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Exploring the Role of Extracurricular Activities in Dental Education: A Riyadh Perspective

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ABSTRACT

This study aimed to find out what extracurricular activities undergraduate dental students from different dental colleges in Riyadh, Saudi Arabia participate in and how they feel about them. In Riyadh, Saudi Arabia, undergraduate dentistry students from different governmental dental institutes were given a self-administered questionnaire containing closed-ended questions. The SPSS (Statistical Package for the Social Sciences) software was used to enter the data and perform a descriptive analysis. A total of 453 students responded to the survey and enrolled in the study. The majority of the study participants (88.96%) had a GPA above 4.0, and 95.1% were from governmental universities. Of the survey participants, 81.3% said that participating in extracurricular activities could enhance their academic achievement. According to the majority of undergraduate dentistry students who participated in the survey, extracurricular activities improved their educational experience. As a result, the number of extracurricular activities offered in dental schools could be increased and dental students could be encouraged to participate.

Keywords: Saudi Arabia, Riyadh, Dental students, Extracurricular activities (ECAs)

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Introduction

Extracurricular activities (ECAs) can be defined as any activity that students participate in outside of their academic program [1, 2]. ECAs could fulfill crucial roles similar to those of the curriculum's obligatory and elective courses. ECAs allow students to put their newly learned material into practice, which benefits not only their academic achievement but also other areas like self-confidence and etiquette [1, 3, 4]. Students' participation in ECAs may help them improve their interpersonal, social, and emotional intelligence. Because they are more tolerant of others' differences, students who participate in ECAs are more receptive to a diverse range of individuals. ECAs may aid students in understanding the value of time management, intellectual and academic proficiency, and critical thinking abilities. ECAs could improve students' employability, stress management, soft skills, and overall experience [5-9].

According to studies, students' academic performance may benefit from a substantial correlation between their self-esteem, their academic self-concept, and the percentage of their engagement in an organization [10, 11]. These studies demonstrate the positive effects of ECAs on development, including increased motivation, higher school graduation rates, and improved grades.

There is little evidence linking medical students' participation in ECAs to their academic success. However, when such activities were stopped, the

examination outcomes got worse [12]. According to a survey conducted among King Abdulaziz University (KAU) students in Saudi Arabia, there were no appreciable variations in the GPA of students or study hours. Nonetheless, the median was greater among ECA participants, and the ECAs have no negative effects on students' academic performance [13]. ECAs improved university students' GPAs in Lahore, Pakistan, according to Zaman *et al*. [14].

Just 9.6% of all participants in a Saudi Arabian study that involved all colleges of health at Imam Abdulrahman Bin Faisal University were involved in ECAs [15, 16]. The primary challenge was that their lessons and activities were typically scheduled at the same time. The faculty's lack of support, inadequate direction, and the unappealing nature of the offered activities were further contributing factors [17].

The ECA participation of the dentistry students at Dammam University in Saudi Arabia was evaluated by Alansari *et al*. [8]. Only 27.1% of dentistry students participated in ECAs, according to their study. Sports and community service were the most often mentioned ECAs. 52% of the dentistry students who participated expressed dissatisfaction with college-organized ECAs, but the majority (60%) believed that ECAs had no detrimental effects on their academic performance.

Less information exists about Riyadh, Saudi Arabian undergraduate students' participation in ECAs, the kinds of ECAs they participate in, how ECAs affect their performance and development, and how they perceive the ECAs' value. This study aimed to determine dental students' participation in ECAs and their opinions about it in several dental schools in Riyadh, Saudi Arabia.

Materials and Methods

Undergraduate dentistry students in many dental schools in Riyadh, Saudi Arabia, participated in a cross-sectional study. With the assistance of a statistician, a questionnaire consisting of eleven multiple-choice questions was developed to assess the correlation between ECAs and GPA. Nine participants from three Riyadh institutions completed the validation process. They were told to use an internet survey, thoroughly read the questions, and provide honest, subjective answers. The notes from the participants were followed while making edits.

