

# THE EFFECTS OF CONTINUING POSTGRADUATE EDUCATION AND CAREER BREAKS ON SATISFACTION LEVELS AMONG DENTISTS IN BULGARIA

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## ABSTRACT

Continuing professional development (CPD) implies many distinct activities and plays a key role in updating dentists' skills, knowledge, and professionalism throughout their working lives. This study aimed to investigate if an association existed between dentists' intentions for postgraduate continuing education (CE) and the levels of their job satisfaction. It was a descriptive cross-sectional investigation using an anonymous self-administered questionnaire mailed to a random sample of 1427 dentists from 107 settlements in Bulgaria. The survey instrument consisted of 37 items and gathered data on respondents' levels of job satisfaction, demographic and workplace characteristics, economic factors, and attitudes toward CPD. Standard descriptive statistics, the chi-square test, and Fisher's exact test were applied to analyze the data obtained. The significance level was set at  $p < 0.05$ . A total of 436 dentists responded to the survey (response rate=30.5%). Dentists who had more opportunities and time for attending courses for CPD ( $n=288$ , 66.1%) demonstrated a higher level of professional satisfaction ( $p < 0.05$ ). Most respondents ( $n=388$ ; 89%) declared a willingness for CE; however, no significant association was found between this factor and job satisfaction ( $p \geq 0.05$ ). About 20% reported having career breaks that varied from a few months to 5-6 years. Dentists without career breaks had higher levels of partial and full satisfaction than those who had such an interruption ( $p < 0.05$ ). Therefore, ensuring more opportunities and time for engagement in various forms of CE as well as limiting career breaks are highly suggested to improve professional development interests among dentists, and ultimately the levels of their job satisfaction.

**Key words:** Continuing professional development, Postgraduate education, Dentists, Job satisfaction, Professionalism.

## Introduction

In 1943, Abraham Maslow, the "father of humanistic psychology", formulated his Hierarchy of Needs Theory. According to Maslow, people have certain needs that must be satisfied, and these needs will act as motivators until they are satisfied [1]. There are five human needs, and they are arranged in a hierarchy or so-called pyramid, with the last of them (self-actualization, self-realization, self-improvement) occupying the top of the pyramid [2-4]. However, issues related to self-improvement, as an integral and highest part of people's value system, paint a different picture of the current dental practice [5, 6]. According to Zillen (1976), the worst mistake in modern dental education is the fact that for many dental practitioners, it ends with university graduation - contrary to the notion that continuous learning is a lifelong process refracted through the lens of individual clinical experience and theoretical knowledge [7]. The author goes on to note that education alone does not solve this problem. Planning for continuing education should begin with a benchmarking of dental care as it is and as we want it to be. Accordingly, the role of other factors such as professional satisfaction, payment, state policy and organization of individual practice, etc., should also be considered.

At present, the central question is what the role of continuing education in the overall concept of dental job satisfaction is - whether it is a cause or a consequence of the latter. In light of this hesitation, various forms of professional training are known to have a positive effect on dental practice [8, 9]. Chapko *et al.* (1984) reported the effects of continuing education in dental practice management in a study conducted among 122 dental practices in the state of Washington, USA. The positive impact of the training was expressed in increasing the volume of services provided and the amount of income received [9].

This is the ideal situation where dental practitioners can train in whatever they desire [10, 11]. The real situation, however, is far from the ideal one, as there are significant barriers on the way to the desired post-graduate qualification. Leggate & Russell (2002) described the attitudes and trends of dentists in Scotland regarding their continuing professional development [12]. A survey involving a total of 1569 dental practitioners was conducted with questions related to demographics, current working conditions, job satisfaction, continuing education, and future career plans. Results suggested that more than 90% took part in some form of professional training but more than half of respondents did not consider that further training would improve their future

career opportunities. The most frequently cited barriers to continuing education were the busy work schedule and the high cost of the courses, without any significant benefit from them. Over 1/3 of dentists under 30 years indicated they intended to specialize, but this trend dropped to 12% for those over 30 years of age [13, 14]. In addition, the number of dentists who intended to take a career break was also very low [12].

This is another problem related to training opportunities, especially among professionals who have had career breaks on various occasions [15, 16]. The research cited above pointed to future initiatives to meet the educational needs of different age groups, focusing on part-time workers and those who had a career break. Several other studies were also associated with similar conclusions on the topic, especially concerning female practitioners in the dental profession [17-20]. Therefore, measures to reduce the time associated with career interruptions, measures aimed at easier reintegration into the profession, and continuing postgraduate training are proper guidelines for increasing the levels of satisfaction with the activities performed [17].

