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ANXIETY, STRESS RESISTANCE AND BURNOUT SYNDROME IN YOUNG DENTISTS WITH DIFFERENT WORK EXPERIENCE

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Abstract. *Dentistry is one of most prosperous and established professions. Young dentists go through the ranks new experiences, and feelings of anxiety, stress, and emotional burnout are especially common.Dentist helps to solve other people's problems and his work is subject to a wide range of stressors, negative emotions, dissatisfaction, nervousness, frustration, depressing situations.Purpose of the study is to examine whether practicing profession of „dentist" is factor in differences in levels of anxiety, resistance to stress and emotional burnout, and to what extent length of service affects size of these differences. Subject of study is to trace correlation between anxiety, stress resistance and burnout syndrome in young dentists aged 24 to 29 years.*

Keywords: dentists; anxiety; stress resistance; burnout.

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Introduction

Anxiety is feeling of tension, worry and fear of something bad that has happened or might happen. When the feeling intensifies and begins to have negative impact on person‘s daily functioning (personal, social, professional), it becomes a disorder.

Dr. Samuel Kutash, clinical psychologist and professor of psychology, developed a theory of anxiety using research on anxiety and stress. Anxiety or state of disequilibrium occurs when one does not experience the optimal level of stress for one‘s own constitution. Tranquility or state of equilibrium or insufficient equilibrium occurs as result of experiencing an optimal level of stress for one‘s own constitution or in a healthy balance(equilibrium),or in unhealthy balance (poor balance). Anxiety can be adaptive, if it is level that can signal the need for change for person, or maladaptive, if it is so high that it is demobilizing, or so low that is non-mobilizing. („Encyclopedia of Psychology“ (1998) ed. Science and Art, Sofia p. 1280)

“Analysis of anxiety requires distinguishing it as state and as personality trait. Anxiety as state is defined as transient emotional state, characterized by an experience of tension, anxiety and negative expectations, combined with activation of autonomic nervous system. Anxiety as state varies in intensity as function of stress to which individual is subjected, and level, in which current situation is experienced as threatening and accompanied by expectations of negative outcome. Anxiety as personality trait reflects relatively stable individual differences in frequency and intensity of anxious states. It exists in latent form as tendency/disposition/a wide range of situations to be perceived as potentially threatening and to react to them with states of anxiety”. (Kalchev P. 2005 „Anxiety in adolescence”, Sofia, p.21)

Stress in modern life is inevitable. Dentists top charts for most stressful professions, followed by doctors, lawyers and chemists. Dentists have many sources of stress, beginning at institute, increasing early in practice, decreasing with more clinical experience. Workplace and its discomfort, lack of control over most treatments, financial problems, relationships with patients, unattainable perfectionism that they strive to achieve, can affect their physical or mental health, creating conditions such as exhaustion, stress and tension. Dentists work under psychological or emotional stress created by patients, most of whom are nervous and scared, from pain, but also from fear of infections. Environment in which they work is potential source of stress. Sound of machine, change in its power and frequency, light of surgical lamp, smell of medicines, disinfectants, are constant irritants that tire. Improper posture, potential back and leg pain, improper chair design, poor ventilation or inappropriate temperature complicate work process and increase stress. Discomfort in workplace, lack of predictable results, expensive materials, dissatisfied patients, financial problems, unattainable perfectionism, unrealistic expectations of patients can create conditions for exhaustion, stress and tension. Occupational stress occurs in interactions of people and their professions. Negative sources of occupational stress can be related to organizational characteristics and processes, working conditions and interpersonal interactions, and demands of work environment and occupational characteristics.

“Stress becomes dangerous and harmful when its duration, demands, intensity, exceed possibilities of adaptation - adaptation disorders occur, which can be a source of neuropsychic tension and a sure path to cremation. If stressor is strong and prolonged and exceeds ability of body to cope, distress occurs (highly harmful stress), which leads to an extreme weakening of physical strength and working capacity of person, which leads to a nervous-emotional breakdown (burnout). (Selye, H., 1974)

In psychology, concept of professional burnout was introduced for first time in 1974 by American psychiatrist and psychologist Herbert Freudenberger in his book „Burnout: The High Cost of Excellence “. As a result of the researcher’s observations of volunteers in clinic for treatment of drug addicts, he noticed that more discouraging esults of

their work, the more they tried, just to increase their sense of helplessness, as result of which they became depressed and emotionally exhausted, nervous and irritable, cynical suspicious of people they work with. / Freudenberger H. J. (1974), Staff Burnout, J Soc Issues; 30; 159-165/

Syndrome affects professionals overwhelmed by people's problems in their daily activities. It is due to stress caused by socializing between people. Main components of burnout syndrome are "emotional exhaustion", "depersonalization" and "reduced work capacity". Dentist helps in solving other people's problems and often work is associated with negative emotions, nervousness, disappointment, depressive situations. The syndrome of professional "burnout" manifests itself with symptoms:

- Physiological – constant fatigue, lowered immunity, sudden changes in appetite and weight, increased blood pressure; stroke, heart attack, ulcer, gastritis, obesity, migraine, asthma, infertility.
- Cognitive - apathy, lack of ideas and rational thinking, loneliness, distancing, bad attitude towards others, negative attitude towards work, unwillingness to work.
- Emotional - feelings of hopelessness, guilt, helplessness, irritability, doubt, mistrust, inability to understand the problems of others.
- Behavioral - lack of ability to work, low ability to work, dissatisfaction, aggression, abuse of alcohol and cigarettes, drugs. (1).

