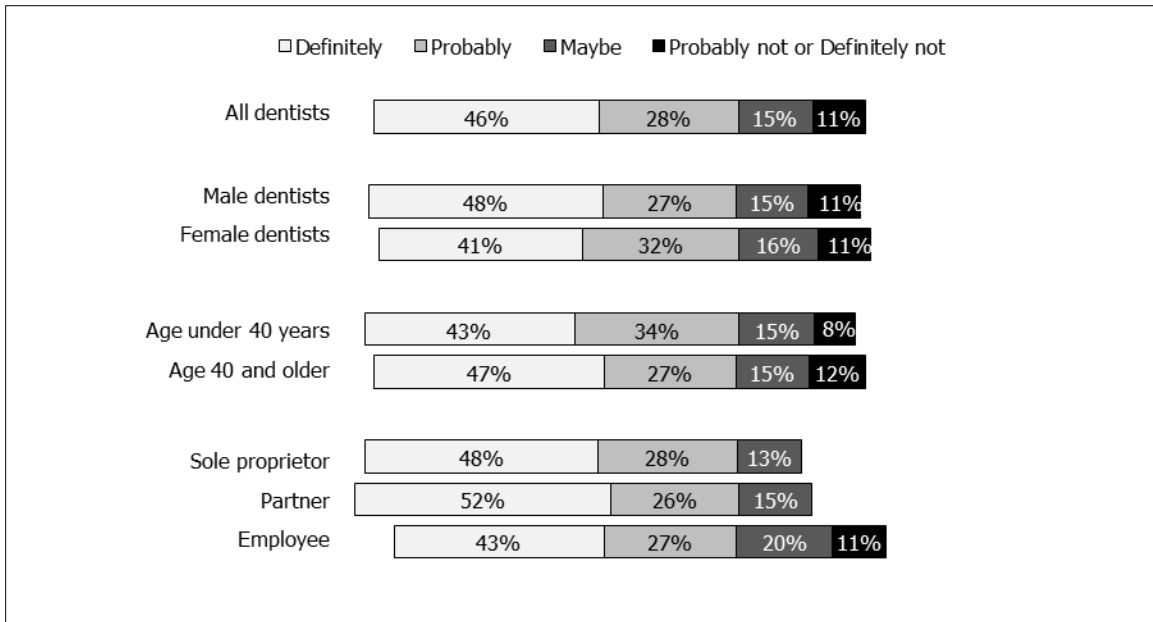


Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Dentists who worked as employees in a private dental practice were less likely than sole proprietors and partners to be satisfied with their current primary practice. Employee status was defined as dentists who receive a salary, commission, percentage or work on an associate basis. More than 14 percent of employees were somewhat unsatisfied or very unsatisfied with their current primary practice.

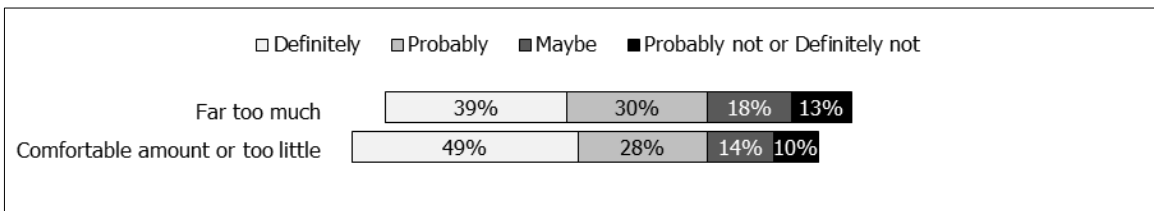
Responding dentists were asked whether they would still want to become a dentist again if they relived their life. As shown in Figure 3, 916 of dentists (46%) reported that they would definitely want to be a dentist again if they re-lived their life. In total, about one-in-ten dentists (11%) said that they would probably not or definitely not want to become a dentist again. Responses to this question did not differ by age category or gender. However, in a logistic model that controlled for age, gender, and harassment in practice, dentists who felt they worked too much were less likely to want to be a dentist. Of the dentists who reported that they would definitely not want to be a dentist again if they re-lived their life, about half (49%) felt that they worked too much at work and more than half (55.6%) were unsatisfied with their primary occupation.

Figure 3: Percent of Dentists who Desire to Become a Dentist if Re-Lived Life



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

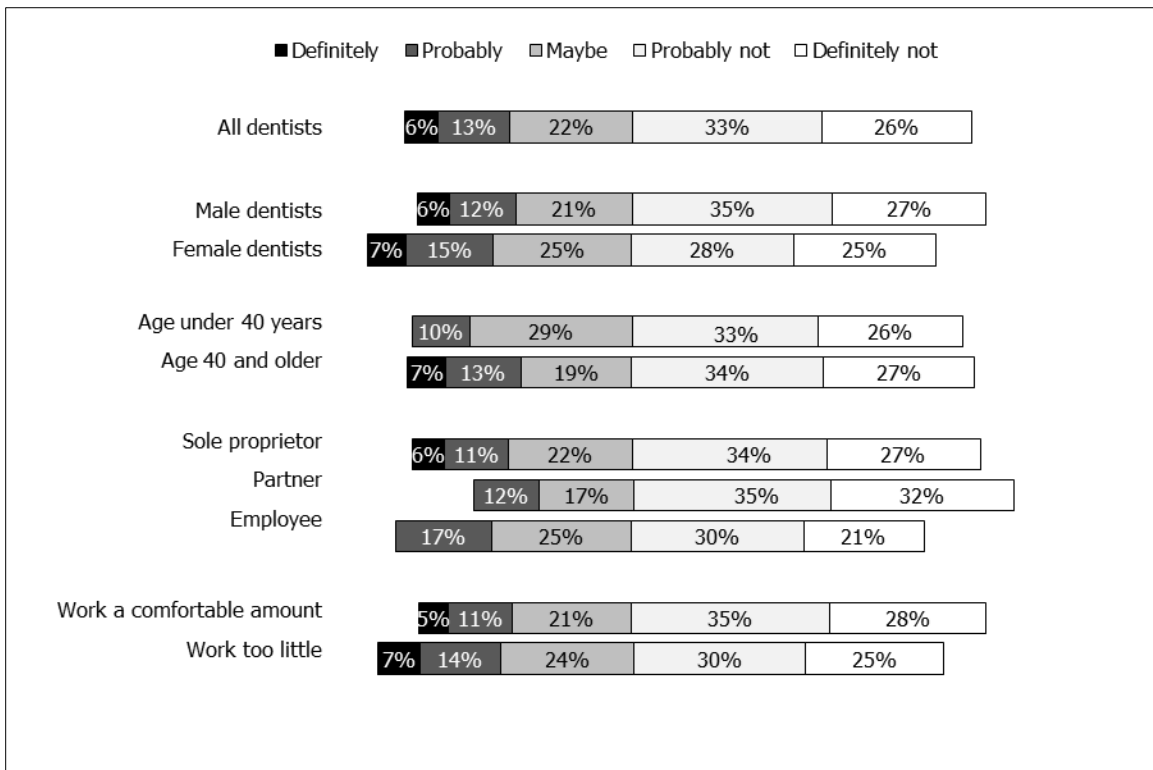
Figure 4: Percent of Dentists who Desire to Become a Dentist if Re-Lived Life and Perceived Level of Work



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

A small percent of dentists (6%) would definitely change their specialty if they were to re-live their life. Most dentists who would want to change their specialty area still reported that they were satisfied with their current primary practice. In total, about one-in-five dentists (19%) said that they would probably or definitely change their specialty. Both male and female dentists over age 40 were more likely to want to change their specialty compared to younger dentists. Of the dentists who would definitely want to change their specialty, 30 percent were unsatisfied with their primary occupation (Figure 5).

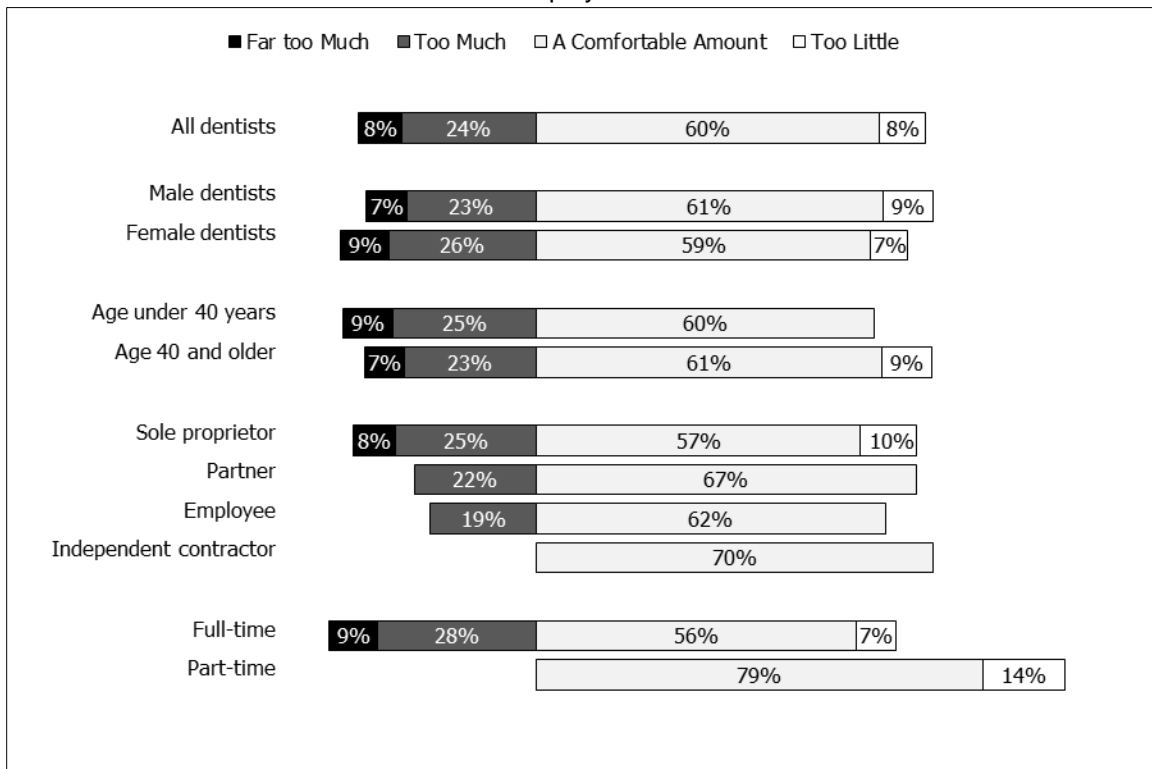
Figure 5: Percent of Dentists who Desire to Change Specialty if Re-Lived Life



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

When asked how they feel about their work level at work, the majority of dentists (60%) responded that they felt they worked a comfortable amount. As shown in Figure 6, nearly one quarter of dentists (24%) felt that they worked too much and 8 percent felt that they worked far too much.

Figure 6: Percent of Dentists and Opinion of Work Level at Work by Demographic and Employment

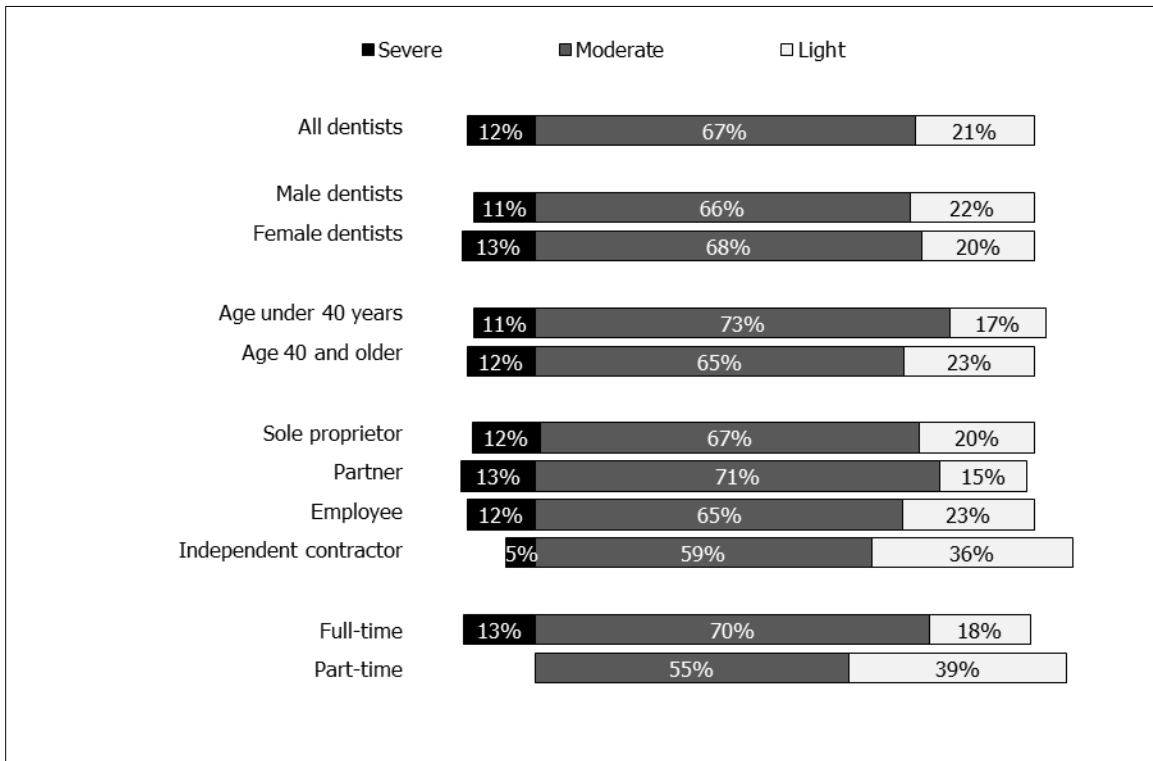


Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

There is very little difference in perceived work level between gender and age group. The majority of female dentists and younger dentists felt that they worked a comfortable amount at their job as did male dentists and older dentists. Part-time dentists, however, were more likely than full-time dentists to indicate that they worked a comfortable amount. A total of 78.7 percent of part-time dentists and 56.4 percent of full-time dentists felt that they worked a comfortable amount at work.