In the previous years, only a few recent papers related to these issues were found [21-23]. Considering the significant gap in the current emerging literature in this regard and given the above, this paper aimed to investigate if an association existed between dentists' intentions for continuing postgraduate education and the levels of their job satisfaction. Three aspects related to the continuing education of dentists were examined, which we consider to be determinants of their professional development – opportunities and time to study, desire for postgraduate training, and career breaks.

## Materials and Methods

The current study was a descriptive cross-sectional investigation using quantitative and qualitative data collection research methods. An anonymous self-administered questionnaire was mailed to a total of 1427 dentists from 107 settlements in Bulgaria. The survey instrument consisted of 37 items and gathered data on respondents' levels of job satisfaction, demographic and workplace characteristics, motivation, economic factors, and attitudes toward continuing professional development. A random sampling technique was used to reach the study participants. All dentists who were members of the Bulgarian Dental Association (BDA) and voluntarily agreed to take part in the survey were included in the sample. Having at least 1 year of work experience was an additional inclusion criterion. Therefore, newly graduated dentists were excluded from the present study. The latter was approved by the Committee for Ethics of Scientific Research to the Medical University-Sofia (CESRMUS) and was in full accordance with the ethical principles of the WMA Helsinki Declaration of 1975, as revised in 2013. Before completing the questions, the dentists were briefly

explained the purpose of the survey, the time involved, the assessment of minimal risk, and contact information regarding further queries. Confidentiality was ensured and no personal identifying or sensitive data was gathered. In addition, respondents were offered no incentives for their participation. The survey was anonymous and voluntary, and consequently, duly completed and returned questionnaires were considered as written implied consent to taking part in the study.

The questionnaire mentioned above contained several groups of questions about 1) dentists' socio-demographic characteristics – age, gender, work experience, and dental practice location); 2) motivation for choosing dentistry as a career; 3) working conditions (ownership of the dental office, dental equipment, and furniture, availability of auxiliary staff, planning, and duration of working hours, type of clinical activities performed, the possibility of consultation with a specialist, administrative activities (document workflow, dental practice management, financial planning, etc.), communications, and sources of stress; 4) professional development (willingness for postgraduate training, opportunities and time for continuing education, and career breaks); 5) self-assessed level of income; 6) other activities outside the dental practice (free time and hobbies); 7) career plans and retirement intentions; 8) job satisfaction (main sources and level of satisfaction, realization of expectations, readiness to choose the same profession again). Dentists' career satisfaction was assessed on a 3-point scale - completely satisfied, partly satisfied, and dissatisfied. Considering the aim of the current paper, the discussion will be focused on the associations of dentists' attitudes towards continuing education with the level of their professional satisfaction.

IBM SPSS Statistics 25.0 was used to analyze the data obtained. Standard descriptive statistics (frequencies and percentages) and graphical analysis were used to present the basic outcomes of the research. To search for significant associations, alternative analysis, the chi-square test, and Fisher's exact test were applied. The significance level was set at  $p < 0.05$ .

## Results and Discussion

### *Demographic characteristics of the sample*

A total of 436 dentists responded to the survey (response rate=30.5%). Of these, 190(43.6%) were males and almost 2/3 – 280(64.2%) were up to 45 years of age. The relative share of dentists with up to 10 years of work experience was the largest (34.9%), followed by those with 11-20 years of work experience (27.5%). Most respondents practiced dentistry either in the capital or in bigger cities in the country. Full demographic details are presented in **Table 1**.

**Table 1.** Demographics of the study population (n=436)

Variables	No.	%	Sp
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Age			
<35	144	33.0	2.17
36-45	136	31.2	2.15
46-55	88	20.2	1.56
>56	68	15.6	1.43
Gender			
Male	190	43.6	2.37
Female	246	56.4	1.63
Work experience (years)			
<10	152	34.9	2.28
11 – 20	120	27.5	2.14
21-30	88	20.2	1.92
>31	76	17.4	1.82
Dental practice location			
Capital city (center)	80	18.35	1.85
Capital city (residential area)	52	11.93	1.55
City	190	43.58	2.37
Town	92	21.10	1.95
Village	22	5.05	1.05
<b>Total</b>	<b>436</b>	<b>100.00</b>	

*Professional development and job satisfaction levels*

Two hundred and eighty-eight (66.1%) of the survey participants indicated that they had the opportunity and time for professional development, and slightly more than 1/3 – 148 (33.9%) considered that they did not have such opportunities. Dental practitioners who had the opportunity and time for professional development had a higher relative share of overall professional satisfaction compared to those who did not have such opportunities, where professional dissatisfaction prevailed. There was a statistically significant relationship between job satisfaction and availability of opportunity and time for professional development ( $p < 0.05$ ) (Table 2).