Experimental formulation of study

2.1. Study anxiety levels , stress resistance and burnout syndrome in dentists aged 24 to 29 years and computer specialists aged 20 to 29 years.

2.2. Aim of this study is to examine whether the practice of profession of „dentist" is a factor in differences in levels of anxiety, resistance to stress and emotional burnout (burnout), and to what extent the length of service affects the size of these differences.

Tasks

* Providing the necessary number of persons for voluntarily participate in the study;
* Formation of experimental group (EG) and control group (CG);
* Selection of methodological tools relevant to the objectives of the study;
* Conducting the experimental study;
* Assessing the levels of anxiety, stress resistance of the subjects;
* Statistical processing and analysis of results;
* Interpretation of the results in the context of modern psychological theories and concepts.

Research hypotheses

1. Dentistry is a factor related to personal differences in terms of personal characteristics, anxiety and resistance to stress, expressed in their higher severity in dentists, compared to people who do not practice this profession.

2. Differences regarding the personality characteristics anxiety and resistance to stress demonstrate a dependence on length of working experience of dentists.

Object of the study

Experimental group - 30 dentists from Vratsa, aged 24 to 29 years. Everyone's participation in study is voluntary. According to length of their work experience as dentists, persons are groups:

- with less than 1 year of work experience (8 dentists),
- with work experience from 1 to 5 years (10 dentists)
- with more than 5 years of work experience (12 dentists).

Control group - 30 computer specialists aged 20 to 29 from a computer company in the town of Vratsa. Everyone's participation in the study is voluntary.

2.6.Subject of study is to trace the correlation between anxiety, stress resistance and burnout syndrome in dentists aged 24 to 29 years

Methods of the study

- Taylor‘s anxiety test (D. Shchetinski and Paspalanov)
- Stress resistance test.
- Burnout syndrome test.

Analysis of the results

Comparative analysis of the results of the experimental and control groups

Analysis of the results of the Taylor test for measuring anxiety

Results in Table № 1 are values obtained from applied T-test for comparison of independent samples, tracking significance of differences in average values of test for measuring anxiety of two studied groups - experimental and control.

Results of applied Chi – square, providing information about differences between CG and EG regarding severity of Anxiety.Intergroup differences are large and significant ($\chi 2 \mid 2 \mid = 30.336$, $p = 0.000$, $df = 4$, Cramer'sV = 0.711). There are no participants in CG in two of categories - increased anxiety and severe anxiety. Highest percentage of CG are non-anxious (56.7%) , in EG they are least (10%). Severe anxiety in EG occupies by a large percentage (33.3%). Low-anxiety and moderate anxiety in EG occupies same percentage. In the CG, rest are slightly anxious, a small percentage (6.7%) are moderately anxiety.

Analysis of the results of the test for measuring stress resistance

Table № 3 presents results of Independent Sample T-Test applications, informing about significance of differences in mean values of test for assessing stress resistance of control and experimental group.

Table 1

Average group values (M + SD) of the Anxiety Assessment Test

Whole groups	Sr.st.-t + St. off
Experimental group	52.5+16.652
Control group	25.8+10.558
t (p)	7.417(.000)
df	58

Note: M - average group value; SD - standard deviation
Difference in average results of anxiety characteristic was statistically significant (t = 7.417, p = .000), as control group showed almost half lower anxiety than experimental group(p> 0.05).

Table 2

Percentage distribution of participants in CG and EG according to level of expression of Anxiety

Anxiety Level					
Whole groups	**Anxiety**	**Weak anxiety**	**Average anxiety**	**Increased anxiety**	**Strong anxiety**
Experimental group	10 %	16.7%	16.7%	23.3%	33.3%
Control group	56.7%	36.7%	6.7%	0%	0%
Pearson Chi - square ($\chi 2 \mid 2 \mid = 30.336$, $p = 0.000$, $df = 4$,Cramer'sV=0.711)					

Table 3

Average group values (M + SD) of the Stress Resistance Assessment Test

Whole groups	Sr.st.-t + St. off
Experimental group	54.46+8.885
Control group	44.53+10.572
t (p)	3.940 (.000)
df	58

Note: M - average group value; SD - standard deviation

Average values of two groups are almost equal. At group level, the studied sample of dentists did not differ from the studied controls on personal characteristics stress resistance (p> 0.05). Results of applied Chi-square analysis, informing about intergroup differences at individual level, revealed a significant difference in percentage distribution of participants in CG and EG according to severity of Stress Resilience (Table № 4).

