



The Relationship between University Students' Awareness of Health Tourism and Health Literacy

Üniversite Öğrencilerinin Sağlık Turizmi Farkındalığı ile Sağlık Okuryazarlığı İlişkisi

Dr. Öğr. Üyesi Rukiye ÇAKMAK¹, Dr. Öğr. Üyesi Dilek YILDIRIM GÜRKAN²

Abstract

This study was conducted to examine the relationship between university students' awareness of health tourism and health literacy. A total of 906 university students who were foreign nationals and Turkish citizens participated in this descriptive study. Personal Information Form, Health Literacy Scale (HLS-14), Health Tourism Awareness Scale (HTAS) were applied face to face to the participants. In the study, HLS total score was $54,05 \pm 10,52$ and the HTAS total score was $62,04 \pm 13,67$. A significant difference was found between the total score and sub-dimensions of the health literacy scale and the variable of gender and nationality ($p < 0,05$). There was no significant difference between the total score of the health tourism awareness scale and variables such as age, gender, school, nationality, having a chronic disease in the family, living with an individual over the age of 65 ($p > 0,05$). In the study, it was found that there was a weak positive relationship between the health tourism awareness scale and the health literacy scale. It was determined that the students had a moderate level of awareness of health literacy and health tourism. It was determined that there was a weak relationship between students' health literacy level and health tourism awareness levels and subscales. It may be recommended to conduct trainings or open elective courses to increase the knowledge level of students on these issues.

Keywords: Awareness of health tourism, health literacy, health tourism

Paper Type: Research

Öz

Bu araştırma üniversite öğrencilerinin sağlık turizmi konusundaki farkındalıkları ile sağlık okuryazarlığı arasındaki ilişkiyi incelemek için yapılmıştır. Tanımlayıcı tipte tasarlanan araştırmaya yabancı uyruklu ve Türk vatandaşı olan toplam, 906 üniversite öğrencisi katılmıştır. Katılımcılara Kişisel Bilgi Formu, Sağlık Okuryazarlığı Ölçeği (SOY), Sağlık Turizmi Farkındalık Ölçeği (STF) yüz yüze olarak uygulanmıştır. Araştırmada SOY ölçeği toplam puanı $54,05 \pm 10,52$ ve STF ölçeği toplam puanı $62,04 \pm 13,67$ bulunmuştur. Sağlık okuryazarlığı ölçeğinin toplam puanı ve alt boyutları ile cinsiyet ve uyruğu değişkeni arasında anlamlı bir fark bulunmuştur ($p < 0,05$). Sağlık turizmi farkındalığı ölçeği toplam puanı ile yaş, cinsiyet, okul, uyruk, ailesinde kronik bir hastalığa sahip olma, 65 yaş üstü bireyle yaşama gibi değişkenler arasında anlamlı bir fark bulunmamıştır ($p > 0,05$). Araştırmada sağlık turizmi farkındalığı ölçeği ile sağlık okuryazarlığı ölçeği arasında pozitif yönde zayıf bir ilişki olduğu bulunmuştur. Öğrencilerin sağlık okuryazarlığı ve sağlık turizmi farkındalıklarının orta seviyede olduğu saptanmıştır. Öğrencilerin sağlık okuryazarlığı düzeyi ile sağlık turizmi farkındalığı düzeyleri ve alt boyutları arasında zayıf bir ilişki olduğu tespit edilmiştir. Bu konularda öğrencilerin bilgi düzeylerini artırmak için eğitimler yapılması ya da seçmeli dersler açılması önerilebilir.

Keywords: Sağlık turizmi farkındalığı, sağlık okuryazarlığı, sağlık turizmi

Makale Türü: Araştırma

¹Yozgat Bozok Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, rukiye.yorulmaz@yobu.edu.tr

²Yozgat Bozok Üniversitesi, Sağlık Bilimleri Fakültesi, dilek.yildirim@yobu.edu.tr

Atf için (to cite): Çakmak, R. & Gürkan, Y.D. (2025). The Relationship between University Students Awareness of Health Tourism and Health Literacy, *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi*, 27(1), 407-415.

Introduction

Health literacy is a relatively new concept in the promotion and development of health and has become one of the topics of great interest around the world in recent years (Nutbeam, 2000, p. 259; World Health Organization, 2013, p. 3). Health literacy is defined by WHO as all of the cognitive and social skills that determine the motivation of individuals to access, understand and use information and the ability to access and interpret information to protect, maintain and improve their health (World Health Organization; Liu et al., 2020, p. 1).

