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A RESEARCH ON HEALTHY LIVING BEHAVIORS OF ARCHERY COACHES AND BOXING COACHES

Ziya Bahadır*, Zehra Certel**, Ramazan Topuz***

*School of Physical Education and Sports, Erciyes University, Kayseri, 38039 Turkiye
** School of Physical Education and Sports, Akdeniz University, Antalya, 07058 Turkiye

***Zeki Altındağ Anatolian High School, Konya, Turkiye

Abstract

The aim of the research was to assess healthy living behaviors of archery coaches and boxing coaches in terms of sportive branch, sportive experience and gender. The study was conducted with boxing coaches (n=119) and archery coaches (n=131). As the data collection tool; "The *Health*-Promoting *Lifestyle* Profile II (HPLP-II) which was developed by Walker et al. and validity and reliability tests of which were performed by Bahar et al. (2008) was employed. In the study; it was found out that mean score of boxing coaches on Physical activity subscale was higher than archery coaches. Besides; no statistically significant differences existed between archery coaches and boxing coaches in terms of gender and sportive experience.

Key Words: Healthy Living Style, Boxing, Archery, Coach.

Okçuluk ve Boks Antrenörlerinin Sağlıklı Yaşam Davranışları Üzerine Bir Araştırma

Özet

Araştırmanın amacı, okçuluk ve boks antrenörlerinin sağlıklı yaşam biçimi davranışlarının spor dalı, spor yaşı ve cinsiyetlerine göre incelenmesidir. Araştırma, boks (n=119) ve okçuluk (n=131) antrenörleri üzerinde gerçekleştirilmiştir. Araştırmada veri toplama aracı olarak 1996 yılında Walker ve ark. tarafından geliştirilen ve Bahar ve Ark (2008) tarafından geçerlik ve güvenirliği yapılan "Sağlıklı Yaşam Biçimi Davranışları Ölçeği (SYBD-II)" kullanılmıştır. Araştırmada; boks antrenörlerinin fiziksel aktivite boyutu puan ortalamaları okçuluk antrenörlerine göre daha yüksek bulunmuştur. Ayrıca araştırmada okçuluk ve boks antrenörlerin cinsiyet ve spor deneyimlerine göre ise bir farklılığa rastlanmamıştır.

Anahtar Kelimeler: Sağlıklı Yaşam Biçimi, Boks, Okçuluk, Antrenör.



1. Introduction

A healthy society is made up only by healthy individuals. Therefore; it is necessary to help individuals to acquire positive behaviors in order to prevent, to maintain and to improve their wellness and health status and to assist them to make correct decisions about their own health (Kong, 1995). World Health Organization argue that 70-80% of the death rates in developed countries and 40-50% of the death rates in developing countries are caused by unhealthy living styles; which points out the importance of developing a healthy life style.

According to health definition made by World Health Organization; health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO).

A healthy lifestyle is to control all of the one's own behaviors that may affect his health and to select and to organize the behaviors appropriate for his own health status while organizing daily activities. An individual who changes these behaviors into attitudes can not only maintain his healthy status but also raise it to a higher level. Health behavior is whole of one's behaviors in which he believes and uses so that they can stay healthy and get protection against diseases (cited Özkan and Yılmaz, 2006). Healthy lifestyle behaviors are a combination of assessments on dietary habits, self-realization, health responsibility, exercise habits, interpersonal support and stress management. Also; healthy life style behaviors are described as a course of actions in which one believes and does so as to remain healthy and to get protection against diseases (Cited by Aslan et al., 2012).

Being healthy is the basic human right and to attain and to maintain it is the basic aim of the health care personnel as well as it is one's own responsibility. One should control himself and desire to get these behaviors in order to gain these health promoting behaviors because it is essential to provide and to maintain health promoting behaviors in order to improve health. Literature includes studies on healthy lifestyle behaviors (Tambağ, 2012; Aslan et al., 2012; Lüleci et al., 2012; Cihangiroğlu and Deveci, 2011; İlhan et al., 2007; Özkan and Yılmaz, 2006). The authors studied healthy life behaviors and the affecting factors with various sample groups. However; there was not a relevant study conducted with coaches. Therefore; the aim of the research was to assess healthy living behaviors of archery coaches and boxing coaches in terms of sportive branch, sportive age and gender.

2. Method

Study Group

The study was conducted with 250 coaches who participated in 1st stage coaching courses for boxing (n=119) and archery (n=131) held in 2013. Mean age of the participant coaches was 31.22±9.26 years. Table 1 included personal information on the coaches.



