

Life of a Medical Student in King Faisal University in Al Ahsaa: Role of Hobbies, Social Life and Stress on Academic Performance

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Abstract: To assess the relationship between lifestyle prior to and after joining medical school, non-academic interests and hobbies on the academic performance of medical students. **Background:** It is well known that medical students are especially vulnerable to academic stress due to the demanding environment of medical schools, which results in reduction of hobbies and social activities. **Methods:** A cross sectional study was conducted among the medical students of the new curriculum of GMCA 2012 at the College of Medicine, King Faisal University. A questionnaire was distributed voluntarily among 142 medical students belonging to the 1st to the 3rd year of this college. **Results:** The results of the questionnaire were analyzed in detail. It was found that the majority of the students were undertaking less hobbies than they used to do prior to joining the college of medicine. Also, as the students progressed in studying years, the time spent on extracurricular activities and interests became progressively less. Female students were found to be less interested in doing their hobbies than males. However, Chi square test revealed that there is no significant relationship between spending time on hobbies in medical school and academic performance. **Conclusion:** Joining medical school was noted to lead to a major change in lifestyle of the students with sacrifice of hobbies, and recreational activities, especially more among females and those in the higher years. However, the study showed that continuing extracurricular activities has no adverse impact on the grades in medical school. In fact, it is thought that it could act as a stress relaxant and a concentration booster, helping in improved grades and superior academic performance.

Keywords: Hobbies, social life, academic performance, medical students.

I. INTRODUCTION

It is a well-known fact that students are subjected to a lot of stress throughout their academic life. Academic stress among college students generally interferes with the students' ability to maintain active social life and other entertainment activities.

There is growing evidence in research literature that Medical students in particular are known to be more vulnerable to academic stress due to the demanding environment of medical schools ^{1, 2}. In addition, it has been observed that stress can exert negative effect on students' academic performance ³.

Academic stress is found to be mainly caused by the difficulty and vastness of the academic curriculum, frequency of examinations, and high parental expectations. To reduce the academic pressure stress, students tend to follow different coping strategies ⁴. One study from Pakistan reported that engaging in entertainment and social activities is considered to be a common coping strategy against stress among medical students ⁵.

Other than relieving stress, hobbies and extracurricular activities have many health benefits for students. One study reported that maintaining Hobbies is found to lower the risk of developing hypertension ⁶. Another study found that students who participate in extracurricular activities are less likely to engage in health risking behaviour such as smoking and drinking ⁷.

It is hypothesized that students who maintain time for entertainment and social activity will achieve better academic performance. This hypothesis is based on the mentioned evidences found in the literature, which report that high level of stress is associated with low academic achievements, thus, reducing the level of stress by effective coping strategies could improve academic performance.

This study was carried out to determine whether maintaining active social life and hobbies have an effect on the academic performance of medical students in Saudi Arabia, Al Ahsa.

II. MATERIALS AND METHODS

A cross sectional study was conducted among the new curriculum medical students of King Faisal University in Al Ahsa, in the Eastern Province of Saudi Arabia. The research was performed after getting consent from the higher authorities.

An online voluntary questionnaire was distributed to collect the data. The questionnaire included 15 elements. All the questions were close ended and had 3-4 responses. The questionnaire was divided into 4 categories-background information, lifestyle before joining the medical college, lifestyle after joining the medical college and academic performance. Assurance was given regarding the confidentiality of the responses.

The research population included the medical students of the new curriculum in KFU.

Inclusion criteria:

1. Medical student in KFU
2. Those following the new curriculum GMCA 2012.

Exclusion Criteria:

1. Students of other colleges
2. Students following traditional curriculum

All the data would be stored safely in a hard disk.

The data was analyzed by using SPSS version 17. Significance was estimated using chi square test. A p-value < 0.05 would be considered significant.