The approval of the King Saud University Institutional Ethical Committee was obtained (E-19-3913) and the participants were asked to sign a consent form before they participated in the study.

To assess the dental students' involvement in ECAs and their opinions, a self-administered, closed-ended online survey was sent to them between December 2019 and April 2020. The statistical software SPSS 26.0 (IBM Inc., Chicago, USA) was used to analyze the data that was gathered. Descriptive statistics, such as percentages and frequencies, were employed to characterize the categorical study variables. The distribution of responses to categorical study variables was compared using Pearson's Chi-square test concerning the categorical outcome variable (prevalence of extracurricular activities). The results were reported as statistically significant when the p-value was less than 0.05.

Results and Discussion

Of the 453 participants in this research, 431 (95.1%) were from governmental universities and were enrolled in all five academic years, 128 (28.0%) were from the fourth academic year, and 55 (12.1%), and 54 (11.9%) were from the first and fifth academic years, respectively. The majority of research participants (88.96%) had GPAs of 4.0 or higher. 73% of the pupils participated in ECAs.

The percentage of 2nd, 3rd, 4th, and 5th-year undergraduate dental students who participated in ECAs was remarkably higher than that of first-year students ($P < 0.0001$), indicating that the students' participation in ECAs was statistically significant in their universities, academic year levels, and GPAs. Regarding their institutions and GPAs, there were no statistically remarkable differences between the students' enrolment in the ECAs. Those who answered positively (81.3%) outperformed those who answered negatively (66.5%) ($P < 0.0001$) in the student's answers to the question "Do you think participating in extracurricular activities causes better academic performance?" **(Table 1)**.

According to the examination of the study participants' answers to the questions and statements about ECAs, there were statistically remarkable variations in the response distribution. A greater percentage of participants answered "from the beginning of my studies at university" (37.2%) and "after one year of study" (36.0%) in response to the question "When did you start attending extracurricular activities?" This difference is statistically significant ($P = 0.015$). When compared to the other activities, a larger percentage (70.3%) of research participants engaged in social activities, which was highly statistically remarkable ($P < 0.0001$). Only 14.4% of the registered students participated in ECAs six times or more per semester, which is statistically remarkable ($P < 0.0001$). Approximately 50% of the students participated once to twice per semester, and 35.4% participated three to

five times. Of the students who participated in the study, over half (53.8%) cited "building the CV" as their motivation, while the remaining 46.2% cited "developing my skills," "building my social network," and " enjoyment and self-satisfaction" (P = 0.0001). Approximately 56.2% of research participants gave the question an unfavorable response. 'Do you find it hard to preserve a suitable academic performance in your participation?', which was remarkable (P < 0.0001). About the question "Have you understood an alter in your scores when you attended an activity?", a higher ratio of study participants (85.9%) responded 'No, I didn't understand any alter, and was statistically remarkable (P < 0.0001). 14.1% of the research participants had reported that their scores had decreased because of their participation in extracurricular activities due to the following reasons: Loss of interest to study after the activity, not having enough time to study, and energy loss to study after the activity. There was no statistically remarkable difference in the responses of the research participants towards the question 'Do you think attending extracurricular activities causes better academic performance?' (P = 0.41) **(Table 2)**.

Table 1. Comparison of extracurricular activities prevalence concerning the GPA, year of study, and university of the dental students (n = 453)

Study variables	Extracurricular activities		χ^2-value	P-value
	Yes	No		
Type of university				
Government	317 (73.5%)	114 (26.5%)	0.007	0.932
Private	16 (72.7%)	6 (27.3%)		
Year of Study				
1st	22 (40.7%)	32 (59.3%)	36.70	< 0.0001
2nd	75 (72.1%)	29 (27.9%)		
3rd	92 (82.1%)	20 (17.9%)		
4th	101 (78.9%)	27 (21.1%)		
5th	43 (78.2%)	12 (12.8%)		
GPA				
5-4.5	193 (76%)	61 (24%)	2.56	0.465
4.4-4.0	105 (70.5%)	44 (29.5%)		
3.9-3.5	24 (66.7%)	12 (33.3%)		
< 3.5	11 (78.6%)	3 (21.4%)		
Do you think attending extracurricular activities causes better academic performance?				
Yes	174 (81.3%)	40 (18.7%)	12.67	< 0.0001
No	159 (66.5%)	80 (33.5%)		

