

Examination of Dental Anxiety and Fear Levels of Dentistry Faculty Students: A Case of North Cyprus

Kübra Özsat^{1*}, Mahdi Ghorbani Mazraeh Khalafi², Hülya Şenol³, Durmuş Aşıcıoğlu⁴ and Merve Karafistan⁵

¹MSc, Department of Social Sciences and Humanities, Cyprus Health and Social Sciences University, Omorfo, Cyprus

²Dt. Department of Dentistry, Cyprus Health and Social Sciences University, Omorfo, Cyprus

³Assistant Professor, Dr, Department of Social Sciences and Humanities, Cyprus Health and Social Sciences University, Omorfo, Cyprus

⁴Assistant Professor, Dr, Department of Dentistry, Cyprus Health and Social Sciences University, Omorfo, Cyprus

⁵MSc, Department of Social Sciences and Humanities, Cyprus Health and Social Sciences University, Omorfo, Cyprus

***Corresponding Author:** Kübra Özsat, Department of Social Sciences and Humanities, Cyprus Health and Social Sciences University, Omorfo, Cyprus.

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Abstract

In this study, dental anxiety and fear levels of the students of the Faculty of Dentistry were examined. The population of the study consists of dentistry students studying in the TRNC in the 2021 - 2022 academic year. 349 individuals selected by random sampling method were included in the study. The data were collected by the administration of the Socio-Demographic Information Form, Dental Fear Scale and Modified Dental Anxiety Scale to the participants. Within the scope of the research, the non-parametric Mann-Whitney U test and Kruskal-Wallis H analysis were used to compare the Dental Fear Scale and Modified Dental Anxiety Scale scores according to the socio-demographic characteristics of the students and their dental experiences. As a result of the analyzes, it was determined that there was no statistically significant difference between dental fear and gender, while age, grade level, tooth brushing frequency, smoking history, frequency and reason for going to the dentist, endodontic internship status, root canal treatment and traumatic dentistry experiences variables were found to be correlated to dental fear. In the study, it was also determined that there was no correlation between dental anxiety and some variables such as gender, smoking history and cause of going to dentist. In addition, it was found out that there are significant differences between the dental anxiety and some variables such as age, grade level, frequency of tooth brushing, frequency of going to the dentist, endodontic internship status, root canal treatment and traumatic dentistry experiences.

Keywords: Dentistry; Dental Anxiety; Dental Fear

Introduction

Although the terms anxiety and fear are often used interchangeably, they are two phenomena that have different meanings. While fear is an emotion felt in the face of a real object or situation, anxiety is the state of uneasiness experienced by the individual against objects or situations whose cause is unknown [1,2]. While fear arises in the face of a known danger that threatens the life of the individual, anxiety is the uneasiness felt even though there is no concrete danger [3]. Although dental anxiety and/or fear is an intense state of anxiety that arises due to fear and anxiety about dental treatment, it negatively affects the quality of life of individuals by creating negative effects on both oral health and general health due to the physiological, intellectual and behavioral differences it causes in patients. Despite technological advances in dentistry, dental anxiety and fear have been found to play a central role in avoiding dental treatments [4]. In this context, it can be said that dental anxiety and fear are common problems seen at different levels in all societies. Fear and anxiety about dental procedures is one of the most common problems faced by all patients around the world. Despite advances in dental materials and

technologies, a significant percentage of patients have dental anxiety. Dental anxiety is ranked fourth among common fears and ninth among intense fears. Many patients are afraid of certain stimuli involved in the dental treatment that are associated with the dentist and may affect the dental treatment plan. Specific procedures such as aerator sound, root canal treatment, tooth extraction or injection are reported to trigger fear or anxiety [5]. It is stated that individuals who are concerned about dental treatment enter the cycle of avoiding dental interventions and therefore their oral health deteriorates. Poor oral health causes embarrassment and avoidance of the dentist until pain or excruciating symptoms are experienced. It is stated that this situation strengthens dental fear and anxiety [6]. Studies have shown that patients with dental anxiety have more periodontal problems, missing and/or less filled teeth compared to other patients [7]. Although it is stated that demographic characteristics may be effective in the development of fear and anxiety reactions in dentistry, painful and traumatic dental treatment experiences, fear/anxiety behaviors exhibited by the family members or close environment, the dentist's approach to the patient and the comments of the dentist about the dental treatment are also effective [8]. In this study, the dental anxiety and fear levels of the students of the faculty of dentistry were examined in detail, based on the idea that it may affect the level of dental anxiety and dental fear due to the education they receive. Factors associated with dental anxiety and fear were also discussed in the study.

