

The Relationship Between Leisure and Public Health with an Emphasis on Sport Activities of Athlete and Non-Athlete Male Students in Razi University of Kermanshah

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Abstract: The aim of this study was to investigate the relationship between leisure and the public health with an emphasis on sport activities of athlete and non-athlete male students in Razi University of Kermanshah. In the study, descriptive and correlation methods were used. The statistical population (non-athletes: 366, athletes: 300) consisted of all male students of Razi University of Kermanshah who were studying in undergraduate, graduate and Ph.D. courses in 2010-2011. 191 non-athlete and 169 athlete students were selected as the sample in accordance with Morgan table. For collecting data, a standard psychological questionnaire under the title of General Health Questionnaire (GHQ) including 28 questions and a kind of researcher-made questionnaire on leisure time were used. For these two groups, the statistical method to determine the relationship among variables was Spearman's correlation coefficient and t test. The results of the study showed no significant relationship between general health and current leisure activities, but when examining the relationship between public health and favorite leisure activities results showed a statistical significant relationship between public health variables and studying non-textbooks in non-athlete group as well as between public health and going to movies and between public health and language learning ($p < 0.05$). But this correlation was not significant among the other leisure activities. The results also showed a significant difference in public health scales (physical symptoms, insomnia, social function disorder and depression) in doctorate students as compared with graduate and undergraduate students and also in single students in comparison with married ones ($p < 0.05$) so that doctorate and married students had a better public health than undergraduate, graduate and also single students. Also, no significant difference was observed among the scales of public health between individual and team sport subjects. It is suggested that the basic guidelines be followed to create favorite leisure activities to promote public health in students especially undergraduate, graduate and single students.

Key words: Public Health % Leisure Time % Sport Activities % Team and Individual Sports Fields

INTRODUCTION

Today's lifestyle has paid less attention to human beings and physical needs are neglected. Most people who are inactive today express the importance of physical activity and recreation issues but they do not have the opportunity for sports. In fact, people's lack of attention to time management and everyday activities has forced people to pay less attention to leisure time and activities that can play an important role in people's physical and mental recovery [1].

For researchers, physical preparation, that is, the achievement of physical and sport activities is emphasized as a base of suitable mental conditions and their findings indicate that physical training in conditions such as depression, anxiety and confidence has been effective [2]. This is of most importance for students. Although students are usually considered as the selected individuals of the society and persons who have many roles in social, cultural and economic structures, various studies show that they are also affected by some kinds of disorders and emotional problems [3]. According to the

World Health Organization (WHO), someone who does not have mental health is not approved to be a healthy person; this message is accepted by the Pan American Health Organization and the World Federation of Mental Health [4].

As students are a big part of our community who live in a sensitive youth period, it is worth considering the qualities of their mental and physical abilities. But public health research has been performed according to the type of activities on which students spend their spare time so that the researchers could address the issue. For this purpose, studies have been carried out so far about the effects of physical activities on public health; most of these studies are about the effects of sport activities on people's mental health, athletes in comparison with non-athletes and also studies on the effects of aerobic and non-aerobic activities on mental and physical aspects. But no studies have examined public health using kinds of activities students perform in their free time. So, researchers attempted to investigate whether there is a difference in public health between athletes and non-athletes according to the kind of activities they perform in their free time [5] and whether participation in team or individual sports, their level of education and marital status have different effects on students' public health. The research also attempted to address this question: is there a relationship between leisure activities and public health of male athlete and non-athlete students of Razi University of Kermanshah? The comparison of this relationship is an effective step towards the welfare and health of students.

MATERIALS AND METHODS

Kind of Research Method: The research method was descriptive and correlative and applied to the field. The research variables were leisure time, mental health and students in Razi University of Kermanshah.

Statistical Population: Statistical population of this study included all male students in Razi University of Kermanshah studying in three levels: graduate, undergraduate and postgraduate in the educational year 2009-2010 (n=666, non-athletes=366 and athletes=300).

Statistical Sample: Statistical sample of this study included 191 non-athletes and 169 athletes who were selected according to Morgan's table.

Measurement Instruments: Library-based information and two researcher-made questionnaires of leisure time and personal features and mental health questionnaire under the title of General Health Questionnaire (GHQ) were used to gather the data.