Table 2. Comparison and distribution of dental students' responses who had attended extracurricular activities (n = 333)

Study variables	No (%)	P-value
When did you start attending extracurricular activities?		
From the start of my university studies	124 (37.2)	0.015
After one year of study	123 (36.9)	
After a couple of years of studies	86 (25.8)	
What extracurricular activity type are you done with?		
Sports activities	29 (8.7)	< 0.0001
Social activities	234 (70.3)	
Research activities	51 (15.3)	
Islamic and other activities	19 (5.7)	
How many times do you attend extracurricular activities each semester?		
≥ 6	48 (14.4)	< 0.0001
3-5	118 (35.4)	
1-2	167 (50.2)	
What is the reason for your participation?		
To make my CV	179 (53.8)	< 0.0001

To increase my skills	57 (17.1)	
To make my social network	33 (9.9)	
Enjoyment and self-satisfaction	57 (17.1)	
Other	7 (2.1)	
Do you find it hard to maintain suitable academic performance throughout your participation?		0.025
Yes	146 (43.8)	
No	187 (56.2)	
Have you understood an alteration in your scores when you attend an activity?		< 0.0001
Yes, my grades enhanced	16 (4.8)	
Yes, my grades reduced	31 (9.3)	
No, I didn't notice any alter	286 (85.9)	
According to the previous question, if you understand a reduction in your grades what do you think the reason is?		< 0.0001
Not having enough time to study	26 (7.8)	
Energy loss to study after the activity	15 (4.5)	
Loss of interest in studying after the activity	6 (1.8)	
I have not understood a decrease	286 (85.9)	
Do you think attending extracurricular activities causes better academic performance?		0.41
Yes	174 (52.3)	
No	159 (47.7)	

ECAs gave the students access to extracurricular activities, which could be a useful tactic for helping them find balance in their lives [18]. As far as we know, this research is the first to evaluate dental students' ECAs across several dental schools in Riyadh, Saudi Arabia. Despite the high degree of scientific participation in dental school, dental students were willing to participate in such activities, as evidenced by the ECAs' participation rate of 73.5% in this study [19, 20]. KSAU-HS (Medical students at King Saud bin Abdulaziz University for Health Sciences) in Riyadh, Saudi Arabia, reported a comparable percentage of 73.5%. [21]. Compared to the previously reported rate, the participation rate of dental students in this research was greater [8]. Nonetheless, the percentage of non-dental students who participate in ECAs is typically lower than that of non-dental students in Swiss and UK universities (87% and 94%, respectively) [6, 22]. Furthermore, the percentage of people who spent fewer than 10 hours a week on ECAs was comparable to the average of 9.8 hours per week seen in another UK research [12]. Most research subjects (70.3%) attended social activities with fewer students attending sports, Islamic, or study activities. While fewer students participated in associative or community activities, Roulin and Bangerter [22] reported that sports and artistic activities were the most popular. Thompson *et al*. [6] found that 39% of 67 undergraduate students in UK schools of management, arts and social sciences, and science and technology participated in sports, 8% participated in arts activities, and 14% participated in volunteer work. Stuart *et al*. [23] stated that, from several UK schools and Universities, male undergraduate students spent more time in sports and committees and were less likely to see volunteer activities as useful to their careers than females. The differences between these European studies and the present study may be attributed to differences in cultural background and academic discipline, as none of these studies included dental or healthcare students. Among the study's limitations are its cross-sectional design, which could make it more difficult to identify any causative correlations, and the convenience sampling of the study population, which could limit how broadly the findings can be applied.

Conclusion

With the aforementioned limitations, the rate of ECA participation was high among dental students from different dental colleges in Riyadh, Saudi Arabia. It is recommended to encourage dental students to participate in ECA by using good ECA management and planning in dental colleges.

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