Health literacy is a concept that goes beyond health education. It addresses the social and environmental factors that affect the ability to interact with health information, make informed decisions, and use health services to benefit themselves and their environment (Azlan, et al., 2021, p. 1). Health literacy is the bridge between an individual's literacy (and other) skills and abilities and the health context. Health literacy is affected by all social, individual and cultural factors. Both the causes and solutions of limited health literacy depend on our cultural and social environment, the health and education systems that serve it, and the interaction between these factors (Nielsan et al., 2004, p. 4).

Individuals' awareness of their health-related rights and responsibilities is related to their level of health literacy (Aslan et al., 2019, p. 1118). Health literacy includes a set of knowledge and skills in order to make appropriate health decisions and to benefit from health services in the most accurate way. These skills include communication, reading, writing, comprehension, numeracy and, increasingly, the use of technology (Hersh et al., 2015, p. 118). Poor health literacy leads to unhealthy choices, more risky behaviors, more inadequate self-management of one's health, and the need for more treatment in hospitals (Kickbusch et al., 2015, p. 1). Accordingly, inadequate health literacy consumes human and financial resources in the health system significantly (Baker et al., 1998, p. 792; Kickbursch et al., 2015, p. 1). It is very important to calculate the health cost well in terms of national economy. In recent years, health tourism is a very popular topic in many countries due to its economic contribution. Health tourism is a type of tourism that allows health institutions to grow in order to improve health of people who travel to thermal springs or health centers for treatment purposes (Aydın, 2012, p. 92). While various classifications have been made for types of health tourism, generally, a three-fold classification is observed, including medical tourism, thermal/SPA/wellness tourism, senior tourism and disabled tourism (Demir and Sezgin, 2020, p. 3). Due to changes in people's perceptions of health, individuals can become health tourists not only for treatment but for many other reasons as well (Doğan and Aslan, 2019, p. 4). The key factor in the success of health tourism is health tourism awareness.

Awareness of health tourism means to have knowledge about health tourism and to use this knowledge. The higher the health tourism awareness of individuals, the more they will be able to find a solution by using their knowledge about health tourism when they have a problem with their health. Awareness of health tourism may be related to the health literacy of individuals. No study demonstrating this relationship was found in the national and international literature. In this study, the relationship between university students' awareness of health tourism and health literacy was examined.

1. Materials And Methods

1.1. Aim

The aim of the study was to examine the relationship between university students' awareness of health tourism and health literacy.

1.2. Population and Sample

The population of the research consisted of all university students, including vocational schools, colleges, faculties, and the TÖMER (Turkish Language Teaching Center), located at the

central campus of Yozgat Bozok University. There are 15,320 actively enrolled students at the central campus of the university. The sample size, determined using the known population sample calculation method for a 95% confidence interval, was found to be 375. This study was completed with the participation of 960 students who volunteered to take part in the research.

1.3. Data Collection Method

“Personal Information Form” and “Health Literacy Scale” and “Health Tourism Awareness Scale” were used to collect data.

Personal Information Form: It consists of 6 questions including sociodemographic variables of students.

1.3.1. Health Literacy Scale (HLS-14)

Health Literacy Scale (HLS-14), Suka et al. (2013) to measure the health literacy levels of adults in Japan in 2010. In the original scale the Cronbach's alpha value was 0.81. Turkish validity and reliability study was carried out by Türkoğlu and Kılıç. The scale has three sub-dimensions: Critical Health Literacy (4 items), Functional Health Literacy (5 items) and Interactive Health Literacy (5 items), a total of 14 items. Türkoğlu and Kılıç found the Cronbach's alpha value of the scale to be 0.8513 (Türkoğlu and Kılıç, 2021, p. 21).

1.3.2. Health Tourism Awareness Scale

The Health Tourism awareness scale was developed by Dağlı in 2021. There are 22 5-point Likert type questions for the health tourism awareness scale. Within each question, there are 5 options that describe the person's level of awareness. The lowest and highest scores are 1 and 5, respectively. The maximum and minimum scores obtained from the scale are 110 and 22, respectively, and the score describing the neutral state is 66.5 (Dağlı, 2021, p. 42).

1.4. Data Analysis

In this study, the data were analyzed with the SPSS 22.0 program. Number (n), percentage (%), mean and standard deviation (SD) were used for descriptive statistics. The normal distribution of data was evaluated using the Shapiro-Wilk test and QQ charts. The t-test was used to compare two independent groups of data. Correlation between scale scores was evaluated with Pearson correlation analysis ($p < 0.05$).