Intergroup differences are large and significant (χ2 | 2 | = 17.833, p = 0.000, df = 2, Cramer's V = 0.545). In CG most participants have a low level of resistance to stress (66%), EG are the least (13.3%). In EG they are mostly with high resistance to stress (30%). More than half of EG differ in average values of stress resistance.

Analysis of burnout syndrome test results

Table № 5 presents results of Independent Sample T-Test applications, tracking significance of differences in mean values of test for assessment of Burnout syndrome in EG and CG.

Results show that at group level dentists differ from computer specialists, with a higher level a significantly higher level (t = 13.734, p = 0.000). and EG according to severity of Burnout syndrome, found significant differences (χ2 | 2 | = 52.696, p = 0.000, Cramer's V = 0.937).

Statistically significant highest percentage of CG shown a high degree of unformed phase (93.3%), compared to EG, where less than half of subjects. In EG 15% of formed phase is observed, in KG there is none. They

Table 4

Percentage distribution of participants in CG and EG according to level of severity of Resistance to stress

Level of Resistance to stress			
Whole groups	**Low**	**Average**	**High**
Experimental group	13,3%	56,7%	30%
Control group	66,7%	23,3%	10%
Pearson Chi-square (χ2|2| =17.833 , p=0.000, df=2,Cramer's V=0,545)			

Table 5

Average group values (M + SD) according to the test for assessment of Burnout syndrome

Whole group	Sr.st.-t + St. off
Experimental group	56.53+8.720
Control group	32.90+3.575
t (p)	13.734 (.000)
df	58

Note: M - average group value; SD - standard deviation

Table 6

Percentage distribution of participants in CG and EG according to the severity of Burnout

Level of Burnout			
Whole group	**Not phase formed**	**Phase in stage formation**	**Phase formed**
Experimental group	46.7 %	38.3%	15 %
Control group	93.3 %	6.7%	0 %
Pearson Chi-square (χ2|2| =52.696, p=0.000, df=2, Cramer's V=0.937)			

are in the formation phase in EG (38.3%) in KG 6.7% (χ2 | 2 | = 52.696, p = 0.000, df = 2, Cramer's V = 0.937).

Analysis of the results of the stress measurement test

Table 7 presents results of Independent Sample T-Test applications, tracking the significance of the differences in mean values of stress test from Burnout syndrome test in EC and CG.

Results show that at group level, dentists differ from computer specialists, demonstrating a higher level (t = 7.748, p = 0.000). Results of applied Chi-square analysis, giving information about intergroup differences in percentage distribution of participants in CG and EG according to severity of Tension, found significant differences (χ2 | 2 | = 40,000, p = 0,000, Cramer's V = 0.816).

Statistically significant difference between groups. In the CG no one has developed symptom stress , while in the EG 20% fall. In EG, half have started to form symptom, and 23.3% have a symptom. Emotional burnout in EG is 6.7% (χ2 | 2 | = 40,000, p = 0,000, df = 3, Cramer's V = 0.816).

Analysis of the results of the test for measuring Resistance

Table № 9 presents the results of Independent Sample T-Test applications, tracking significance of differences in mean values of Resistance Test for dentists and computer specialists.

Results show that at group level, dentists differ from computer specialists, demonstrating a significantly higher level (t = 9,665, p = 0,000). Results of applied Chi-square analysis, giving information about intergroup differences in percentage distribution of participants in CG and EG according to severity of Resistance, again found significant differences (χ2 | 2 | = 37.593, p = 0.003, Cramer's V = 0.792).

A statistically higher percentage of CGs showed no symptom-resistant resistance compared to EG, where it accounted for lowest percentage of 6.7%. In CG, there are 16.7% ,whitch begin to develop symptom, but there is not a single symptom or complete burn. Half of subjects started to develop symptom in EG, and formed symptom occupies a large percentage of 30% and there is a complete burn only in EG 13.3% (χ2 | 2 | = 37.593, p = 0.000, Cramer'sV = 0.792).

Table 7

Average group values (M + SD) of the Voltage Assessment Test

Whole group	Sr.st.-t + St. off
Experimental group	12.96+3.736
Control group	7.46+1.074
t (p)	7.748(.000)
df	58

Note: M - average group value; SD - standard deviation

Table 8

Percentage distribution of participants in CG and EG according to level of expression of Tension

Level of Tension				
Whole group	**Not symptom developed**	**Began to develop**	**Formed**	**Burnout**
Experimental group	20%	50%	23.3%	6.7%
Control group	100%	0%	0%	0%
Pearson Chi-square (χ2|2| =40.000, p=0.000,df=3, Cramer's V=0.816)				

Table 9

Average group values (M + SD) of the Resistance Assessment Test

Whole group	Sr.st.-t + St. off
Experimental group	15.46+3.980
Control group	7.16+2.506
t (p)	9.665(.000)
df	58

Note: M - average group value; SD - standard deviation

Table 10

Percentage distribution of participants in CG and EG according to level of severity of Resistance

level of Resistance				
Whole group	**Not symptom developed**	**Began to develop**	**Formed**	**Burnout**
Experimental group	6.7 %	50%	30 %	13.3%
Control group	83.3 %	16.7%	0%	0%
Pearson Chi-square (χ2|2| =37.593, p=3.000, df=3, Cramer's V=0.792)				

Analysis results of test for measuring Exhaustion

Table № 11 presents results of Independent Sample T-Test, which tracks the significance of differences in mean values of Exhaustion Exhaustion test for dentists and computer specialists.