III. RESULT

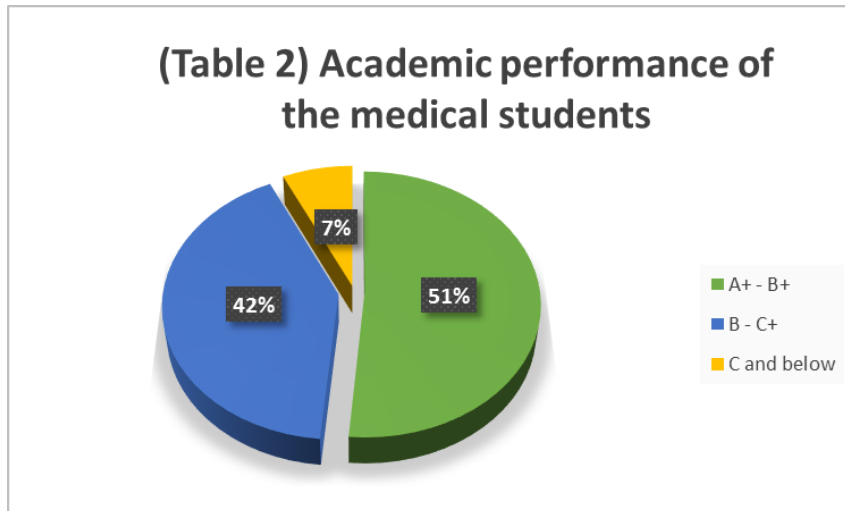
This study was conducted among the new curriculum GMCA 2012 medical students at the College of Medicine, King Faisal University. A total of 142 medical students had voluntarily filled the questionnaire. 52.8% of them were females, and 47.2% were males. The mean age of these students was 20.29 years.

Of the 142 students, 65 were of year 1, 50 of year 2 and 27 belonged to year 3.

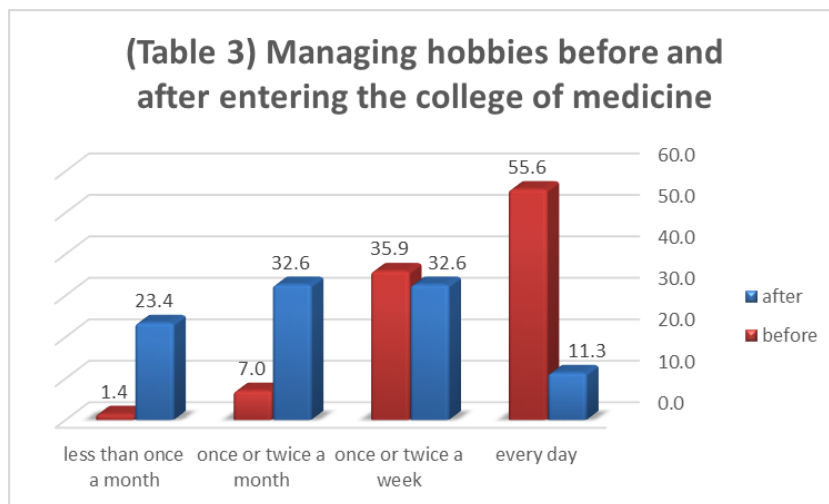
(Table 1): Year -Gender Cross tabulation

		gender		Total	
		Male	Female		
year	1	Count	29	36	65
	2	Count	31	19	50
	3	Count	7	20	27
Total		Count	67	75	142

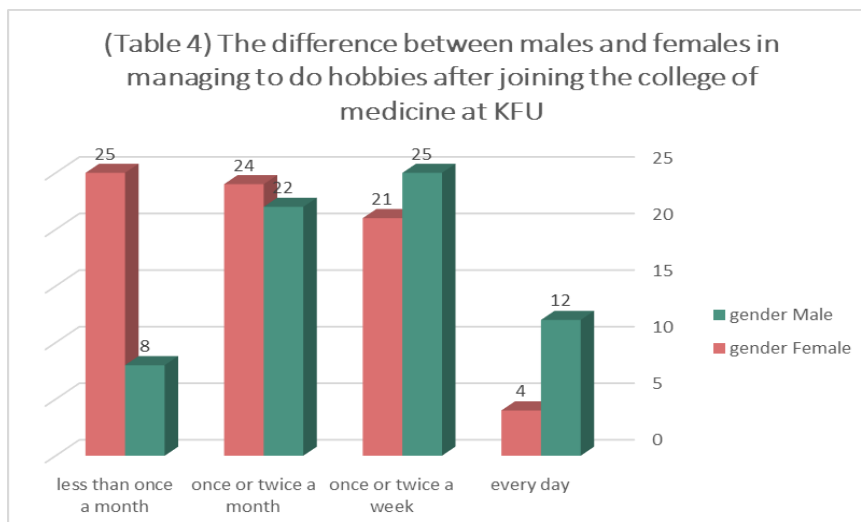
As a preliminary survey, it was observed that 51% of the students managed to get grades ranging from A+ to B+, while the rest had grades of B and below in the previous two blocks (Table 2).