Method

The population of the study was the dentistry students studying in the TRNC in the 2021 - 2022 academic year. 349 individuals selected by the random sampling method were included in the study. The data were collected online from November to December 2021. Ethical permission was obtained from the Scientific Research Ethics Committee of Cyprus University of Health and Social Sciences before the data collection process. Socio-Demographic Information Form, Dental Fear Scale and Modified Dental Anxiety Scale were used as data collection tools in the research. The distribution of students according to their socio-demographic characteristics and dental experience was determined by frequency analysis, and descriptive statistics were used to analyze the scores obtained from Dental Fear Scale and Modified Dental Anxiety Scale scores. The normal distribution of the Dental Fear Scale and Modified Dental Anxiety Scale scores of the students was examined using the Kolmogorov-Smirnov test and it was determined that they did not comply with the normal distribution. Accordingly, the non-parametric Mann-Whitney U test and Kruskal-Wallis H test were used to compare the Dental Fear Scale and Modified Dental Anxiety Scale scores according to the socio-demographic characteristics and dental experience of the students.

Results

Analysis of the socio-demographic data of the participants showed that 48.14% of the participants were women and 51.86% were men; 53.58% were between age of 18 - 26, 26.93% were between 27 - 35 and 19.48% of them were between age of 36 and over. In addition, 12.61% were 1st grade, 20.06% were 2nd grade, 16% were 3rd grade, 24.36% were 4th grade and 26.93% were 5th grade students.

51.58% of the students smoke, 37.54% occasionally, 38.68% when they have pain, 23.78% regularly go to the dentist. It was determined that 28.37% of the participants visited a dentist for check, 31.81% due to tooth ache, 12.32% for restorative procedures and 11.46% for orthodontic treatment. 29.51% of the students brush their teeth once a day, 48.14% 2 - 3 times a day, 16.62% more than 3 times a day. 51.58% have had previous root canal treatment experience, 43.55% had a traumatic dentistry experience and 53.01% had an endodontic internship.

When table 1 and 2. was examined, it was determined that the students participating in the study got an average of 53.66 ± 23.77 points from the Dental Fear Scale and 13.39 ± 6.10 points from the Modified Dental Anxiety Scale.

	Number (N)	Percentage (%)
gender		
woman	168	48,14
man	181	51,86
age		
18-26	187	53,58
27-35	94	26,93
36 and above	68	19,48
Grade level		
1. grade	44	12,61
2. grade	70	20,06
3. grade	56	16,05
4. grade	85	24,36
5. grade	94	26,93
Smoking		
yes	180	51,58
no	169	48,42
Frequency of visiting a dentist		
seldomly	131	37,54
when having tooth ache	135	38,68
regularly	83	23,78
Cause of last visit to a dentist		
check	99	28,37
tooth ache	111	31,81
restorative procedures	43	12,32
surgical procedures	24	6,88
orthodontic treatment	40	11,46
gingival problem	32	9,17
Frequency of tooth brushing		
Once in a week	20	5,73
Once in a day	103	29,51
2-3 times in a day	168	48,14
More than 3 times in a day	58	16,62
Previous experience of root canal treatment		
yes	180	51,58
no	169	48,42
Traumatic dentistry experience		
yes	152	43,55
no	197	56,45
Endodontic internship		
yes	185	53,01
no	164	46,99

Table 1: Evaluation of descriptive data according to students' socio-demographic characteristics and dentist experience.

	N	\bar{x}	S	M	Min	Max
Dental Fear Scale scores	349	53,66	23,77	55,00	19	95
Modified Dental Anxiety Scale scores	349	13,39	6,10	12,00	5	25

Table 2: Students' Dental Fear Scale and Modified Dental Anxiety Scale scores.

According to figure 1, it was determined that 34.38% of the students i had low dental fear levels, 25.21% had moderate, 20.63% had high and 19.77% had extremely high levels of dental fear.