The majority of dentists (67%) reported that they have a moderate level of stress at work (Figure 7). Less than one-in-eight dentists (12%) reported severe stress at work. The level of work stress was about the same for female dentists versus male dentists and for younger dentists versus older dentists.

Figure 7: Percent of Dentists and Perceived Stress Level at Work by Demographic and Employment



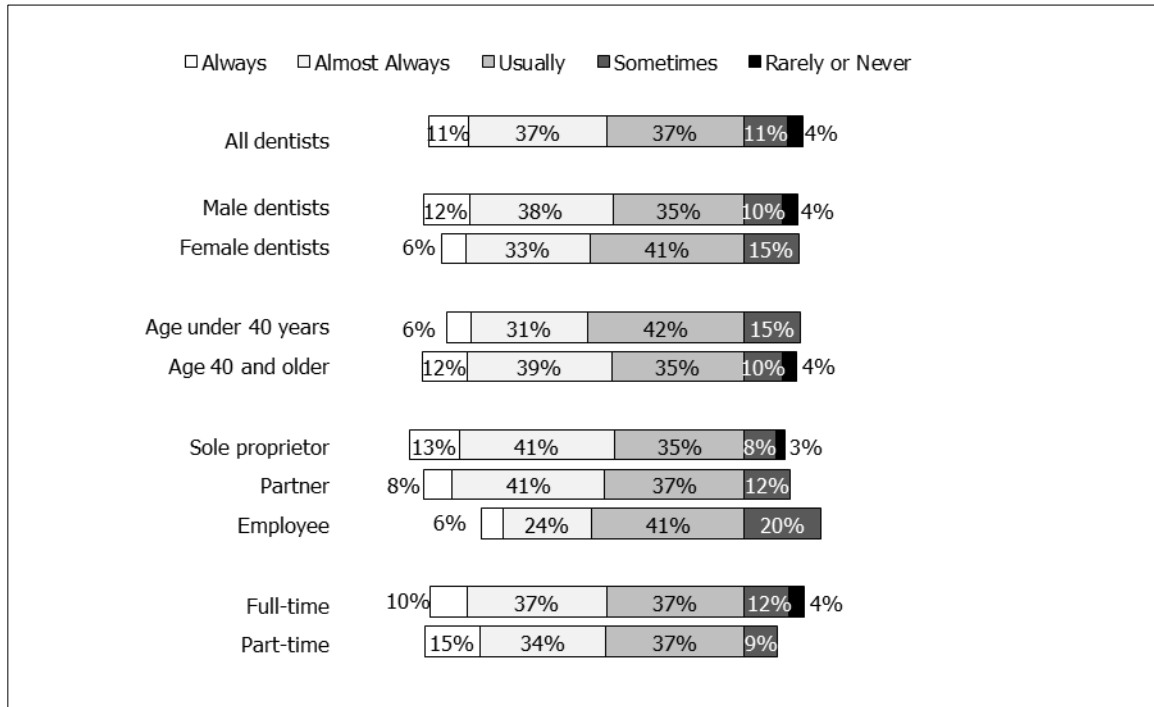
Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Part-time dentists were more likely to have light stress than full-time dentists were. Over one-third of part-time dentists (39%) reported that they have light stress at work while only 18 percent of full-time dentists reported light stress. Fewer than 25 percent of part-time dentists reported that they faced severe stress at work.

Dentists were asked whether they felt in control of their work environment. Only 16 percent of dentists felt that they were rarely or never in control of their work environment. Older dentists and male dentists were significantly more likely to report that they felt more in control of their work environment than dentists under age 40 or female dentists (Figure 8). A total of 13.5 percent male dentists age 40 or more felt that they were always in control of their work environment while 5.5 percent of female dentists under age 40 felt that they were always in control of their work environment.

Dentists who were sole proprietors were most likely to feel in control of their work environment. The majority of sole proprietors (54%) reported that they always or almost always felt in control of their work environment. Almost one-in-three dentists (30%) working as employees in a private practice felt that they were sometimes, rarely, or never in control of their work environment.

Figure 8: Percent of Dentists and Perceived Level Control of Work Environment by Demographic Employment



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

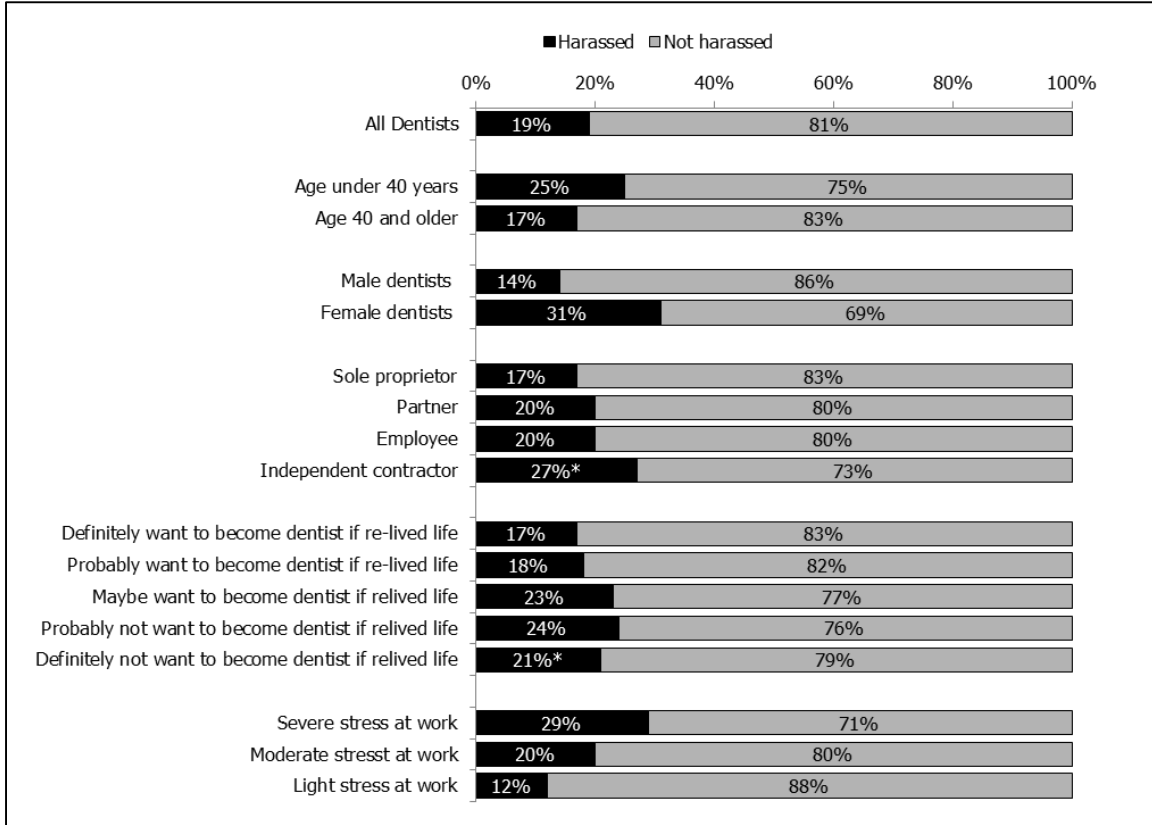
Dentists who felt that they were always or almost always in control of their work environment also had a higher level of job satisfaction than dentists who usually, sometimes, rarely, or never felt in control of their work environment. Of dentists who reported that they always felt in control of their work environment, 79 percent were very satisfied with their primary practice. Only 14 percent of dentists who reported that they were sometimes, rarely, or never in control were very satisfied with their primary practice.

Harassment

Responding dentists were asked whether they have ever been harassed in a dental setting. Nearly one-in-five dentists (19%) reported that they have experienced some type of harassment. In a logistic model that controlled for dentist’s status in practice (i.e. sole proprietor, partner or employee), female dentists were twice as likely as male dentists to report harassment. Charges for harassment-allegations across industries in the U.S. made up nearly 31 percent of all charges to the US Equal Employment Opportunity Commission (EEOC) in 2015. In turn, preventing harassment in the workplace has become a national priority for EEOC.³

³ U.S. Equal Employment Opportunity Commission Fiscal Year 2015 Enforcement and Litigation Data; Press Release 2/11/16. Available at: <https://www.eeoc.gov/eeoc/newsroom/release/2-11-16.cfm>

Figure 9. Percent of Dentists who have been Harassment in Dental Practice by Demographics and Employment



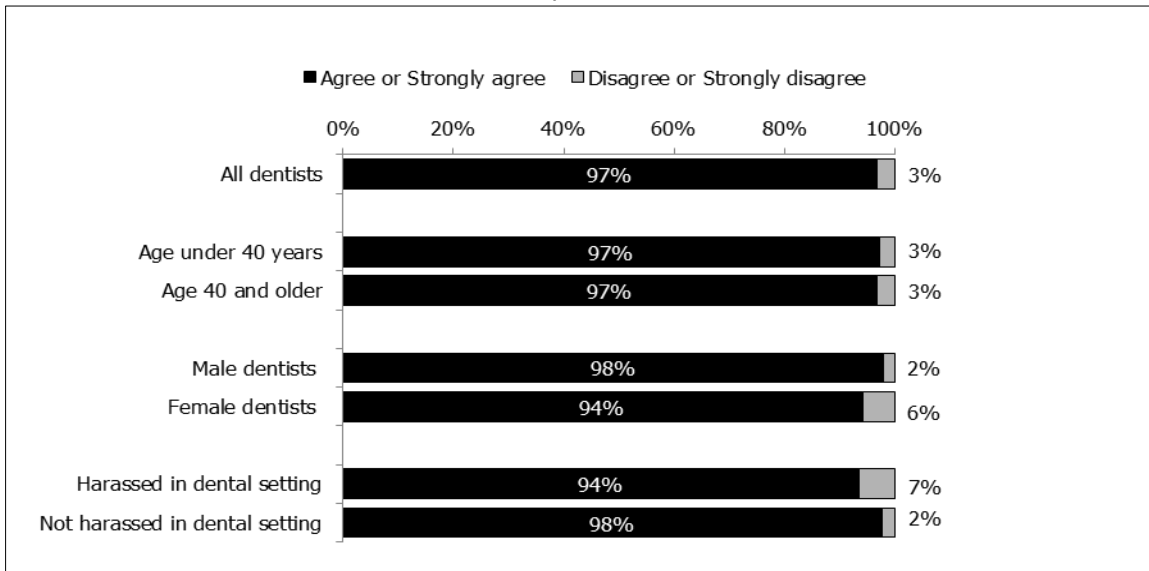
*Category contained fewer than 30 responses, percent is considered unreliable

There is an effect on work satisfaction between dentists who have been harassed while in practice and those who have not been harassed while in practice. Dentists who reported having experienced harassment while in practice were less likely to want to be a dentist again if they re-lived their life, they were more likely to experience severe stress at work, and they were less likely to feel in control of their work environment.

Level of Respect and Competence in Work Place

Dentists were asked their level of agreement with the statement “I think the people I work with respect me.” The majority of dentists (97%) agreed with this statement. The percent of men who agreed that the people they work with respected them was higher than that of women (98% and 94.2%, respectively). The percent of dentists who reported that they feel respected was lower among dentists who had been harassed in a dental setting compared to those who had not been harassed (94% and 98%, respectively).

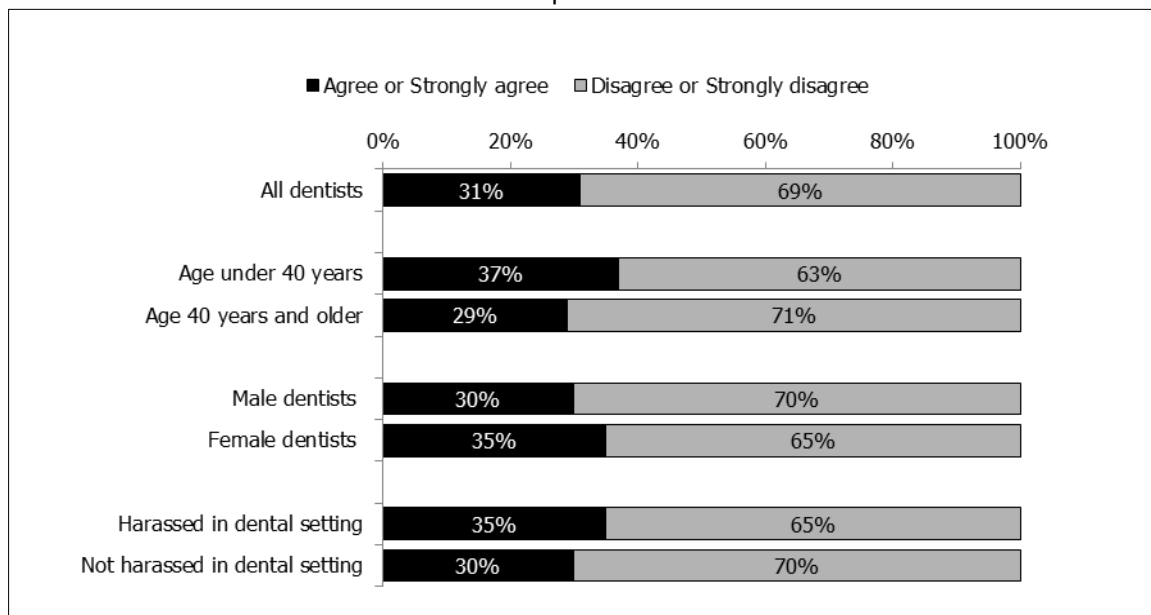
Figure 10: Percent of Dentists and Agreement with the Statement “I Think the People I Work with Respect Me”



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Dentists were asked their level of agreement with the statement “I sometimes doubt my own competence.” Less than one-in-three dentists (31%) agreed with this statement. Dentists under age 40 were more likely than older dentists to agree that sometimes they doubt their own competence (37% and 29%, respectively). Female dentists were more likely than male dentists to agree that sometimes they doubt their own competence (35% and 30%, respectively). For dentists harassed in the dental setting, 35% agreed that sometimes they doubt their own competence while 30% of dentists not harassed in the dental setting agreed.

