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Influence of leisure time on health status in Iranian high School students; A cross -sectional study

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ABSTRACT

The leisure time and physical activity have an impact on physical and mental health and human well-being. The purpose of the present study was to examine the influence of leisure time on health status among Iranian high students. A Cross – Sectional Study was carried out among high school students in Ilam, Western of Iran during academic years 2014-2015. Sampling was performed using a multi-stage sampling method. Data were collected by demographic; the General Health Questionnaire-28 (GHQ) and Inventory Leisure Time Activities. SPSS software Package 16 was used to analyze the data of this project. A total 370 student was studied. Subjects consisted of 170 (45.9%) males and 200 (54.1%) females. The Mean ± S D overall score of general health was higher among female than male (P < 0.05). Among of health dimension, severe depressive symptoms had the highest prevalence (26%). While sever social dysfunction (15.4%) had the lowest prevalence of severe symptoms. However, there was not significant differences between total leisure time and gender, but also, the Mean ± SD overall score o f active leisure time was higher among male than female (P = 0.00). Our finding indicated that the general health is lower in Iranian female students than male students. Also the mean overall score of active leisure time was higher among male than female.

Keywords: Cross – Sectional Study, Health dimension, leisure time

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INTRODUCTION

Health is the most fundamental concept in human life. Based on the new definition of the World Health Organization (WHO), the health is assumed not only the absence of disease and physical health, but also the mental and social well-being and optimum comfort (1, 2). Therefore, in assessing the health of individuals, it should not pay attention only to the traditional health indicators, such as mortality and disease rates. Mental health is one of the most important health components (3).

The leisure time and physical activity have an impact on physical and mental health (4) and human well-being (5, 6). Researchers believed that the method to spend leisure time is changing in different societies. Aarnio et al evaluated the leisure-time physical activity pattern among 1338 boys and 1596 girls' adolescence and reported that the

stability of leisure time physical activity is highest among adolescence who participated in several different types of sports (7). Another study investigated the physical activity among students and reported that the levels of leisure time physical activity decline from high school to college periods. Also the activity pattern in college students is usually inadequate to improve their health and fitness (4).

There are several affecting factors on activities in leisure time, including age, income, family structure and occupation (6, 8, 9).

Since, the most rapid decline in leisure time physical activity occurs in late adolescence and early adulthood (4), therefore, the purpose of this study was to examine the influence of active and passive leisure time on health status among Iranian high students.

MATERIALS AND METHODS

A Cross – Sectional Study was carried out among hig h school students in Ilam, Western of Iran during academic years 2014-2015. Overall, 370 students were calculated as the sample size using Cochran formula, N=10000 and confidence interval 95%. Sampling was performed using a multi-stage sampling method as described in previous studies (10, 11). Data were collected by demographic (age, gender, education field, education level); the General Health Questionnaire-28 (GHQ-28) and Inventory Leisure Time Activities.

The Goldberg GHQ-28 is used in epidemiological studies (12,13). This famous instrument can assess the psychiatric disorders in different conditions. GHQ-28 has been translated into several languages and used internationally. Validity and reliability of GHQ-28 Test have been confirmed in previous studies (13-15) and Iranian population (16).

GHQ-28 is contain physical symptoms (items 1–7), an xiety and insomnia (8–14), social dysfunction (15–2 1) and severe depression (22–28) domains. However, differe nt scoring systems have been applied to for GHQ-28 we used the traditional scoring method. We assign a Likert method to indicate symptom severity, which scores the item response between 0–3 (0–1–2–3, subscale range) (17) . The whole score was 0-84 per person. Previous research has determined a cutoff point 23 in the Iranian population. Participants who receive a score of 23 or less is considered as healthy and participants who receive a score of 24 or higher are considered as disorders (16).

In the present study, the leisure time was assessed using a researcher made questionnaire. The validity of the questionnaire was confirmed by content validity. The reliability of questionnaire was measured using Cronbach's alpha and test-re test ($\alpha = 0.85$). The concept of leisure time was divided into two parts including; active and passive leisure time. The active leisure time indicated, all activities in which was consumed the physical and mental energy. However, is divided into two groups of low energy consumption, such as yoga and walking and high consumption of energy like aerobic exercise. While the passive leisure referred to the time that individual spend in activities that are relaxing and that need little attempt such as watching TV, Internet, newspaper, and radio (6).