Leisure Activity Questionnaire: This researcher-made questionnaire including 32 closed questions and one open question was used to gather the data. Rahmani (2006) in a research considered the role of exercising and sporting in spending leisure time among 400 students in Takestan Azad University. The validity of the questionnaire was determined using experimental research and the Cronbach " method ("=0.79) [Personal information (3 questions), Leisure time (15 questions), Leisure time and exercising (13 questions)] [6].

Mental Health Questionnaire: It included 28 questions that is designed using analytical factors and is considered as a standard instrument in 70 countries around the world. The coefficient validity of these 28 questions was satisfactory and it was as equal as a questionnaire containing 30 or 60 questions [7]. It also has four scales and each scale contains 7 questions that measure physical symptoms, anxiety and disorders in social actions. The validity of this questionnaire was reported by Cronbach " method as 67% to 76% [8]. Different methods were suggested to score this test. In this study, Likert simple method was used. According to this method, each answer has 0 to 3 points. Each person's total point would be the sum of these four subscales [9].

Kolmogorov-Smirnov Test: Before determining the kind of tests, it is necessary to make sure of variables. If the variables are normal, parameter tests are used; otherwise, non-parameter ones should be used. Therefore, to determine the public health and its indexes, Kolmogorov-Smirnov test was used. As the significance level of all variables was less than 0.05, non-parametric tests were used.

Statistical Methods: To study and analyze data collected from questionnaires, following statistics were used:

Descriptive Statistics: In this method, to achieve mean, standard deviation, frequency and the percentage of all tested materials, descriptive statistics were used. In this stage, students' comments were compared and their personal information was explained and described according to their preferences.

Inferential Statistics: To compare the public health and all indexes (factors) between athlete and non-athlete students, graduate and undergraduate and also single and married ones, T test was used for two independent groups and to determine the relationship between variables, Spearman's correlation coefficient was used. The data were analyzed by SPSS software and graphs and charts were drawn by EXCEL software.

RESULTS

Table 1 showed marital status, educational level, number of athlete and non-athlete students who participated in this study.

As it is observed in the above table, 89.70% of participants were single and 10.29% were married. Among the participants of this research, 55.8% were non-athletes and 44.2% were athletes. Meanwhile, graduates were 73.8%, undergraduates 23.7% and postgraduates 3.85% of this research sample.

The research results showed that 73% of athlete students and 85.5% of non-athlete students spent most of their leisure time in dormitories. They had more leisure time at night. Mean public health of these students showed a significant relationship with being athlete and non-athlete, that is, athlete students had a higher public health (23.9%) than non-athlete students ($p < 0.05$) (Table 2).

Results showed that students who were more satisfied with their leisure time had higher public health and those who were less satisfied with their leisure time did not have a good overall health status. This difference was significant between athlete and non-athlete students who were less or more satisfied with their leisure time and athlete students had higher level of public health ($p < 0.05$). (Table 3)

The results of the research showed that soccer, martial arts, basketball, fitness, running, walking and swimming had the highest share in sport needs of the students (Table 4).

Table 1: Marital status, educational level and the number of athlete and non-athlete students

Index Property		Frequency	Percentage of Abundance	Percent of Cumulative Frequency
Marital Status	Single	244	89.70	89.70
	Married	16	10.29	100
Number of Students	Non-athletes	145	55.8	55.8
	Athletes	115	44.2	100
Educational level	B.A.	190	73.08	73.08
	M.A.	60	23.7	96.15
	Ph.D.	10	3.85	100

Table 2: Mean and standard deviation of public health and locations to spend leisure time in athletes and non-athletes

Public Health Location of Leisure	Non-athletes			Athletes			Significance Level
	Standard Deviation	Mean	Percent	Standard Deviation	Mean	Percent	
House	18.47	26.8	2.1	3.92	20.45	8.7	0.56
Dormitory	12.49	25.85	85.5	13.67	23.9	73	0.02*
University	9.13	26.80	8.3	5.94	23.52	6.1	0.15
Street	9.00	25.8	2.8	0.00	0.000	1.7	0.27
Cultural –religious centers	-	-	-	10.97	22.35	2.6	0.45
Sport centers	0.000	34	1.4	13.26	25	7.8	0.16

* 0.05 is significant.