Figure 11: Percent of Dentists and Agreement with the Statement “I Sometimes Doubt My Own Competence”



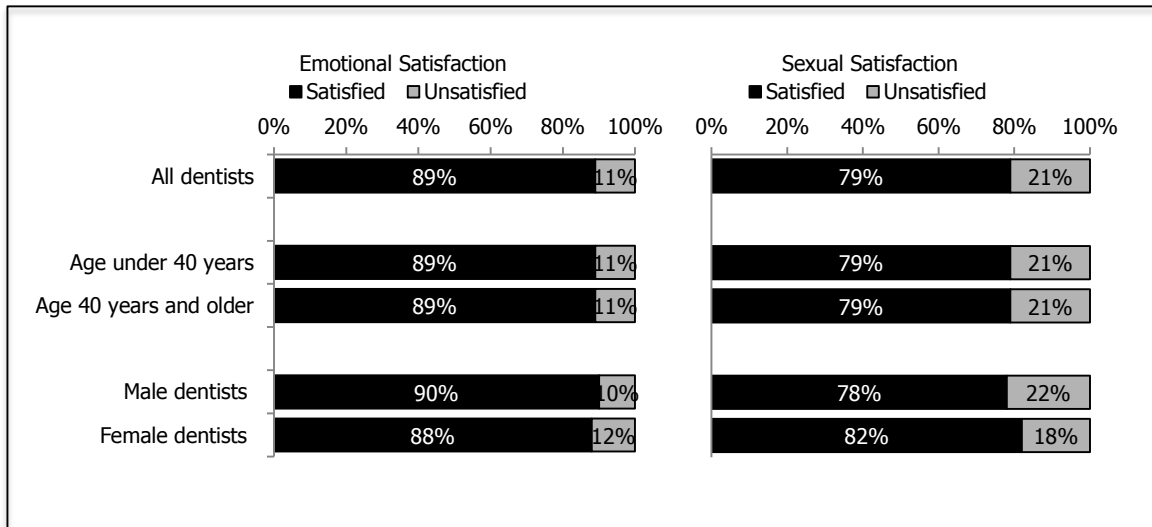
Home Life

Satisfaction with Relationship

The majority of dentists (89%) reported that they were satisfied or very satisfied emotionally with their relationship with their spouse or equivalent domestic partner. One-in-ten dentists (11%) were somewhat unsatisfied or very unsatisfied with their relationship on an emotional level. Satisfaction did not differ by age or gender (Figure 12).

The majority of dentists (79%) reported that they were satisfied or very satisfied with their sexual relationship with their spouse or equivalent domestic partner. One-in-five dentists (21%) were somewhat unsatisfied or very unsatisfied with their relationship on a sexual level. Satisfaction did not differ by age or gender (Figure 12).

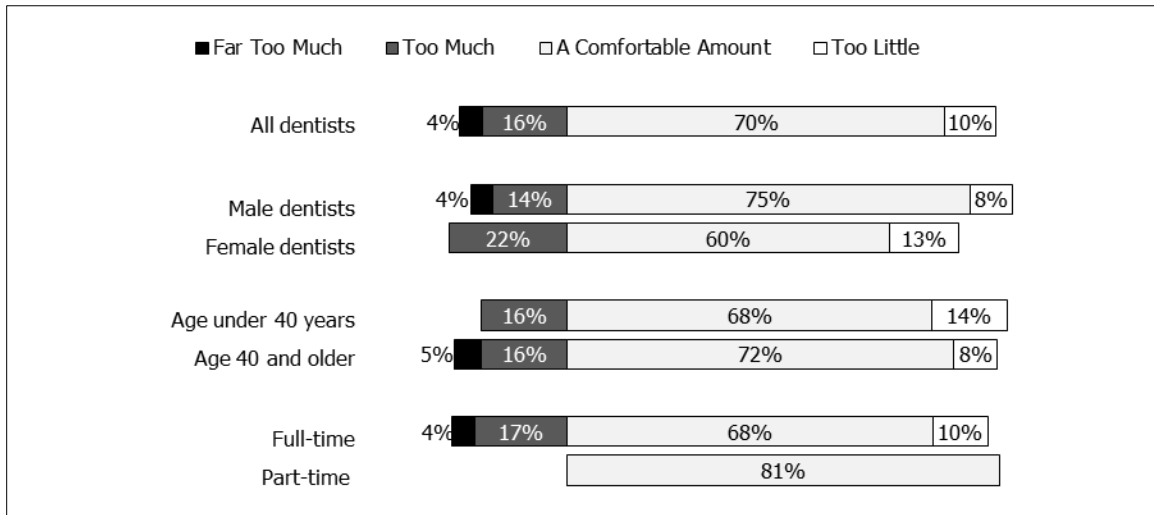
Figure 12: Percent of Dentists who Reported Emotional and Sexual Satisfaction with Spouse or Domestic Partner



Work Level at Home

While there was no notable difference in work level *at work* by gender, female dentists were more likely than male dentists to report working far too much or too much at home. About one third (27%) of female dentists felt that they worked far too much or too much at home while 17 percent of male dentists felt that they worked far too much or too much at home. Female dentists age 40 or older were slightly more likely than younger female dentists to feel that they worked too much at home. Part-time dentists were more likely than full-time dentists to indicate that they worked at home a comfortable amount (80.7% and 68.25%, respectively).

Figure 13: Percent of Dentists and Reported Level of Work at Home



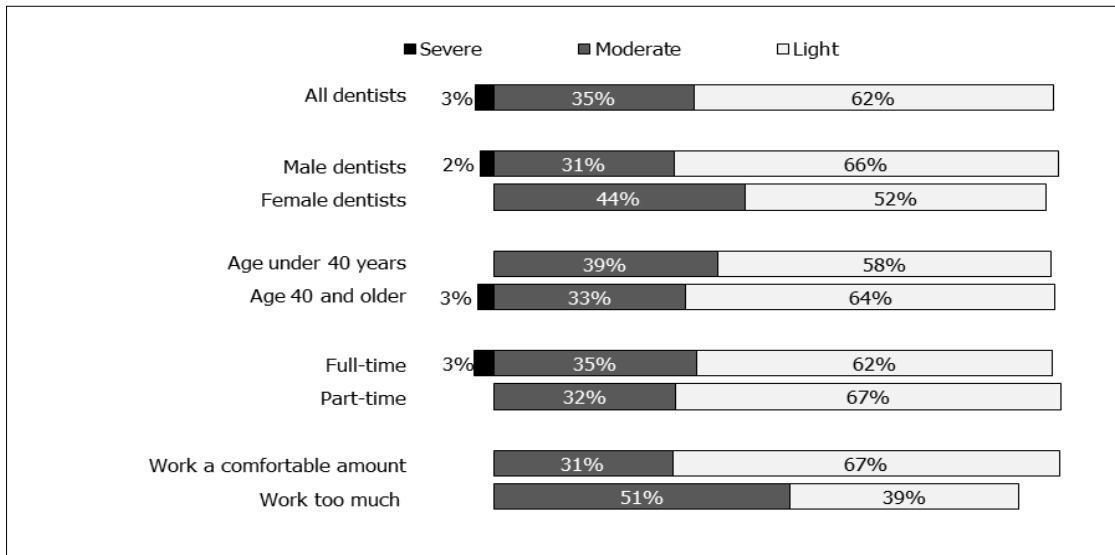
Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Perceived Stress Level at Home

Dentists were asked to rate their daily stress level at home using the descriptors: severe, moderate, and light. The majority of dentists (62%) reported that their daily stress level at home was light. A few dentists (3%) felt that they had severe stress at home (Figure 14).

Female dentists were more likely to report experiencing severe or moderate stress at home than male dentists. A total of six percent of all female dentists experienced severe stress at home and nine percent of female dentists 40 years or older had severe stress. Dentists who reported a level more than a comfortable amount of work at home were more likely to have moderate or severe stress at home.

Figure 14: Percent of Dentists Perceived Stress Level at Home



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

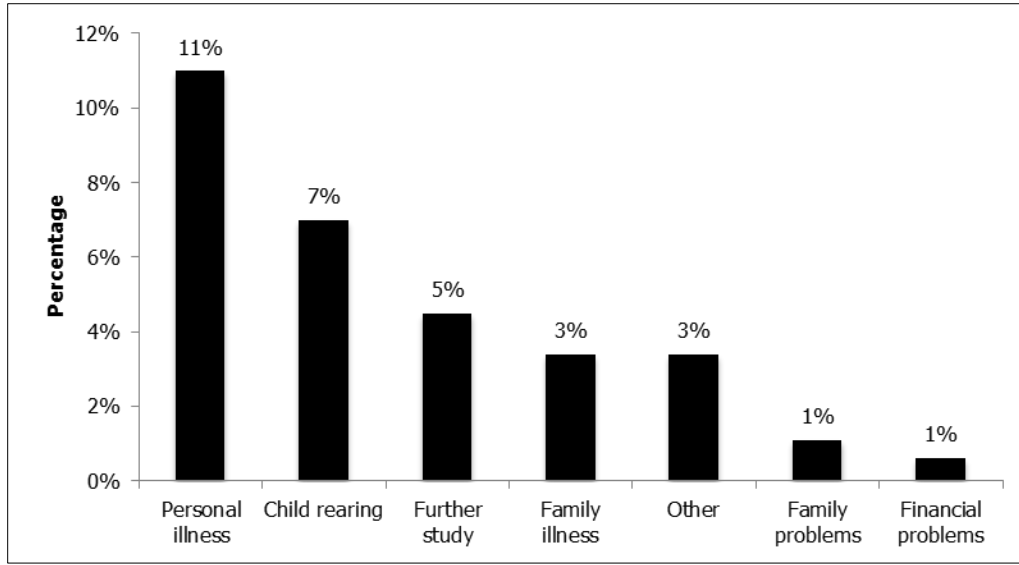
The only medical condition that was significantly associated with home stress level was elevated cholesterol diagnosed in a dentist's immediate family member (see Table 9). The association remains significant when controlling for gender.

Leave of absence

Dentists were asked if they had taken leave of absence for a list of reasons. About one-in-five (22%) reported taking a leave of absence. Of all absences, absence for personal illness was the most common (11%) followed by child rearing (7%). Figure 15 shows the proportion of dentists who took a leave of absence, by reason.

Dentists 40 years of age or older were more likely to take a leave of absence for personal illness than younger dentists. Female dentists were more likely than male dentists to take a leave of absence for child rearing (23% of females and <1% of males) and family illness (5.6% of females and 2.4% of males). There were no significant differences in other types of leave of absence by age or gender.

Figure 15: Percent of Dentists who took a Leave of Absence, by Reason for Leave of Absence



Religious or spiritual activities

The majority of dentists (70%) spent some time engaged in activities that are religious or spiritual in nature during a typical week. Dentists 40 years of age or older reported spending, on average, more hours per week than younger dentists, Table 6.

According to the *American Time-Use Survey*, the average amount of time spent in religious and spiritual activities by the general population was 1.0 hours per week. Females in the general population spent an average of 1.2 hours per week while males spent an average of 0.84 hours per week in religious or spiritual activities.⁴

⁴ Bureau of Labor Statistics, time spent in primary activities and percent of the civilian population engaging in each activity, averages per day by sex, and 2015 annual averages. Available at: <https://www.bls.gov/news.release/atus.t01.htm>

Table 5: Mean Number of Hours Spent in Religious or Spiritual Activities during a Typical Week

	Number of Hours	Mean 95 % Confidence Interval
All Dentists	2.5	2.4-2.7
Age Group		
Dentists under 40 years of age	2.2	1.8-2.5
Dentists 40 years of age or older	2.7	2.5-2.9
Gender		
Male dentists	2.7	2.5-2.8
Female dentists	2.2	1.9-2.6
Gender within Age group		
Male dentists under 40 years of age	2.5	2.0-3.0
Female dentists under 40 years of age	1.7	1.4-2.1
Male dentists 40 years of age or older	2.7	2.5-2.9
Female dentists 40 years of age or older	2.6	2.0-3.1

Exercise

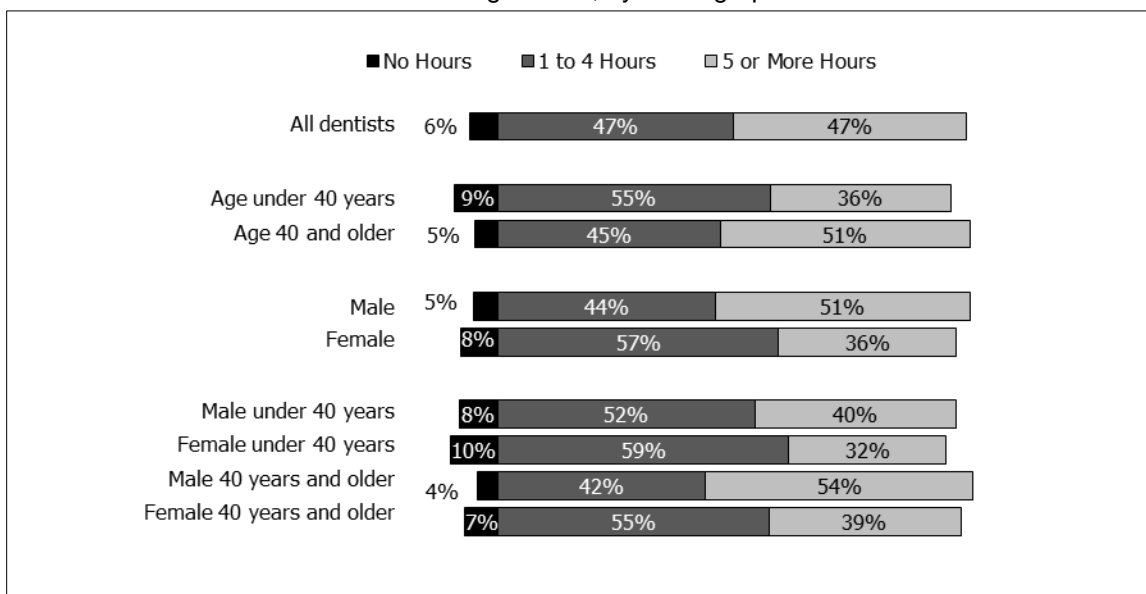
Most dentists (94%) engaged in some form of exercise in an average week (Figure 16). Male dentists age 40 years or more (96%) were most likely to report that they engaged in exercise during the week. A total of 90 percent of female dentists under 40 years of age engaged in some form of exercise during a typical week. Mean number of hours is reported in Table 7. According to the American Heart Association, about 30 percent of U.S. adults report participating in no leisure time physical exercise.⁵