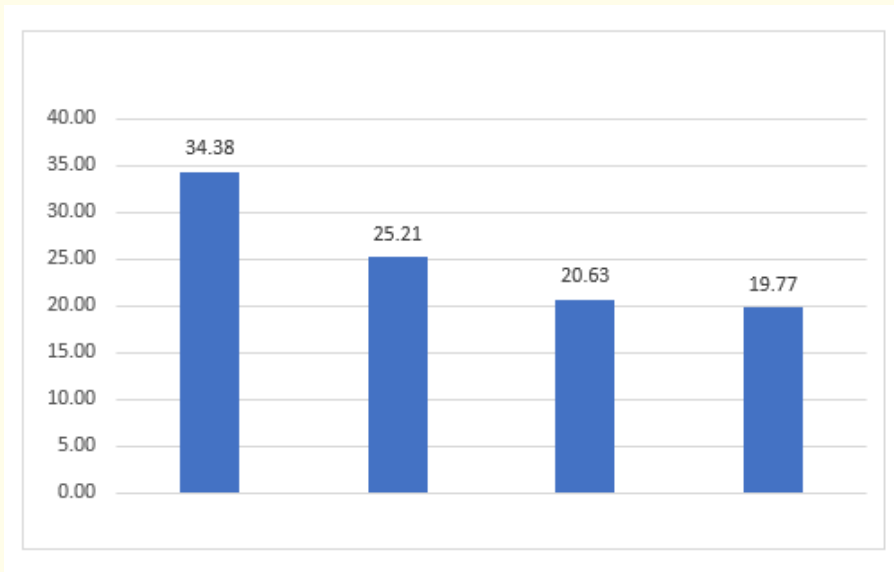


Figure 1: Dental fear levels of students.

When figure 2. was examined, it was determined that 76.50% of the students had normal dental anxiety levels and 23.50% had high levels.

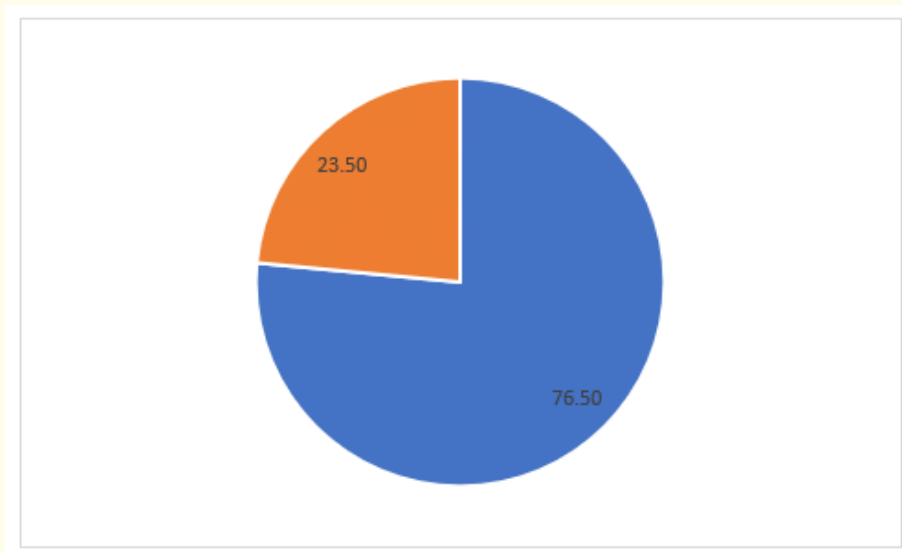


Figure 2: Dental anxiety levels of students.

It was determined that there was no statistically significant difference between dental fear scores according to the gender of the students included in the study ($p > 0.05$). dental fear scores of female and male students are similar. Also, it was found out that there was a statistically significant difference between the dental fear scores of the students according to the age group, and it was determined that the dental fear scores of the students in the 18 - 26 age group were lower than the other age groups ($p < 0.05$). In addition, dental fear scores of students in the 27 - 35 age group are lower than students aged 36 and over.

It was determined that the difference between the dental fear scores of the students according to the grade level was statistically significant ($p < 0.05$). Dental fear scores of the 1st and 2nd grade students were lower than the 4th and 5th grade students. The difference between dental fear scores according to the smoking status of the students was statistically significant ($p < 0.05$). Dental fear scores of smokers are higher than non-smokers. It was determined that there was a statistically significant difference between the dental fear scores of the students according to the frequency of visiting a dentist ($p < 0.05$). The scores of the students who stated that they went to the dentist when they had pain were higher than the others. In addition, there was a statistically significant difference between the dental fear scores of the students according to the last reason they went to the dentist ($p < 0.05$). Dental fear scores of those who went to the last dentist for examination/control and restorative procedures were lower than those who went to the dentist due to the surgical procedures and gingival complaints.