1.5. Ethical Dimension

Approval of the Ethics Committee of Yozgat Bozok University (Decision No: 30/07 Date: 16.02.2022) and institutional permission of the relevant institution were obtained to conduct the study. Permission to use the scale was obtained from the owners of the scales used in the study.

2. Results

The study was completed with a total of 906 people. The participants consisted of females by 69.1% and males by 30.9%, and 84.9% of them were the citizens of the Republic of Turkey. 51.3% of the participants were between the ages of 18-20, while 48.7% of them were 21 years and over. 29.4% of the participants had a family member with a chronic disease. When the sociodemographic characteristics of the participants participating in the study and the health literacy subscales were examined, a statistically significant relationship was found between the variables of gender, age, nationality, having a family member with a chronic disease, and some subscales of health literacy. A statistically significant relationship was found between gender, one of the demographic variables, and all subscales of the health literacy scale ($p < 0.05$). Furthermore, health literacy of female participants was higher compared to male participants in all subscales of health literacy. Considering the age variable, a statistically significant relationship was found in the interactive health literacy scale ($p < 0.05$). When Table 1 was examined, it was observed that the participants aged 21 and over had higher interactive health literacy. A statistical relationship

was found between nationality, one of the demographic variables, and all subscales of the health literacy scale ($p<0.05$). As a result of the study, it was seen that there was a statistical relationship between the variable of having a family member with a chronic disease and all subscales of health literacy ($p<0.05$). It was seen that the participants with a family history of chronic diseases had higher total scores of the interactive health literacy, critical health literacy and health literacy compared to those without a family history of chronic diseases.

Table 1. Sociodemographic characteristics of the participants and the HLS Scale and Its

Variables	N(%)	Functional HLS	Interactive HLS	Critical HLS	HLS Total
		Mean±SD	Mean±SD	Mean±SD	Mean±SD
		19,16±5,33	19,25±4,84	15,63±4,08	54,05±10,52
Gender					
Female	626(69,1)	19,42±5,38	19,63±4,64	15,84±4,05	54,91±10,35
Male	280(30,9)	18,56±5,18	18,41±5,18	15,15±4,12	52,12±10,65
Test/P		2,269/0,02	3,533/0,00	2,376/0,01	3,712/0,00
Age					
18-20 years	465(51,3)	19,31±5,14	18,85±4,89	15,39±3,91	53,56±10,54
21 years and older	441(48,7)	18,99±5,53	19,68±4,76	15,88±4,25	54,56±10,48
Test/p		0,897/0,37	-2,582/0,01	-1,809/0,07	-1,433/0,15
Nationality					
Turkish citizen	769(84,9)	19,37±5,44	19,63±4,66	15,86±4,03	54,87±10,30
Not a Turkish citizen	137(15,1)	17,96±4,52	17,16±5,29	14,34±4,16	49,47±10,56
Test/p		2,862/0,04	5,103/0,00	3,955/0,00	5,624/0,00
School					
Health	602(66,4)	19,36±5,45	19,46±4,73	15,70±4,06	54,53±10,26
Non-health departments	304(33,6)	18,76±5,08	18,84±5,04	15,48±4,12	53,09±10,97
Test/p		1,596/0,11	1,815/0,07	0,773/0,439	1,905/0,05
Having a family member with a chronic disease					
Yes	267(29,5)	19,44±5,24	19,91±4,66	16,17±3,89	55,53±10,16
No	639(70,5)	19,04±5,37	18,98±4,89	15,40±4,14	53,43±10,61
Test/p		1,037/0,30	2,637/0,00	2,603/0,00	2,754/0,00
Living with an individual over 65 years of age					
Yes	172(19,0)	18,73±5,73	18,92±5,26	15,58±4,26	53,24±10,16
No	734(81,0)	19,26±5,24	19,33±4,74	15,64±4,04	54,24±10,60
Test/p		-1,154/0,24	-0,943/0,34	-0,190/0,85	-1,123/0,26

*t test

HLS: Health Literacy Scale

The relationship between the sociodemographic characteristics of the participants and the subscales of the health tourism awareness scale is presented in Table 2. Considering Table 2, a statistically significant relationship was found between demographic variables of gender, and image ($p<0.05$). There was a statistically significant difference between the schools attended by the participants and the language-education dimension, one of the subscales of health tourism awareness ($p<0.05$).

