

Cross-Sectional Study

The Role of Life Satisfaction and Social Support on the Academic Burnout of Dental Students

Cigdem Atalayin^{1*}, Murat Balkis², Huseyin Tezel¹, Banu Onal¹, Gul Kayrak³

¹Department of Restorative Dentistry, School of Dentistry, Ege University, Bornova, Izmir, Turkiye.

²Department of Psychological Counseling and Guidance, Faculty of Education, Pamukkale University, Denizli, Turkiye.

³Department of English Language Teaching (Preparatory School), School of Foreign Languages, Dokuz Eylul University, Izmir, Turkiye.

*E-mail ✉ dtcatalyin@gmail.com

Received: 21 February 2024; Revised: 27 April 2024; Accepted: 04 May 2024

ABSTRACT

Academic burnout in students means creating a feeling of fatigue towards doing homework, having a pessimistic tendency toward education and course materials, and a feeling of academic inadequacy. The current research was conducted to study the role of life satisfaction and social support in the dental student's academic burnout. In this cross-sectional (descriptive-analytical) study, 162 dental students were included in the study with a full population sampling method, according to the inclusion criteria. The research tools included Diener's Life Satisfaction Questionnaire, Bresó *et al.*'s academic burnout Questionnaire, and Zimet's Social Support Questionnaire. The collected data was entered into SPSS23 software and analyzed using a t-test, variance analysis, and linear regression analysis. Based on the obtained results, 106 students (65.4%) were at a high level of academic burnout. The life satisfaction (13.38) and social support (4.53) scores in most of the students were in the average group. Data analysis showed no significant difference in average life satisfaction, social support, and academic burnout with academic semesters and gender ($p > 0.05$). The findings of the regression analysis revealed that social support and life satisfaction both had a significant and inverse effect ($\beta = -0.290$, $\beta = -0.156$) on academic burnout. Based on the findings of the present study, most of the students had a high level of academic burnout, and the life satisfaction and social support of most of the students were not at the desired level. Since life satisfaction and social support have an inverse and significant effect on academic burnout, by increasing these two variables, we can make a great contribution to decreasing the amount of academic burnout among dental students.

Keywords: Life satisfaction, Social support, Dental students, Academic burnout

How to Cite This Article: Atalayin C, Balkis M, Tezel H, Onal B, Kayrak G. The Role of Life Satisfaction and Social Support on the Academic Burnout of Dental Students. Ann J Dent Med Assist. 2024;4(1):9-15. <https://doi.org/10.51847/JJvBi0A77S>

Introduction

Learners in educational environments face many challenges in achieving their educational goals. Negative challenges will have harmful effects on students' motivation, academic performance, and psychological well-being. In other words, while attending university brings pleasant experiences for many students, for some students, academic assignments will lead to academic burnout.

Educational places are considered workplaces of learners; although learners do not work as employees in educational situations, from a psychological point of view, their educational and curricular activities can be considered as "work" [1-3]. Academic burnout has a detrimental impact on cognitive commitment, participation in class activities, interest in course materials, negative feelings in academic affairs, and the feeling of being able to learn course materials, and the

amount of this unwanted variable increases during the student period [4, 5].

Academic burnout in students means creating a feeling of fatigue towards doing homework and studying, having a pessimistic tendency toward education and course materials, and a feeling of academic incompetence [6]. Therefore, it is important that professors or counselors, in addition to the usual evaluation through standard variables such as intelligence and personality, also evaluate the academic motivation and academic burnout of their students [4]. Therefore, the development of burnout during higher education may be an important concern [6]. On the other hand, lack of motivation and being tired of studying are also included in the definition of academic burnout [7]. For this reason, sometimes this concept has been equated with depression, while these two concepts are completely different from each other [8].

