

The Relationship Between Exercise Addiction Levels and Healthy Nutrition Levels of Students Studying at the Faculty of Health Sciences

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Abstract –

Introduction: Exercise is planned, structured, voluntary, continuous activities aimed at improving one or more elements of physical fitness. One aspect of healthy lifestyle behaviors is nutrition, while another aspect is exercise and physical activity. Many studies in the literature emphasize the physical, psychological, and physiological benefits of regular physical exercise. Therefore, in our study, we aimed to investigate the relationship between exercise addiction levels and healthy nutrition levels of students studying at the faculty of health sciences.

Method: The study was conducted on 133 students studying at the faculty of health sciences. Participants' demographic and income information was recorded. Exercise dependence levels were evaluated with the Exercise Dependence Scale, and nutritional levels were evaluated with the Nutrition Exercise Behavior Scale.

Results: Average age and body mass index of the participants, respectively; It was 21.83 ± 4.21 and 18.13 ± 3.09 . It was found that there was a correlation between the exercise addiction levels of the participants and their healthy eating habits ($p < 0.001$ - $r = 0.386$). In addition, it was found that there was no significant correlation with the subscale evaluating unhealthy nutrition parameters ($p = 0.401$ - $r = 0.073$).

Conclusion: It has been observed that there is a positive correlation between exercise addiction and healthy nutrition levels of students studying at the faculty of health sciences. Accordingly, it is seen that more attention is paid to the level of exercise and healthy nutrition. We believe that exercise should be an integral part of daily activities for a healthy diet.

Keywords – Exercise, Addiction, Healthy Eating, University Student

I. INTRODUCTION

Physical health, it is the absence of any discomfort in the human body, a disability that will affect or limit daily life. It is one of the most important duties of people to try to stay away from diseases that will affect the body. The most important reason for this is that individuals do not have enough energy to carry out the work they plan to do rather than being completely healthy, or whether there is an obesity problem due to overweight or an unbalanced diet, all of them are related to physical health [1]. The body and body structures of individuals who exercise regularly to be physically and physiologically healthy differ

from those who do not exercise. The heart and lungs of individuals who exercise regularly are more active in response to exercise. This active working state helps the body to pump more blood and to have more oxygen circulation. Strong and durable muscles and increasing the flexible structures of the joints provide better protection of individuals against disabilities and injuries. Being more active results in a higher fat burning rate in the body. Thus, more calories are burned [2]. The main conditions for being physically healthy are participation in exercise, regular and balanced nutrition, weight control, avoiding alcohol and

substance use, self-care, staying away from stress, rest and sleep [3].

One of the most important determinants of health is the nutritional status of individuals. Although nutrition is shaped entirely within the framework of individuals' own wishes, nutrition has a very important place for a healthy life [4]. Nutrition; It is defined as the state of using macro and micro nutrients needed by the body at the optimum level in order to ensure growth and development and to maintain a healthy life throughout life [5, 6]. In the emerging new world order, as a result of the development of digitalization processes, a sedentary lifestyle has increased, but recently, as a result of the difficulties caused by the pandemic, there have been differences in people's nutritional behaviors and attitudes [7]. University period is one of the most important periods in the formation of a healthy or unhealthy lifestyle [8]. In this period, the stress level is high, environmental factors are more effective, and with the problems caused by being away from the family environment, the tendency to fast-food diet outside the home increases and an irregular eating habit is formed [9]. When the literature is examined, various studies have been carried out to determine the healthy eating and exercise habits of university students [10-12]. Therefore, in our study, we aimed to investigate the relationship between exercise addiction levels and healthy nutrition levels of students studying at the faculty of health sciences.

II. MATERIALS AND METHOD

The study was conducted on 133 students studying at the faculty of health sciences. Participants' demographic and income information was recorded. Exercise dependence levels were evaluated with the Exercise Dependence Scale (EDS), and nutritional levels were evaluated with the Nutrition Exercise Behavior Scale (NEBS).

A. Exercise Dependence Questionnaire

The Exercise Dependence Questionnaire is a 29-item self-report measure of exercise dependence symptoms which consists of the following eight subscales: (a) interference with social/family life, (b) positive reward, (c) withdrawal symptoms, (d) exercise for weight control, (e) insight into the problem, (f) exercise for social reasons, (g) exercise for health reasons, and (h) stereotyped behavior. Preliminary research has established adequate reliability and validity of the scale [13].