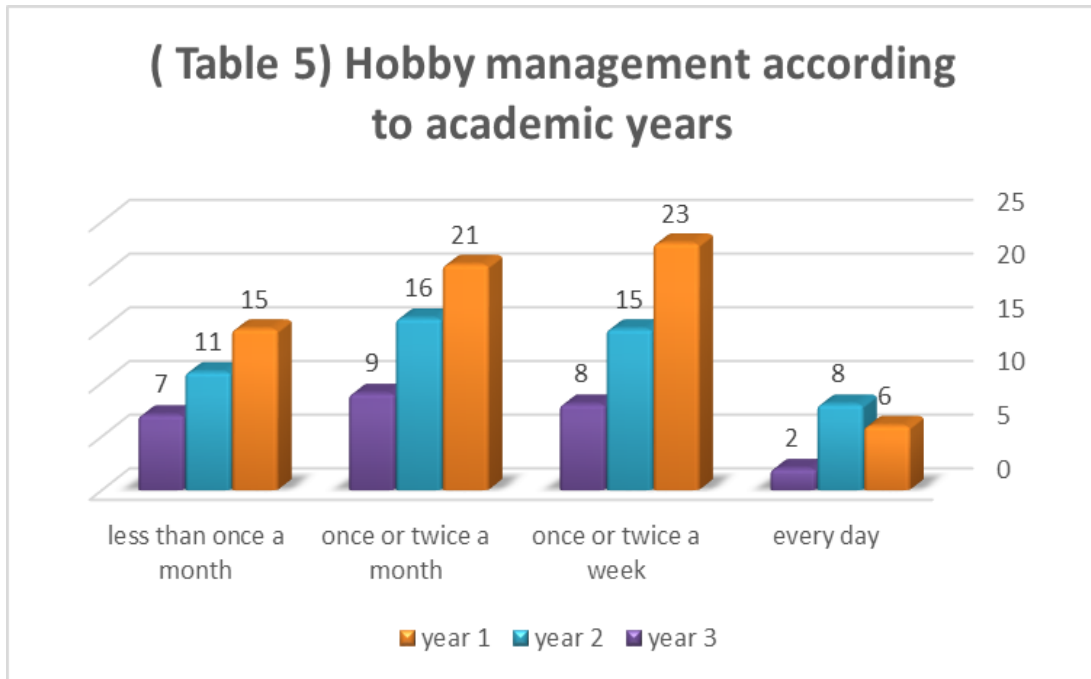
Following this, it was decided to investigate if undertaking hobbies was sacrificed on joining medical school. It was noticed that practicing their hobbies had been altered after entering the college of medicine in the following manner, as illustrated in table 3. It is shocking to note that although 55.6% of the students used to do their extracurricular activities daily prior to joining medical school. However, only 11.3% of the students managed to do the same after joining medical school.