Social support can be mentioned in the analysis of factors influencing the reduction of academic burnout. Social support is external support that originates from different areas of human life, such as work or family [9]. Social support provides a resource that enables people to cope with stress. While people show negative emotions associated with burnout when they lose social support [10, 11]. Sometimes, people's excessive expectations make students perceive continuous and intense pressure objectively, which causes them to become anxious and tired of studying, or in other words, academic burnout. It can be said that high social support increases self-acceptance, positive self-image, and love and value feelings, and low social support decreases dissatisfaction in life and positive self-image. In addition, social support decreases the negative impacts of environmental stress and naturally increases life quality and life satisfaction [12, 13]. It seems that the next influential index in reducing academic burnout is life satisfaction. Life satisfaction can be defined as people's overall evaluation of their lives [14].

Life satisfaction is the result of satisfaction in the main areas of life such as job, health, marriage, education, and income, and its inverse relationship with academic burnout has been shown [15-17]. Since the level of academic success of students can be one of the signs of achieving the goals of the higher education system, students who do not feel satisfied in their lives show low levels of social functioning, physical health, and academic achievement. On the other hand, academic performance can also be considered as a tool to achieve life satisfaction. It seems that there is a two-way relationship between life satisfaction and academic

performance; therefore, because the study period of dentistry is long, exhausting, and stressful, students in this field are naturally exposed to mental health damage and more mental and academic burnout. Therefore, considering the important and destructive role that academic burnout can have on the psyche and future of students and scholars, in the current study we have determined the role of the two main components, i.e., life satisfaction and social support, on the academic burnout of students.

Materials and Methods

In this cross-sectional (descriptive-analytical) study, 162 dental students from the 8th semester of the Faculty of Dentistry were included in the study. Inclusion criteria included 8th-semester students and above (except guest or transfer students) who did not have a history of psychiatric illness or stressful events during the last 4 months. The exclusion criterion was not filling out the questionnaire completely.

After the subjects entered the study, the aim of the research was mentioned to the students before completing the questionnaire, and they were assured that the information would remain confidential and that the information would not be used as a tool. Then, the students completed the questionnaire, which includes 4 parts of demographic information (including age, sex, and academic semester), Diener *et al.*'s standard life satisfaction questionnaire (SWLS), Zimet *et al.*'s perceived questionnaire of social support, and Bresó *et al.*'s academic burnout questionnaire.

The questionnaire of Perceived Social Support of Zimet *et al.* (Perceived Social Support) contains 12 questions from three sources: family, community, and friends. These three sources are measured on a 7-point Likert scale, and in this way, the minimum and maximum scores obtained from the questionnaire were equal to 12 and 84, respectively [18]. Diener *et al.*'s standard life satisfaction questionnaire (SWLS) consists of five questions. This questionnaire is graded based on a five-point Likert scale, so the low, medium, and high scores are 5, 15, and 25 [19]. The academic burnout questionnaire of Bresó *et al.* measures the three areas of academic burnout, academic apathy, and academic ineffectiveness. The said questionnaire has 15 questions. Academic fatigue has five questions, academic apathy has four questions, and academic inefficiency has six questions. This questionnaire is scored based on a seven-point Likert scale [20].

After collecting the data, the raw data was entered into SPSS23 statistical software. Frequency distribution tables, dispersion indices (interquartile range and standard deviation), and common central indices

(median and mean) along with minimum and maximum were utilized to describe the data. Pearson correlation coefficient was utilized to determine the relationship, and t-test and analysis of variance were used to determine the relationship between life satisfaction, social support, and academic burnout with semesters and gender. The relationship between variables was analyzed using linear regression analysis. The significance level in this research was considered 0.05.

Results and Discussion

Among the 162 general dentistry doctoral students in the 8th semester and above, 47.5% (77 people) were women and 52.5% (85 people) were men. The results showed that the largest number of students (28.4%, 46 people) were studying in the eighth academic semester and the least number of them (11.1%, 18 people) were studying in the 12th academic semester.

