http://doi.org/10.22282/ojrs.2019.48

INVESTIGATING PERCEIVED STRESS LEVELS AND LIFESTYLES OF UNIVERSITY STUDENTS

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ABSTRACT

The purpose of this study was to investigate perceived stress levels and healthy lifestyles of students from Faculty of Sports Science, Faculty of Education and Faculty of Communication at Trabzon University. The population of the research consisted of students from Faculty of Sports Science, Faculty of Education, and Faculty of Communication at Trabzon University in 2019-2020 academic year and sample consisted of 350 university students (153 female, 197 male) who accepted to voluntarily participate in the research. In this research, Personal information form, Healthy Lifestyles Behavior Scale Perceived Stress Scale (PSS-10) were used as a data collection tool. Alpha 0.05 level was accepted as significant. There was significant difference in perceived stress levels according to gender variable ($p<0.05$). There were significant differences in other sub-dimensions except for the sub-dimension of Health Responsibility ($p<0,05$). There was a significant difference to be found between all sub-dimensions of scale and school independent variables in female participants ($p<0,05$). There was significant differences in other sub-dimensions ($p>0,05$).As a result, perceived stress levels and health-improving behavior levels showed a significant difference according to gender and school variables. Health-improving behavior levels showed a significant difference in female and male participants in different sub-dimensions. Regarding scores of Health-improving Behavior levels Scale, students' scores in the Faculty of Sports Science were found to be significantly high.

Key Words: Perceived Stress, Health, Sports, Behavior

INTRODUCTION

Nowadays, protection from diseases or how to improve health instead of treatments remained on the agenda. Particularly, Health Improvement and Promotion concept emphasizing health consciousness in health education has come to the forefront (Pelitoğlu-Çıldır, Özgür, 2013). University education period is a duration when individuals have drastic experiences. University education paths the way not only for professional training but also plays an important role in personality development, in individual life, and in health behavior. These changes in one's life are especially important with regard to attitudes and behavior toward health because a university students' attitudes and behaviors influence present and future life and his/her future family. For that reason, the health level of a society can be measured with healthy individuals in that society (Ayaz, Tezcan and Akınca 2005; Batı et al., 2003).

According to the definition of World Health Organization (WHO) Health is not only not having a disease and an injury but also it is being well with regard to physical, mental, and social way (WHO, 2014a, Boelen, 2005). It is stated that besides the physical capacity of health, it is a positive conception based on social and personal things, and a thing should be placed within the most important values and responsibilities of people (Kaplun, 1992; Kaplan, Sallis and Patterson, 1993). In some studies, as the definition of WHO has limited aspects, it is stated that it should be redefined with concepts like quality, quantity and spiritualism (Galloway, 2003).

It is necessary to make biological, physical, and social environments positive in order to protect health. However, precautions should not be neglected toward an individual. Being born and living in a healthy environment is a birthright which mankind earned. Equality in opportunity is a fundamental law in improving health and protecting from diseases (MEGEP, 2008).

Improving health is defined as enabling improvement and increasing the controls over people's own health, and a component of economic, organizational, and environmental supports for a state of any behavior and life toward health (WHO, 2014b; Özvarış, 2006).

Another definition related to improving health is helping people understand the synergy between their optimal health and their core passions, increasing their motivations in reaching their optimal health and changing their lifestyles for optimal health levels (O'Donnel, 2009; Yardım, Gögen and Mollahaliloğlu, 2009).

To be healthy is a right for everyone, and an individual is responsible for his/her health. In order for an individual to gain health-improving behavior, he/she needs to control herself/himself, and be willing to gain these behaviors because in order to improve health, a positive health behavior should be acquired and continued. For this reason, it is important to investigate the health behavior of university students and support them where they need information for a healthy society. As such, the purpose of this research was to determine whether university students in the faculties of sports science and health have differences in their behavior levels in improving health, perceived stress levels and gender according to variables related to education field .