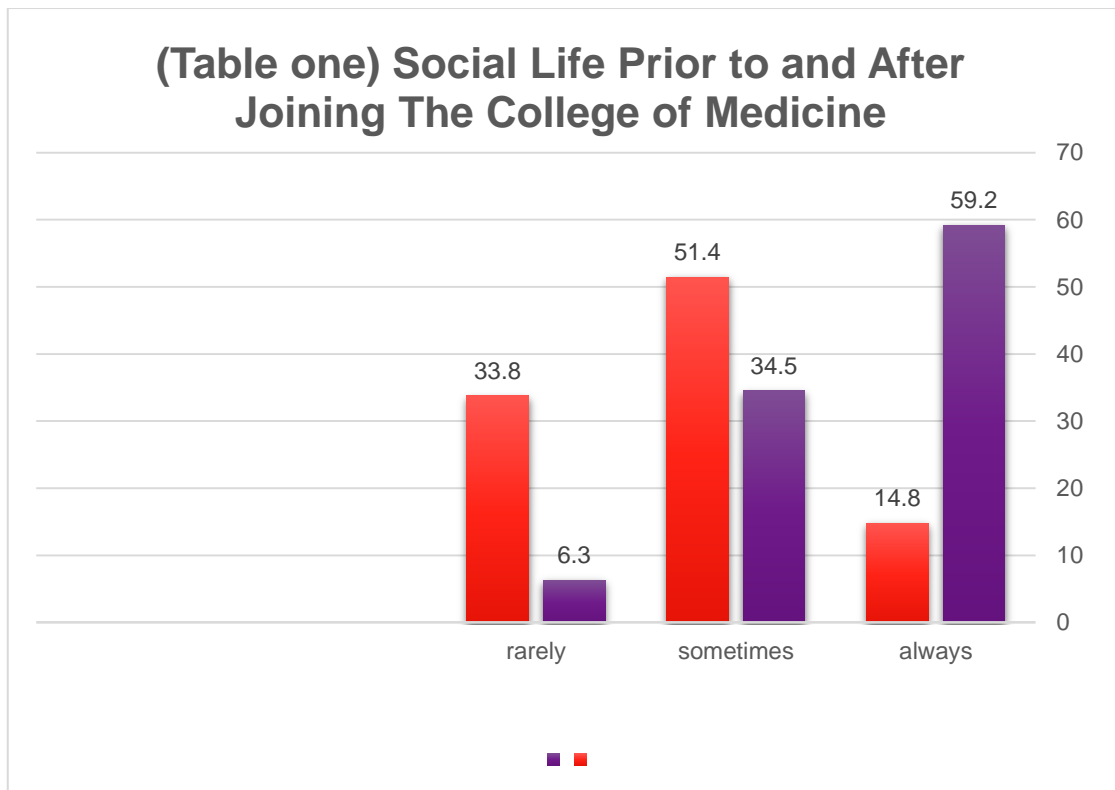
Also, analysis of the data revealed that male students managed to do their hobbies more frequently than females after joining the college of medicine at KFU (Table 4).



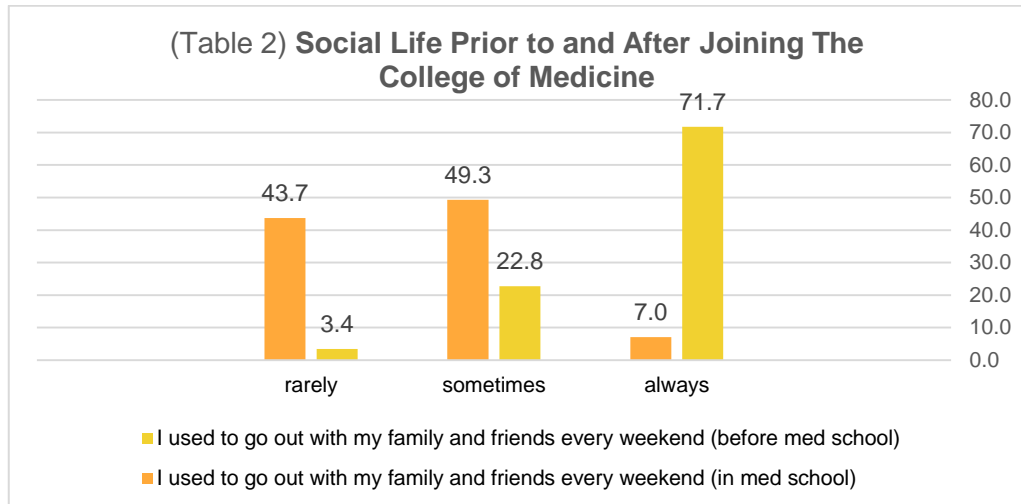
It was also discovered that third year students has the lowest frequency among all the students in doing hobbies (Table 5).