Results show that, at group level, dentists differ from computer specialists, with a significantly higher level of burnout (t = 8.392, p = 0.000). and EG according to the degree of exhaustion, again found significant differences (χ2 | 2 | = 39.141, p = 0.000, Cramer'sV = 0.808)

There are statistical differences. CG almost no one developed symptoms of exhaustion 96.7% and 3.3% began to form. In EG began to form symptom is 63.3%. There is complete exhaustion in EG - 6.7%. It was formed in EG -13.3%. The undeveloped symptom in EG is 16.7% (χ2 | 2 | = 39.141, p = 0.000, Cramer's V = 0.808).

Table 11

Average group values (M + SD) according to the Exhaustion test

Whole group	Sr.st.-t + St. off
Experimental group	12.80+3.661
Control group	6.73+1.507
t (p)	
df	58

Note: M - average group value; SD - standard deviation

Table 12

Percentage distribution of participants in the CG and EG according to level of exhaustion

level of Exhaustion				
Whole group	**Not symptom developed**	**Began to develop**	**Formed**	**Full exhaustion**
Experimental group	16.7 %	63.3%	13.3 %	6.7%
Control group	96.7 %	3.3%	0%	0%
Pearson Chi-square (χ2|2| =39.141, p=0.000, df=3, Cramer's V=0.808)				

Comparative analysis of results of subgroups of dentists with different experience

Comparative analysis of results of subgroups of dentists with different experience in Taylor anxiety test

Table № 13 presents results of Fisher's applied F-test (One Way ANOVA), tracking the significance of differences in dentists with different backgrounds divided into three groups on Taylor anxiety test compared to controls.

There are statistically significant differences (p = .000). Dentists with more than 5 years of experience are the most anxious, and those with least experience are the least anxious.First category (up to 1 year) compared to CG does not give big differences. Second and third exceed level of control two or three times (25.80 + 10.558). Results of the applied Chi-square analysis, providing information on differences in percentage distribution of work experience of dentists according to level of anxiety, found significant differences (χ2 | 2 | = 82,933, p = 0,000, Cramer's V = 0.679).

Statistically large differences were observed (p = 0.000). Dentists with a work experience of 1-5 years and over 5 years do not have single representative who is anxious or with low anxiety. Dentists with more than 5 years of experience have severe anxiety (75%) and increased anxiety (25%). Dentists with 1-5 years of experience (50%) have moderate anxiety, (40%) have increased anxiety and (10%) have severe anxiety. Dentists with experience up to 1 year are slightly anxious (62.5%), and (37.5%) are not anxiety .Most dentists with up to 1 year of experience are slightly anxious (62.5%) and (37.5%) are non- anxiety . Statistically, there are large differences between dentists in different years of service (χ2 | 2 | = 82,933, p = 0,000, df = 12, Cramer's V = 0.679). Comparing CG with dentists with up to 1 year of work experience - in both categories there is non-anxiety and low anxiety, in CG there are 6.7% moderately anxiety , which is missing in first category of dentists. There are big differences in other two categories.

Among dentists with 1-5 years of work experience, half are moderate anxiety, have increased anxiety, which (40%) and severe anxiety (10%), where CG is absent. In category over 5 years, most dentists have high anxiety (75%) and rest are increased anxiety, where they are absent in CG. The data are displayed in diagram № 1:

Table 13

Intragroup comparison of dentists with different experience in Anxiety

Internship	M+SD	p
KG (0 years)	25.80+10.558	.000
Up to 1 year	30.37+9.811	.000
1-5 years	53.40+7.589	.000
Over 5 years	66.50+7.217	.000

Note: M - average group value; SD - standard deviation

Table 14

Percentage distribution of dentists with different of experience by level of anxiety

	Level of Anxiety				
Internship	**Anxienty**	**Weak anxiety**	**Average anxiety**	**Increased anxiety**	**Strong anxiety**
KG (0 years)	56.7%	36.7%	6.7%	0%	0%
Up to 1 year	37.5 %	62.5%	0 %	0 %	0 %
1-5 years	0 %	0 %	50 %	40%	10%
Over 5 years	0 %	0 %	0 %	25%	75%
Pearson Chi-square (χ2|2| =82.933, p=0.000, df=12, Cramer's V=0.679)					

