

The relationship between nutritional behavior and mental well-being levels of sports science students

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Abstract. The purpose of this study is to examine the relationship between the nutritional behavior and mental well-being of Iğdır University Sports Science Students. Descriptive method was used in the research. The research group of the study has been formed a total of (125 females, 168 males) students schooled at Iğdır University Department of Physical Education and Sports College. In order to collect the data of the study, the Attitude Scale Towards Healthy Behavior (ASTHB) developed by Tekkursun Demir and Cicioglu (2019) and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) scale adapted to Turkish by Keldal (2015) were used. The Attitude Scale for Healthy Nutrition Behavior and the Warwick-Edinburgh Mental Well-Being Scale is a 5-point Likert-type scale. SPSS-24 package program was used for data analysis. The skewness and kurtosis values have been examined to find out whether the data had a normal distribution. As a result, it has been determined that the data had a normal distribution. Descriptive statistical analysis and correlation analysis have been used in the analysis of the data. Considering the research findings, it has been seen that the nutrition and mental well-being levels of sports science students were high. As a result of the correlation analysis, it has been determined that there is a statistically significant positive correlation between information about nutrition and positive nutrition dimension and mental well-being.

Key words: physical education and sports, nutrition, mental well-being

Introduction

Healthy lifestyle; “It means a life maintained by paying attention to health rules.” One of these rules is nutrition. Nutrition is the intake of required nutrients for the body (1). These substances consist of fats, carbohydrates, proteins, minerals and vitamins. For a healthy nutrition, these substances have to be enough to meet the body’s needs, and we must pay attention to the quantity and quality of the foods taken (2). We have many benefits from paying attention to nutrition (mental, psychological, physical, etc.), and get many harms (obesity, cardiovascular diseases, stress, etc.) if we do not (3).

In recent years, it has been observed that awareness about healthy nutrition has been increased with academic and social studies (4). Besides many

institutions and organizations around the world, the World Health Organization (WHO) carry out important studies on healthy nutrition. Obesity is the primary among these studies. In the statement made by the World Health Organization, it has been stated that obesity rates increase every year (5). Obesity means fatty degeneration (1). Obesity, that has become a global problem, can cause serious problems if precautions are not taken. One in every two adults and one in six children living in OECD (Organization for Economic Cooperation and Development) countries are overweight or obese (6). In addition, according to the report published by the World Health Organization, the world spent 7.5 trillion USD for health in 2016. This amount corresponds to nearly 10% of global GDP. Average health expenditure per capita is 1000 US dollars (7). The studies and the money spent further

reveal the importance of a healthy nutritional attitude. Individuals who do not have a healthy nutritional attitude suffer from physical and mental losses, as well as economic losses.

The World Health Organization (2004) defined mental well-being as “being aware of one’s own abilities, overcoming the stress that occurs in his/her life, being productive and beneficial in business life, and contributing to society due to his/her abilities” (8). Researches have shown that individuals with high mental well-being have better psychological and physical health and higher quality of life (9-10). Furthermore, it has been found that individuals with high mental well-being have higher creativity and immune systems, have good relationships with people, are more productive at work and live longer (11).

It is important to investigate the effects of healthy nutritional attitudes of university students, who do not have proper economic conditions and generally live in dormitories and houses, on their mental well-being. In the literature review, it has been revealed that there was no study on this subject before. From this point of view, the purpose of our study is to examine the relationship between the nutritional attitude and mental well-being of sports science students.

Method

In this study, quantitative research method has been used. The purpose of quantitative research is to objectively measure the behaviors of individuals through similar studies such as tests and questionnaires and explain them with numerical data (12).

Population and Sample

Depending on the purpose of the research, the group consisting of all individuals (units) that can be researched or generalized is called a population. The sample is a limited set that is believed to represent the population best when the entire population cannot be measured (13). In this context, the population of the study has been composed of students studying at Iğdır University Physical Education College, while the

sample consisted of students (125 females, 168 males) who voluntarily agreed to participate in the study at the Physical Education College.

Data Acquisition Tools

The Attitude Scale Towards Healthy Behavior (ASTHB)

It was developed by Tekkursun Demir and Cicioğlu (2019) (14).

Cronbach Alpha value of the Attitude Scale Towards Healthy Behavior scale is .90. The ratings of positive items in the scale are “Strongly Disagree”, “Disagree”, “Neutral”, “Agree”, “Strongly Agree”. Positive attitude items; 1, 2, 3, 4 and 5 negative attitude items have been scored as 5, 4, 3, 2 and 1.

Positive items consists of items 1, 2, 3, 4, 5, 12, 13, 14, 15, and 16.

Negative items consists of items 6, 7, 8, 9, 10, 11, 17, 18, 19, 20 and 21.

It has a structure consisting of 21 items and 4 factors. These factors have been denominated as Information About Nutrition (IAN), Emotion Towards Nutritional (ETN), Positive Nutrition (PN), and Malnutrition (MN).