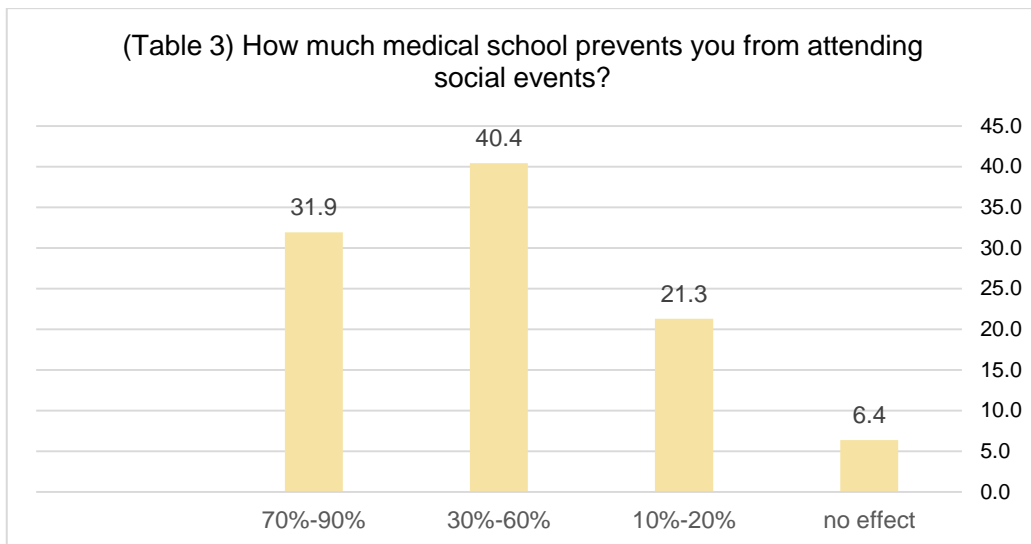
Another change observed in the life of the students after joining the college of medicine was regarding their social activities. Similar to hobbies, there is a dramatic decrease in the students' social activities. While 59.9% of the students used to always attends social events before joining med school, only 14.8% of them managed to do the same after joining med school. (Table 1)



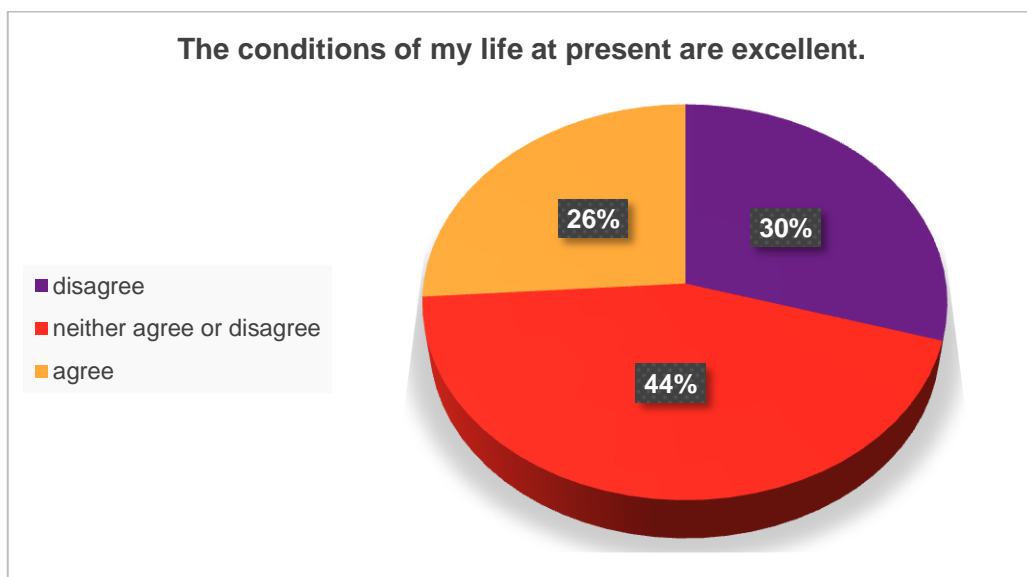
Similarly, the time the students spend with their friends and families has been significantly altered. Analysis of the sample data showed that 71.7% of the students used to always spends their weekends with their friends and family. However, only 7% percent of the students managed the same after joining med school (Table 2)