It was observed that there were statistically significant differences between the dental fear scores of the students according to the frequency of tooth brushing ($p < 0.05$). The dental fear scores of the students who brushed their teeth more than 3 times a day were found to be higher than the others. There were statistically significant differences between the dental fear scores of the students according to their previous root canal treatment experience and traumatic dentistry experience ($p < 0.05$). Dental fear scores of students who had previous root canal treatment experience and traumatic dentistry experience were found to be higher. Also, it was determined that there was a statistically significant difference between the dental fear scores of the students according to their endodontic internship, and the dental fear scores of those who had an endodontic internship were found to be higher than those who did not ($p < 0.05$).

Table 3 and 4 presents the findings regarding the comparison of Modified Dental Anxiety Scale (MDAS) scores according to the socio-demographic characteristics of the students and their dentist experience. It was determined that there was no statistically significant difference between the MDAS scores of the students according to their gender, and the MDAS scores of the female and male students were found to be similar ($p < 0.05$).

	N	\bar{x}	S	M	So	Z / X ²	P	Difference
Gender								
woman	168	53,71	22,78	57,00	176,30	-0,232	0,817	
man	181	53,61	24,71	53,00	173,80			
age								
18-26	187	44,74	22,49	40,00	136,95	67,370	0,000*	1-3
27-35	94	58,91	21,56	59,50	197,57			1-2
36 and above	68	70,91	17,93	67,00	248,43			2-3
Grade level								
1.	44	45,82	17,79	43,50	143,11	21,305	0,000*	1-4
2.	70	47,93	19,53	53,50	152,63			1-5
3.	56	50,27	17,62	51,50	160,41			2-4
4.	85	54,59	25,03	56,00	179,49			2-5
5.	94	62,77	28,10	67,00	211,21			
Smoking								
yes	180	57,26	24,03	57,00	189,83	-2,835	0,005*	
no	169	49,82	22,93	51,00	159,20			
Frequency of visiting a dentist								
Occasionally	131	48,59	19,64	50,00	154,97	13,872	0,001*	1-2
When having tooth ache	135	59,34	24,49	61,00	199,71			2-3
Regularly	83	52,41	26,63	51,00	166,43			

Cause of last visit to a dentist								
Check	99	47,45	23,16	47,00	149,37	16,938	0,005*	1-4
Ache	111	56,23	22,37	55,00	185,84			1-6
Restorative procedures	43	47,95	22,87	40,00	152,79			3-4
Surgical procedures	24	61,25	17,55	59,00	209,21			3-6
orthodontic treatment	40	56,33	30,08	62,50	182,51			
Gingival problems	32	62,56	21,60	59,50	211,50			
Frequency of brushing tooth								
Once in a week	20	55,80	11,26	57,00	186,20	15,276	0,002*	1-4
Once in a day	103	51,32	20,95	51,00	165,67			2-4
2-3 times in a day	168	50,89	24,63	53,00	163,56			3-4
More than 3 times in a day	58	65,09	26,01	73,50	220,84			
Previous root canal treatment experience								
yes	180	63,97	22,72	62,00	218,33	-8,283	0,000*	
no	169	42,67	19,61	40,00	128,86			
Travmatic dentistry experience								
yes	152	69,38	20,19	74,00	239,04	-10,420	0,000*	
no	197	41,52	18,68	38,00	125,59			
Endodontic internship								
yes	185	60,31	24,39	61,00	201,75	-5,264	0,000*	
no	164	46,15	20,68	45,00	144,82			

Table 3: Comparison of Dental Fear Scale scores according to students' socio-demographic characteristics and dentist experience. * $p < 0,05$.