METHOD

In this research, survey model from descriptive research models used in education sciences and social sciences were used. As it is known, studies carried out according to the survey model were aimed to investigate characteristics of individuals who participated in the study in consideration of some demographical variables (Can, 2008). As our study aimed to determine students' perceived stress levels, health-improving behavior levels in the Faculty of Sports Sciences, Faculty of Education, Faculty of Communication, it is designed as a descriptive research. The population of the research consisted of students from Faculty of Sports Science, Faculty of Education and Faculty of Communication at Trabzon University in 2019-2020 academic year. The sample consisted of 350 university students (153 female, 197 male) who accepted to participate voluntarily in research. In this research, Personal information form, Healthy Lifestyles Behavior Scale developed by Walker et al. (1987) and Perceived Stress Scale (PSS-10) developed by Cohen, Kamarck, and Mermelstein (1983) were used as a data collection tool. Data obtained from research were analyzed by SPSS 20 package programme, and Alpha 0.05 level was accepted as significant. Basing on Pender's Improving

Health Model, in order to measure health-improving behaviors of individuals, Health-Improving Lifestyle Developing Scale were developed by Walker et al. (1987). This scale was revised by Walker et al. (1996), and Healthy Life Style Behaviors Scale II with 52 items was developed. This scale comprised of 6 factors, including spiritual development, interpersonal relationship, nutrition, physical activity, health responsibility, and stress management (Bahar, Gördes, Ersin and Kıssal, 2008).

Scale is 4 Likert type, and scored as never ‘’1’’, sometimes ‘’2’’, often ‘’3’’, regularly ‘’4’’. The lowest score for the whole scale is 52, and the highest score is 208 (Bahar et al. 2008). In our study, Cronbach Alpha Coefficient of the scale was .89, and 0,68-0,79 for sub-groups. Tenfold version of perceived stress scale developed by Cohen, Kamarck, and Mermelstein (1983) was aimed to measure how an individual perceived his/her life as stressful. For example, questions like “How often did you feel yourself stressful or nervous last month” were asked. Evaluation in the Fivefold evaluation scale was as 0= never, 4= very often. PSS-10 total score is obtained by reversing 4,5,7,8 positive items (For example, item 4: How often did you feel yourself in confidence about handling your individual problems last month). The total score changed between 0-40, and a high score was an indicator of unrest. Internal consistency in general literature was found between .75 - .86. SPSS 20.0 package programme was used for statistical analysis. T-test was used while analyzing research data. For comparison of groups that are more than two, One Way Anova test was used. Alpha was taken as .05 for statistical significance.

FINDINGS

Table 1. T-Test Results of Individuals According to Health-Improving Behavior Levels according to Gender Variable

Scale Sub-Dimension	Gender	N	Avg.	Sd	t	df	P
Health Responsibility	Female	153	19,02	4,38	-1,19	642	0,121
	Male	197	22,3	4,79			
Exercise	Female	153	18,7	4,6	-6,16	642	0,00
	Male	197	22,67	4,96			
Nutrition	Female	153	20,04	3,96	-2,44	642	0,010
	Male	197	22,13	4,89			
Spiritual Development	Female	153	25,68	4,5	-2,62	642	0,003
	Male	197	28,12	4,4			
Interpersonal Communication	Female	153	24,76	4,35	-2,08	642	0,006
	Male	197	26,34	4,76			
Stress Management	Female	153	18,71	3,25	-3,09	642	0,001
	Male	197	21,88	4,62			

In sub-dimension and T-test results of individuals according to Health-improving Behavior Levels, female participants' average in the sub-dimension Health responsibility was as 19,02±4,38, and male participants' average was as 22,3±4,79 and there was no significant difference ($p>0,05$). In Exercise sub-dimension, male participants' average was 22,67±4,96, and female participants' average was 18,7±4,6, and there was a statistically significant result ($p<0,05$).

In sub-dimension Nutrition, male participants' average was 22,13±4,89, and female participants' average was 20,04±3,96. There was a statistically significant difference ($p<0,05$). In the sub-dimension Spiritual Development female participants had 25,68±4,2 and male participants had 28,12±4,7 averages. There was a statistically significant results ($p<0,05$). In sub-dimension Interpersonal Communication, female participants had 24,76±4,35 and male

participants had 26,34±4,76 average score, and there was a statistically significant difference (p<0,05). In the sub-dimension Stress Management, female participants had 18,71±3,25, and male participants had 21,88±4,75. There was a statistically significant difference (p<0,05).

