

Healthy nutrition attitudes of sports science students

Nedim Malkoç^{1}, Onur Mutlu Yaşar², Murat Turgut², Mustafa Kerem², Bereket Köse³, Ahmet Atlı⁴, Hakan Sunay⁵*

¹University of Health Science, Faculty of Life Sciences, Istanbul, Turkey - *E-mail: nedimmalkoc82@gmail.com; ²Kastamonu University, School of Physical Education and Sports, Turkey; ³Şırnak University, School of Physical Education and Sports, Turkey; ⁴Iğdır University, School of Physical Education and Sports, Turkey; ⁵Ankara University, Sports Science Faculty, Ankara, Turkey

Summary. The concept of healthy nutrition can be expressed as a naturally occurring concept with human history. It is seen that there is awareness about healthy nutrition activities especially in recent years and it has been increasing both academically and socially. Healthy and adequate nutrition habits are important for both individual and public health. The aim of the study is to examine the attitudes of the senior students, who are educating in the field of sports sciences, towards healthy nutrition. The sample of the study consisted of 216 university students from Kastamonu University, School of Physical Education and Sports. Attitude Scale for Healthy Nutrition consisting of 21 items and 4 sub-dimensions adapted by Turkish by Demir and Cicioglu (2019) were used. In order to determine which analysis to use parametric and non-parametric in order to determine the differences between the groups, firstly, whether the data were normally distributed or not was examined within the scope of kurtosis and skewness values. Cronbach Alpha Value of the Attitude Scale for Healthy Nutrition was found to be 90. In conclusion, as a result of the evaluations in the research, the relationship between the participants' gender, age parameters and healthy nutrition attitudes was determined. As a result of the analyzes, the sub-dimension of the highest average score of the participants is the "Information About Nutrition" (X=3.76) sub-dimension. The lowest average score was found in the "Bad Nutrition Habits" (X=2.24) sub-dimension

Key words: Healthy Nutrition, Sport Science, Students

Introduction

The concept of healthy nutrition can be expressed as a naturally occurring concept with human history. It is seen that there is awareness about healthy nutrition activities especially in recent years and it has been increasing both academically and socially (1-11). Many states in the world, as well as the world health organization, carry out policies on healthy nutrition. Despite this, people also have responsibilities regarding healthy nutrition. With the prolongation of human life and diseases, the concept of nutrition in human life has gone beyond just calorie intake (12). It is possible

to see that people have changed their nutrition habits negatively recently. In this sense, the number of unhealthy people with weight problems is increasing(13).

Nutritional behaviors are one of the most important parameters of people's health and can affect people's nutritional attitudes, such as family, social environment, lifestyle, and culture (14). Healthy and adequate nutrition habits are important for both individual and public health (15). In the literature, unhealthy nutritionist addressed in two different scope as malnutrition and over nutrition. In this context, unhealthy nutrition attitudes also have negative, physiological, psychological and economic impacts on the life(16).

Unhealthy nutrition can be physiologically caused by many diseases such as obesity, heart disease, diabetes, amnesia, cholesterol, extreme fatigue (17-20). In addition, unhealthy nutrition attitudes can cause negative consequences such as psychological loss of self-confidence, depression, schizophrenia, dementia and alcohol dependence (21).

There may be difficulties in healthy nutrition attitudes due to potential reasons such as university students living in dormitories and student houses and not having sufficient financial status. However, the awareness and attitudes of university students, who will play an important role in the physical and mental health of new generations, are important for the future times of societies. In particular, healthy nutrition attitudes of university students who are educated in sports sciences are important in terms of being role models. In this context, the aim of the study is to examine the attitudes of the senior students, who are educating in the field of sports sciences, towards healthy nutrition.

Research Hypotheses

1. According to the Gender/Sex Variable of the Participants, female participants' attitudes towards healthy nutrition are higher.
2. According to the Age Variable of the Participants, older participants have higher attitudes towards healthy nutrition.
3. According to the variable of the educating area of the participants, there is no difference between the attitudes of the participants regarding healthy nutrition.
4. According to Participants' Financial Status Variable, participants with higher financial status perception have higher attitudes towards healthy nutrition.

Method

The population of the study consists of students studying at Kastamonu University. The sample of the study consisted of 216 university students from Kastamonu University, School of Physical Education and Sports. Three different department students participated in the research; Physical Education Teaching

Department (P.E.T.E.), Coaching Education Department and Sports Management Department. Within the scope of the research, purposeful sampling method was chosen as the sampling method. Data collection tool consisting of two parts was used in the research. In the first part of the data collection tool, a questionnaire consisting of the personal information of the participants was used. In the second part, Attitude Scale for Healthy Nutrition consisting of 21 items and 4 sub-dimensions adapted by Turkish by Demir and Cicioglu (2019) were used (22). In the analysis of the data, firstly, the demographic information of the participants and frequency and percentage analysis were used for the answers to the questions. Afterwards, it was examined whether the answers of the participants' data collection tool differed according to age, gender, income status, educating area. In order to determine which analysis to use parametric and non-parametric in order to determine the differences between the groups, firstly, whether the data were normally distributed or not was examined within the scope of kurtosis and skewness values. Cronbach Alpha Value of the Attitude Scale for Healthy Nutrition was found to be 90. Cronbach alpha reliability values of the sub-dimensions of the scale are between .82 and .91. In this sense, the data used in the research were found to be reliable (23).