	N	\bar{x}	S	M	So	Z / X^2	P	Difference
gender								
woman	168	13,33	6,08	12	174,99	-0,002	0,999	
man	181	13,44	6,13	12	175,01			
age								
18-26	187	11,64	5,35	10	146,85	33,653	0,000*	1-3
27-35	94	14,53	6,05	13	197,56			1-2
36 and above	68	16,60	6,47	17,5	221,21			2-3
Grade level								
1.	44	10,75	3,72	11	139,27	18,114	0,001*	1-4
2.	70	11,49	4,75	11	147,37			1-5
3.	56	12,70	4,16	12,5	175,13			2-4
4.	85	14,26	6,46	13	188,61			2-5

5.	94	15,66	7,47	17	199,91			
smoking								
yes	180	14,08	6,65	13	183,44	-1,617	0,106	
no	169	12,65	5,37	12	166,01			
Frequency of visiting a dentist								
occasionally	131	11,82	4,79	11	153,85	14,261	0,001*	1-2
When having ache	135	14,93	6,41	14	199,68			
regularly	83	13,34	6,81	10	168,24			
Reason for last visit to a dentist								
check	99	11,91	5,37	10	151,99	9,054	0,107	
ache	111	14,23	5,92	13	192,34			
Restorative procedures	43	12,84	5,87	11	168,60			
Surgical procedures	24	13,75	5,66	11,5	182,46			
orthodontic treatment	40	14,65	8,02	16	179,95			
Gingival problems	32	13,94	6,17	12	182,84			
Frequency of brushing tooth								
Once in a week	20	11,10	3,48	11,5	146,85	14,633	0,002*	1-4
Once in a day	103	12,95	5,51	12	171,24			2-4
2-3 times in a day	168	12,88	6,25	11	165,27			3-4
More than 3 times in a day	58	16,43	6,46	18,5	219,56			
Previous root canal treatment experience								
yes	180	15,73	6,53	16	210,56	-6,809	0,000*	
no	169	10,89	4,40	10	137,12			
Travmatic dentistry experience								
yes	152	16,78	6,47	18	225,93	-8,299	0,000*	
no	197	10,77	4,22	10	135,71			
Endodontic internship								
yes	185	14,99	6,51	13	199,15	-4,758	0,000*	
no	164	11,57	5,02	11	147,76			

Table 4: Comparison of Modified Dental Anxiety Scale scores according to students' socio-demographic characteristics and dentist experience.

It was determined that there was a statistically significant difference between the MDAS scores of the students according to the age group, and it was determined that the MDAS scores of the students in the 18 - 26 age group were lower than the other age groups ($p < 0.05$). In addition, the MDAS scores of the students in the 27 - 35 age group were found to be lower than the students aged 36 and over. It was determined that the difference between the MDAS scores of the students according to the grade level was statistically significant ($p < 0.05$). The MDAS scores of the 1st and 2nd grade students were lower than the 4th and 5th grade students. There was no statistically significant difference in MDAS scores according to the smoking status of the students ($p > 0.05$).

It was determined that there was a statistically significant difference between the MDAS scores of the students according to the frequency of going to the dentist ($p < 0.05$). The scores of the students who stated that they went to the dentist when they had pain were higher than the students who went to the dentist occasionally. It was determined that there was no statistically significant difference between the MDAS scores of the students according to the last reason of visiting a dentist ($p > 0.05$). It was observed that there were statistically significant differences between the MDAS scores of the students according to the frequency of tooth brushing ($p < 0.05$). The MDAS scores of the students who brushed their teeth more than 3 times a day were found to be higher than the others.

It was observed that there was a statistically significant difference between the MDAS scores of the students according to their previous root canal treatment experience ($p < 0.05$). Students who had previous root canal treatment experience had higher MDAS scores. The difference between the MDAS scores of the students according to their previous traumatic dentistry experience was found to be statistically significant ($p < 0.05$). Students with traumatic dentistry experience have higher MDAS scores. It was observed that there was a statistically significant difference between the MDAS scores of the students according to the endodontic internship status ($p < 0.05$). The MDAS scores of those who had an endodontic internship were higher than those who did not.

Discussion

In this study, the prevalence of dental anxiety was found to be 23.5%, and the prevalence of dental fear was 19.7. Similar to our results, it was found that the prevalence of dental anxiety in adults was 38.0% [9]. In another study examining the dental anxiety levels of individuals over the age of 50 in the USA, it was reported that the prevalence of dental anxiety was 24.0% [10]. In a study examining the factors affecting dental anxiety levels of dental students, it was found that the incidence of dental anxiety was 23.0%, similar to the findings of this study [11]. In another study, dental fear levels of individuals with and without health workers were examined and it was found that the incidence of dental fear in individuals who were health workers was similar (24,5) [12].

