

Health Promoting Behaviours of Sub-Elite Athletes*Osman PEPE¹ Özdemir ATAR², Barış KARAOĞLU², Mustafa Can KOÇ², Oktay ŞAHİN²***ABSTRACT**

Objectives: The aim of the study is to determine the health promoting behaviour levels of sub-elite athletes.

Methods: In this study, 68 male and 81 female totally 149 sub-elite athletes which were participated to the games of Turkish University Sport Federation, organized in Kayseri city, were participated voluntarily. Socio-demographic data form which included 3 personal questions and “Healthy Lifestyle Behaviors Scale II” were applied to volunteers. Statistical analysis were done by IBM SPSS 16.0 (Statistical Package for the Social Sciences) package program. The t-test for comparison between two independent groups and ANOVA for analysis of more than two groups were used. Post Hoc Tukey test was used to find the statistical difference among groups. The level of statistical error was 0.05.

Results: When “Healthy Lifestyle Behaviors Scale II” total point and the sub-dimensions of the “Healthy Lifestyle Behaviors Scale II” analyzed according to gender, statistically meaningful difference was found at physical activity parameter ($p < 0.05$) but meaningful difference was not found at the healthy responsibility, spiritual growth, interpersonal relations, stress management, nutrition and “Healthy Lifestyle Behaviors Scale II” total point ($p > 0.05$). When “Healthy Lifestyle Behaviors Scale II” total point and the sub-dimensions of the “Healthy Lifestyle Behaviors Scale II” analyzed according to sport type and age, statistically significance was not observed ($p > 0.05$).

Conclusion: In conclusion, It was so clear that there were no studies about health promoting behaviours of athletes. According to our findings, Turkish athletes needed to be informed about healthy promoting behaviors by coaches, universities and other health organizations. It was thought further studies needed to do about healthy promoting behaviors of different athlete groups.

Keywords: Healthy promoting Behaviour, Athletes, Sub-elite.

INTRODUCTION

In the present day, the university education of students contributes to alterations on their personality development, personal life and health behavior. According to definition of WHO, health is not only lack of illness and injury, health is completely well-being on account of physical, mental and social (Yardim et al., 2009). Nowadays perceptive of health is not only devoted to prevent of illness, health propose maintenance approach based on health that protect, continue and

improve health condition of individual, family and society. This perceptive was based on acquiring behaviors that protect, continue and improve well-being condition of individuals and based on judgement about their health (Çelik et al., 2009). The efforts of people to improve health status are important to be healthy to control and improve their health. Thus people improve healthier life conscious, remedy life style, perceive their own duties to keep healthy, behave guiding and improving the health by perceiving their own duties to keep

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healthy and abstaining the behaviors at risk. The health levels of societies are evaluated by majority of healthy people (Karadeniz et al., 2008).

According to our review of literature, health promoting behaviour has been studied on many people includes university students, nurses, (Çelik et al., 2009, Karadeniz et al., 2008, Von Bothmer & Fridlunt, 2005, Mcelligot et al., 2009) but has not been studied on athletes. The aim of the study is to determine the health promoting levels of sub-elite athletes.

METHODS

Participants

In this study, 68 male and 81 female totally 149 sub-elite athletes which were participated to the games of Turkish University Sport Federation, organized in Kayseri city, were participated voluntarily.

Data collection method

Socio-demographic and “Healthy Lifestyle Behaviors Scale II” (HLBS II) inventory were performed by volunteers. Socio-demographic form was included 3 personal questions as age, gender and sport type.

Healthy Lifestyle Behaviors Scale II (HLBS II) inventory was developed by Walker et al. (1987), re-organized in 1996. This is a self-administered questionnaire with 52 questions covering different

aspects of 6 factors. The HLBS-II is a 52-item scale consisting of four-point responses. The construct validity was confirmed through factor analysis (Yu-Ying & Shu-Pi, 2002). A reliability and validity study in Turkey was made by Esin in 1997 (Bahar et al, 2008). These factors are health responsibility (3, 9, 15, 21, 27, 33, 39, 45, 51), nutrition (2, 8, 14, 20, 26, 32, 38, 44, 50), stress (5, 11, 17, 23, 29, 35, 41, 47), spirituality (6, 12, 18, 24, 30, 36, 42, 48, 52), interpersonal relations and physical activity (4, 10, 16, 22, 28, 34, 40, 46). The HPLP II asks respondents to select one of four answer choices. The answer choices are rated from 1 to 4 (1 = never, 2= sometimes, 3= often, 4= routinely). The scores are then totaled in each of the six subscales and results are tabulated. The subscales with the lowest scores indicate areas of weakness. (Bahar et al, 2008).

Statistical Analysis

Statistical analysis were done by IBM SPSS 16.0 (Statistical Package for the Social Sciences) package program. The t-test for comparison between two independent groups and ANOVA for analysis of more than two groups were used. Post Hoc Tukey test was used to find the statistical difference among groups. The level of statistical error was 0.05.

RESULTS

Table 1: The comparison of HLBS values of genders.

Variable	Groups	n	Mean±SD	T	P
Health Responsibility	Male	68	23,22±4,51	0,38	,703
	Female	81	22,93±4,84		
Physical Activity	Male	68	22,74±3,97	2,08	.039*
	Female	81	21,33±4,19		
Nutrition	Male	68	20,47±3,85	0,14	,887
	Female	81	20,38±3,65		
Spiritual Growth	Male	68	27,49±4,16	,392	,695
	Female	81	27,19±5,02		
Interpersonal Relations	Male	68	25,88±4,05	-,555	,580
	Female	81	26,28±4,68		
Stress Management	Male	68	21,50±3,69	-,315	,753
	Female	81	21,69±3,70		
HLBS II Total Point	Male	68	143,91±17,88	,513	,609
	Female	81	142,27±20,63		

According to Table 1, statistically meaningful difference was found at physical activity parameter ($p < 0.05$), but meaningful difference was not found at the healthy responsibility, spiritual growth, interpersonal relations, stress management, nutrition and HLBS II total point ($p > 0.05$).