Table 6: Mean Number of Hours Spent Exercising in a Typical Week

	Number of Hours	Mean 95 % Confidence Interval
All Dentists	5.0	4.8-5.1
Age Group		
Dentists under 40 years of age	3.9	3.6-4.2
Dentists 40 years of age or older	5.3	5.2-5.5
Gender		
Male dentists	5.3	5.1-5.5
Female dentists	4.1	3.9-4.4
Gender within Age group		
Male dentists under 40 years of age	4.2	3.8-4.7
Female dentists under 40 years of age	3.6	3.2-3.9
Male dentists 40 years of age or older	5.6	5.4-5.8
Female dentists 40 years of age or older	4.5	4.1-4.9

⁵ American Heart Association. Heart Disease, Stroke and Research Statistics At-a-Glance, 2016. Available at: <http://www.heart.org>

Figure: 16. Percent of Dentists who Reported No, One to Four or Five or More Hours of Exercise in an Average Week, by Demographics



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Sleep

Nearly all dentists (91%) reported that they sleep between six and eight hours in a typical night. While there was no meaningful difference in mean number of hours spent sleeping in a typical night (Table 8), a larger percentage of dentists under age 40 reported more than seven hours sleep than older dentists (Figure 17).

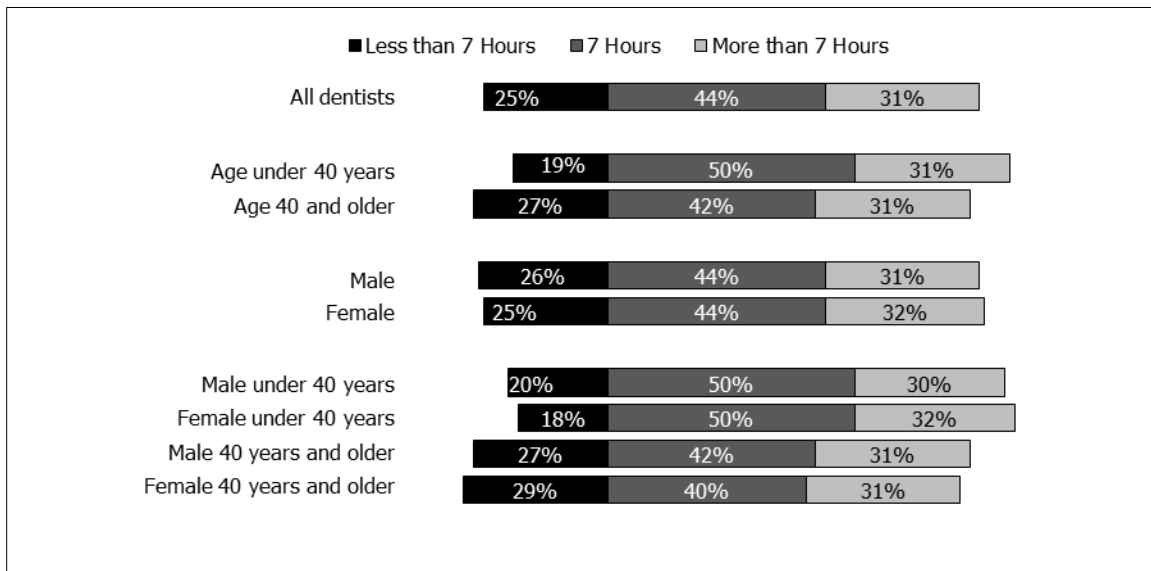
While the average amount of sleep reported by dentists was seven hours per night, the general population sleeps an average of 8.8 hours per night. The Bureau of Labor Statistic's 2015 *Economic News Release* showed that men slept an average of 8.7 hours per night and women slept an average of 8.9 hours.⁶

⁶ Bureau of Labor Statistics, time spent in primary activities and percent of the civilian population engaging in each activity, averages per day by sex, and 2015 annual averages. Available at: <http://www.bls.gov/news.release/atus.t01.htm>

Table 7: Mean Number of Hours Spent Sleeping in a Typical Night

	Number of Hours	Mean 95 % Confidence Interval
All Dentists	7.0	7.0-7.1
Age Group		
Dentists under 40 years of age	7.1	7.0-7.2
Dentists 40 years of age or older	7.0	7.0-7.2
Gender		
Male dentists	7.0	7.0-7.1
Female dentists	7.1	7.0-7.1
Gender within Age group		
Male dentists under 40 years of age	7.1	6.9-7.2
Female dentists under 40 years of age	7.2	7.0-7.3
Male dentists 40 years of age or older	7.0	7.0-7.1
Female dentists 40 years of age or older	7.0	6.9-7.1

Figure 17: Percent of Dentists who reported less than the Average Number of Hours of Sleep among Dentists in a Typical Night, by Demographics



Health

Diagnosed Medical Conditions

Of all dentists, 54 percent reported that they had been diagnosed with at least one of the items from a list of medical conditions. Dentists were more likely to report a diagnosed medical condition in themselves than in their spouse or immediate family member. Dentists 40 years of age and older were more likely to report a condition than younger dentists. A total of 23 percent of dentists reported elevated cholesterol, 12 percent had headaches, and 10 percent suffered from depression. Of female dentists, nine percent reported that they have been diagnosed with premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD) and six percent with postpartum depression (Table 9).

Among male dentists, elevated cholesterol was the most common condition reported (28%), followed by heart disease (11%). Among female dentists, headache was the most common condition, followed by depression (13%). There were differences in the percentages reported by gender for individual conditions, see Figure 18.

Overall, dentists reported conditions in themselves in similar proportion to those reported by dentists in the 2003 Dentist's Well-Being Survey. However, in 2015, a larger percentage reported that they had been diagnosed with diabetes compared to 2003 (5% vs. 3%, respectively), and a smaller percentage of women reported PMS or PMDD compared to 2003 (9% vs. 15%, respectively).

Among the entire U.S. population, some percentages of diagnosed medical conditions include the following: 1.9 percent of adults over age 25 have abused an illicit drug (marijuana, cocaine, heroin, etc.). Slightly more than half (56.5%) of people over age 25 were current alcohol users in 2014, and 5.9 percent had an alcohol use disorder. In a one-year period, 8.5 percent of U.S. women and 4.7 percent of men experience a major depressive episode. Of American adults, 18 percent have an anxiety disorder (including panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, generalized anxiety disorder, and phobias) in a one-year period, and women are 60 percent more likely than men to experience an anxiety disorder in their lifetime. In 2015, 1.8 percent of Americans had a binge-eating disorder in a one-year period.^{7, 8} About 20-30 percent of the population is affected with temporomandibular joint dysfunction (TMD).⁹

⁷ National Institute of Mental Health 2015 reports, available at: <https://www.nimh.nih.gov/health/statistics/index.shtml>

⁸ Substance Abuse and Mental Health Services Association, Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health, available at: <http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf>

⁹ Guo C, et al. Arthrocentesis and lavage for treating temporomandibular joint disorders. The Cochrane Database of Systematic Reviews, 2009.

Table 8: Self-Reported Diagnosed Medical Conditions in Dentists

Self-reported condition	Number	Dentists
		Percent ¹
Elevated cholesterol	467	23.0
Headaches	239	12.0
Depression	203	10.0
Heart disease	166	8.3
Anxiety disorders	133	6.6
Temporomandibular joint dysfunction (TMD)	126	6.3
Significant traumatic event	117	5.8
Repetitive-stress injury	110	5.5
Diabetes	103	5.1
Chronic fatigue	87	4.3
Panic attacks	80	4.0
Premenstrual syndrome (PMS) or Premenstrual dysphoric disorder (PMDD) ²	50	8.9
Compulsive overeating	49	2.4
Alcohol abuse	46	2.0
Obsessive-compulsive disorder	44	2.2
Post-traumatic stress disorder	36	1.8
Postpartum depression ²	32	5.7
Domestic violence	20	~
Sexual abuse	20	~
Other substance abuse	16	~
Attempted suicide	8	~
Anorexia	7	~
Bipolar disorder	6	~
Bulimia	6	~
Compulsive gambling	5	~
Other psychiatric disorder	5	~

1. Percent of dentists

2. Among female dentists

Figure 18: Percent of Dentists who reported a Medical Condition, by Gender

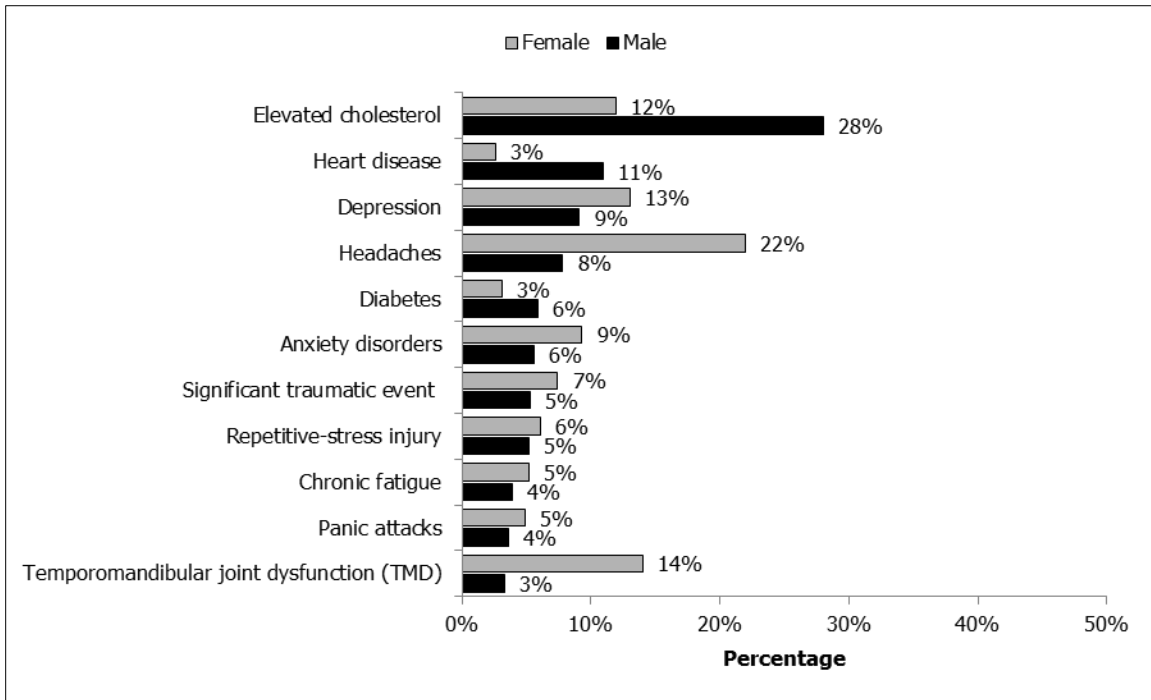
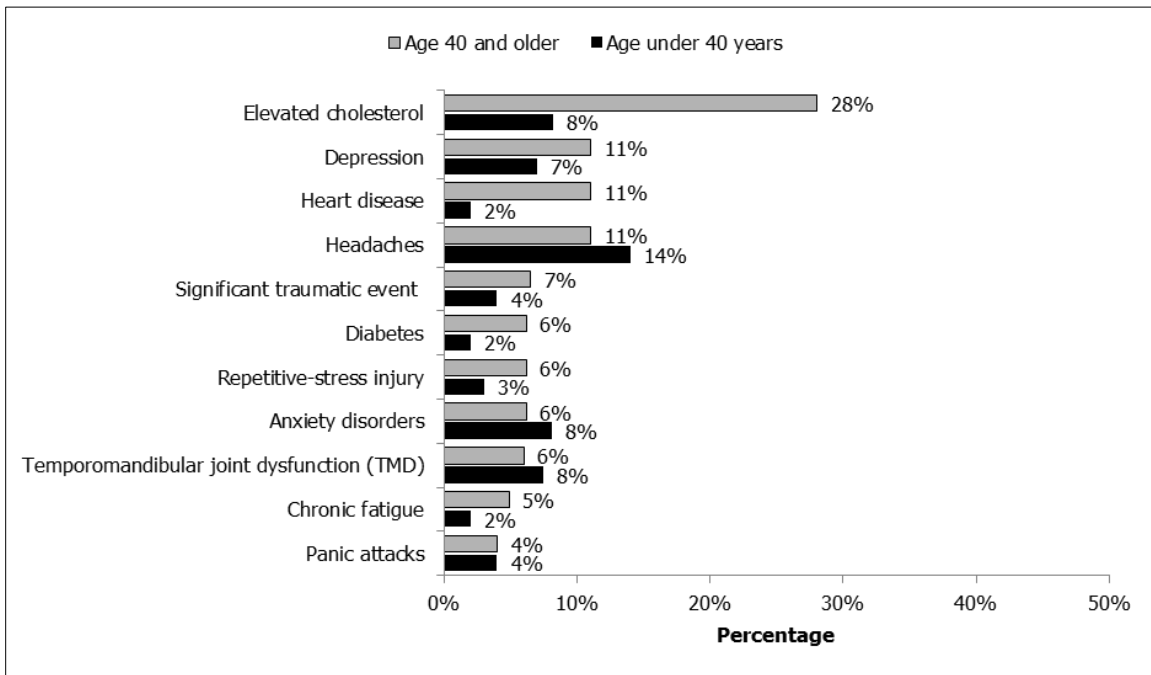