When the literature was examined, it was found that, unlike these results, the frequency of dental fear in children was found (39.5%) [13]. It is thought that the reason for obtaining different findings on the subject may be the different sample sizes, the differentiation of the methods used in the studies or geographical variation. In the study, while it was determined that the dental fear levels of the individuals were not related to gender, it was determined that age, grade level, tooth brushing frequency, smoking history, frequency and reason for going to the dentist, endodontic internship status, root canal treatment and traumatic dentistry experiences affected dental fear. According to these results, the level of dental fear increases as age and grade level increase. In addition, smokers compared to non-smokers, those who go to the dentist less often when they have pain, those who go for surgical procedures and gingival complaints compared to those who go for examination/control and restorative procedures, those who brush their teeth more than 3 times a day compared to those who brush less frequently; Those who have root canal treatment and traumatic dentistry experience have higher dental fear levels compared to those who do not have.

While there are studies reporting that women's dental fear levels are higher than men [14,15], there are also studies reporting that there is no difference in dental fear levels of men and women [16-18]. In studies examining the relationship between age and grade level and dental fear, it has been revealed that these factors affect the level of dental fear, but different results have been obtained from this study. In a study, unlike this study, it was found that dental fear levels of 1st year dentistry students were higher than 4th and 5th grade students and as the clinical experience of the students increased with the grade level, their dental fear levels decreased [19].

Similarly, there are other studies reporting that dental fear levels of first-year dentistry students are higher than that of senior students [20,21]. In a study in which dental fear levels of dental students were examined according to various demographic variables, it was determined that, unlike this study, the level of dental fear decreased as age increased [22]. In this study, it was revealed that the level of dental fear of students with a history of smoking was higher than those who did not smoke. In these studies, it is stated that dental fear is predicted by different personal characteristics rather than smoking [23,24].

It can be said that the different findings may be due to the differences in the size of the sample groups and the education level classifications. In this study, it was revealed that students who go to the dentist when they have pain have higher dental fear levels. This result is consistent with the literature. In a study, it was found that the level of dental fear of individuals who regularly go to the dentist is lower than those who go when they have pain [25]. In a study examining the factors affecting dental fear in patients undergoing dental treatment, it was found that there was a relationship between dental fear and frequency of visits; It has been determined that the dental fear levels of the patients who regularly come to the examinations are significantly lower than the other individuals [26].

There are other studies reporting that individuals who regularly visit the dentist have reduced dental fear [27,28]. Studies examining tooth brushing frequency and dental fear, similar to the findings of this study, report that individuals with high dental fear brush their teeth more than other individuals [29,30]. Similar results were obtained in a study in which the effect of the reason for going to the dentist on dental fear was examined. This study consisted of 170 individuals. It has been determined that the dental fear levels of individuals who go to the dentist for examination/control are lower than those who apply for gingival complaints or surgical procedures [31].

It can be thought that these results are related to the fact that individuals who go to the dentist regularly can be intervened without the need for major operations and they respond more quickly to treatment due to regular interventions. In the study, it was determined that the dental fear levels of individuals with previous root canal treatment and traumatic dentistry experience were higher, and it was seen that these results were in parallel with the literature. It is stated that the traumatic dentistry experiences of the individual are effective in the emergence of fear reactions in dentistry [32]. Many studies on the subject have reported that the most important component of dental fear is traumatic dental experiences [33,34].

In a study examining the dental fears of patients admitted to orthodontic treatment, it was found that previous traumatic dentistry experiences statistically affected dental fear scores; positive correlations were found between traumatic experience and dental fear [35]. Many individuals are afraid of certain stimulants associated with the dentist; It is stated that some procedures such as aerator sound, root canal treatment or injection trigger dental fears of individuals. However, it has been reported that the long duration of the root canal treatment protocol and the long-term pain experience of individuals after the intervention increase dental fear [36]. In this study, it was determined that the level of dental fear of individuals who had an endodontic internship was higher than those who did not have an endodontic internship, but it was seen in the literature that endodontic education did not change the level of dental fear [37,38].

Considering the findings of this study, it was seen that gender, smoking history and reason for going to the dentist were not related to dental anxiety. In addition, statistically significant differences were found between age, grade level, frequency of tooth brushing, frequency of going to the dentist, having an endodontic internship, root canal treatment and traumatic dentistry experiences and dental anxiety. According to these results, as age and grade level increase, the level of dental anxiety increases. In addition, those who go to the dentist when there is pain are higher than those who go to the dentist occasionally, those who brush their teeth more than 3 times a day compared to those who brush less, those who have no previous root canal treatment and traumatic dentistry experience, and those who have an endodontic internship have higher levels of dental anxiety than those who do not.