Three hundred and eighty-eight (89%) of the respondents declared a willingness for post-graduate continuing education and only 48(11%) answered this question negatively (75% of the latter had more than 20 years of work experience). However, according to data analysis, no significant association was found between professional satisfaction and the desire for postgraduate studies ( $p \geq 0.05$ ) (Table 2).

About 20% of surveyed participants noted a break in their

working career, but the majority did not report such an interruption (Figure 1). Eighty-two dentists indicated for what reason and for what time they had career breaks. Most often, the interruption was due to pregnancy, childbirth, and raising a child (children) - 62(75.61%), but other reasons were also reported: training - 6(7.32%), health reasons - 8(9.76%), work abroad – 4(4.88%) and other reasons – 2(2.44%) (Figure 2). According to the answers received, career breaks varied from a few months to 5-6 years. Dentists without career interruptions had higher levels of partial and full satisfaction than those who had such an interruption. There was a significant relationship between career breaks and job satisfaction ( $p < 0.05$ ) (Table 2).

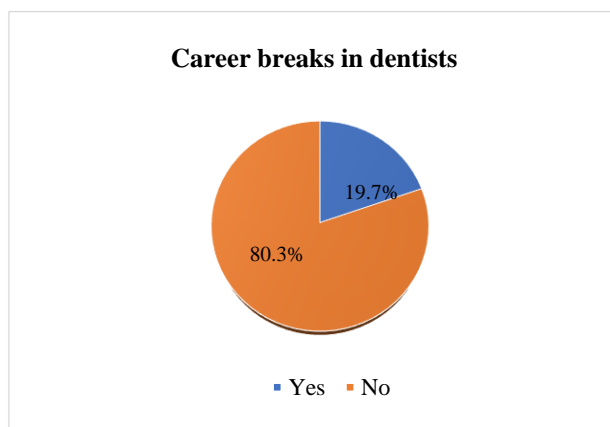


Figure 1. Frequency distribution of dentists according to the presence of career breaks (N=436)

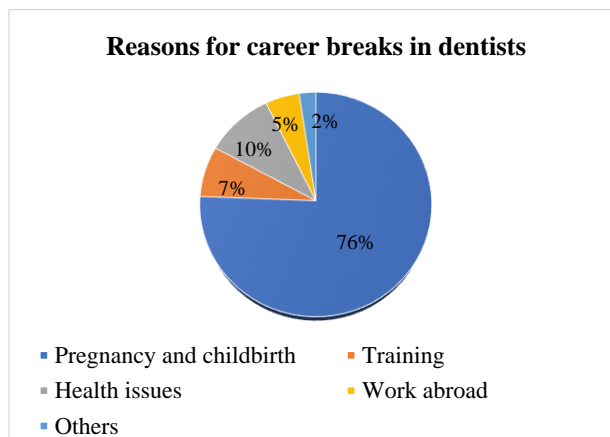


Figure 2. Frequency distribution of dentists according to the most common reasons for career interruption (N=82)

Table 2. Frequency distribution of dentists by career satisfaction, CPD, and career breaks

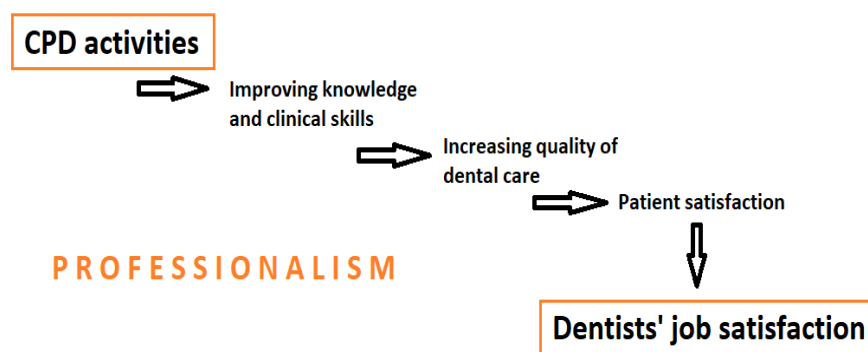
	Level of job satisfaction			Total N, (%)
	Dissatisfied N, (%)	Partly satisfied N, (%)	Satisfied N, (%)	
<b>Opportunity and time for professional development</b>				