Table 1. Descriptive statistics (mean, SD (standard deviation), minimum, and maximum) of life satisfaction, social support, and academic burnout of dental students.

Variable	Number	Minimum	Maximum	Mean \pm SD	The maximum score that can be obtained
Academic burnout	162	47	74	62.77 \pm 5.397	105
Life satisfaction	162	6	24	13.38 \pm 4.078	25
Social support	162	2	6.75	4.535 \pm 0.845	7

In **Table 1**, the descriptive statistics (mean, SD (standard deviation), minimum, and maximum) of social support, life satisfaction, and academic burnout are presented. It can be seen that the average score of academic burnout is 62.77 \pm 5.39, which varied from a minimum of 47 to a maximum of 75. The maximum score that can be obtained in Bresó *et al.*'s academic burnout questionnaire is 105. The average score of life satisfaction was also reported as 13.38 \pm 4.07, which varies from a minimum of 6 to a maximum of 24. The maximum score that can be obtained in this questionnaire is 25 and finally, the average score of social support was 4.53 \pm 0.84, which ranges from a minimum of 2 to a maximum of 6.75. The maximum score that can be obtained in the perceived

questionnaire of social support of Zimet *et al.* is also 7. The frequency of social support scale scores among dental students was such that the largest number of students (116 people, 71.6%) had an average level of social support, and the frequency of life satisfaction scale scores among dental students showed that 45.1% (73 people) of students were in the average group and the very good and poor life satisfaction groups had almost the same share and about 27%. In addition, according to the frequency of academic burnout scores, it can be said that more than 50% (106 people) of students were in the high academic burnout group and 34.6% (56 people) of them were in the medium academic burnout group.

Table 2. Mean and standard deviation of life satisfaction, academic burnout, and social support of dental students based on gender.

Variable	Gender	Number	Mean	SD	T-test		
					t-value	Degree of freedom	P-value
Academic burnout	Female	77	62.94	5.025	-0.381	160	0.70
	Male	85	62.62	5.738			
Life satisfaction	Female	77	13.10	4.115	0.827	160	0.409
	Male	85	13.63	4.052			
Social support	Female	77	4.410	0.889	1.80	160	0.07
	Male	85	4.649	0.792			

As shown in **Table 2**, the t-test did not demonstrate a significant difference in the average scores of life satisfaction, social support, and academic burnout of

dental students with gender ($p = 0.07$, $p = 0.4$ and $p = 0.7$, respectively).

Table 3. Mean and standard deviation of the degree of life satisfaction, academic burnout, and social support of dental students based on academic semester.

Variable	Academic semester	Number	Mean	SD	ANOVA	
					F-value	P-value
Academic burnout	8	46	62.67	5.48	0.51	0.72
	9	29	61.17	4.62		
	10	42	63.33	6.30		
	11	27	63.55	4.71		
	12	18	63.16	4.98		
Life satisfaction	8	46	13.04	4.21	0.19	0.94
	9	29	13.31	4.11		
	10	42	13.69	4.70		
	11	27	13.33	3.46		
	12	18	13.72	3.17		
Social support	8	46	4.61	0.75	0.36	0.83
	9	29	4.25	0.91		
	10	42	4.63	0.86		
	11	27	4.56	0.78		
	12	18	4.48	0.97		

According to **Table 3**, ANOVA analysis of variance did not demonstrate any significant difference in the average scores of life satisfaction, social support, and academic burnout of dental students by academic semester ($p = 0.9$, $p = 0.8$, and $p = 0.7$, respectively). To determine the relationship between life satisfaction,

social support, and academic burnout based on correlation coefficients between variables, the correlation between academic burnout with social support ($r = -0.095$) and life satisfaction ($r = -0.169$) are both negative and it was significant at the 0.05 level (**Table 4**).

Table 4. Pearson correlation coefficient between variables.