Table 2. T-test results of perceived stress levels of participants according to Gender Variable

	Gender	N	Avg.	Sd	t	df	P
Perceived Stress	Female	153	14,27	4,35	3,358	642	0,002
	Male	197	15,85	5,28			

According to T-test result of Perceived Stress Levels, in Perceived Stress level, averages of females were 14,27±4,35, and males had 15,95±5,28, and there was a statistically significant difference (p<0,05).

Table 3. One Way Anova Results of Health-Improving Behaviors of Female Participants According to School Variables

		Square Total	df	Average Square	F	Sig.
Health Responsibility	Intergroups	3,905	2	1,95	8,06	0,00
	In-groups	107,47	444	0,24		
	Total	111,37	446			
Exercise	Intergroups	24,34	2	12,17	39,62	0,00
	In-groups	136,39	444	0,307		
	Total	160,73	446			
Nutrition	Intergroups	3,68	2	1,84	10,08	0,00
	In-groups	81,12	444	0,183		
	Total	84,8	446			
Spiritual Development	Intergroups	4,33	2	2,16	8,97	0,00
	In-groups	107,33	444	0,24		
	Total	111,67	446			
Interpersonal	Intergroups	2,7	2	1,35	5,59	0,004
	In-groups	107,52	444	0,24		

Communication	Total	110,23	446			
Stress Management	Intergroups	5,2	2	2,6	13,18	0,00
	In-groups	87,68	444	0,19		
	Total	92,89	446			

There was a significant difference between all sub-dimensions of Health-Improving Behavior Levels and School independent variable in female participants ($p<0,05$).

Table 4. One Way Anova Results of Perceived Stress Scores of Female Participants According to School Independent Variable

		Squares Total	**df**	**Average Square**	**F**	**Sig.**
Perceived Stress Scores	Intergroups	91,64	2	45,82	1,95	0,14
	In-groups	10431,21	444	23,44		
	Total	10522,85	446			

There was no statistically significant difference between results obtained from Perceived Stress Scores of female participants and school independent variable ($p>0,05$).

Table 5. One Way Anova Results of Health-Improving Behavior Levels of Male Students According to Independent School Variable

	Total Squares	**df**	**Average Square**	**F**	**Sig.**
Health Responsibility	Intergroups	1,42	2	0,71	0,03
	In-groups	56,59	194	0,29	
	Total	58,01	196		
Exercise	Intergroups	6,29	2	3,14	0,001
	In-groups	69,12	194	0,35	
	Total	75,42	196		
Nutrition	Intergroups	,39	2	0,98	0,02
	In-groups	55,33	194	0,85	
	Total	55,73	196		

Spiritual Development	Intergroups	4,88	2	2,44	0,001
	In-groups	42,14	194	0,21	
	Total	47,02	196		
Interpersonal Communication	Intergroups	4,58	2	2,29	0,001
	In-groups	43,75	194	0,22	
	Total	48,33	196		
Stress Management	Intergroups	3,03	2	1,51	0,01
	In-groups	62,39	194	0,32	
	Total	65,43	196		

There was a significant difference between all sub-dimensions of One Way Anova results and sub-dimensions of Health-improving Behavior Levels scale according to school variable in Male participants ($p<0,05$).

Table 6. One Way Anova Results of Perceived Stress Levels of Male Students According to School Variable

		Total Squares	**df**	**Average Square**	**F**	**Sig.**
Perceived Stress	Intergroups	57,64	2	28,82	1,11	0,33
	In-groups	5040,02	194	25,98		
	Total	5097,67	196			

Perceived Stress Scores of male students were found as statistically significant according to the school variable ($p>0,05$).