When the literature is examined, it is seen that there are studies that support the findings obtained from this study, but there are also studies that have different findings. When the relationship between gender and dental anxiety is examined, there are studies stating that there is no statistical difference in dental anxiety levels according to the gender of the patients [39,40]. Contrary to these results, there are also studies reporting that women have higher dental anxiety levels [41]. Researchers report that this is because women are more comfortable expressing their emotions and reactions than men [42,43]. Although positive correlations were found between grade level and dental anxiety in this study, studies in the literature report negative correlations between grade level and dental anxiety. In a study examining the relationship between dental anxiety and alexithymia levels of dental faculty students in the USA, it was concluded that dental anxiety and alexithymia levels of first year students were higher than those of senior students [44]. In another study, the oral dental

health attitudes and behaviors and dental anxiety levels of the students of the faculty of dentistry were examined and it was determined that the dental anxiety levels of the senior students were lower than the others [45].

In this study, unlike the literature, it was found that the dental anxiety levels of the students who do endodontic internships are higher than those who do not do endodontic internships, but it is seen that there is no study in the literature that detects a significant difference between endodontic internship and dental anxiety [46,47]. It is seen that there are studies that reach different results in the relationship between root canal treatment and dental anxiety. In a study, the researchers examined the dental anxiety and coping methods, 234 individuals were included in the study and no significant difference was found in the dental anxiety levels of individuals who had root canal treatment and those who did not [48]. Unlike these results, there are also studies stating that root canal treatment increases the level of dental anxiety in individuals because it is a painful procedure [49,50]. It can be thought that these different results are due to population groups. When the literature on traumatic dental experience and dental anxiety was examined, it was found that similar results were obtained with our study.

In a study examining the effect of periodontal awareness levels of dentistry students on the level of dental anxiety, it was revealed that students with traumatic dentistry experience had higher dental anxiety levels [51]. It has been reported that traumatic dental treatment experiences of individuals cause negative expectations in individuals and this situation increases dental anxiety [52]. In addition, it is stated that the traumatic dental treatment experiences of family members and close friends are also effective in the level of dental anxiety [53]. Similar to the findings of this study, in a study investigating the relationship between dental anxiety levels of pregnant women and demographic characteristics, it was observed that the level of dental anxiety increased with increasing age [54]. In studies examining the effects of dental anxiety on individuals' oral hygiene habits, it has been found that individuals with high dental anxiety levels have a higher frequency of tooth brushing than other individuals [55].

In another study, it was found that dental anxiety was directly related to the individuals' tooth brushing habits and frequency. This study reported that individuals with dental anxiety brush their teeth more and use more cleaning tools such as dental floss and toothpicks [56]. Studies examining the relationship between dental anxiety and reason for going to the dentist have reached results that support the findings of this study, and it has been observed that the dental anxiety levels of individuals who go to the dentist because of pain are higher than those who occasionally go to the dentist. It is said that the dental intervention needs of individuals are primarily due to pain and that pain is one of the most important causes of dental anxiety [57]. In a study examining the effect of dental implant application on the level of dental anxiety, it was found that the smoking history of the patients did not make a significant difference in the level of dental anxiety [58]. It has been revealed in studies that the reasons for going to the dentist do not predict dental anxiety. In these studies, it was also stated that dental anxiety levels of individuals are affected by their dental experience rather than the reason for going to the dentist [59,60].

Conclusion and Recommendations

In the study, it was determined that dental fear levels of dentistry faculty students were not related to gender, while age, grade level, tooth brushing frequency, smoking history, frequency and reason for going to the dentist, endodontic internship status, root canal treatment and traumatic dentistry experiences affected dental fear. However, it was determined that the students' gender, smoking history and the reason for going to the dentist were not related to dental anxiety, while there were statistically significant differences between age, grade level, frequency of tooth brushing, frequency of going to the dentist, having an endodontic internship, root canal treatment and traumatic dentistry experiences and dental anxiety.

As a result, it is clear that dental anxiety and fear is a common condition that causes problems both in our country and in many societies despite the advances in dentistry and the ability to control pain more effectively. In this context, it is highly recommended to do similar studies on the factors that cause dental anxiety and fear and the effects of these reactions on oral and dental health to be able to solve these problems.

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