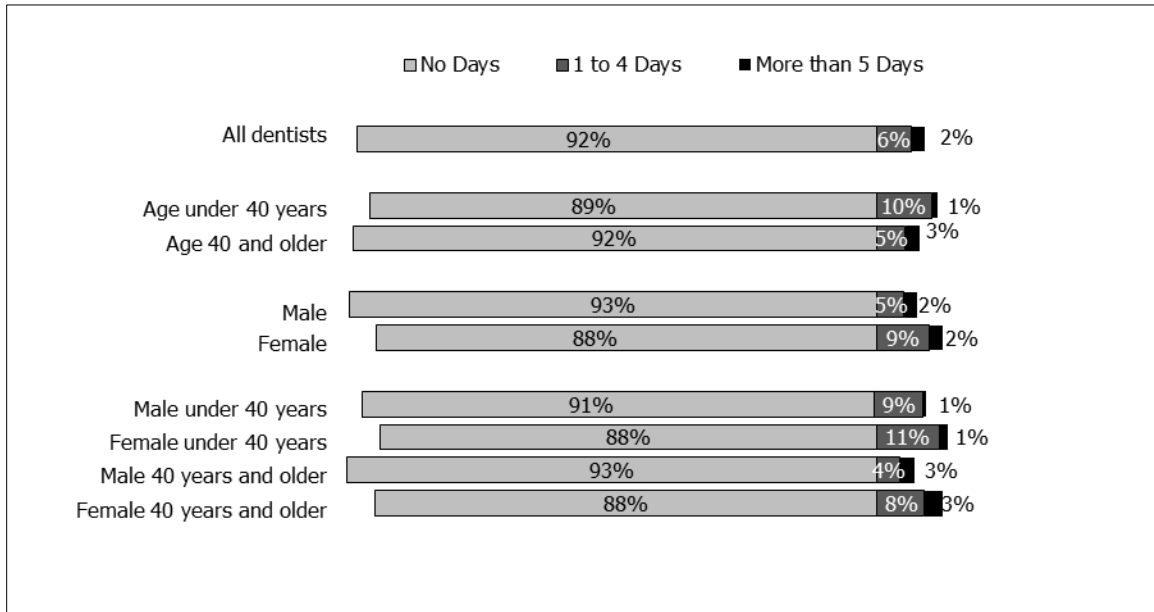
Figure 19: Percent of Dentists who reported a Medical Condition, by Age Group



Effect of Poor Health on Activities

Dentists were asked for the number of days during the past month that poor physical or mental health kept them from usual activities (i.e. work, recreation). Of all dentists, the majority (92%) reported zero days lost. Reported number of days lost ranged from zero to 30 days. Female dentists were more likely to take days off than male dentists, Figure 20.

Figure 20: Percent of Dentists who reported No Days, One to Four Days, or More than Five Days Missed due to Poor Health, by Demographics



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Spouse or Family Member Medical Condition

Dentists were asked whether their spouse or any immediate family members had been diagnosed with a provided list of medical conditions. Of all dentists, 36 percent had a spouse diagnosed with a medical condition, and 47 percent had an immediate family member diagnosed with a medical condition, Table 5. The most frequent conditions in spouses of dentists were elevated cholesterol (9.6%), depression (9.5%), headaches (8.6%), anxiety disorders (5.2%), temporomandibular joint dysfunction (3.8%), and panic attacks (3.8%).

The most frequent conditions in immediate family members (including children, parents and siblings) were depression (17%, interpreted as 17.0% of all dentists had an immediate family member diagnosed with depression), elevated cholesterol (14%), heart disease (14%), diabetes (11%) and alcohol abuse (11%).

In 2015, an estimated 6.7 percent of all adults aged 18 or older in the U.S. had at least one major depressive episode in the past year.¹⁰ The 2016 American Heart Association statistics update

¹⁰ National Institute of Mental Health, Major Depression among Adults available at: <https://www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml>

states that heart disease is the number one cause of death in the U.S. The same report estimates that about 43 percent of the U.S. population have elevated total cholesterol of 200 mg/dL or higher and one in three have high levels of LDL cholesterol.¹¹

Table 9: Diagnosed Medical Conditions in Spouse or Immediate Family Members

Diagnosed condition	Spouse		Family Member	
	Number	Percent ¹	Number	Percent ¹
Elevated cholesterol	192	9.6	282	14.0
Depression	191	9.5	341	17.0
Headaches	173	8.6	115	5.7
Anxiety disorders	103	5.2	191	9.5
Temporomandibular joint dysfunction (TMD)	77	3.8	43	2.2
Panic attacks	76	3.8	126	6.3
Significant traumatic event	69	3.4	84	4.2
Postpartum depression	60	3.0	22	~
Chronic fatigue	54	2.7	31	1.5
Premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD)	53	2.6	31	1.5
Diabetes	49	2.4	222	11.0
Alcohol abuse	45	2.3	214	11.0
Heart disease	44	2.2	275	14.0
Obsessive-compulsive disorder	38	1.9	69	3.4
Repetitive-stress injury	30	1.5	31	1.6
Bipolar disorder	23	~	95	4.8
Other substance abuse	20	~	119	5.9
Post-traumatic stress disorder	20	~	17	~
Sexual abuse	19	~	32	1.6
Domestic violence	16	~	50	2.5
Attempted suicide	15	~	70	3.5
Compulsive overeating	14	~	39	1.9
Other psychiatric disorder	12	~	53	2.6
Anorexia	11	~	34	1.7
Bulimia	11	~	26	~
Compulsive gambling	3	~	21	~

1. Percent of all dentists

¹¹ American Heart Association. Heart Disease, Stroke and Research Statistics At-a-Glance, 2016. Available at: <http://www.heart.org>

Medications

Dentists were asked which prescribed, over-the-counter, or herbal medications they currently use on a regular (weekly or more often) basis. Allergy medications were most common, reported by 18 percent of dentists, followed by analgesics (17%). Less than one-out-of-ten dentists used any other medication listed, Table 10.

Table10: Medications Used by Dentists on a Regular Basis

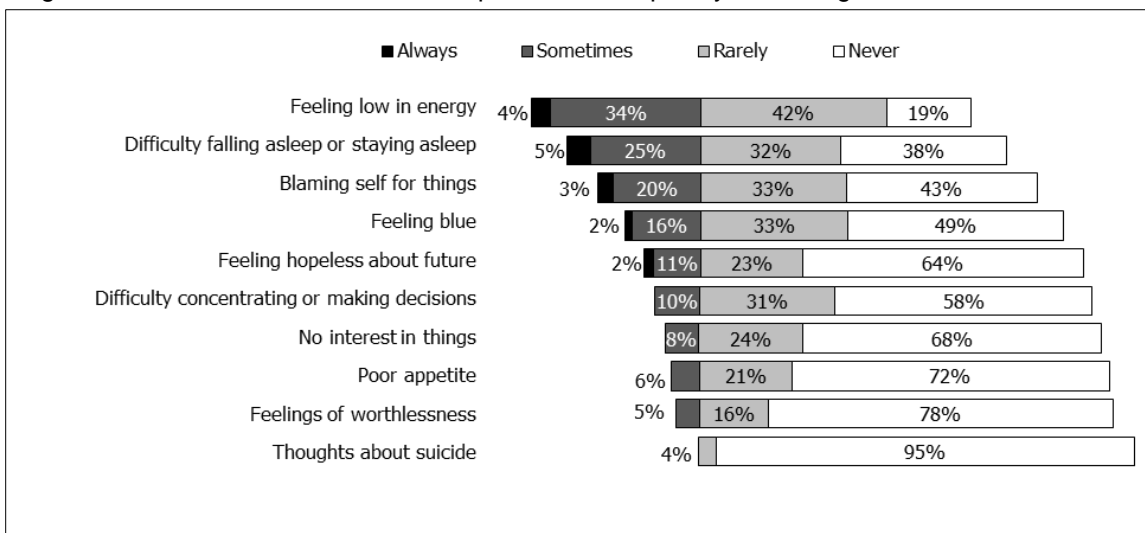
Medication	Number	Dentists Percent ¹
Allergy medications	359	18.0
Analgesics	329	17.0
Antidepressants	145	7.3
Sleeping pills	145	7.4
Other	143	7.2
Diuretics	114	5.8
Herbal medications	114	5.8
Anxiolytic medications	66	3.4
Laxatives	59	3.0
Marijuana	43	2.2
Opiates	30	1.5
Weight loss drugs	30	1.5
Other stimulants	27	~
Nitrous oxide	19	~

1. Percent of dentists

Depression

Dentists were asked ten questions about their feelings and mental condition in the past two weeks. More than one-third of dentists (38%) reported that they always or sometimes felt low in energy during the last two weeks, three-in-ten (30%) always or sometimes had difficulty falling asleep or staying asleep and about one-in-four (25%) always or sometimes blamed themselves for things. Thoughts about suicide were reported by five percent of dentists. (See Figure 21)

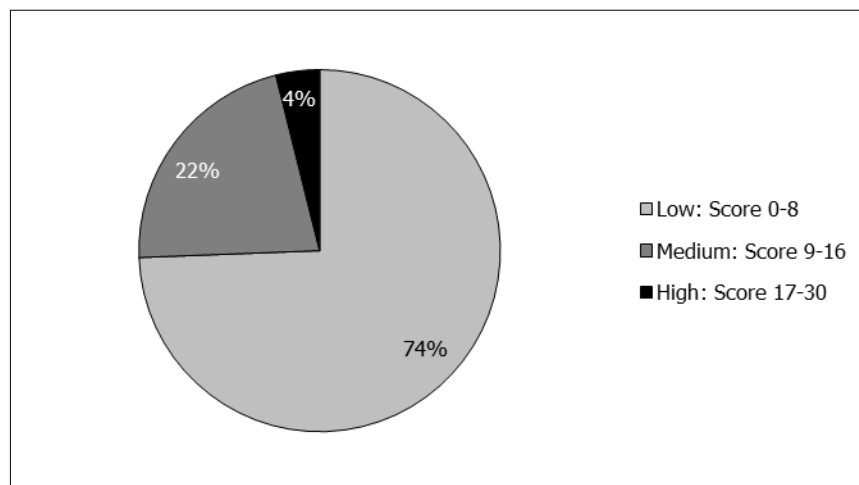
Figure 21: Percent of Dentists and Responses to Frequency of Feelings in the Past Two Weeks



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

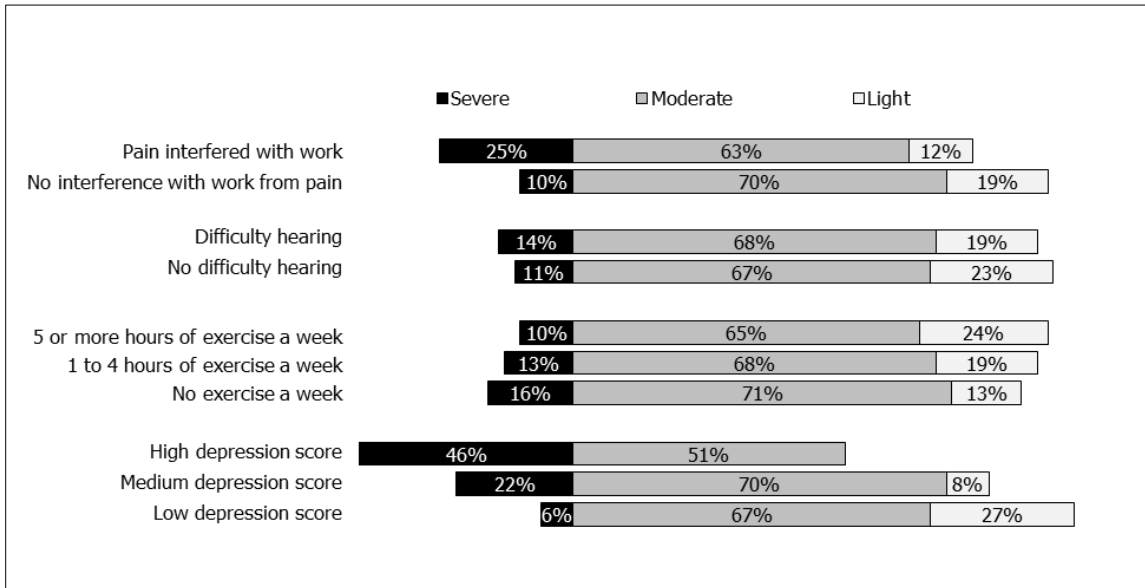
Responses to the questions on depression were scored using the following scale: 0=Never, 1=Rarely, 2=Sometimes and 3=Always. Totaling the dentist's responses to the ten questions, 74 percent of dentists had a score of eight or less. Over one-fifth of dentists (22%) had a total score of 9 – 16 and 3.9 percent had a score of 17 or higher (Figure 22). Half of the dentists with a score over nine (51%) reported that they have not been diagnosed with depression. Dentists under 40 years old had a higher average score compared to older dentists and female dentists had a higher average score than males.

Figure 22: Percent of Dentists with Low, Medium or High Depression Score



Depression was highly correlated with stress level at work. Dentists who had a high average depression score were more likely to experience severe stress at work – 46 percent of dentists with high depression score compared to 22 percent of dentists with medium depression score or six percent with a low score (Figure 23).