No	<b>10(62.5)<sup>a</sup></b>	60(46.2) <sup>a</sup>	78(26.9) <sup>b</sup>	148(33.9)
Yes	6(37.5) <sup>a</sup>	70(53.8) <sup>a</sup>	<b>212(73.1)<sup>b</sup></b>	288(66.1)
<b>Willingness for continuing education</b>				
No	2(12.5) <sup>a</sup>	16(12.3) <sup>a</sup>	30(10.3) <sup>a</sup>	48(11.0)
Yes	14(87.5) <sup>a</sup>	114(87.7) <sup>a</sup>	260(89.7) <sup>a</sup>	388(89.0)
<b>Career breaks</b>				
No	10(62.5) <sup>a</sup>	<b>112(86.2)<sup>bc</sup></b>	228(78.6) <sup>ac</sup>	350(80.3)
Yes	<b>6(37.5)<sup>a</sup></b>	18(13.8) <sup>bc</sup>	62(21.4) <sup>ac</sup>	86(19.7)
<b>Total N, (%)</b>	16(100.0)	130(100.0)	290(100.0)	436(100.0)

Note: the same letters on the horizontal lines mean the absence of a statistically significant difference, and the different letters – the presence of such (p<0.05)

The current study was undertaken to explore dentists' willingness and opportunities for continuing professional development (CPD) as well as the relationship between these variables and the levels of dentists' career satisfaction. As a life-long learning process, it has been well comprehended that ongoing professional education is an important attribute of the work environment and essential for dental

professionals to maintain and improve their knowledge and clinical skills [21-23]. More significantly, participating in CPD activities will contribute to increasing the quality of dental services provided, patients' satisfaction, dentists' self-confidence, and job satisfaction, which generally outlines the framework of professionalism in dentistry [21, 23-26] (**Figure 3**).



**Figure 3.** General framework – CPD, job satisfaction, and professionalism

The relationship between dental professional satisfaction and continuing education (CE) activities, expressed in various forms of postgraduate training – reading professional journals, attending qualification courses, and undertaking retraining courses [27], has been suggested several times in the literature [8, 9]. Our results indicated that most participants in the study (90%) wanted to attend CE activities, however, only 2/3 (66%) had the opportunity and time for this. Similarly, lack of time and cost were mentioned as the most common obstacles limiting dentists from regularly undertaking activities related to CPD [21, 23]. Moreover, we found that with the increase in work experience, the lack of desire for professional development also increased. Contrary to these outcomes, Bailey *et al.* (2013) reported that CPD engagement was significantly higher in mid and late-career than in early-career dentists [22]. Nevertheless, in the present investigation, a significant association between dentists' willingness for continuing education with the level of their job satisfaction was not

established. We found a higher degree of overall professional satisfaction only among those practitioners who had the opportunity and time for CPD participation.

A statistically significant relationship was also found between the presence of career breaks and professional satisfaction. About 20% of dentists, mostly women, had career interruptions due to childbirth and child-rearing, a fact frequently observed in the emerging literature, and which highlights the negative role of career breaks on professional development and satisfaction [18-20, 28]. The current findings confirmed that dentists who had no career interruptions were with higher levels of partial and overall job satisfaction.

*Limitations*

The present study provides valuable insights into the associations between CPD intentions and levels of career satisfaction among dentists. However, it had some limitations. First, the cross-sectional design of the study

presented only a snapshot of dentists' perspectives and attitudes toward investigated research issues. Therefore, further longitudinal investigations are needed to trace these questions in time. Second, the response rate of the study was low (30.5%) and subsequently, non-responders might have undermined the power of the study. And third, a limited line of variables related to continuing postgraduate education was examined. Considering that participation in CE programs is a multifactorial activity, future research should focus on investigation of additional variables such as age, gender, location, type of dental practice (solo/group), employment of auxiliary staff, etc.

### Conclusion

Continuing professional training for dentists implies many distinct activities and plays a key role in keeping dentists' skills, knowledge, and professionalism up to date throughout their working lives. Based on the results of this study, dentists who had more opportunities and time for attending courses for professional development demonstrated a higher level of professional satisfaction as compared with those who did not have such opportunities. Additionally, career breaks were also significantly related to the levels of job satisfaction - dentists who did not have career interruptions were with a higher level of satisfaction than the other group who interrupted their dental practice on various occasions. Therefore, ensuring more opportunities and time for engagement in various forms of CE as well as limiting career breaks are highly suggested to improve professional development interests among dentists, and ultimately the levels of their job satisfaction.

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