DISCUSSION AND RESULTS

In order to determine whether there was a difference according to gender and educational field between healthy life-improving behaviors and perceived stress levels, health-improving behavior levels of university students in the Faculty of Sports Sciences, Faculty of Education, and Faculty of Communication, 153 female, 197 male, in total 350 individuals participated in the research.

When individuals' average and standard deviation scores of perceived stress levels participated were examined, the highest average in female participants was "getting angry" and "disappointment" item, and in male participants, it was the disappointment item

When Health-improving Behavior Levels according to school and gender variable were examined, both female and male participants were seen to have high total score value in Faculty of Sports Sciences.

According to sub-dimensions of gender variable of Health-improving Behavior Levels and statistical comparison results, in the comparison of the sub-dimension Health responsibility, there was no significant difference between male and female participants' averages, however, there was a significant difference in other sub-dimensions ($p>0,05$).

According to Sayan (1998), responsibility for health affects beginning to health-improving behavior and its continuity. Internal control over health reflects responsibility level on own health of an individual.

Akgül (2008) in his master's thesis reported that male participants had higher scores in self-realization, and exercise and stress management fields, while female participants had higher scores in health responsibility and nutrition fields.

Pender et al. (1992) sorted the individual causes and health status, motivation, environmental, psychological, and physical characteristics affecting health lifestyle behavior of individuals

Individuals' scale results related to perceived stress levels were compared according to gender variable. In Perceived stress levels, female participants had 14,27±4,35 and male participants had 15,85±5,28 average scores. Significance was found as significant ($p<0,05$).

In his Master's research, Yıldırım (2005) found exercise score averages of male students higher than female students.

Yıldırım (2005) determined that university students had the lowest score in exercise behavior, and the highest score was in self-realization.

Yıldırım (2005) found that according to faculty and schools they were attended, university students had higher scores in health responsibility which is a sub-dimension of Health Lifestyle Behavior Scale than Sciences, Social Sciences, Health Sciences, and Vocational Schools.

When standard deviation and participants' average scores of Health-improving Behavior Levels were examined, the sub-dimension Spiritual Development was seen to have its highest scores in both female (x=3,08±0,48) and male (x=3,18±0,42) participants.

According to Health-improving Behavior Levels scale sub-dimensions of female participants were examined. There was a statistically significant difference between all sub-dimensions of Health-improving Behavior levels scale and School variable ($p<0,05$).

According to Perceived Stress Scores scale, sub-dimensions of female participants were examined. There was no statistically significant difference between the results obtained from Perceived Stress Levels of female participants and school variable ($p>0,05$).

There was no significant difference ($p>0,05$) between school independent variable and Health Responsibility and Nutrition sub-dimensions of Health-improving Behavior Level scale, and there was a significant difference between other sub-dimensions in male students ($p<0,05$).

When Perceived stress scores according to male participants were examined, there was no statistically significant difference between school variable and the results obtained from Perceived Stress Scores scale ($p>0,05$). In a research of Cengiz et al. (2018) in male soccer coaches, he found a significant relationship between ages of participants and perceived stress. That means stress is influenced by male participants' age. In this sense, a significant difference was not seen as male students had nearly the same ages.

As a result, there was significant difference in perceived stress levels according to gender variables. There was no significant difference in health responsibility sub-dimension of Health Improving Behavior Levels scale. Also there was a significant difference in other sub-dimensions.

There was a statistically significant difference in all sub-dimensions of Health-improving Behavior Levels of female participants and school independent variables in male students, and there was no statistically significant difference in Health responsibility and Nutrition which are sub-dimensions of Health-improving Behavior Levels scale in male students with school independent variable. Also there was a significant difference in other sub-dimensions ($p<0,05$).

Sports Culture and Health-improving behaviors begin in family and take it shape in University education. For this reason, common organizations should be attached importance with regard to increase the level from medium level to students' good level of health-improving behaviors in the Faculty of Sports Sciences and other faculties

When findings are examined related to perceived stress levels, they were less in exercising individuals. For that reason, it should be taken into consideration that students should participate in sports and exercise activities in parallel with their educations and they should make it a lifestyle. In this sense, supporting students is very important.

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