Figure 23: Percent of Dentists with Severe, Moderate and Light Level of Stress by Medical Condition and Exercise



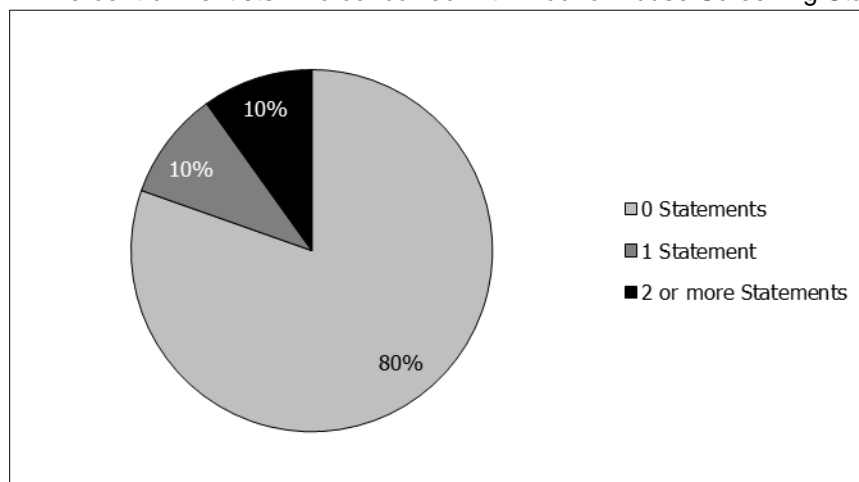
Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Alcohol Use

Of all dentists, 23 (1%) reported that they were currently in recovery from alcoholism. Dentists who were not currently in recovery from alcoholism were asked four questions about their drinking habits: if they ever felt that they should cut down on their drinking, if they ever had been annoyed by other people criticizing their drinking, if they had ever felt bad or guilty about their drinking, and if they had ever had a drink first thing in the morning to steady nerves or to get rid of a hangover. These questions were taken from the CAGE Questionnaire, developed in 1970 by Dr. John A Ewing to screen patients for alcoholism.¹² Nearly one-in-five dentists (18%) who were not recovering from alcoholism felt that they should cut down on drinking. Only eight dentists reported that they had a drink first thing in the morning, Table 11.

¹² Ewing, John A. Detecting Alcoholism, the CAGE Questionnaire. *Journal of the American Medical Association*. 1984. 252: 1905-1907.

Figure 24: Percent of Dentists who concurred with Alcohol Abuse Screening Statements



A total of two or more positive answers to the CAGE questionnaire is considered indicative of probable alcoholism. Bush and colleagues found that using this cutoff, 75 percent of alcoholics and 96 percent of non-alcoholics were correctly identified.¹³ Figure 24 shows the number of statements with which responding dentists were in agreement. The majority of dentists (80%) answered none of the questions in the affirmative. A total of 10 percent of dentists answered two or more questions positively. Of the dentists who concurred with three or four of the alcohol statements, two-thirds reported in this survey that they had not been diagnosed with alcohol abuse.

Table 11: Positive Responses to Questions about Alcohol Abuse

	Number Responded "Yes"	Dentists Percent
Have you ever:		
Felt you should cut down on drinking	222	18.0
Been annoyed by others who criticize your drinking	55	4.5
Felt bad or guilty about your drinking	113	9.2
Had a drink first thing in the morning	8	~

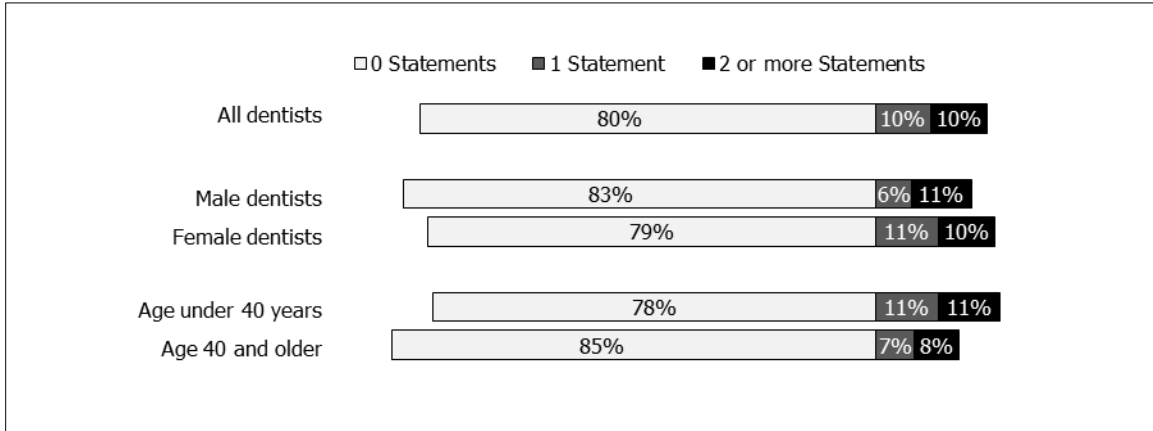
Results of a general population study using the CAGE scale showed that 10.9 percent of 703 drinkers aged 18 and over reported two or more items affirmatively.¹⁴

Dentists under age 40 were more likely than younger dentists to respond to the alcohol questions positively. A total of 11 percent of male dentists and 11 percent of dentists under age 40 agreed with two or more of the CAGE questionnaire alcohol questions (Figure 25). In the 2003 Dentists Well-Being Survey, males older than 40 were more likely than younger male dentists to score at high risk for alcohol abuse.

¹³ Ewing, John A. Detecting Alcoholism, the CAGE Questionnaire. *Journal of the American Medical Association*, 1984. 252: 1905-1907.

¹⁴ Bush, B et al. Screening for Alcohol Abuse using the CAGE Questionnaire. *American Journal of Medicine*, 1987. 82: 231-23S.

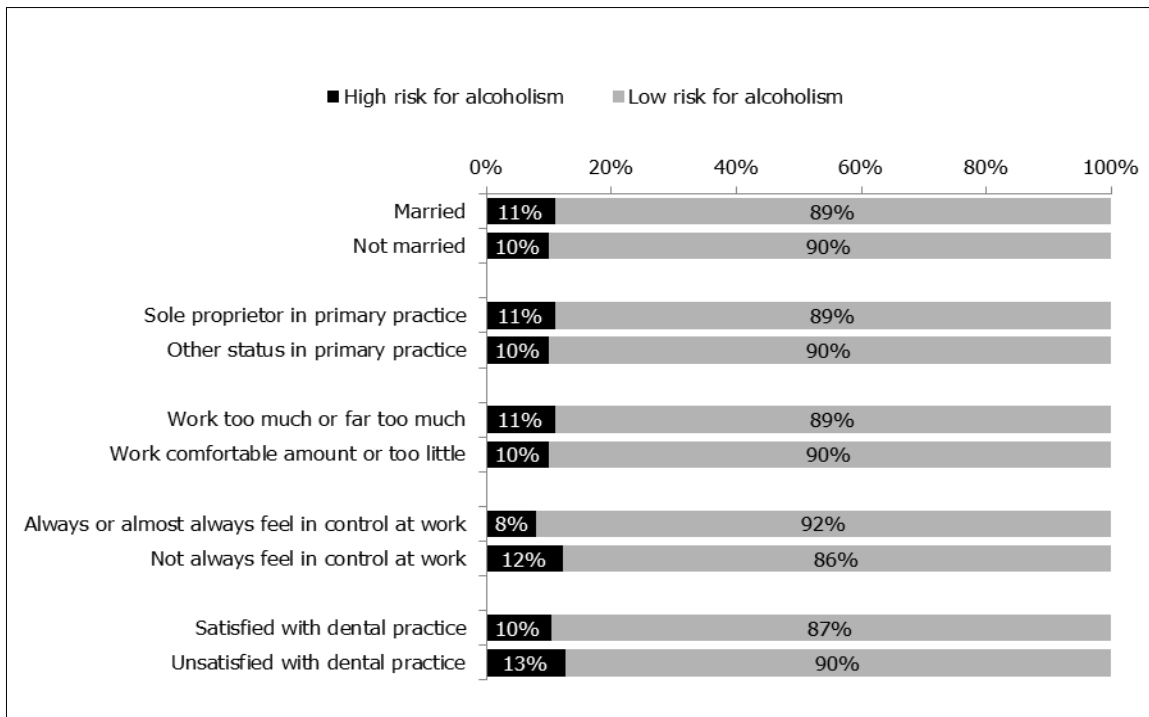
Figure 25: Percent of Dentists who concurred with Alcohol Use Statements, by Dentist's Gender and Age



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

A higher percentage of dentists who reported feeling not always in control and dentists unsatisfied with their dental practice scored at high risk for alcoholism (Figure 26).

Figure 26: Percent of Dentists at Risk for Alcoholism by Marital Status, Employment Status and Satisfaction with Dental Practice



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Drug Use

Prescription drug abuse is an emerging health issue for the general population. Oral healthcare workers, due to their ease of access to prescription drugs and daily stress of the profession may be at increased risk for misuse.

Of all dentists, 12 (<1%) reported that they were currently in recovery from a drug addiction. Dentists who were not currently in recovery from a drug addiction were asked four questions about their drug use habits: if they ever felt that they should cut down on their drug use, if they ever had been annoyed by other people criticizing their drug use, if they had ever felt bad or guilty about their drug use, and if they had ever used drugs first thing in the morning to steady nerves or to get rid of a hangover. These questions were adapted from the CAGE Questionnaire, developed in 1970 by Dr. John A Ewing to screen patients for drug use.¹⁵ Fewer than 15 dentists responded positively to each of the four questions (Table 12). Percentages and further analysis by age and gender are not shown because there are too few respondents in each category to report statistical information.

A total of two or more positive answers to the CAGE questionnaire is considered indicative of probable drug addiction. Almost all dentists (98%) answered none of the questions in the affirmative. A total of 11 (<1%) dentists answered two or more questions positively. Percentages and further analysis by age and gender are not shown because there are too few respondents in each category to report statistical information.

Table 12: Positive Responses to Questions about Drug Abuse

	Number Responded “Yes”	Dentists Percent ¹
Have you ever:		
Felt you should cut down on drug use	14	~
Been annoyed by others who criticize your drug use	7	~
Felt bad or guilty about your drug use	8	~
Used drugs first thing in the morning	5	~

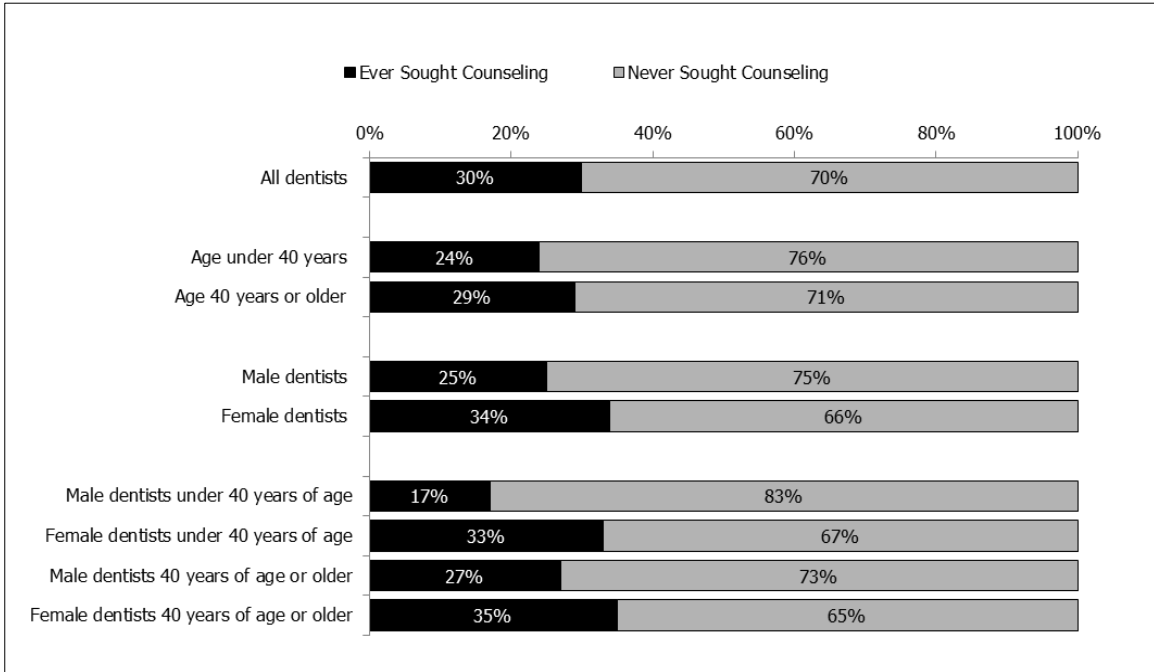
1. Percent of dentists. Sensitive questions are thought to affect three important survey outcomes: (a) overall, or unit, response rates (that is, the percentage of sample members who take part in the survey), (b) item nonresponse rates (the percentage of respondents who agree to participate in the survey but who decline to respond to a particular item), (c) and response accuracy (the percentage of respondents who answer the questions truthfully). Sensitive questions are suspected of causing problems on all three fronts, lowering overall and item response rates and reducing accuracy as well.

Participation in Counseling or Therapy

Dentists were asked if they have ever sought professional help – counseling or psychotherapy – for a personal problem. Three-in-ten (30%) reported that they had sought professional help and four percent were currently involved in counseling or therapy at the time of the survey (Figure 26). In a model that adjusted for age, female dentists were more likely to seek professional help compared to male dentists.

¹⁵ Brown, R.L., and Rounds, L.A. Conjoint screening questionnaires for alcohol and drug abuse. *Wisconsin Medical Journal* 94:135-140, 1995.