Furthermore, when the students were asked how much medical school prevents them from attending social events, the majority of them (40.4%) answered by a range of 30%-60% (Table 3)

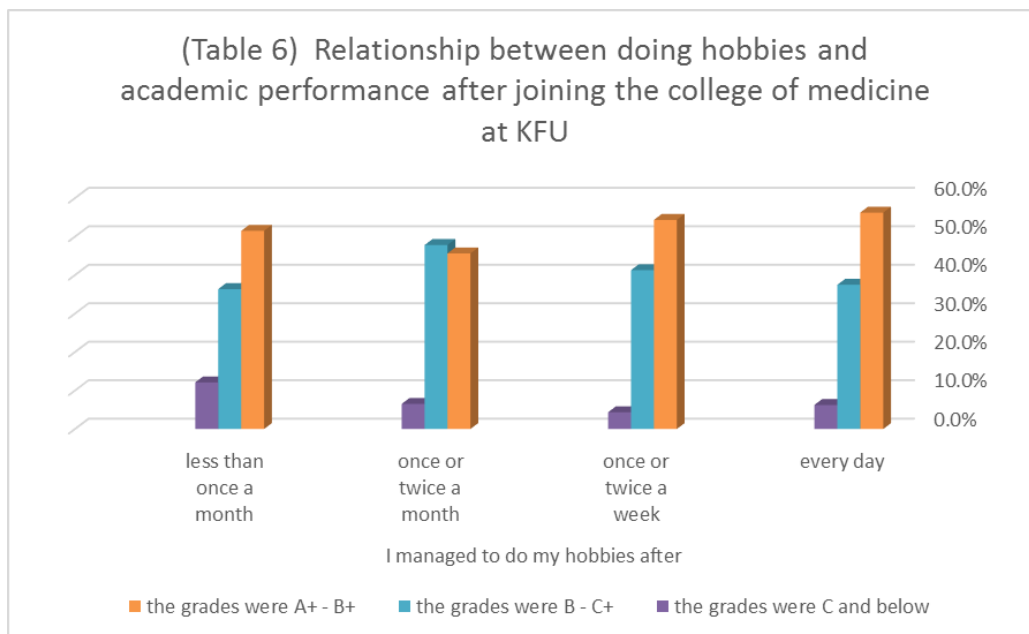


Moreover, analysis to the sample's life satisfaction showed that 30% of the students were unsatisfied with their life, and 26% were satisfied. The rest (44%) showed a neutral response.



It is assumed that many students give up their hobbies and interests in the pursuit of better academic performance and superior grades. To find the relationship between doing hobbies after joining medical school and the academic performance among medical students, chi-square test was conducted. The test shows that, the P-value was 0.827, which is greater than 0.05. So, the null hypothesis is accepted. There is no significant relationship between conducting hobbies in medical school and academic performance (Table 6). Thus, continuing with hobbies and non-academic interests has no influence on the academic performance and grades of the medical students.

Chi-Square Tests			
	Value	df	P-value
Pearson Chi-Square	2.855 ^a	6	.827



IV. DISCUSSION

A sample of 142 medical students of the new curriculum of GMCA 2012 in the College of Medicine, King Faisal University, Saudi Arabia was studied in order to assess the relationship between lifestyle prior to and after joining medical school, non-academic interests and hobbies on their academic performance.

A dramatic decrease in the frequency of hobby performance and social activities was noted after joining the medical school. Before entering medical school, the majority of students were able to practice their hobbies every day, whereas afterwards, the frequency for most of the student reduced to once or twice a week (32.6%), or once or twice a month (32.6%). A study from Dammam also observed that medical students, compared to non-medical students, are more vulnerable to negative lifestyle changes after initiation of medical college ⁸.

Male medical students were found to be doing their hobbies more than female students. Different studies have found males to be more focused on achieving specific goals than females like sports activities, hobbies, or work ⁹. Boys and adolescent males were found to be more likely to participate in sports related activities ^{10,11,12,13}. The reason behind the lesser participation of females in extracurricular activities could be because they concentrate more on their studies and grades than males. Therefore, they tend to spend more time studying rather than doing their hobbies. Also, it is thought that males have a more wide variety of priorities and aims than females. Yet another reason could be that cultural factors also play a role in this disparity between male and female engagement in extracurricular activities.