Table 3: Public health mean and standard deviation based on the amount of athletes and non-athletes' satisfaction of their free time using t test

Leisure Satisfaction	Athletes			Non-athletes			Significance Level
	Standard Deviation	Mean	Percent	Standard Deviation	Mean	Percent	
I am not satisfied	12.12	27.95	57.9	15.63	29.18	37.00	0.35
I am a little satisfied	10.5	23.7	26.2	9.60	24.23	18.1	0.02*
I am almost satisfied	6.44	20.14	12.4	7.70	13.19	22.8	0.01*
I am satisfied	7.50	22.16	2.1	11.12	13.76	8.7	0.68
I am quite satisfied	0.000	14.5	1.4	6.11	8.16	2.4	0.73

* Level 0.05 is significant.

Table 4: Students' favorite sports

Priority	Sports for Athletes	Mean Score	Priority	Sports for non-athletes	Mean Score
1	Soccer	4.19	1	Hiking	3.71
2	Martial arts	3.70	2	Soccer	3.67
3	Basketball	3.68	3	Basketball	3.66
4	Running	3.46	4	Swimming	3.49
5	Hiking	3.31	5	Fitness training	3.40
6	Aerobics	3.26	6	Volleyball	3.32
7	Volleyball	3.24	7	Martial arts	3.27
8	Swimming	3.10	8	Aerobics	2.82
9	Chess	3	9	Cycling	2.73
10	Wrestling	2.93	10	Horse-riding	2.63

Table 5: Mean and standard deviation of athlete students' public health based on students' educational level using t test

Mental Factors	Educational level						Significance Level
	Graduate		Undergraduate		Postgraduate		
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	
Public health	48.36	12.37	46.73	12.09	45.23	9.19	0.254
Physical symptoms	11.47	3.99	10.56	3.015	10.23	0.41	0.03
Anxiety and insomnia	11.65	3.7	11.29	3.08	11.23	2.91	0.41
Social function disorder	14.25	3.33	14.58	3.07	13.52	3.93	0.39
depression	11.09	4.84	10.12	4.07	10.23	3.5	0.067

* Level 0.05 is significant

When considering students' public health based on their educational level, the results showed that the mean score of postgraduates was lower than graduates and undergraduates. This difference was significant in subscale of physical symptoms ($p < 0.05$) which shows that the general health of postgraduate students in this subscale is better than graduate and undergraduate ones (Table 5).

DISCUSSION AND CONCLUSION

Findings of this study showed that students performed various activities in their spare time which were ranked from the most to the least preferred ones as sports, friendship, working with the computer, listening to the music, watching TV for athlete students and watching TV, friendship, listening to the music, working with the computer and non- textbook studies for non-athlete students. In comparison with athletes, watching TV was non-athlete students' first preference.

In this study, sporting was the first preference of the most students which shows students' interest in different sports in their free time. As the nature of the students is inactive and as they tend to have more research activities and as they are aware of the benefits of physical and sporting activities, they can perceive a lack of activities in their lifestyle.

Considering the students' free time, the results of the research showed that the mean of the athlete and non-athlete students' free time was 3-4 hours daily. That finding is similar to the findings of many researches performed in our country Iran including Sanei (1995) and Rahmani (2006) [10, 6]. The amount of free time for university professors is 2 hours daily which shows that the students' free time is double [11]. It seems that the reported free time is suitable and better plans can be performed for their better mental and physical conditions.

When comparing students' public health based on their free time, the results showed that the mean of athlete students' public health was higher than non-athletes. This difference is significant in students who have 3-4 hours of leisure time. The reason can be that athlete students with 3-4 hours of leisure time have sufficient spare time for sport activities; on the other hand, according to the studies performed in this regard and based on the effects of exercise on general health, it seems that the effect of exercise activities is more than activities such as watching TV (students watch TV 5 hours of their free time). As the results showed, public health of students depended on the kind of activities they perform in their leisure time and it appears that athlete students who devote most of their free time to exercise have a higher public health than the non-athlete students who have more free time but do not exercise regularly.

Considering the sport barriers of students, being busy, lazy and bored, the lack of equipment and economic problems and social issues were some of obstacles listed in two groups of athlete and non-athlete students.

Recommendations:

- C Guiding students to spend their free time in sport centers and to hold explanatory classes by authorities to familiarize them with all mental and physical advantages of sport activities.
- C As the public health of athlete students of individual and team sports does not have any significant differences and their public health is almost the same, it is better for students not to limit themselves to a specific field.
- C Providing programs and charts to familiarize students with the methods of achieving physical fitness and to print, copy and distribute leaflets among university students.

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