Results

As a result of the analyzes, the sub-dimension of the highest average score of the participants is the "Information About Nutrition" ($X = 3.76$) sub-dimension. The lowest average score was found in the "Bad Nutrition Habits" ($X = 2.24$) sub-dimension (Table 2).

Nutritional attitude levels of man and women participants were examined (Table 3.). According to the results of the analysis, the average scores of the female participants in the Information About Nutrition sub-dimension and the Positive Nutritional Habits sub-dimension were found to be higher than the average scores of the male participants ($p < 0.05$). In other words, in the Information About Nutrition sub-dimension and Positive Nutritional Habits sub-dimension, women participants have higher nutritional attitudes than men.

Nutritional attitude levels of university students studying in different departments were examined in the research (Table 4.). According to the results of the analysis, the average scores of any group in the section variable did not show a statistically significant difference compared to the average scores of the other groups. In other words, healthy nutrition attitude levels of university students studying in different departments were determined at a similar level.

Table 1. Descriptive statistics of the participants

	Groups	(f)	(%)
Gender	Man	142	65.7
	Woman	74	35.3
Age	M=22.76	216	100
Income Statu	Bad	38	17.6
	Normal	156	72.2
	Good	22	10.2
Educating Area	P.E.T.E.	39	18.1
	Coaching Education	83	38.4
	Sports Management	94	43.5
Total	216		

Table 2.

Sub-Dimensions	\bar{X}	Sd	Skewness	Kurtosis
Information about nutrition	3.76	1.13	-1.079	.287
Feeling for nutrition	3.39	1.15	-.106	-.884
Positive nutritional habits	3.34	1.09	-.264	-.961
Bad nutrition habit	2.24	.978	.847	.062

Table 3. Gender variable analysis results of the participants

Sub-Dimensions	Gender/Sex	n	\bar{X}	Ss	p	Difference
Information about nutrition	Man (1)	142	3.63	1.18	.026*	2 > 1
	Woman (2)	74	4.00	1.01		
Feeling for nutrition	Man (1)	142	3.35	1.19	.449	-
	Woman (2)	74	3.48	1.09		
Positive nutritional habits	Man (1)	142	3.23	1.12	.044*	2 > 1
	Woman (2)	74	3.54	1.00		
Negative nutrition habit	Man (1)	142	2.28	.94	.451	-
	Woman (2)	74	2.17	1.05		

p < 0.05

In the study, the relationship between the participants' perceptions of financial status and their nutritional attitudes were examined (Table 5.). According to the results of the analysis, no statistically significant difference was found between the means cores of the groups. In addition, the average scores of the group with "normal" perception of financial status in all sub-dimensions were determined at a higher level compared to other groups.

In the study, the correlation between the participants' age parameters and their nutritional attitude levels was examined (Table 6.). According to the results of the analysis, there was no significant relationship between the participants' ages and the Information About Nutrition sub-dimension. In addition, a negative relationship was found between the ages of the participants and the sub-dimensions Feeling for Nutrition and Negative Nutrition Habit. In the research, a positive relationship was found in the Positive Nutritional Habits sub-dimension with the age parameter of the participants only.

Discussion and Conclusion

According to the results of the research, Information About Nutrition sub-dimension and Positive Nutritional Habits sub-dimension, women participants have higher nutritional attitudes than men. In this sense, it is seen that the 1st Hypothesis proposed in the research is partially accepted. In the study conducted by Manippa et al. (2017), the difference between the food choices of women and men was examined. According

Table 4. Department variable analysis results of the participants

Sub-Dimensions	Department	n		Ss	p	Difference
Information about nutrition	P. E. T. E.	39	3.88	1.01	.058	-
	Coaching Education	83	3.94	1.01		
	Sports Management	94	3.55	1.26		
Feeling for nutrition	P. E. T. E.	39	3.53	.1.03	.704	-
	Coaching Education	83	3.40	1.08		
	Sports Management	94	3.34	1.28		
Positive nutritional Habits	P. E. T. E.	39	3.25	1.01	.111	-
	Coaching Education	83	3.53	.97		
	Sports Management	94	3.20	1.20		
Negative nutrition Habits	P. E. T. E.	39	2.10	.89	.189	-
	Coaching Education	83	2.15	.86		
	Sports Management	94	2.38	1.09		

$p < 0.05$

Table 5. Participants' Perception of Income Variable Analysis Results

Sub-Dimensions	Income Perception	n	\bar{X}	Ss	p	Difference
Information about nutrition	Bad	38	3.63	1.25	.061	-
	Normal	156	3.86	1.04		
	Good	22	3.25	1.42		
Feeling for nutrition	Bad	38	3.33	1.14	.729	-
	Normal	156	3.43	1.15		
	Good	22	3.22	1.28		
Positive nutritional habits	Bad	38	3.04	1.01	.195	-
	Normal	156	3.48	1.08		
	Good	22	2.81	1.10		
Negative nutrition habit	Bad	38	2.22	.90	.061	-
	Normal	156	2.28	.98		
	Good	22	2,05	1.04		