Regarding the frequency of doing hobbies among different years, it was discovered that third year students had the lowest frequency of doing their hobbies. A similar result was found in a Chinese study (Yang Zhang) ¹⁴ which stated that third year students showed greater decrease in social activities as compared with students in other phases of their medical

education. Supe A N has reported that there is an increase in academic stress among second and third year students⁹. Yet another study¹⁶ showed that medical students feel more confident at the first two years, but they experience more stress and anxiety at the third year. Other researches have reported that medical students incur stress and anxiety at different levels across all four years¹⁷. Conversely, among other age groups, some studies have shown better performance in Form 4 boys than Form 2¹⁸, and some have highlighted the influence of parental control on grades in different ages¹⁹. In our study, the lower level of extracurricular activity performance could probably be explained due to increased academic demand and workload in medical school, as well as the common perception among students that abandoning leisure time activities in favor of studies could lead to better grades.

Because of this common perception, it was decided to investigate the relationship between frequency of doing hobbies and academic performance. Our study shows that giving sufficient time for hobbies, social activities and other extracurricular activities has no adverse effect on grades in medical school. This finding is similar to the views of Cooper et al (1999), who state that the extracurricular activities had improved the students' social skills relatively, but it didn't influence their performance at school²⁶. Other studies show a positive correlation between performing extracurricular activities and performing hobbies^{20,21,22}. In contrast, Walsh et al noted a negative association between media use and academic outcome (with the exception of newspaper reading and listening to music)²³. The majority of the studies of the same topic indicated the indirect positive relationship between the involvement of students in extracurricular activities and their academic performance. Thus, we find that our result correlates with other studies investigating the same, which were conducted in different parts of the world and among students of different subjects and specialties. In fact, it is thought that extracurricular activities help to act as a stress buster, boost concentration and improve self-confidence. Very few similar studies are there among medical students. Further investigations and research in this direction is ideal as this would help students in medical schools to be better prepared to tackle the tough academic life, and also provide guidelines to them to reduce stress and enjoy their student life.

5. CONCLUSION

Extracurricular activities are a very important part of one's daily life. They help to relieve stress, improve concentration and act as a morale and confidence booster. Medical students, especially females, progressing in studying years, devote lesser time to hobbies and other extracurricular activities. Continuing extracurricular activities has no adverse impact on the academic performance in medical school.

It is felt that further studies are needed in this direction. The authors look forward to further increasing the scope of this research by involving the students of the traditional curriculum of the medical college. Also, it would be a fruitful exercise to expand this kind of research to include student of other colleges.

REFERENCES

- [1] Guthrie E, Black D, Bagalkote H, Shaw C, Campbell M, Creed F. Psychological stress and burnout in medical students: a five-year prospective longitudinal study. *JR Soc Med.* 1998;91:237-43.
- [2] Lloyd C, Gartrell NK; Psychiatric symptoms in medical students. *Comprehensive Psychiatry*, 1984; 25(6): 552-565.
- [3] Mosley TH, Perrin SG, Niral SM, Dubbert PM, Grothues CA, Pinto BM; Stress, coping, and well-being among third-year medical students. *Acad Med.*, 1994; 69(9): 765-767
- [4] Chandrashekhara T Sreeramareddy, Pathiyil R Shankar, VS Binu, Chiranjoy Mukhopadhyay, Biswabina Ray, and Ritesh G Menezes. Psychological morbidity sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Med Educ.* 2007; 7: 26. Published online Aug 2, 2007. doi: 10.1186/1472-6920-7-26 PMID: PMC1951961
- [5] Shaikh BT, Kahloon A, Kazmi M, Khalid H, Nawaz K, Khan N, Khan S. Students, stress and coping strategies: a case of Pakistani medical school. *Educ Health (Abingdon)* 2004;17:346-53. doi: 10.1080/13576280400002585.
- [6] Nedic O, Belkic K, Filipovic D, Jovic N: Job stressors among female physicians: relation to having a clinical diagnosis of hypertension. *Int J Occup Environ Health* 2010, 16:330-340.