Figure 27: Percent of Dentists who Ever Sought Counseling or Psychotherapy

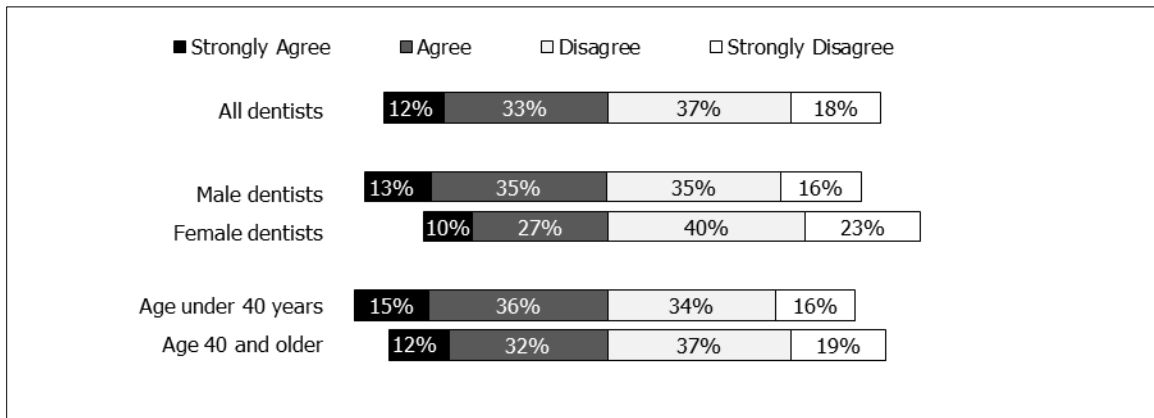


Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Of dentists that were currently in therapy, 3.5 percent were in individual therapy and 1.5 percent were in marital/couples therapy. Fewer than 30 dentists reported that they were currently participating in group therapy or family therapy.

When asked whether they thought it would be difficult for them to seek help because they think they should be able to solve their own problems, male dentists were more likely to agree. A total of 48 percent of male dentists and 51 percent of dentists under age 40 agreed or strongly agreed that it would be difficult from them to seek professional help (Figure 28).

Figure 28: Percent of Dentists and Agreement with the Statement that it would be Difficult to Seek Help

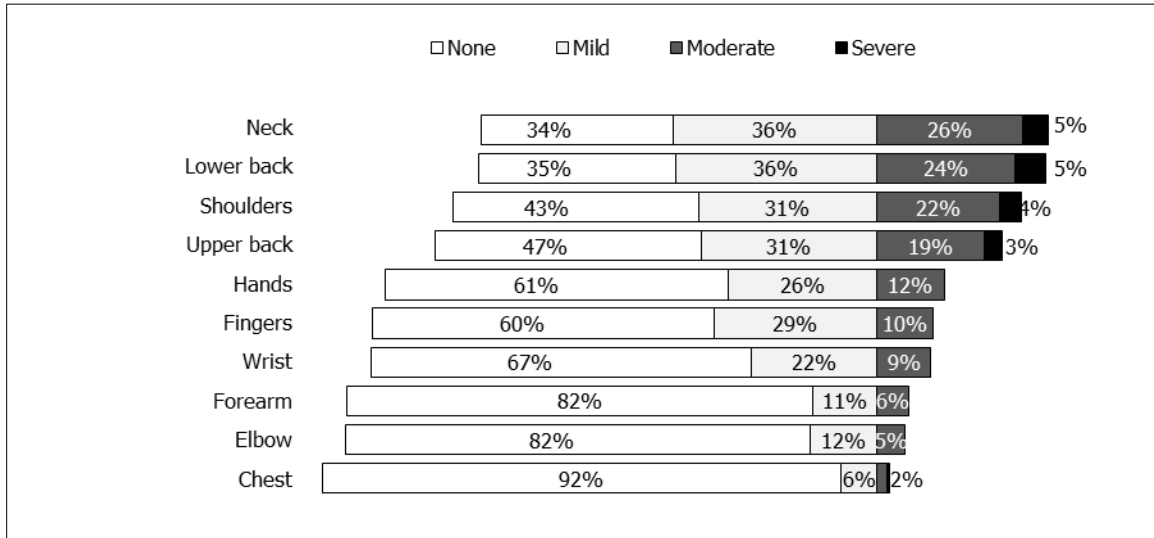


Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

Pain and Discomfort at Work

Dentists were given a list of ten areas of the body and asked to report the level of pain or discomfort experienced in each area during the past 12 months while working or after working. Three-out-of-ten (31%) dentists reported moderate or severe pain or discomfort in the neck and the same proportion (29%) reported pain or discomfort in the lower back. These two areas were most often associated with pain or discomfort (Figure 29).

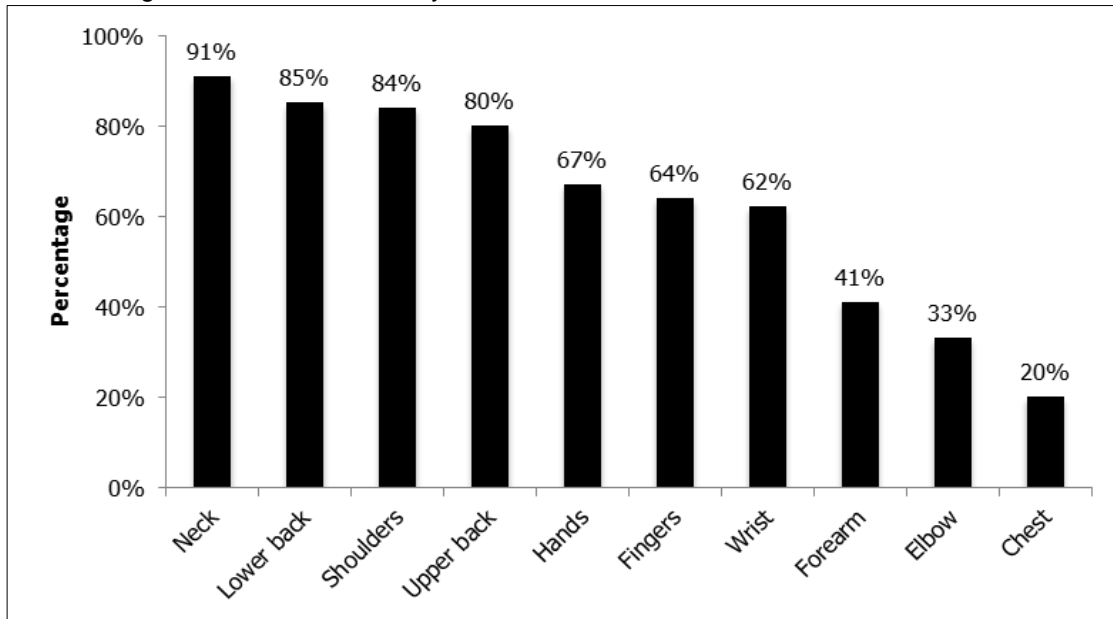
Figure 29: Percent of Dentists who Reported None, Mild, Moderate or Severe Pain by Area of the Body



Where categories contained fewer than 30 responses, percent was not calculated; therefore the total percent for each row may not total 100.

A total of 16 percent of dentists experienced work interference due to pain associated with a listed area of the body (Figure 30). Dentists age 40 and older and female were more likely to have work interference due to pain. Most dentists in whom pain interfered with work reported they were never diagnosed with chronic pain (69%). As shown in Figure 30, neck, lower back and shoulder pain were the primary areas reported in those in whom pain interfered with work.

Figure 30: Area of the Body in which Pain or Discomfort Interfered with Work



Dentists were given a list of specific diseases and conditions associated with pain or discomfort and asked for which they have been diagnosed. If they had any condition, dentists were asked if they sought treatment. Back problems were the most common condition with 28 percent responding they had been diagnosed and sought treatment, and seven percent responding that they had back pain but did not seek treatment. Among other conditions dentists did not seek treatment for were arthritis, stroke osteoporosis and cancer (Table 13).

Several conditions associated with pain or discomfort reported by dentists were reported in similar or greater frequency by the employed U.S. population in 2015. According to the 2015 National Health Interview Survey of U.S. adults age 18 and over, 17.7 percent of those who were currently employed had arthritis, 13.8 percent had neck pain and 26.8 percent had lower back pain.¹⁶

Pain or discomfort had an effect on dentists' level of stress at work. Of dentists who reported pain or discomfort, 25 percent indicated severe stress at work compared to 10 percent in whom pain or discomfort did not interfere with work (Figure 23, above).

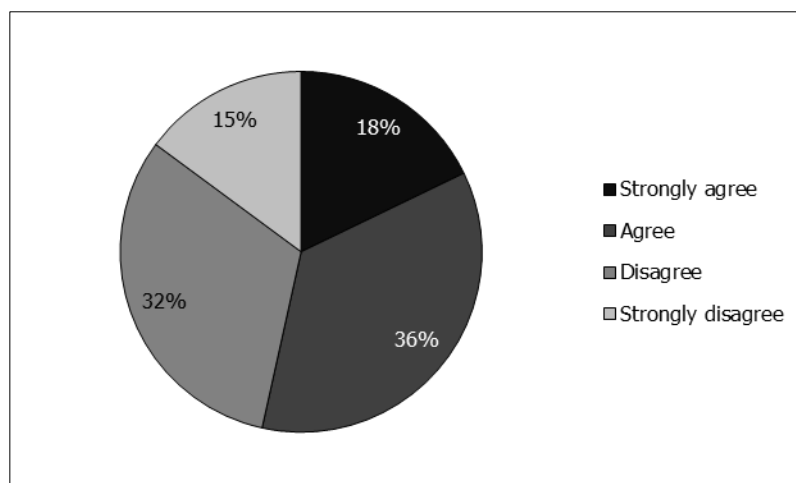
¹⁶ National Center for Health Statistics, National Health Interview Survey 2015, Summary Health Statistics. Available at: <http://www.cdc.gov/nchs/nhis/shs.htm>

Table 13: Dentists Diagnosed with Conditions Associated with Pain or Discomfort and Treatment Seeking Behavior

Diagnosed condition	Yes, Sought Treatment		Yes, Did Not Seek Treatment		No	
	N	%	N	%	N	%
Arthritis (degenerative)	149	8.6	84	4.9	1,490	86.5
Rheumatoid arthritis	20	~	8	~	1,630	98.3
Back problems	504	27.9	117	6.5	1,183	65.6
Cancer	173	10.2	2	~	1,524	89.7
Carpal tunnel syndrome	71	4.2	35	2.1	1,573	93.7
Chronic pain	115	6.9	29	1.7	1,534	91.4
Fibromyalgia	15	~	6	~	1,641	98.8
Hyperthyroid	32	1.9	1	~	1,628	98.0
Neurodegenerative disease	8	~	2	~	1,640	99.4
Numbness, paresthesia or muscle weakness	177	10.4	52	3.1	1,469	86.5
Osteoporosis	37	2.2	8	~	1,620	97.3
Stroke	15	~	1	~	1,641	99.0

Of dentists who reported being diagnosed with a listed condition but did not seek treatment, more than half (54%) agreed with the statement that “it would be difficult for me to seek help because I think I should be able to solve my own problems” (Figure 31).

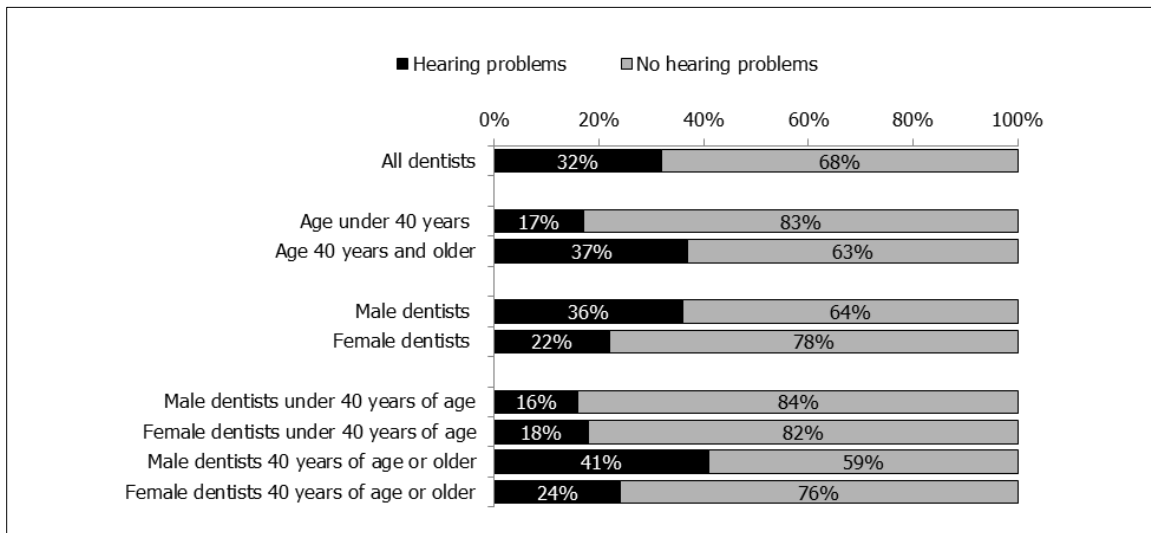
Figure 31: Percent of Dentists who were Diagnosed with a Condition Associated with Pain or Discomfort and Response to Statement “It would be Difficult to Seek Help Because I Think I Should be Able to Solve My Own Problems”



Difficulty Hearing

About one-in-three (32%) dentists reported they noticed signs they were having hearing problems. Figure 32 shows there are significant differences in hearing problems by age and gender. Dentists age 40 and older and male were most likely to report hearing problems (41%) compared to other gender and age groups. While the majority of dentists (61%) reported that their symptoms have remained the same since first noticed, 37 percent said they have worsened and 13 percent said symptoms have improved. A small percentage of dentists reported using hearing protection (4%).

Figure 32: Percent of Dentists who Indicated They Noticed Signs of Hearing Problems, by Demographics



Only one-in-ten dentists who reported hearing problems used a hearing aid and most were not evaluated by an audiologist (63%). Almost half (49%) agreed with the statement that “it would be difficult for me to seek help because I think I should be able to solve my own problems.”

Dentists who reported difficulty hearing were more likely to experience severe level of stress at work compared to dentists without hearing difficulty (14% and 11%, respectively) (Figure 23, above).