	Social support	Life satisfaction
Social support	1	-
Life satisfaction	0.203**	1
Academic burnout	-0.095*	-0.169*

*Significant coefficients with an error level smaller than 0.05

**Significant coefficients with an error level smaller than 0.01

Considering the significance of the correlation between variables, linear regression analysis was performed based on life satisfaction and social support. The results obtained from linear regression analysis showed

that life satisfaction has a significant and inverse effect ($p = 0.035$, $\beta = -0.156$) and social support has a significant and inverse effect ($p < 0.001$, $\beta = -0.290$) on academic burnout (**Table 5**).

Table 5. Regression analysis of the relationship between life satisfaction and social support on academic burnout.

Independent variables	B	Beta	T	P-value
Life satisfaction	- 0.100	- 0.156	- 1.961	0.035
Social support	- 0.630	- 0.290	- 2.093	< 0.001

The current study was conducted to determine the role of life satisfaction and social support on the academic burnout of students. The results of the current study revealed that the level of academic burnout among the students of dental school was high. In addition, in our

study, there was a negative and significant correlation between academic burnout and social support. Burnout is a psychological condition that occurs as a long and chronic response to interpersonal stressors. Burnout leads to poor self-care and mental health,

medical errors, poor performance, increased turnover, and absenteeism. These factors not only affect the individual but also affect the well-being, productivity, and safety of consumers of health and healthcare services [21]. In academic burnout and the overall score of social support, it shows that students, who feel that they do not have enough competence in education, rarely receive social support in the academic environment. In addition, in the current study, the correlation between academic burnout and life satisfaction was also shown to be negative and significant, which is consistent with other studies [22-25].

One of the mental health indicators is the level of satisfaction with life. Life satisfaction is a person's attitude and general evaluation towards his life as a whole or some aspects of life such as educational experience, family life, emotional life, and work. Experiencing satisfaction and happiness in life is considered the highest goal of life, and feelings of sadness and dissatisfaction are often considered an obstacles in the way of fulfilling one's duties. In line with the definition of this conceptual structure, Goldsmith *et al.* state that psychological capital includes the individual's perceptions of the degree of coordination between defined and drawn goals with performance outcomes that are obtained in the process of continuous evaluations and internal and relatively stable satisfaction in the sequence of life leads [26]. This psychological capital is defined by specifications such as a person's belief in his abilities to achieve success, persistence in pursuing goals, creating positive self-documents, and enduring difficulties. In another study, Tannenbaum *et al.* showed that irrational thoughts such as the need for approval from others, high expectations of oneself, worry and anxiety, avoiding problems, and helplessness to change, are related to low self-esteem and dissatisfaction with life [27]. In this regard, Rammstedt's opinion is that how people overcome negative life events may have an effective role in their life satisfaction [28]. He also stated that people who have experienced negative events in life but have focused on the positive aspects of life, report more satisfaction with life. In other words, such people separate the negative events of life, which are the facts of life, from the positive events and focus their attention on the positive events [28].

In summarizing the theoretical and research bases, it can be said that most researchers in the field of life satisfaction agree that life satisfaction has a considerable effect on all aspects of a person's personality, how they work, and their reactions to all life events [29, 30]. From this point of view, it can be

said that the progress and success of students in academic courses depends to a large extent on their satisfaction with life, and this makes the role of mental health professionals more clear in this field. In general, in the results obtained, life satisfaction and social support have a significant effect on academic burnout, and by using programs and plans to promote and increase these two categories, it is possible to make a great contribution to decreasing the amount of academic burnout among students, which As a result, we will witness the academic progress and improvement of student's performance, the number of students withdrawing from education will be reduced, and more experienced forces will be available to the society. Since academic burnout can be generalized to the job sector as well, by improving the parameters affecting it, it is possible to reduce job burnout among employees and increase the expected outputs, which can be one of the next research topics. Among other conditions and fields that can be mentioned are socioeconomic status, family conditions, professors' teaching styles, college atmosphere, conflicts, and parents' help. Creating an intervention program may prevent the increase of academic burnout to save them from emotional exhaustion, apathy, and ineffectiveness. Therefore, by identifying the factors influencing the progress and academic performance of students, it is possible to create a suitable approach in the direction of planning, development, and evolution of educational programs so that the best possible findings can be achieved both for the students and for the desired educational development [31-33].