- [7] Anna M. Adachi-Mejia, PhD; Jennifer J. Gibson Chambers, DO, MS; Zhigang Li, PhD; James D. Sargent, MD. The Relative Roles of Types of Extracurricular Activity on Smoking and Drinking Initiation Among Tweens. 2014;14:271–278
- [8] Sultan Qaboos Univ Med J. A Comparative Study of Perceived Stress among Female Medical and Non-Medical University Students in Dammam, Saudi Arabia 2010 Aug; 10(2): 231–240
- [9] Lee Ellis, Scott Hershberger, Evelyn Field, Scott Wersinger, Sergio Pellis, David Geary, Craig Palmer, Katherine Hoyenga, Amir Hetsroni, and Kazmer Karadi. Sex Differences: Summarizing More Than a Century of Scientific Research. Psychology Press (Taylor & Francis Group), New York, 2008.
- [10] <http://www.ccl-cca.ca/pdfs/OtherReports/GuevremontKohenFindlayExtracurricular.pdf>
- [11] Zena R. Mello y Frank C. Worrell. Gender Variation in Extracurricular Activity Participation and Perceived Life Chances in Trinidad and Tobago Adolescents. University of California. Vol.17, No 2, 91-102.
- [12] Bush '03, Jilann M., "The Effect of Extracurricular Activities on School Dropout" (2003). Honors Projects. Paper 16. http://digitalcommons.iwu.edu/psych_honproj/16
- [13] Nancy Darling, Linda L. Caldwell, Robert Smith. Participation in School-Based Extracurricular Activities and Adolescent Adjustment. National Recreation and Park Association. Vol. 37, No. I, pp. 51-7.
- [14] Yang Zhang, Bo Qu, Shisi Lun, Dongbo Wang, Ying Guo, Jie Liu. Quality of Life of Medical Students in China: A Study Using the WHOQOL-BREF. November 2012/Volume 7/Issue 11/e49714
- [15] Gentile, Julie P., and Brenda Roman. "Medical Student Mental Health Services: Psychiatrists Treating Medical Students." Ed. Paulette M. Gillig. Psychiatry (Edgmont) 6.5 (2009): 38–45.
- [16] Wolf TM. Stress, coping and health: enhancing well-being during medical school. Med Educ. 1994 Jan;28(1):8-17; discussion 55-7.
- [17] Siew Foen Ng, Razimi Zakaria, See May Lai & Gary J. Confessore (2014): A study of time use and academic achievement among secondary-school students in the state of Kelantan, Malaysia, International Journal of Adolescence and Youth, DOI:10.1080/02673843.2013.862733
- [18] Battle, J., & Coates, D. L. (2004). Father-only and mother-only, single-parent family status of black girls and achievement in grade twelve and at two-years post high school. The Journal of Negro Education, 73, 392–407.
- [19] Aydin Balyer, Yuksel Gunduz, Effects of structured extracurricular facilities on students' academic and social development, WCES 2012, Procedia - Social and Behavioral Sciences. Volume 46, Pages 1-5940 (2012)
- [20] Holloway, J. (January, 2000). Extracurricular Activities: The Path to Academic Success? Educational Leadership. 57(4), 87-88. <http://www.ascd.org/publications/educational-leadership/dec99/vol57/num04/-Extracurricular-Activities@-The-Path-to-Academic-Success%C2%A2.aspx>
- [21] Professor Howard Johnston, Ph. D. Extracurricular Activities and Student Achievement, Secondary Education at the University of South Florida, Tampa. Journal of Research & Development in Education, Vol 30(1), 1996, 42-50.
- [22] Haapala EA, Poikkeus A-M, Kukkonen-Harjula K, Tompuri T, Lintu N, et al. (2014) Associations of Physical Activity and Sedentary Behavior with Academic Skills – A Follow-Up Study among Primary School Children. PLoS ONE 9(9): e107031. doi:10.1371/journal.pone.0107031
- [23] Jennifer L. Walsh, Robyn L. Fielder, M.S., Kate B. Carey, Ph.D. and Michael P. Carey, Ph.D. Female College Students' Media Use and Academic Outcomes: Results from a Longitudinal Cohort Study. Emerg Adulthood. 2013 September 1; 1(3): 219–232. doi:10.1177/2167696813479780