B. Nutrition Exercise Behavior Scale (NEBS)

NEBS is a five-point Likert-type scale consisting of 45 items and four sub-factors. Positive expressions on the scale; It was scored as "Describes me completely=5", "Describes me quite=4", "Describes me a little=3", "Describes me very little=2" and "Does not describe me at all=1". The scores given for each question in the scale are taken as basis. Items 7, 8, 9, 10, 11, 12, 14, 15, 17, 18, 20, 22, 30, 31, 32, 34, 35, 36, 37, 38, 39, 42, 43 are positive statements, although it represents a negative attitude in terms of behavior. Scale scores are evaluated in line with the scores obtained from the scale sub-dimensions. "Indicates that there is a psychological/addictive eating behavior. The score distribution of "Healthy nutrition-exercise behavior sub-factor" is between 14-70. A high score indicates healthy eating-exercise behavior. The score distribution of "unhealthy diet and exercise behavior sub-factor" is between 14-70. A high score indicates unhealthy diet-exercise behaviour. The "meal order sub-factor" score distribution is between 6-30. A high score indicates good meal order [14].

C. Statistics Analysis

Descriptive statistics for categorical variables are expressed as frequencies. For the descriptive statistics of numerical variables, mean±standard deviation values are presented. The relationships between the scales were examined with the Spearman Correlation Test and in the interpretation of the correlation coefficient, "If <0.2, very weak correlation", "weak correlation between 0.2-0.4", "moderate correlation between 0.4-0.6", "High correlation between 0.6-0.8", "0.8> very high correlation criteria were used. The analysis of the data was made in SPSS 21 (IBM Inc. Chicago. IL. USA) statistical package program.

Table 1. Evaluation parameter

Evaluation parameter	Ort±std
Healthy eating exercise behavior	47,56±6,22
Unhealthy eating exercise behavior	41,43±5,63
Exercise Addiction level	47,29±8,34

III. RESULTS

Average age and body mass index of the participants, respectively; It was 21.83 ± 4.21 and 18.13 ± 3.09 . The mean and standard deviations of the parameters evaluated and analyzed for correlation are given in table 1. It was found that there was a correlation between the exercise addiction levels of the participants and their healthy eating habits. In addition, it was found that there was no significant correlation with the subscale evaluating unhealthy nutrition parameters (see table 2).

Table 2. Correlation of exercise and nutrition data

	Exercise Addiction level	
	r	p
Healthy eating exercise behavior	0.386	<0.001
Unhealthy eating exercise behavior	0.073	0.401

IV. DISCUSSION

This study was conducted to determine the prevalence of exercise habits and eating habits among university students in the Faculty of Health Sciences and to find the relationship between them.

Turkoglu et al, in his study, found a significant difference in the analysis of healthy nutrition total score according to exercise status, due to those who exercise [15], in another study, found that there was a significant difference due to physical activity in the comparison of healthy nutrition total score with the sub-dimension of knowledge about nutrition according to physical activity status, and there was a significant difference in the emotion towards nutrition sub-dimension due to those who did not do physical activity. No difference was found in the sub-dimensions of Positive Nutrition and Malnutrition. He interpreted these results as healthy eating attitudes are higher in those who do physical activity [16]. Ari and Cakir found a significant difference in the comparison of healthy nutrition total score on the basis of physical activity status variable in their study. They stated that the difference was due to those who did regular physical activity. In the study, when the healthy nutrition scores were examined according to the activity frequency variable, a significant difference was found on the basis of the total score variable. It was determined that the total scores of

those who do activities every day and those who do activities 3-4 times a week are higher. There was a difference in the positive nutrition sub-dimension, and it was determined that the difference was in favor of those who were active 3-4 times a week. It is thought that doing regular physical activity and applying healthy nutrition together contribute to the formation of this difference. No difference was found in the Malnutrition sub-dimension [17]. Physical activity level directly affects healthy lifestyle behaviors [18]. We also obtained results similar to the literature in our study. We observed that there is a positive and significant correlation between exercise level and healthy nutrition level.

V. CONCLUSION

It has been observed that there is a positive correlation between exercise addiction and healthy nutrition levels of students studying at the faculty of health sciences. Accordingly, it is seen that more attention is paid to the level of exercise and healthy nutrition. We believe that exercise should be an integral part of daily activities for a healthy diet.

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