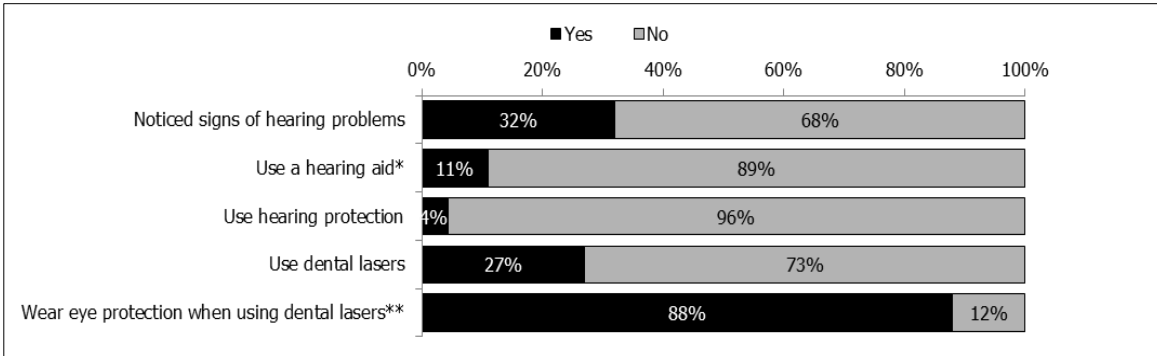
In a national healthy survey of adults, approximately 15 percent of Americans aged 18 and over report some trouble hearing and men are more likely than women to report having hearing loss.¹⁷

¹⁷ Blackwell DL, Lucas JW, Clarke TC. Summary health statistics for U.S. adults: National Health Interview Survey, 2012. National Center for Health Statistics. Vital Health Stat 10(260). 2014. (PDF)

Laser Use

Of all dentists, 27 percent reported they used dental lasers to treat their dental patients. Use of eye protection when using dental lasers was common, 88 percent reported they used eye protection (Figure 33). There were no differences in dentist age, gender or status in primary practice on reported use of lasers or eye protection.

Figure 33: Percent of Dentists who Reported Use of Hearing Aid, Ear or Eye Protection



*Among dentists with hearing problems

**Among dentists who use dental lasers

Closing Remarks

This survey identifies specific health and well-being areas that the American Dental Association can utilize to develop resources to improve or maintain the personal and professional quality of life of dentists. As dentists, you need to set an example of good health to your patients and future generations of dentists and dental team members.

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Appendix C

Sample 2015 Dentist Well-Being Survey

ADA American
Dental
Association®

211 East Chicago Avenue
Chicago, Illinois 60611
312-440-2622

Council on Dental Practice

2015 Dentist Well-Being Survey

Please **circle** the number corresponding to the most appropriate response or fill in the blank. As a reminder, **ANSWERS WILL REMAIN ANONYMOUS.**

- Which of the following best describes your **current primary occupation?** (Please circle only **one** response.)

a. Private practice (full-or part-time)	1
b. Dental school faculty	2
c. Federal dental services	3
d. Other dental occupation	4
e. Other non-dental occupation	5
f. Other, please specify: _____	
- About how many hours per week do you usually spend in your primary occupation?
hours/week
- If you are in private dental practice, please indicate your current status in your **primary practice.**

a. Not in private practice (Skip to Question 5.)	1
b. A sole proprietor (i.e., the only owner)	2
c. A partner	3
d. An employee (on salary, commission, percentage, or associate basis)	4
e. An independent contractor	5
- How satisfied are you with your **current primary practice?**

a. Very satisfied	1
b. Somewhat satisfied	2
c. Somewhat unsatisfied	3
d. Very unsatisfied	4
e. Not applicable	5
- Do you feel that you work: (Circle one number in each column.)

	At Home	At Work
a. far too much?	1	1
b. too much?	2	2
c. a comfortable amount?	3	3
d. too little?	4	4
e. not applicable	5	5
- If you re-lived your life, would you still want to become a dentist?

a. Definitely	1
b. Probably	2
c. Maybe	3
d. Probably not	4
e. Definitely not	5
- Would you change your specialty?

a. Definitely	1
b. Probably	2
c. Maybe	3
d. Probably not	4
e. Definitely not	5
- What is your **current** relationship status?

a. Single, never married	1
b. Married	2
c. Widowed	3
d. Divorced	4
e. Separated	5
f. Member of an unmarried couple	6
- If you have been married more than once, how did your marriage(s) end? (Circle all that apply.)

1. Not married more than once (Skip to Question 10).1	
2. Divorce	2
3. Death	3
- If you have been married more than once, how many times have you been married? _____
- How would you rate your satisfaction with the relationship with your spouse or equivalent domestic partner on both an emotional and sexual basis? (Circle one number in each column.)

	Emotional	Sexual
a. Very satisfied	1	1
b. Somewhat satisfied	2	2
c. Somewhat unsatisfied	3	3
d. Very unsatisfied	4	4
e. Not applicable	5	5
- Have you taken a leave of absence(s) from your career as a dentist for any of the following reasons?

	Yes	No
a. Further study	1	2
b. Personal illness	1	2
c. Family illness	1	2
d. Child rearing	1	2
e. Family problems	1	2
f. Financial problems	1	2
g. Other, please specify _____		
- About how many hours do you sleep in a typical night?
hours
- What is your daily stress: (Circle one number in each column.)

	At Home?	At Work?
a. Severe	1	1
b. Moderate	2	2
c. Light	3	3
- Do you feel in control of your work environment?

a. Always	1
b. Almost always	2
c. Usually	3
d. Sometimes	4
e. Rarely	5
f. Never	6
- About how many hours per week do you spend in activities that are religious or spiritual in nature? (If none, enter zero.)
hours/week
- 16a. Have you ever been harassed in a dental setting (i.e., received unwanted physical or verbal attention, propositions, hostilities or threats)?

Yes	1
No (Skip to Question 17.)	2
- 16b. If yes, circle all situations that apply.

	Gender-based sexual	Life-style based	Ethni-cally based
This occurred:			
1. before dental school	1	2	3
2. during dental school	1	2	3
3. while intern/resident	1	2	3
4. while in practice	1	2	3
- About how many hours per week do you engage in some form of exercise?
hours/week
- Please indicate your level of agreement with each of the following statements describing your work experience, using the following scale: 1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree.

	Strongly Agree		Strongly Disagree
a. I think the people I work with respect me	1	2	3 4
b. I sometimes doubt my own competence	1	2	3 4

19. For the conditions listed below, please circle all that have been diagnosed or that may apply to yourself, your spouse or your immediate family (children, parents and siblings).

	Yourself	Spouse	Immediate Family
a. Alcohol abuse.....1	2	3	
b. Other substance abuse1	2	3	
c. Sexual abuse1	2	3	
d. Domestic violence1	2	3	
e. Depression1	2	3	
f. Attempted suicide.....1	2	3	
g. Bipolar disorder.....1	2	3	
h. Anorexia1	2	3	
i. Bulimia1	2	3	
j. Compulsive overeating.....1	2	3	
k. Panic attacks.....1	2	3	
l. Anxiety disorders.....1	2	3	
m. Obsessive-compulsive disorder.....1	2	3	
n. Other psychiatric disorder ...1	2	3	
o. Repetitive-stress injury1	2	3	
p. Elevated cholesterol.....1	2	3	
q. Heart disease1	2	3	
r. Compulsive gambling1	2	3	
s. Significant traumatic event ..1	2	3	
t. Diabetes1	2	3	
u. Post-traumatic stress disorder1	2	3	
v. Headaches.....1	2	3	
w. Chronic fatigue1	2	3	
x. Temporomandibular joint dysfunction (TMD).....1	2	3	
y. (women only) Premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD).....1	2	3	
z. Postpartum depression.....1	2	3	

20. During the past month, for how many days did poor physical or mental health keep you from your usual activities (i.e., work, recreation)? (If none, enter zero.).....
days

21. During the last two weeks, how often have you: (Circle one number for each question using the following scale: 1=always, 2=sometimes, 3=rarely, 4=never.)

	Always			Never
a. been feeling low in energy?1	2	3		4
b. been blaming yourself for things?1	2	3		4
c. had a poor appetite?1	2	3		4
d. had difficulty falling asleep or staying asleep?.....1	2	3		4
e. been feeling hopeless about the future?.....1	2	3		4
f. been feeling blue?.....1	2	3		4
g. had no interest in things?.....1	2	3		4
h. had feelings of worthlessness? 1	2	3		4
i. thought about or wanted to commit suicide?1	2	3		4
j. had difficulty concentrating or making decisions?1	2	3		4

22a. Are you currently in recovery from alcoholism?
Yes (Skip to Question 23a.) 1
No..... 2

22b. If you are not currently in recovery from alcoholism, have you ever:

	Yes	No
1. felt that you should cut down on your drinking?.....1		2
2. been annoyed by other people criticizing your drinking?.....1		2
3. felt bad or guilty about your drinking? ...1		2
4. had a drink first thing in the morning to steady your nerves or to get rid of a hangover?1		2

23a. Are you currently in recovery from a drug addiction?
Yes (Skip to Question 24.)1
No2

23b. If you are not currently in recovery from a drug addiction, have you ever:

	Yes	No
1. felt that you should cut down on your drug use?.....1		2
2. been annoyed by other people criticizing your drug use?1		2
3. felt bad or guilty about your drug use? ..1		2
4. used drugs first thing in the morning to steady your nerves or to get rid of a hangover?1		2

24. Which of the following prescribed, over-the-counter (OTC), or herbal medications do you currently use on a regular (weekly or more often) basis? (Circle all that apply.)

	MD-prescribed	Self-prescribed or obtained
a. Antidepressants1		2
b. Anxiolytic medications.....1		2
c. Diuretics1		2
d. Laxatives1		2
e. Sleeping pills.....1		2
f. Analgesics.....1		2
g. Opiates.....1		2
h. Herbal medications1		2
i. Marijuana1		2
j. Allergy medication.....1		2
k. Weight loss drugs1		2
l. Other stimulants1		2
m. Nitrous oxide1		2
n. Other1		2

25. Have you ever sought professional help -- counseling or psychotherapy -- for a personal problem?
Yes1
No2

26. Please indicate your level of agreement with the following statement about professional help, "It would be difficult for me to seek help because I think I should be able to solve my own problems."

a. Strongly agree.....1
b. Agree2
c. Disagree.....3
d. Strongly disagree.....4

27a. Are you currently involved in counseling or therapy?
Yes.....1
No (Skip to Question 28.).....2

27b. If you are currently involved in counseling or therapy, what type of therapy? (Circle all that apply.)

1. Individual therapy1
2. Group therapy2
3. Marital/couples therapy3
4. Family therapy4
5. Other, please specify _____

28. Thinking about the past 12 months, please indicate the level of pain or discomfort you first noticed while working or after working in any of the following areas:

	None	Mild	Moderate	Severe
a. Fingers.....1	2	3	4	
b. Wrist.....1	2	3	4	
c. Hands1	2	3	4	
d. Forearm1	2	3	4	
e. Elbow1	2	3	4	
f. Shoulders1	2	3	4	
g. Neck1	2	3	4	
h. Upper back1	2	3	4	
i. Lower back1	2	3	4	
j. Chest.....1	2	3	4	

29. If you selected Mild, Moderate or Severe for any of the body parts in Question 28, how has the pain and discomfort interfered with your work?
- a. No pain or discomfort..... 1
 - b. Some, but no interference..... 2
 - c. Some interference..... 3
 - d. Had to take off work..... 4
30. Have you ever been diagnosed with any of the following diseases or conditions? (1=Yes, and sought treatment; 2=Yes, but did not seek treatment; 3=No)

	Yes, and sought treatment	Yes, but did not seek treatment	No
a. Arthritis (degenerative).....	1	2	3
b. Rheumatoid arthritis.....	1	2	3
c. Back problems.....	1	2	3
d. Cancer.....	1	2	3
e. Carpal tunnel syndrome.....	1	2	3
f. Chronic pain.....	1	2	3
g. Diabetes.....	1	2	3
h. Fibromyalgia.....	1	2	3
i. Hyperthyroid.....	1	2	3
j. Neurodegenerative disease (e.g., Alzheimer's, Parkinson's).....	1	2	3
k. Numbness, paresthesia or muscle weakness.....	1	2	3
m. Osteoporosis.....	1	2	3
n. Stroke.....	1	2	3

31. Have you ever noticed any signs that you were having hearing problems?

Yes 1
 No (Skip to Question 36.)..... 2

32. If yes, what year did you first notice any signs that you were having hearing problems?.....

year

33. Since the year you entered above, have your symptoms:

- a. Worsened?..... 1
- b. Remained the same?..... 2
- c. Improved?..... 3

34. Since you noticed that you were having hearing problems, have you had your hearing evaluated by an audiologist and been diagnosed with a hearing problem?

Yes 1
 No..... 2

35. Do you use a hearing aid?

Yes 1
 No..... 2

36. Do you use hearing protection when treating patients?

Yes 1
 No..... 2

37. Do you use dental lasers to treat your dental patients?

Yes 1
 No (Skip to Question 39.)..... 2

38. Do you wear eye protection while using dental lasers?

Yes 1
 No..... 2

39. In what year were you born?.....

birth year

40. In what year did you graduate from dental school?.....

graduation year

41. In what state do you currently reside?.....

42. What was your 2014 net income before paying personal income taxes?.....\$

43. What is your gender?

Male 1
 Female 2

44. Do you know that a state dentist well-being program is available through your state dental society?

Yes 1
 No 2

45. Please feel free to make any comments about how you think the ADA could better support the personal well-being of dentists. PLEASE PRINT.

Thank you for your assistance with this research project. Please return the questionnaire by folding and placing tape as indicated. Drop both this completed questionnaire and the enclosed postcard in the mail (so that we can exclude you from follow up mailings of this survey while maintaining the confidentiality of your responses). Postage is already paid on both.

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