$p < 0.05$

to the results of the research, it was found that women participants got higher average scores than man participants from the nutrition behavior test (24). In the study conducted by Ree et al. (2008), factors affecting the food selection of Canadian society were examined. According to the results of the research, the importance given by female participants to healthy nutrition was found to be higher than male participants (25). It can be stated that there are similarities with the other

two studies in this context according to the gender/sex variable. It can be stated that these results are related to women doing more cooking and having a more precise personality than men.

According to the results of the analysis, the average scores of one of group in the section variable did not show a statistically significant difference compared to the average scores of the other groups. In this sense, it is seen that the 2nd Hypothesis proposed in the research is

Table 6. Relationship between participants' age variable and healthy nutrition attitudes

		Age	Information about nutrition	Feeling for nutrition	Positive nutritional habits	Negative nutrition habit
Age	Pearson Correlation	1	-,008	-,228**	,168*	-,145*
	Sig. (2-tailed)		,906	,001	,013	,033
	N	216	216	216	216	216
Information about nutrition	Pearson Correlation	-,008	1	,400**	,692**	,101
	Sig. (2-tailed)	,906		,000	,000	,139
	N	216	216	216	216	216
Feeling for nutrition	Pearson Correlation	-,228**	,400**	1	,370**	,644**
	Sig. (2-tailed)	,001	,000		,000	,000
	N	216	216	216	216	216
Positive nutritional habits	Pearson Correlation	,168*	,692**	,370**	1	,210**
	Sig. (2-tailed)	,013	,000	,000		,002
	N	216	216	216	216	216
Negative nutrition habit	Pearson Correlation	-,145*	,101	,644**	,210**	1
	Sig. (2-tailed)	,033	,139	,000	,002	
	N	216	216	216	216	216

completely accepted. Nutritional attitudes of university students were investigated by Güneş and Çalık (2015). According to the results of the research, there was no significant difference between the university students who are educating in two different faculties in terms of nutritional attitudes (26). The nutrition attitudes of university students of health sciences and university departments of other departments were examined by El-Bagoury et al. (2017). According to the results of the research, there was no significant difference between the university students who received education in two different faculties in terms of nutritional attitudes (27). In this sense, it is seen that there are similarities between two studies and this study according to the variable of the department. The reason for this similarity can be expressed as the sharing of common culture and social environment of university students in general.

In the research, healthy nutrition attitudes of the participants were examined according to their perceptions of financial status. According to the results of the research, it was determined that there was no statistically significant difference according to the participants' perceptions of the financial situation. In this context, the 3rd hypothesis stated in the research

was rejected. In the study conducted by Lalluka et al. (2010), it was stated that the economic situation is an important part of healthy nutrition habits (28). In another study conducted by Lenoir-Wijnkoop et al. (2011), it was stated that there is a positive relationship between healthy nutrition and economic status (29). In this context, it is seen that there are differences between the research and expressions made and the results of the research. The reason for this situation is that the financial situation of university students participating in the research will not be separated from each other with great differences.

The relationship between the ages of the participants and healthy nutrition habits was investigated in the research. According to the results of the research, a positive correlation was found between the ages of the participants and the Positive Nutritional Habits dimension. There was a negative or very low positive relationship between the participants' ages and other sub-dimensions. In this context, the 4th hypothesis given in the research was not accepted. According to the results of the research conducted by Jeruszka-Bielak et al. (2018), there was no significant difference between the healthy nutrition knowledge levels and

ages of the participants(30).In the research conducted by Fekete et al. (2012), healthy nutrition habits according to the age of the participants were examined. According to the results of the research, it was stated that the interest of the home meals in healthy foods increased with the increasing age of the participants(31). It can be stated that there is a partial similarity between the research and this research. In this context, it is anticipated that healthy nutrition habits and awareness will increase with the age of individuals.

In conclusion As a result of the evaluations in the research, the relationship between the participants' gender, age parameters and healthy nutrition attitudes was determined. Increasing the activities aimed at providing healthy nutrition behaviour for university students should become a global policy.

Limitations and Suggestions

Within the scope of the research, only the opinions of the sports science students were taken and evaluated. In addition to this, it will be beneficial for future research to get the opinions of students from different educational fields and compare them with sports science students. In addition, taking some physical parameters of the students participating in the research and associating them with their attitudes towards healthy nutrition can be offered as a suggestion for other similar researches. For future research, it will be possible to collect different correlation models by collecting data on potential social concepts (Stress, Happiness, Hopelessness, etc.) that affect healthy eating attitude and healthy eating attitude.

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Correspondence:
Nedim Malkoc,
University of Health Science Turkey,
Faculty of Life Sciences,
Istanbul, Turkey
Phone: +905414553988
E-mail: nedimmalkoc82@gmail.com