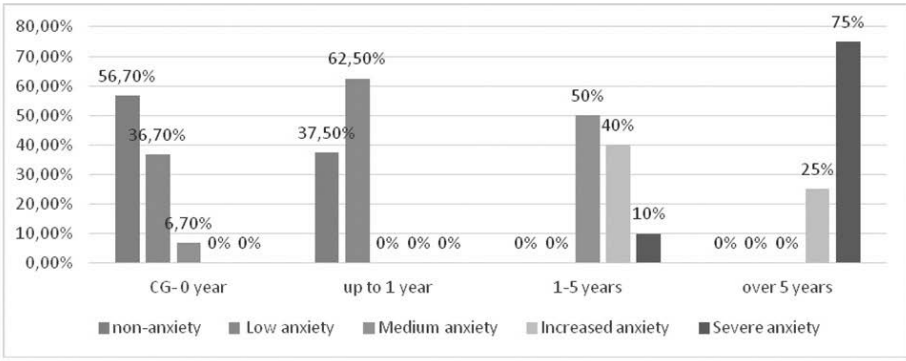

Diagram 1. Distribution the level of Anxiety in dentists with different work experience

Comparative analysis of results of the subgroups of dentists with different experience in test Resistance to stress

Table № 15 presents results of Fisher's applied F-test (One Way ANOVA), tracking the significance of differences in dentists with different experience of service divided into three groups according to stress resilience test and compared with controls.

Compared with CG, all of categories differ and have statistically significant differences (p = 0.000). Resistance to stress increases with years of experience and dentists with more than 5 years of experience is highest compared to CG, in 1-5 years is several percent lower, up to 1 year of experience is relatively lower.

Sesults of applied Chi-square analysis, giving information about differences in percentage distribution of work experience of dentists according to severity of Stress Resistance, again found significant differences ($\chi 2 \mid 2 \mid = 26.167$, p = 0.000, Cramer's V = 0.484) .

Table 15

Group comparison of subgroups of dentists with different experience in Stress Resistance

Internship	M+SD	p
KG (0 years)	44.53+10.572	.000
Up to 1 year	47.12+8.790	.000
1-5 years	55.00+7.287	.000
Over 5 years	58.91+7.378	.000

Note: M - average group value; SD - standard deviation

Table 16

Percentage distribution of dentists with different experience in resistance to stress

Internship	Low resistance to stress	Moderate resistance to stress	High resistance to stress
KG (0 years)	66.7%	23.3%	10%
Up to 1 year	50%	50%	0%
1-5 years	0%	70%	30%
Over 5 years	0%	50%	50%
Pearson Chi-square ($\chi 2 \mid 2 \mid$ =26.167, p=0.000, df=6, Cramer's V=0.484)			

Large statistically significant differences were observed (p = 0.000). Controls are located in all three categories, with highest percentage having low resistance to stress (66.7%). Dentists up to 1 year of work experience have equal parts of low stress resistance and medium stress resistance are closest as data to CG.Dentists with 1-5 years of work experience do not have single representative, most of them are medium resistance and (30%) with high resistance to stress, compared to high levels of CG. Dentists with more than 5 years of work experience differ most from CG, sharing equal places with medium and high resistance to stress. High stress resistance is highest and 40% more than CG. Data are displayed in diagram № 2:

Comparative analysis of the results of subgroups of dentists with different work experience in the test for Burnout

Table № 17 presents results of applied Fisher's F-test (One Way ANOVA), tracking significance differences of dentists with different work experience divided into three groups according to the burnout syndrome test and compared with controls.

Statistically significant differences were observed (p = 0.000). Compared to CG, dentists with 1 year of work experience differ significantly, with work experience of more than 5 years. Burnout syndrome is most pronounced in dentists with 1-5 years of work experience. Results of applied Chi-square analysis, providing information on differences in percentage distribution of work ex-

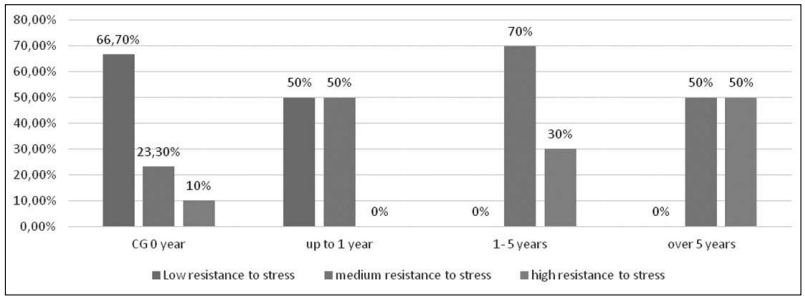

Diagram 2. Distribution of Stress Resistance in Dentists with Different Work Experiences

Table 17

Group comparison subgroups of dentists with different experience in Burnout

Internship	M+SD	p
KG (0 years)	32.90+3.575	.000
Up to 1 year	48.00+4.780	.000
1-5 years	61.00+8.419	.000
Over 5 years	58.50+7.255	.000

Note: M - average group value; SD - standard deviation

Table 18

Percentage distribution of dentists with different experience in Burnout

Internship	Not phase formed	Phase in stage formation	Phase formed
KG (0 years)	93.3%	6.7%	0%
Up to 1 year	0%	100%	0%
1-5 years	0%	40%	60%
Over 5 years	0%	75%	25%
Pearson Chi-square ($\chi 2\|2\|$=68.000, p=0.000, df=6, Cramer's V=0.753)			

perience of dentists according to severity of Burnout syndrome, found significant differences ($\chi 2 \mid 2 \mid = 68{,}000$, $p = 0{,}000$, Cramer's $V = 0.753$).