Table 2. Sociodemographic characteristics of the participants and health tourism awareness scale and its subscales

Variables	N	Language-Education	Effects of Health Tourism	Image	Institutional Competence	HTAS Total
		Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
		17,80±4,26	16,40±3,87	14,99±4,48	12,83±3,39	62,04±13,67
Gender						
Female	626(69,1)	17,83±4,26	16,31±3,77	14,66±4,28	12,82±3,30	61,63±13,25
Male	280(30,9)	17,74±4,28	16,62±4,06	15,72±4,83	12,84±3,59	62,94±14,54
Test/P		0,295/0,76	-1,127/0,26	-3,306/0,00	-0,091/0,92	-1,329/0,18

Age						
18-20 years	465(51,3)	17,76±4,22	16,26±3,82	15,05±4,34	12,64±3,28	61,73±13,31
21 years and older	441(48,7)	17,85±4,31	16,55±3,91	14,92±4,63	13,02±3,50	62,36±14,04
Test/p		-0,299/0,76	-1,114/0,26	0,423/0,67	-1,674/0,09	-0,685/0,49
Nationality						
Turkish citizen	769(84,9)	17,78±4,38	16,38±3,86	14,90±4,49	12,84±3,46	61,91±13,98
Not a Turkish citizen	137(15,1)	17,94±3,52	16,54±3,89	15,48±4,44	12,77±3,00	62,75±11,79
Test/p		-0,484/0,62	-0,432/0,66	-1,408/0,16	0,215/0,830	-0,660/0,50
School						
Health	602(66,4)	18,12±4,22	16,47±3,87	15,04±4,37	12,85±3,47	62,50±13,90
Non-health departments	304(33,6)	17,19±4,28	16,26±3,87	14,88±4,70	12,77±3,24	61,12±13,16
Test/p		3,115/0,00	0,545/0,44	0,512/0,609	0,859/0,746	1,434/0,15
Having a family member with a chronic disease						
Yes	267(29,5)	17,42±4,35	16,42±4,08	14,61±4,47	12,73±3,55	61,20±14,02
No	639(70,5)	17,97±4,22	16,40±3,78	15,14±4,48	12,87±3,33	62,38±13,51
Test/p		-1,762/0,07	0,093/0,92	-1,625/0,105	-0,534/0,593	-1,188/0,23
Living with an individual over 65 years of age						
Yes	172(19,1)	17,35±4,62	16,37±4,18	14,62±4,50	12,93±3,67	61,27±14,37
No	734(81,0)	17,91±4,17	16,41±3,79	15,07±4,47	12,80±3,33	62,21±13,50
Test/p		-1,553/0,12	-0,137/0,89	-1,198/0,23	0,425/0,67	-0,812/0,41

*t test

SD: Standard Deviation

HTAS: Health tourism awareness scale

The relationship between the health tourism awareness scale and the health literacy scale is presented in Table 3. When the table was examined, a weak positive correlation was found between health tourism awareness and the total health literacy scale scores. The relationship between the subscales was also found to be weak.

Table 3. The relationship between the health tourism awareness scale and the HLS scale

Variables	Functional HLS	Interactive HLS	Critical HLS	HLS Total	Language-Education	Effects of Health Tourism	Image	Institutional Competence	HTAS Total
Functional HLS	1	0,164	0,120	0,629	-0,114	-0,177	-0,119	-0,081	-0,116
Interactive HLS	0,164	1	0,715	0,821	0,145	0,210	0,149	0,237	0,213
Critical HLS	0,120	0,715	1	0,778	0,138	0,186	0,135	0,248	0,202
HLS Total	0,629	0,821	0,778	1	0,063	0,130	0,061	0,164	0,117
Language-Education	-0,114	0,145	0,138	0,063	1	0,661	0,594	0,558	0,833
Effects of Health Tourism	-0,077	0,210	0,186	0,130	0,661	1	0,696	0,658	0,881
Image	-0,119	0,149	0,135	0,061	0,594	0,696	1	0,651	0,872
Institutional Competence	-0,081	0,237	0,248	0,164	0,558	0,658	0,651	1	0,823
HTAS Total	-0,116	0,213	0,202	0,117	0,833	0,881	0,872	0,823	1

Pearson correlation

HLS: Health Literacy Scale

HTAS: Health Tourism Awareness Scal

Discussion

In this study, the relationship between university students' awareness of health tourism and health literacy was attempted to be revealed. While the mean health literacy score of the participants in the study was 54.05±10.52, the mean score of health tourism awareness was 62.04±13.67. In this study, a relationship was found between gender and health literacy. In the literature review, there were studies with statistically significant results between gender variable and health literacy (Yılmaz and Günel, 2020, p. 553;