Warwick-Edinburgh Mental Well-being Scale (WEMWBS)

WEMWBS, developed by Tennant and colleagues (2007), has been adapted into Turkish by Keldal (2015) (15). The one-dimensional scale has a total of 14 items (e.g., “I feel useful (helpful)”). WEMWBS, which has a 5-point Likert type rating (1: Strongly Disagree - 5: Strongly Agree), is given between 14-70 points.

The Cronbach Alpha value of the Warwick-Edinburgh Mental Well-being scale has been determined as .92. Warwick-Edinburgh Mental Well-being scale is a 5-point Likert type scale.

Data Analysis

SPSS (24.0) program has been used to evaluate the research data. The skewness and kurtosis values

have been examined to determine whether the data were normally distributed. At the end of this, it has been determined that the data had a normal distribution. Hair et al. (2010) and Byrne (2010) state that the data have a normal distribution when Skewness values are between -2 and +2 and Kurtosis values are between -7 and +7 in normality distribution measurements (16). Descriptive statistical analysis and correlation analysis have been used in the analysis of the data. In the evaluation of the data, the significance level has been accepted as $p < 0.05$.

Results

As a result of the correlation analysis, it has been determined that there is a statistically significant positive relationship between the knowledge about nutrition and the dimension of positive nutrition and mental well-being.

Discussion and Conclusions

According to the findings of the study, among the nutritional attitude sub-dimensions, the highest score is "knowledge about nutrition" ($X = 3.73$) and the lowest average score is "malnutrition" ($X = 1.76$). Researches conducted by Vancelik et al. (2007),

Cihangiroğlu ve Devenci (2011), Malkoç et al. (2020), Üstün et al. show similarities with our research findings (2020) (17-18-19-20), whereas in the studies conducted by Onurlubas et al. (2015), Ermis et al. (2015) it was determined that most of the university students (64%) did not have a healthy nutrition and their nutritional knowledge level was insufficient (59%) (21-22).

In the report that has been published by the World Health Organization (2016), heart disease ranked first among the top 10 causes of death in the world (23). One of the most important causes of heart disease is obesity. Obesity adversely affects heart health both by itself and by causing high blood pressure, diabetes and increased blood cholesterol levels (24). Excessive and wrong nutritional behavior cause obesity (25). The health and school success of students with poor nutrition and malnutrition are negatively affected (26). Students who do not have a balanced nutrition have a high risk of malnutrition, obesity, cardiovascular

Table 2. Descriptive Statistical Findings of the Sub-dimensions

	n	\bar{x}	sd
Information About Nutrition	5	18,69	4.77
Emotion Towards Nutritional	6	11,14	5,32
Positive Nutrition	5	17.39	5.11
Malnutrition	5	8.82	3.70
Mental	14	52.47	12.0

Table 1. Descriptive Statistics

	Group	(f)	(%)
Gender	Female	125	42.7
	Male	168	57.3
Age	M = 22.24	293	100
Department	Teaching	136	46.4
	Administration	41	39.6
	Coaching	116	14.0
Income	0-750	168	57.3
	751-1500	75	25.6
	1501 and above	50	17.
Regular exercise situation	Yes	117	39.9
	no	176	60.1
Total	293		

Table 3. Correlation Analysis

		Mental
Information About Nutrition	Pearson Correlation	.242**
	Sig. (2-tailed)	.000
	N	293
Emotion Towards Nutritional	Pearson Correlation	.080
	Sig. (2-tailed)	.181
	N	293
Positive Nutrition	Pearson Correlation	.211*
	Sig. (2-tailed)	.000
	N	293
Malnutrition	Pearson Correlation	.036
	Sig. (2-tailed)	.546
	N	293

diseases, diabetes, hypertension and various cancer diseases (27). In this context, high health nutrition scores of sports science students are of great importance in terms of preventing obesity, cardiovascular diseases and psychological diseases that may occur in the future.

Considering the research findings, it has been found that mental well-being scores of sports science students were high. It is known that sports have an effect on preventing psychological and physical problems, and enhancing health and mental well-being (28). Duman et al. (2020), Tekkursun Demir (2018) have found similar results in their research with our study (29-30).

As a result of the correlation analysis, it has been determined that there is a statistically significant positive correlation between information about nutrition and positive nutrition dimension and mental well-being. There is a strong relationship between balanced nutrition and academic achievement (31). Our research findings show that the relationship between nutritional attitudes and mental well-being of sports science students being significant means their academic success will be high as well.

Limitations and Suggestions

Conducting the research in different regions may show the effect of ethnic, social and cultural differences on nutritional attitudes.

In order to improve the awareness of sustainable healthy nutrition and mental well-being of students, online and face-to-face educational conferences and scientific activities on healthy nutrition may be held at universities.

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