In CG, largest percentage (93.3%) have a phase that has not formed burnout syndrome (6.7%) in formation stage. Dentists with work experience up to 1 year (100%) in stage of formation, which differs from CG. In category 1-5 years, most of them have formed a phase (60%), rest are the process of formation, especially distinguishable from CG. Dentists with more than 5 years of experience share (75%) formation phase and a smaller percentage (25%) of formed phase. In all three groups , there is no phase in which syndrome has not formed, which is highest in CG. Data are displayed in diagram № 3:

Comparative analysis of results of subgroups of dentists with different work experience in Stress Test

Table № 19 presents the results of Fisher's Appendix F test (One Way ANOVA), tracking the significance of differences in dentists with different experience divided into three groups on the stress test and compared with controls.

Statistically significant differences were observed ($p = .000$). Dentists with a work experience of up to 1 year are closest to CG, a significantly higher ratio is distinguished by dentists with a work experience of 1-5 years and over 5 years compared to CG. Standard deviation is 2/3 more than CG. Strongest tension is with dentists with 1-5 years of work experience, and least with up to 1

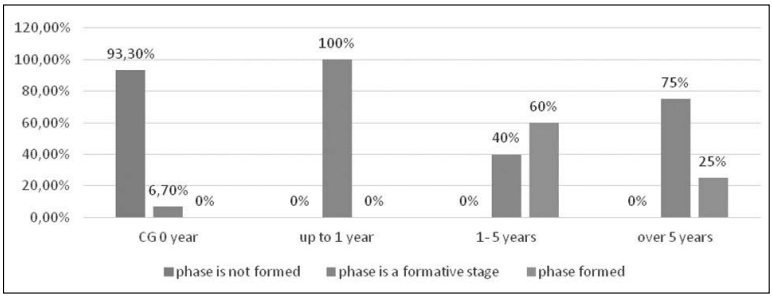

Diagram 3. Distribution of Burnout syndrome in dentists with different work experience

Table 19

Comparing subgroups of dentists with different experience in Stress

Internship	M+SD	p
KG (0 years)	7.46+1.074	.000
Up to 1 year	9.37+3.159	.000
1-5 years	14.00+3.496	.000
Over 5 years	14.50+2.746	.000

Note: M - average group value; SD - standard deviation

Table 20

Percentage distribution of dentists with different length of service by Tension

Internship	Not symptom developed	Began to form	Formed	Formed tension
KG (0 years)	100%	0%	0%	0%
Up to 1 year	75%	0%	12.5%	12.5%
1-5 years	0%	70%	30%	0%
Over 5 years	0%	66.7%	25%	8.3%
Pearson Chi-square ($\chi 2 \mid 2 \mid = 59.898$, $p=0.000$, $df=9$, Cramer's $V=0.577$)				

year of work experience. Results of applied Chi-square analysis, providing information on differences in percentage distribution of work experience of dentists according to severity of stress, revealed significant differences ($\chi 2 \mid 2 \mid = 59.898$, $p = 0.000$, Cramer's $V = 0.577$).

There is 100% undeveloped symptom in CG. First category is the only one which there is underdeveloped symptom (75%) as in CG. Dentists with 1-5 years of work experience (70%) have started a symptom and (30%) have already formed, where there is no data in the CG. Data are displayed in diagram № 4.

Comparative analysis results of subgroups of dentists with different work experience in the Resistance test

Table № 21 presents the results of applied Fisher's F-test (One Way ANOVA), tracking significance of differences of dentists with different experience divided into three groups according to resistance test and compared with the controls.

There are statistically significant differences. In the group of dentists up to 1 year is the closest to CG, and with 1-5 years are highest data and differences from CG, over 5 years is characterized by a high percentage difference from CG. Results of applied Chi-square anal-

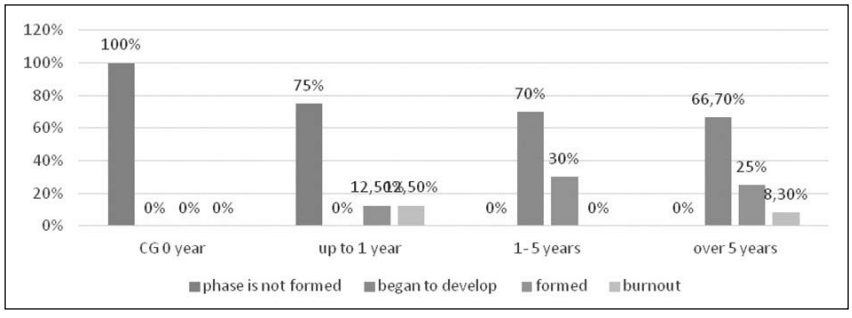

Diagram 4. Distribution of Tension in dentists with different work experience

Table 21

Comparing subgroups of dentists with different experience in Resistance

Internship	M+SD	P
KG (0 years)	7.16+2.506	.000
Up to 1 year	13.12+3.681	.000
1-5 years	17.20+4.779	.000
Over 5 years	15.58+2.778	.000