Table 1. Personal information of the coaches

Variables		N	%
Branch	Boxing	119	47.6
	Archery	131	52.4
Gender	Female	36	14.4
	Male	214	85.6
Education	Primary school	24	9.6
	High school	67	26.8
	University	144	57.6
	Master degree	15	6.0
Sportive Experience	1-10 years	137	54.8
	11-20 years	74	29.6
	\geq 21 years	39	15.6
Marital Status	Married	104	41.6
	Single	146	58.4
Income Status	Low	30	12.0
	Moderate	198	79.2
	High	22	8.8
TOTAL		250	100

Data Collection Tool

As the data collection tool; "The *Health*-Promoting *Lifestyle* Profile II (HPLP-II)" which was developed by Walker et al. and validity and reliability tests of which were performed by Bahar et al. (2008) was employed.

HPLP-II was developed by Walker et al. (1996) and measures health promoting behaviors in relation with one's healthy lifestyle. Validity and reliability tests of the scale were performed by Bahar et al. (2008). HPLP-II is a four point Likert type with 52 items. The lowest score is 52 and the highest score is 208. Higher scores mean that one performs the health behaviors questioned in the scale at a high level. The scale has six subscales:

Spiritual growth focuses on how much one knows himself, his life objectives and self-development abilities and how much he is satisfied with himself (9 items).

Nutrition involves one's selection and organization of a healthful diet and meals and his values in selecting foods (9 items)

Physical activity indicates how much exercises –unchangeable part of a healthy life- are done by the individual (8 items).

Health responsibility involves one's accountability for and participation in his own well-being (9 items).



Interpersonal relations entails communication with significant others and duration of this communication (9 items).

Stress management entails the identification of stress resources and stress control mechanisms (8 items).

Bahar et al. (2008) found Cronbach Alpha coefficient of The *Health*-Promoting *Lifestyle* Profile II (HPLP-II) as .92. For the subscales; the reliability coefficient was .77 for health responsibility, .79 for physical activity, .68 for nutrition, .79 for spiritual growth, .80 for interpersonal relationships and .64 for stress management. In the present study; Cronbach Alpha coefficients became as follows: .71 for spiritual growth, .72 for nutrition, .76 for physical activity, .79 for health responsibility, .73 for interpersonal relationships, .63 for stress management and .91 for total scale.

Analysis of the data

For the analyses of the data; such descriptive statistical methods as arithmetic means, weighted means and standard deviations were employed and Kolmogorow Smirnow test was used to know whether or not the data followed a normal distribution. Also; parametric tests – t-test and Anova test- were used, too. In order to explore the source of the difference; Tukey test was performed.

3. Findings

Findings Relating Healthy Life Style Behaviors

Table 2 demonstrated mean scores, minimum scores and maximum scores obtained by the participant coaches from HPLP-II scales and its subscales.

Table 2. Mean scores, minimum scores and maximum scores and Standard Deviation obtained by the participant coaches from HPLP-II scales and its subscales

Scale	n	X±SD	Min-max scores
Spiritual growth	250	3.17±.43	1.78-4.00
Nutrition	250	2.52±.50	1.11-4.00
Physical activity	250	$2.79 \pm .58$	1.13-4.00
Health responsibility	250	$2.57 \pm .54$	1.22-4.00
Interpersonal relations	250	2.96±.46	1.44-4.00
Stress management	250	$2.66 \pm .47$	1.25-4.00
SYBD-II	250	2.78±.37	1.57-4.00



When the data in Table 2 were analyzed and mean scores obtained by the coaches from HPLP-II were respectively listed; these were $(X=3.17\pm.43)$ for Spiritual growth, $(X=2.96\pm.46)$ for Interpersonal relations, $(X=2.79\pm.58)$ for Physical activity, $(X=2.66\pm.47)$ for Stress management, $(X=2.57\pm.54)$ for Health responsibility and $(X=2.52\pm.50)$ for Nutrition. HPLP-II total score was $(X=2.78\pm.37)$. Table 3 showed t-test analyses of the scores obtained by the participant coaches from HPLP-II scales and its subscales in terms of sportive branch.