This study was conducted with the approval of the ethics committee of Ilam Department of Education. The aim of the study was described an informed consent was obtained from all participants. To enhance confidentiality, all questionnaires were completed anonymously and only required information was collected. All collected data were analyzed using SPSS version 16.

RESULTS

A total 370 student was studied. Subjects consisted of 170 (45.9%) males and 200 (54.1%) females. The Mean ± SD overall score of general health was higher among female than male ($P < 0.05$). The comparisons of health demission scores based on gender are presented in table 1.

Table 1: Comparison of health demission scores based on gender of participants in the study

Health dimension	Gender		Total	df	P- value*
	Male	Female			
Physical	9.22 ± 2.92	12 ± 4.21	10.72 ± 3.92	368	0.000
Anxiety and sleep disorders	9.53 ± 3.26	11.5 ± 4.21	10.6 ± 3.93	368	0.000
Social dysfunction	10.88 ± 3.60	9.57 ± 4.21	10. 2 ± 4	368	0.000
Depression	9.45 ± 3.8	12.56 ± 5.2	11.18 ± 4.58	368	0.000
Total score	39 ± 7.85	45.7 ± 11.63	42.68 ± 10.6		0. 000

** α= 0.99*

Among of health dimension sever depressive symptoms had the highest prevalence (26%). While sever social dysfunction (15.4%) had the lowest prevalence of severe symptoms. Absolute and relative frequencies of the health status of participants in the study are presented in table 2.

Table 2: The absolute and relative frequencies of the health status of participants in the study

Health dimension	Healthy, N (%)	Disorder symptom		Total
		Mild	Sever	
Physical	44(11.9)	241(65.1)	85(23)	370(100)
Anxiety and sleep disorders	39(10.5)	247(66.8)	84(22.7)	370(100)
Social dysfunction	66(17.8)	247(66.8)	57(15.4)	370(100)
Depression	32(8.6)	242(65.4)	96(26)	370(100)

However, there was not significant differences between total leisure time and gender, but also, the Mean ± SD overall score of active leisure time was higher among male than female (P = 0.00). The comparisons of leisure time based on gender are presented in table 3.

Table 3: Comparison of leisure time based on gender of participants in the study

Variable	Gender		Total	df	P- value*
	Male	Female			
Active leisure time	2.88 ± 0.78	2.52 ± 0.46	2.7 ± 0.65	368	0.000
Passive leisure time	2.84 ± 0.83	3.14 ± 0.76	3 ± 081	368	0.000
Total leisure time	2.9 ± 0.76	2.86 ± 0.6	2. 88 ± 0.46		0.17

** α= 0.99*

There was a statistically significant difference between age and school grade with leisure time (P < 0.001). There was an inverse significant relationship between active leisure time and health status (p= 0.05). The Comparison the health status based on leisure time of participants in the study is reported in table 4.

Table 4: Comparison the health status based on leisure time of participants in the study

Leisure time	**Health status**	
	r	P- value*
Active leisure time	- 0.33	0.05
Passive leisure time	0.142	0.006
Total leisure time	0.07	0.19

DISCUSSION

In the present study, we investigated the influence of leisure time on the health status of high students. In the present study, all participants whose receive a general health score of 23 or less were considered as healthy, while all participants whose receive a score of 24 or higher were considered as disorders. Based the results, the Mean ± SD overall score of general health was higher among female than male. The difference was more obvious in depression demission (12.56 ± 5.2 Vs. 9.45 ± 3.8; p=0. 000). R esearchers introduce several factors such as biological differences and age as the risk factors of high incidence of depression in women compared with men (18). So this increase emerges in early adolescence and remains throughout the adult life. In fact, it has been proposed those females are more susceptible to depression than male even before adolescence (19).

Another our finding indicated that Mean ± SD overall score of active leisure time was higher among male than female. We know that rapid technological progress in recent decades has accelerated the time to do things in

people's lives. The dramatic effects of these developments can be pointed to increased leisure time. On the other hand, according to existing public facilities and cultural conditions in Iran, take advantage of the public amusement is higher in men than women. Therefore, achieve such results is expected in the Iranian society. Other studies confirm the situation in Iran. However, often is equal the leisure time for men and women, but also, there is not equal active leisure facilities in women compared with men (20). A population-based study, investigated the association between gender and leisure-time physical activity among Brazilian population. The results of this study indicated that Brazilian men are more active than women. There was a positive significant correlation between socioeconomic level and activate leisure-time in both men and women. However, there was a positive correlation between age and inactivity in men; but also, there was not this correlation among women (21).