Note: M - average group value; SD - standard deviation

Table 22

Percentage distribution of dentists with different length of service in Resistance

Internship	Not symptom developed	Began to form	Formed	Developed Resistance
KG (0 years)	83.3%	16.7%	0%	0%
Up to 1 year	25%	37.5%	37.5%	0%
1-5 years	0%	50%	20%	30%
Over 5 years	0%	58.3%	33.3%	8.3%
Pearson Chi-square ($\chi 2 \mid 2 \mid = 46.838$, $p=0.000$, $df=9$, Cramer's $V=0.510$)				

ysis, providing information on differences in percentage distribution of work experience of dentists according to level of resistance, found significant differences (χ2 | 2 | = 46.838, p = 0.000, Cramer's V = 0.510).

In CG, highest percentage of 83.3% has an undeveloped symptom and 16.7% began to develop a symptom. Dentists with up to 1 year of experience have 25% undeveloped symptoms. In group 1-5 years, 50% have started to develop a symptom, 30% have developed resistance and 20% have formed where in CG are absent. Over 5 years of work experience, 58.3% have started to develop a symptom, 33.3% have formed and 8.3% have fully developed resistance. Data are displayed in diagram № 5:

Comparative analysis of dentists with different fatigue test experience

Table № 23 presents results of Fisher's applied F-test (One Way ANOVA), tracking the significance of differences in dentists with different lengths of experience divided into three groups on exhaustion test and compared with controls.

There are differences in the comparison. Closest with work experience up to 1 year and most diverse at 1-5 years. Results of applied Chi-square analysis, giving information about differences in % distribution of length of service of dentists according to level of exhaustion, again found significant differences (χ2 | 2 | = 44,969, p = 0.000, Cramer's V = 0.500).

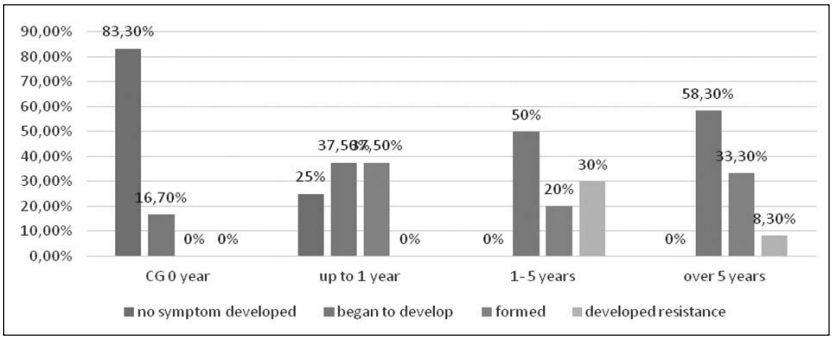

Diagram 5. Resistance in dentists with different working experience

Table 23

Group comparison of subgroups of dentists with different experience in Exhaustion

Internship	M+SD	p
KG (0 years)	6.73+1.507	.000
Up to 1 year	10.25+2.915	.000
1-5 years	14.10+3.142	.000
Over 5 years	13.41+3.895	.000

Note: M - average group value; SD - standard deviation

Table 24

Percentage distribution of dentists with different exhaustion experience

Internship	Not symptom developed	Began to form	Formed	Emotional burning
KG (0 years)	96.7%	3.3%	0%	0%
Up to 1 year	37.5%	62.5%	0%	0%
1-5 years	0%	70%	20%	10%
Over 5 years	16.7%	58.3%	16.7%	3.3%
Pearson Chi-square (χ2|2| =44.969, p=0.000, df=9, Cramer's V=0.500)				