Yang et al., 2020, p. 5; Tuğut et al., 2021, p. 107; Öztürk and Tezel, 2022, p. 5). There are also studies that do not support the results of this study and that do not have a statistically significant relationship between the gender variable and health literacy. (Özdenk et al., 2019, p. 55; Evans, 2019, p. 232; Aslan et al., 2019, p. 1123; Tekin, 2019, p. 586; Ertaş and Göde, 2021, p. 6; Çelik et al., 2021, p. 599; Naveed ve Shaukat, 2021, p. 50; Munangatire et al., 2022, p. 5). Furthermore, it was seen in the study that the health literacy level of females was higher compared to males. The study of Yılmaz and Günel, and the study of Sarhan et al. also support the result obtained in this study (Yılmaz and Günel, 2020, p. 553; Sarhan et al., 2021, p. 858).

As a result of this study, no statistically significant relationship was found between the age variable and the total health literacy score. When the literature was reviewed, it was seen that there were studies supporting the result of the study (Evans et al., 2019, p. 232; Naveed and Shaukat, 2021, p. 50; Öztürk and Tezel, 2022, p. 5). In the study conducted by Yang et al., the age variable and health literacy were found to be statistically significant (Yang et al., 2020, p. 5). The fact that the group in this study consisted of students and did not include very different age groups may be the reason why there were no significant age-related differences. In this study, although there was no statistically significant difference in the HLS scores of foreign students, it was seen that their scores were lower compared to Turkish students. The fact that the majority of the foreign students (70%) studying at our university and participating in our study came from African countries may have affected this result.

In the study, no statistically significant relationship was found between having a chronic disease in the family, one of the demographic variables, and the interactive and critical health literacy dimensions, which are among the health literacy dimensions, and the total health literacy score. In the study conducted by Ozen et al. on nursing students, no statistical relationship was found between having a chronic disease in the family and health literacy. (Ozen et al., 2019, p. 399). Low health literacy is one of the important obstacles in the self-management of chronic diseases (Heijmans, et al., 2015, p. 2015). In this study, although there was no statistically significant relationship between the HLS scale and the individual with a family history of chronic disease, the HLS scale scores were higher in those living with individuals with chronic disease. Frequent visits to health institutions and increased interaction with health personnel in the treatment of chronic diseases may have led to an increase in the level of health literacy of people. There was no relationship between the variable of living with an individual over the age of 65 and the subscales of health literacy. Although chronically ill and elderly individuals often want to benefit from health tourism, living with elderly and chronically ill individuals did not cause an increase in the level of health tourism awareness.

When the relationship between the dimensions of health tourism awareness and demographic variables was examined in the study, the statistical significance in gender and school variables was remarkable. A statistically significant relationship was found between gender, one of the demographic variables, and the image dimension, one of the dimensions of health tourism awareness. In the study conducted by Dağlı in 2021, a statistical relationship was found between the gender variable and the image dimension (Dağlı, 2021, p. 54). In this study, no relationship was found between health tourism effects, language-education, institutional competence, which are among the dimensions of health tourism awareness, and gender. The results of Dağlı's study also support the results of this study (Dağlı, 2021, p. 54).

In this study, there was no statistical relationship between the dimensions of health tourism awareness and the age variable. In the study conducted by Dağlı, there was a relationship between the age variable and the effects of language-education and health tourism, however, no statistical relationship was found between image and institutional competence (Dağlı, 2021, p. 56).

In this study, while there was a statistical relationship between language-education, one of the dimensions of health tourism awareness, and the school variable, there was no relationship between the school variable and other dimensions of health tourism. In the study conducted by Dağlı, a statistical relationship was found between the dimensions of the effects of language-education and health tourism and the department variable (Dağlı, 2021, p. 60-61).

In the literature, there is no other study examining the relationship between health tourism awareness scale and health literacy scale, and in this study, it was determined that there was a weak positive relationship between health tourism awareness and health literacy scale.

Conclusion and Recommendations

The research results indicate that students have a moderate level of health literacy and health tourism awareness. A weak relationship was found between students' health literacy levels and their levels of health tourism awareness, as well as its sub-dimensions. To increase students' knowledge levels, it is recommended to provide education on health literacy and health tourism or offer elective courses. Considering that students are an active user group of social media, it is suggested to enrich social media content to enhance health tourism awareness. The contribution of health tourism to the country's economy should be emphasized. Especially, students who will serve as healthcare professionals should be made aware of the importance of increasing our country's health tourism potential and improving the public's health literacy level.

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