Table 3. Comparison of the scores obtained by the participant coaches from HPLP-II scales and its subscales in terms of sportive branch

Scale	Sportive	n	X	Sd	t	p
	branch					
Spiritual growth	Boxing	119	3.18	.42		
	Archery	131	3.15	.44	.590	.556
Nutrition	Boxing	119	2.56	.51		
	Archery	131	2.49	.48	1.150	.251
Physical activity	Boxing	119	2.88	.52		
	Archery	131	2.70	.62	2.505	.013*
Health responsibility	Boxing	119	2.51	.53		
-	Archery	131	2.62	.55	-1.722	.086
Interpersonal relations	Boxing	119	2.92	.44		
_	Archery	131	3.00	.47	-1.245	.214
Stress management	Boxing	119	2.66	.42		
· ·	Archery	131	2.65	.50	.303	.762
SYBD-II	Boxing	119	2.79	.33		
	Archery	131	2.77	.42	.404	.687

^{*}P<.05

When the data of Table 3 were analyzed in terms of sportive branch variable; it was noted that among means scores of the healthy lifestyle behaviors; there was a statistically significant difference only in Physical activity (t=2.505; p=.013; p<.05). As far as other subscale scores were concerned; no statistically significant difference existed. Table 4 included the data relating the scores obtained by the participant coaches from HPLP-II scales and its subscales in terms of sportive experience (sportive age).



Table 4. Comparison of the scores obtained by the participant coaches from HPLP-II scales and its subscales in terms of sportive experience (sportive age).

Spiritual growth 1-10 years 11-10 years 74 3.19 .44 .309 .734 ≥21 years 39 3.13 .41 Nutrition 1-10 years 137 2.45 .49 .11-20 years 74 2.52 .49 5.437 .005* ≥21 years 39 2.75 .47 Physical activity 11-20 years 74 2.85 .55 .547 .47 ≥21 years 39 2.81 .59 Health 1-10 years 137 2.53 .52 responsibility 11-20 years 74 2.55 .53 .53 1.948 .145 .21 years 39 2.72 .63 Interpersonal 1-10 years 137 2.96 .46 relations 11-20 years 74 2.98 .44 .103 .902 .21 years 39 2.94 .50 Stress 1-10 years 137 2.65 .48 management 11-20 years 74 2.68 .42 .125 .882 .21 years 39 2.63 .49 SYBD-II 1-10 years 137 2.75 .39	Scale	Sportive experience (sportive age)	n	X	Sd	F	P	Difference
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≥21 years 39 2.63 .49 SYBD-II 1-10 years 137 2.75 .39		•						
SYBD-II 1-10 years 137 2.75 .39	management	•				.125	.882	
•	SYBD-II	•						
$\geq 21 \text{ years}$ 39 2.83 .38		11-20 years	74 20	2.80	.35	.817	.443	

P<.05

When the data presented in Table 4 were analyzed in terms of sportive experience (sportive age); it was seen that among the means scores of healthy lifestyle behavior; there was a statistically significant difference only in Nutrition (F=5.437; p=.005; p<.05). As far as other subscale scores were concerned; no statistically significant difference existed. Those coaches with a sportive experience of ≥ 21 years had higher mean scores in Nutrition as compared to those with a sportive experience of 1-10 years.

T test was conducted in order to assess mean scores relating healthy lifestyle behaviors of the coaches in terms of gender. According to the t-test results; mean scores were as follows: Spiritual growth (t=-1.160; p=.247), Nutrition (t=-.830; p=.407), Physical activity (t=-1.763; p=.079), Health responsibility (t=1.039; p=.300), Interpersonal relations (t=1.070; p=.286), Stress management (t=-.279; p=.781) and HPLP-II (t=-.445; p=.657). No statistical difference was seen in the subscales (p>.05).



4. Discussion and Conclusion

The results of the study which was conducted to assess healthy living behaviors of archery coaches and boxing coaches in terms of sportive branch, sportive age and gender were presented below.

Of the healthy lifestyle behaviors; the coaches received the highest mean score in Spiritual growth (X=3.17) whereas the lowest score in Nutrition (X=2.52). In the study of Bozhüyük (2010) on the students of health sciences; it was seen that the students received the highest mean score in Spiritual growth ($X=2.86\pm.47$) whereas the lowest score in Physical activity ($X=15.94\pm4.38$). In this study, too, the highest mean score was obtained in Spiritual growth. Yet, because of our sample group made up by coaches, it seemed normal that a higher mean score was obtained in Physical activity.

Physical activity of healthy lifestyle behaviors of the boxing coaches was higher than archery coaches. When sportive branches were considered; archery encourages mastering body and improves self-confidence, attention and concentration and motivation. Athletes try to go beyond their capacities. Boxing, on the other hand, requires mutual physical struggle and activates all of the muscles. In this sense, in our study Physical activity was found to be higher among the boxing coaches.

When healthy lifestyle behaviors of the coaches were examined in terms of sportive experiences; it was noted that there was a difference in Nutrition. Coaches with shorter sportive experiences had lower mean scores in Nutrition. Thus; it may be argued that both archery coaches and boxing coaches knew the importance of healthy lifestyle behaviors but those with longer sportive experiences paid more attention to Nutrition. The reason may be related to the fact that weight gain gets easy due to slowing down of the metabolism with age.