Conclusion

The current research was conducted to study the role of life satisfaction and social support in the academic burnout of dental students. In general, according to the obtained results, life satisfaction and social support can predict academic burnout; therefore, by using strategies that can increase life satisfaction in students and also by using strategies to increase social support perceived by students, academic burnout can be reduced.

Acknowledgments: None

Conflict of Interest: None

Financial Support: None

Ethics Statement: None

References

1. Salmela-Aro K, Savolainen H, Holopainen L. Depressive symptoms and school burnout during adolescence: Evidence from two cross-lagged longitudinal studies. *J Youth Adolesc.* 2009;38:1316-27.
2. Salmela-Aro K, Upadaya K, Hakkarainen K, Lonka K, Alho K. The dark side of internet use: Two longitudinal studies of excessive internet use, depressive symptoms, school burnout and engagement among finnish early and late adolescents. *J Youth Adolesc.* 2017;46(2):343-57. doi:10.1007/s10964-016-0494-2
3. Macaľka E, Tomaszek K, Kossewska J. Students' depression and school burnout in the context of family network acceptance and deviation from balanced time perspective. *Educ Sci.* 2022;12(3):1-13. doi:10.3390/educsci12030157
4. David A. Examining the relationship of personality and burnout in college students: The role of academic motivation. *Med Educ Eval Rev.* 2010;1:90-104.
5. Muntean LM, Nireştean A, Sima-Comaniciu A, Măruşteri M, Zăgan CA, Lukacs E. The relationship between personality, motivation and academic performance at medical students from Romania. *Int J Environ Res Public Health.* 2022;19(15):8993. doi:10.3390/ijerph19158993
6. Rudman A, Gustavsson JP. Burnout during nursing education predicts lower occupational preparedness and future clinical performance: A longitudinal study. *Int J Nurs Stud.* 2012;49(8):988-1001.
7. Schaufeli WB, Martinez IM, Pinto AM, Salanova M, Bakker AB. Burnout and engagement in university students: A cross-national study. *J Cross-Cult Psychol.* 2002;33(5):464-81.
8. Koutsimani P, Montgomery A, Georganta K. The relationship between burnout, depression, and anxiety: A systematic review and meta-analysis. *Front Psychol.* 2019;10:1-19.
9. Ten Brummelhuis LL, Bakker AB. A resource perspective on the work-home interface: The work-home resources model. *Am Psychol.* 2012;67(7):545-56.
10. Maslach C, Leiter MP. The truth about burnout: How organizations cause personal stress and what to do about it. 1st ed. San Francisco, Calif.: Jossey-Bass; 1997. 23 p.
11. Huurre T, Eerola M, Rahkonen O, Aro H. Does social support affect the relationship between socioeconomic status and depression? A longitudinal study from adolescence to adulthood. *J Affect Disord.* 2007;100(1-3):55-64.
12. Dasht Bozorgi Z, Homai R. The relationship between self-compassion, social support and hope with persecution of nursing students. *Educ Strategy Med Sci.* 2018;11(1):126-32.
13. Silver D, Saunders M, Zarate E. What factors predict high school graduation in the Los Angeles Unified school district. Santa Barbara, CA: California Dropout Research Project; 2008. 4 p.
14. Frisch MB, Clark MP, Rouse SV, Rudd MD, Paweleck JK, Greenstone A, et al. Predictive and treatment validity of life satisfaction and the quality of life inventory. *Assessment.* 2005;12(1):66-78.
15. Capri B, Ozkendir OM, Ozkurt B, Karakus F. General self-efficacy beliefs, life satisfaction and burnout of university students. *Procedia Soc Behav Sci.* 2012;47:968-73.
16. Matos MM, Sharp JG, Iaochite RT. Self-efficacy beliefs as a predictor of quality of life and burnout among university lecturers. *Front Educ.* 2022;7:887435. doi:10.3389/educ.2022.887435
17. Sanseverino D, Molinaro D, Spagnoli P, Ghislieri C. The dynamic between self-efficacy and emotional exhaustion through studyholism: Which resources could be helpful for university students? *Int J Environ Res Public Health.* 2023;20(15):6462. doi:10.3390/ijerph20156462
18. Zimet G, Dahlem NY. Multidimensional scale of perceived social support (MSPSS). *J Pers Assess.* 1988;52(1):30-41. doi:10.1207/s15327752jpa5201_2
19. Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *J Pers Assess.* 1985;49(1):71-5.
20. Fata N, Kiani M. Modeling of the relationship among student academic burnout, and personal and educational experiences and reporting of avoidance strategies: The intermediating role of academic engagement. *JINEV.* 2019;12(48):131-60.
21. Bafei SEC, Chen J, Qian Y, Yuan L, Zhou Y, Sambou ML, et al. The association between burnout, social support, and psychological capital among primary care providers in Togo: A cross-sectional study. *Medicina.* 2023;59(1):175.
22. Wang Q, Sun W, Wu H. Associations between academic burnout, resilience and life satisfaction among medical students: A three-wave longitudinal study. *BMC Med Educ.* 2022;22(1):248.