Table 2: The comparison of HLBS values of sport types.

Variable	Groups	n	Mean±SD	T	P
Health Responsibility	Individual	90	23,39±4,68	1,06	,291
	Team	59	22,56±4,67		
Physical Activity	Individual	90	22,21±4,08	,867	,388
	Team	59	21,61±4,23		
Nutrition	Individual	90	20,74±3,62	1,30	,195
	Team	59	19,93±3,86		
Spiritual Growth	Individual	90	27,30±4,57	-,072	,943
	Team	59	27,36±4,77		
Interpersonal Relations	Individual	90	26,38±4,05	,951	,343
	Team	59	25,68±4,87		
Stress Management	Individual	90	21,90±3,58	1,21	,227
	Team	59	21,15±3,82		
HLBS II Total Point	Individual	90	144,42±19,43	1,09	,277
	Team	59	140,88±19,26		

According to Table 2, meaningful difference was not found at sub-dimensions of the HLBS II and HLBS II total point ($p > 0.05$).

Table 3: The comparison of HLBS values of age.

Variable	Group	n	Mean±SD	F	P	Difference
Health Responsibility	18-21 ^a	68	22,56±5,01	1,17	,314	-
	22-24 ^b	64	23,73±4,27			
	25-28 ^c	17	22,53±4,72			
Physical Activity	18-21 ^a	68	21,99±4,11	0,03	,972	-
	22-24 ^b	64	21,91±4,36			
	25-28 ^c	17	22,18±3,54			
Nutrition	18-21 ^a	68	19,91±3,61	1,21	,301	-
	22-24 ^b	64	20,91±3,97			
	25-28 ^c	17	20,65±3,16			
Spiritual Growth	18-21 ^a	68	27,59±5,20	0,23	,797	-
	22-24 ^b	64	27,16±4,16			
	25-28 ^c	17	26,89±4,12			
Interpersonal Relations	18-21 ^a	68	26,32±4,81	0,16	,852	-
	22-24 ^b	64	25,92±4,11			
	25-28 ^c	17	25,88±3,79			
Stress Management	18-21 ^a	68	21,43±3,63	2,31	,103	-
	22-24 ^b	64	22,19±3,49			
	25-28 ^c	17	20,12±4,28			
HLBS II Total Point	18-21 ^a	68	142,38±20,84	0,30	,739	-
	22-24 ^b	64	144,33±18,97			
	25-28 ^c	17	140,71±14,97			

According to Table 3, meaningful difference was not found at sub-dimensions of the HLBS II and HLBS II total point ($p>0.05$)

DISCUSSION

In this study, 68 male and 81 female totally 149 sub-elite athletes which were participated to the games of Turkish University Sport Federation, organized in Kayseri.

When the sub-dimensions of the HLBS II analyzed according to gender, statistically meaningful difference was found at physical activity parameter ($p<0.05$). Karadeniz et al, (2008) were studied on healthy lifestyle behaviours of university students and found significant difference according at physical activity parameter to gender. This result is similar to our findings. When the HLBS II Total scores compared according to gender, Statistically significance was not observed but males' score was found higher than females' score. According to literature, many studies were showed that female students have higher HLBS II Total scores than male students (Karadeniz et al, 2008, Ulla Díez & Pérez-Fortis 2010, Larouche 1998). It could be said that sport has a better effect on developing male's health promoting behaviours.

The other sub-dimensions of HLBS II were compared and meaningful difference was not found. While mean Health Responsibility, Nutrition, Spiritual Growth points of male athletes were higher, mean Interpersonal Relations, Stress Management points of female athletes were higher. In the research of Walker et al (1987) were studied on The Health-Promoting Lifestyle Profiles of nurses and reported that Mean Health Responsibility, Nutrition, Spiritual Growth scores of female nurses were found higher than male nurses. Although statistically significant was not found at the HLBS II Total point, scores of male athletes higher than female. In another study, İlhan et al (2010) were studied on healthy lifestyle behaviors of

university students and reported that HLBS II Total point scores of female students higher than male students. In our study, male athletes have higher HLBS II Total point scores than female athletes. The reason of this situation was thought that sport has more positive effect on health promoting levels of male athletes.

When HLBS II total point and the sub-dimensions of the HLBS II analyzed according to sport type, Meaningful difference was not found at sub-dimensions of the HLBS II and HLBS II total point ($p>0.05$). Not to finding any statistical significance between individual and team athletes, is an unexpected situation at this study. Generally, the sub-dimensions and the HLBS II scores were higher in favor of individual athletes. According to literature, The lowest and highest HLBS II scores for whole were as 52 and 208 points respectively (Bahar et al, 2008). Our findings were lower than literature. It was so clear that athletes needed to be informed about Healthy Lifestyle Behaviors

When HLBS II total point and the sub-dimensions of the HLBS II analyzed according to age groups, Meaningful difference was not found at sub-dimensions of the HLBS II and HLBS II total point ($p>0.05$).

Duffy et al (1996), reported that age has a positive relationship with health promoting behaviours. In our study, we found negative relationship between age and health promoting behaviours. The reason of this situation was thought that athletes had less information about health promoting behavior.

CONCLUSION

In conclusion, it was so clear that there were no studies about health promoting behaviours of athletes. According to our findings, Turkish athletes needed to be informed about healthy promoting behaviors by coaches, universities and other health organizations. It was thought further studies needed to do about healthy

promoting behaviors of different athlete groups.

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