We found an inverse significant relationship between active leisure time and health status. So that by increasing active leisure time, the score of general health has declined. This suggests that exercise improves the health status. Studies have shown a positive impact of physical activities on the physical (22-24) and mental health (25). On the other hand, active leisure and exercise have been presented as effective ways to treat the depression (26, 27).

CONCLUSION

Our finding indicated that the general health is lower in Iranian female students than male students. The situation is particularly dramatic in the depression demission. Considering that mean overall score of active leisure time is higher among Iranian male than Iranian female, the procurement and preparation of suitable locations for women's active leisure time is recommended.

REFERENCES

[1] Direkvand–Moghadam A, Sayehmiri K, Delpisheh A, et al. *J Clin Diagn Res*. **2014**;8(2):106-09.
[2] Helen H SS, Rob M. Report of the World Health Organization. In: Melbourne DoMHaSAicwtVHPFaTUo, editor. Melbourne; **2005.**
[3] Direkvand-Moghadam A, Delpisheh A, Direkvand-Moghadam A. *J Clin Diagn Res*. **2014** Oct;8(10):OC13-5.
[4] Kozechian H, Heidary A, Saiah A, Heidary M. *International Journal of Academic Research in Business and Social Sciences*. **2012**;2(4):132-9.
[5] Williams T, Guerin E, Fortier M. *Appl Psychol Health Well Being*. **2014**;6(2):151-72.
[6] Piko BF, Vazsonyi AT. *Journal of Adolescence***. 2004**;27(6):717-30.
[7] Aarnio M. *Scandivian Journal of Medicine and Science in Sports*. **2002;**12(3):179-85.
[8] Jackson EL, Henderson KA. *Leisure Sciences Journal.* **1995**;17(1):31-51.
[9] Settle RB, Alreck PL, Belch MA. *Association for consumer research.* **1979**;6(1):139-45.
[10] RahimPour P, Direkvand-Moghadam A, Direkvand-Moghadam A, Hashemian *J Clin Diagn Res*.**2015**; 9(12):JC05-JC7.
[11] RahimPour P, Direkvand-Moghadam A, Direkvand-Moghadam A, Hashemian A. *Der Pharmacia Lettre.* **2015**;7(10):118-21.
[12] Goldberg DP, Hillier VF. *Psychol Med.* **1979**; 9(1):139-45.
[13] Bridges KW, Goldberg DP. *Br J Psychiatry*. **1986**;148:548-53.
[14] de Mont-Marin F, Hardy P, Lepine JP, Halfon P, Feline A. *Encephale*. **1993**;19(4):293-301.
[15] Alhamad A, Al-Faris EA. *J Family Community Med*. **1998**;5(1):13-9.
[16] Noorbala A, Bagheri Yazdi S, Yasamy M. *Hakim.* **2009;**11(4):47-53.
[17] Aderibigbe Y, Gureje O. *Social Psychiatry and Psychiatric Epidemiology.* **1992**;17:280- 83.
[18] Hankin BL, Abramson L. *Psychological Bulletin.* **2001;**127:1-40.
[19] Ge X, Conger RD. *Developmental Psychology.* **2003;** 37:1-20.
[20] Bittman M, Wajcman J. *Social Forces.* **2000**;79(1):165-89
[21] Azevedo MR, Araujo CL, Reichert FF, Siqueira FV, da Silva MC, Hallal PC. *Int J Public Health*. **2007**;52(1):8-15.
[22] Hildebrandt VH, Bongers PM, Dul J, van Dijk FJ, Kemper HC. *Int Arch Occup Environ Health.* **2000**;73(8):507-18.
[23] Kujala UM, Taimela S, Viljanen T. *Br J Sports Med***. 1999**;33(5):325-8.
[24] Lian WM, Gan GL, Pin CH, Wee S, Ye HC.*Am J Public Health.* **1999**;89(10):1578-80.
[25] Ohta M, Mizoue T, Mishima N, Ikeda M. *J Occup Health*. **2007**;49(1):46-52.
[26] Carek PJ, Laibstain SE, Carek SM. *Int J Psychiatry Med*. **2011**;41(1):15-28.

[27] Parker AG, Hetrick SE, Jorm AF, Yung AR, McGorry PD, Mackinnon A, et al. *Trials*. **2011**;12:76. doi: 10.1186/1745-6215-12-76