Healthy lifestyle behaviors of the coaches did not differ in terms of gender. It may be said that healthy lifestyle behaviors of the male and female coaches were similar. The studies of Ünalan et al. (2007) and Oyur Çelik et al. (2009) report similar results. In the study of Yıldırım (2005) conducted with university students; there was a statistically significant difference in Exercise subscale in terms of gender variable and mean Exercise scores of the male university students were higher than mean exercise scores of the female university students. In the study of Bozhöyük (2010); when the difference between female students and male students was assessed; male students obtained higher scores in Physical activity and the difference was found statistically to be significant. In our study; the reason why there was no difference between genders may have resulted from the fact that the students received similar education.

As a result; boxing and archery coaches are very sensitive to healthy lifestyle behaviors because they are born in sports. In the study of Bahadır et al. (2013) on the students who studied at the school of physical education and sports; it was seen that those who did sports regularly had higher mean scores in all of the subscales of healthy lifestyle behaviors as



compared to those did not do sports regularly. As far as the study results were concerned; we were of the opinion that in the coaching courses organized by the federations, teaching such subjects as nutrition and health protective behaviors more will help coaches be aware of healthy lifestyle behaviors

REFERENCES

Aslan, H. Erci, B. Aktürk, Ü. Öztürk, H. (2012). Assessment of Health Behaviors of 3rd, 4th and 5th grade students, 2nd National School Health Congress, 17-18 May, Adana. 142-144.

Bahadır, Z., Certel, Z., Kaplan, E., (2013). Investigation of Healthy Lifestyle Behaviors of Physical Education and Sport School Students. 4th International Conference on New Horizons in Education (INTE). 25-27 June, Rome-Italy, Poster Presentation.

Bahar Z, Beşer A, Gördes N, Ersin F, Kıssal A. (2008). Validity and Reliability Tests of the *Health*-Promoting *Lifestyle* Profile II (HPLP-II), Cumhuriyet University, Nursing School Journal, 12 (1): 1-12.

Bozhüyük, A. (2010) Investigation of Healthy Lifestyle Behaviors of Health Sciences Students at Çukurova University, Çukurova University Medicine Faculty, Family Medicine Department, Specialty Dissertation.

Cihangiroğlu, Z., Deveci, S.E. (2011). Healthy Lifestyle Behaviors of Health Sciences Students at Elazığ Health School, Fırat University and the affecting factors, Fırat Medicine Journal, 16 (2): 78-83.

İlhan, N., Batmaz, M., Akhan, L.U. (2007). Healthy Lifestyle Behaviors of University Students, 2nd National Public Health Congress, 23-26 October, Denizli. 34-44

Lüleci, E. Hıdıroğlu, S. Keskin, Y. Karavuş, M. (2012). Healthy Lifestyle Behaviors of 1st year and 2nd year students who studied at Medicine Faculty and Faculty of Law of Marmara University Haydarpaşa Campus and the affecting factors, 2nd National School Health Congress, 17-18 May, Adana. 159-161.

Oyur Çelik, G., Malak, A,T., Bektaş, M., Yılmaz, D., Sami Yüner, A. (2009). Examination of the factors that affected health improvement behavior among health school students. Anatol Journal Clinical Investigation 3(3): 164-169.

Özkan, S. Yılmaz, E. (2006). Healthy Lifestyle Behaviors of The Nurses Who Worked at Hospitals. National Surgery Congress, 24-28 May, Antalya.

Kong R. (1995). Building Community Capacity For Health Promotion: A Challenge For Public Health Nurses, Public Health Nursing, 12 (5): 312-318.



Ünalan D, Şenol V, Öztürk A, Erkorkmaz Ü. (2007). Examination of the correlation between healthy lifestyle behaviors and self-care strength levels of the students who studied at health schools and social programs of vocational higher schools. Istanbul University, Medicine Faculty Journal 14(2):101-109.

Tambağ, H. (2012). Healthy Lifestyle Behaviors of nursing students and the affecting factors, 2nd National School Health Congress, 17-18 May, Adana. 70-71.

Walker, S. N, Hill-Polerecky, D. M, (1996). Psychometric Evaluation of the Health Promoting Lifestyle Profile II. Unpublished manuscript, University of Nebraska Medical Center. (http://app1.unmc.edu/Nursing/conweb/HPLPII_Abstract_Dimensions.pdf) Accessed on 10.10.2013.

World Health Organization. WHO definition of health. (http://www.who.int/about/definition/en/print.html) Accessed on: 10.10.2013.

Yıldırım, N (2005). The effect of some-socio demographic characteristics of the university students upon healthy lifestyle behaviors, unpublished master dissertation, Cumhuriyet University, Sivas.