23. Çapri B, Gündüz B, Akbay SE. The study of relations between life satisfaction, burnout, work engagement and hopelessness of high school students. *IES*. 2013;6(11):35-46.
24. Bozkur B, Güler M. Achievement need and burnout in university students: Serial mediation by resilience and life satisfaction. *Stud Psychol*. 2023;65(1):86-101.
25. Shengyao Y, Xuefen L, Jenatabadi HS, Samsudin N, Chunchun K, Ishak Z. Emotional intelligence impact on academic achievement and psychological well-being among university students: The mediating role of positive psychological characteristics. *BMC Psychol*. 2024;12(1):389. doi:10.1186/s40359-024-01886-4
26. Goldsmith AH, Veum JR, Darity Jr W. The impact of psychological and human capital on wages. *Econ Inq*. 1997;35(4):815-29.
27. Tannenbaum C, Ahmed S, Mayo N. What drives older women's perceptions of health-related quality of life? *Qual Life Res*. 2007;16(4):593-605.
28. Rammstedt B. Who worries and who is happy? Explaining individual differences in worries and satisfaction. *Pers Individ Differ*. 2001;43(6):1626-34.
29. Jalilian K, Momeni K, Jebraeili H. The mediating role of early maladaptive schemas in the relationship between attachment styles and loneliness. *BMC Psychol*. 2023;11(1):136. doi:10.1186/s40359-023-01172-9
30. Chi D, Zhong H, Wang Y, Ma H, Zhang Y, Du X. Relationships between positive schemas and life satisfaction in psychiatric inpatients. *Front Psychol*. 2022;13:1061516. doi:10.3389/fpsyg.2022.1061516
31. Liu Y, Cao Z. The impact of social support and stress on academic burnout among medical students in online learning: The mediating role of resilience. *Front Public Health*. 2022;10:938132. doi:10.3389/fpubh.2022.938132
32. Chen C, Zhu Y, Xiao F, Que M. Academic motivation and social support: Mediating and moderating the life satisfaction and learning burnout link. *Psychol Res Behav Manag*. 2023;16:4583-98. doi:10.2147/PRBM.S438396
33. Liu X, Zhou M, Guo J. Effects of EFL learners' perceived social support on academic burnout: The mediating role of interaction engagement. *Sage Open*. 2023;13(4):21582440231212725. doi:10.1177/21582440231212725