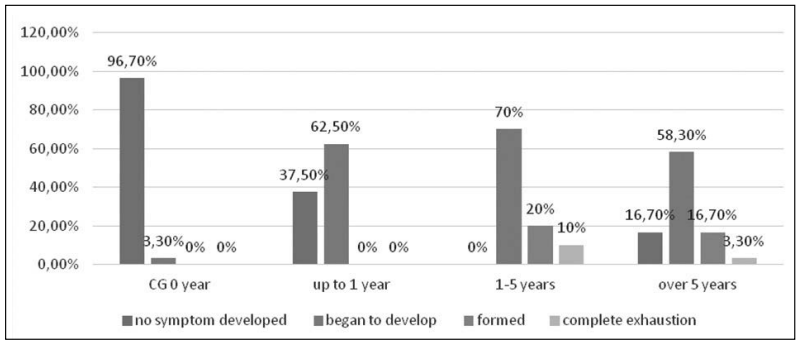

Diagram 6. Distribution of burnout in dentists with different work experience

In CG (96.7%) they have no developed symptom and (3.3%) began to form. In dentists with up to 1 year of experience, symptom is undeveloped (37.5%), in 1-5 years there is not representative, and over 5 years (16.7%). In CG there is (3.3%) a symptom started to form, up to 1 year (62.5%), at 1-5 years (70%), and over 5 years (58.3%). Formed symptom in CG up to 1 year do not have even 1%, in dentists 1-5 years (20%), over 5 years (16.7%). Emotional burnout in CG up to 1 year have not representative, at 1-5 years (10%), and (3.3%) in dentists with work experience over 5 years. Data are displayed in diagram № 6:

Conclusions

In intergroup comparison of whole groups based on results of Taylor test for measuring personal anxiety, differences were found between group of dentists and group of computer specialists at both group and individual levels. Percentage of non-anxious is significantly higher in CG (56.7%), percentage of highly anxious is significantly higher in EG (33.3%). High personal anxiety demonstrated by 1/3 of group is probably related to specifics of dental profession, namely long and tiring working days, responsibility they bear for dental health of patients every working day .Comparison of the group of dentists with the group of computer specialists in terms of stress resistance revealed significant differences at both individual and group levels: the controls showed lower resistance to stress compared to studied dentists.While 66.7% of CG showed low resistance to stress, 56.7% of EG showed medium resistance to stress, nearly 1/3 of them - 30% and high stress resistance . Dentists are every day under stress and computer specialists work in a much calmer environment.Comparisons in the group of dentists regarding the anxiety factor have significant differences. Percentage of non- anxiety is significantly high for dentists with up to 1 year of service (37.5%), percentage of highly anxiety is significantly high for dentists with 5 years of service (75%) and 10% for dentists with 1-5 years of service . While 62.5% of dentists with a work experience up to 1 year are slightly anxious, 50% of dentists with a work experience of 1-5 years have moderate anxiety , 40% have increased anxiety.Comparison in group of dentists in terms of stress resistance revealed significant differences: dentists up to 1 year of work experience showed 50% low and 50% average stress resistance compared to studied dentists over 5 years of experience 50% medium and 50% high stress resistance . While 50% of dentists with a work experience up to 1 year showed low resistance to stress, 70% of dentists with a work experience of 1-5 years showed a medium resistance to stress, and nearly 1/3 of them , are high resistance to stress. Of groups in terms of the level of emotional burnout at both group and

individual levels revealed a fully developed syndrome in dentists with more than 5 years of experience: 93.3% of CGs did not develop burnout syndrome, while a large percentage of EGs have developed symptoms .Comparison of group of dentists with group of computer specialists in terms of stress factor revealed significant differences between them both individually and at group level.In 23.3% has already formed ,6.7% are already in the phase of emotional burnout. Comparison of the group of dentists with group of computer specialists in terms of exhaustion factor revealed significant differences both at group levels: 96.7% of CG showed undeveloped exhaustion, 6.7% of EG showed complete exhaustion and 63.3% - are in a phase of exhaustion formation. Comparison in group of dentists in terms level of emotional burnout revealed a fully developed syndrome of 60% with 1-5 years of experience and 25% work experience over 5 years, while 100% with work experience up to 1 year are in stage of burnout. syndrome, while stage of formation with a work experience of 1-5 years is 40%, is with a work experience of more than 5 years is 75%. Comparisons in group of dentists regarding stress factor revealed significant differences. It was found that in 75% work experience up to 1 year this symptom is not developed, which is explained by difficulty of profession and lack of experience of young dentists. While dentists with a work experience of 1-5 years begun to form a symptom of 70%, and with a work experience of more than 5 years is 66.%, up to 1 year is absent (0%). Comparison in group of dentists regarding exhaustion factor revealed significant differences between them both at individual and group levels: while 10% with 1-5 years of work experience showed complete exhaustion and dentists with 5 years of work experience 3.3%, then dentists up to 1 year of work experience are 0%. While 37.5% of dentists with a work experience up to 1 year and 16.7% with a work experience of more than 5 years showed an underdeveloped symptom, dentists with a work experience of 1-5 years showed 0%.

Conclusion: Both at group level and individually, there are significant differences in anxiety between the studied CG and EG, ie, first hypothesis of study that dentists are significantly more anxious than computer specialists was confirmed.Both at group level and the individual level, in terms of personal characteristics, stress resistance, there are significant differences between studied groups - control and experimental,i.e. the other hypothesis of study, that resistance to stress is lower in control group, is confirmed. In considered levels of burnout syndrome, both at individual and group level, EG have higher levels of studied characteristic of CG, which confirms the hypothesis that EG has higher levels of emotional burnout than CG. Study proved main hypothesis that anxiety and stress resistance are higher in dentists compared to computer specialists. Longer tenure leads to higher levels of anxiety, resistance to stress and presence of burnout .

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