

The relationship between self-consciousness levels and health literacy of sports sciences faculty students

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Abstract. This study aimed to examine the relationship between self-consciousness levels and health literacy levels of individuals studying at the Faculty of Sport Sciences. The data of the study were collected from a total of 214 individuals, 107 women and 107 men, through an online form in the 2023-2024 academic year. In the study, the Self-Consciousness Scale developed by Fenigstein et al. [1975] and adapted to Turkish language and culture by Rugancı [1994] and the Health Literacy Scale - Short Form developed by Duong et al. [2019] and adapted to Turkish language and culture by Karahan Yılmaz and Eskici [2021] were used. It was established that the study data exhibited a normal distribution. Consequently, t-tests, ANOVA, Pearson correlation analysis, and regression analysis were conducted. The research findings indicated a positive relationship between the self-consciousness levels and health literacy levels of the students in the Faculty of Sport Sciences, with self-consciousness predicting 7.9% of the variance in health literacy.

1 Introduction

In order for an individual to know how to react to others and events, he/she must first be able to understand his/her own emotions. In this context, self-consciousness draws attention as the most important of emotional intelligence competencies [1]. Self-awareness is defined as the ability to recognize one's emotions and thoughts about those emotions. [2]. According to Goleman [3], self-consciousness is not an exaggerated reaction to the intensity of emotions or exaggerating what is felt, but a neutral state that enables one to be self-orientated while in emotions. Self-consciousness is a basic characteristic of individuals as well as a state related to awareness of who they are [4]. It is the individual's awareness of his/her weaknesses and strengths, recognizing his/her emotions, and using his/her awareness as a guide in his/her life [3].

Fenigstein, Scheier, and Buss [5] defined three aspects of self-consciousness. These are private self-consciousness, general self-consciousness, and social anxiety. The first dimension of private self-consciousness is self-reflection, and it is the ability to observe one's

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feelings, thoughts, and actions and to think about the questions of what I feel and how I behave in the situations that arise [6]. Another dimension of private self-consciousness is insight, which is a multidimensional skill that enables the individual to be aware of his/her strengths and weaknesses [7]. General self-consciousness, on the other hand, includes features that can be observed by other people such as appearance, and refers to the individual's ability to be aware of the reactions of other people [8]. Another dimension of self-consciousness is social anxiety. Social anxiety is the state of being anxious in one's interaction with other people and is usually caused by the fear of being evaluated negatively [9].

People with high self-consciousness will be able to better understand the people around them and what is happening as individuals with high levels of awareness who know their own feelings and can be sure of them [10]. Today, people are expected to adopt health protection and promotion practices, to have information about health services, and to participate actively in making decisions about health, as well as to know their rights and responsibilities [11]. In this context, it is important to explain the importance of these issues in the formation of healthy behaviors [12] and to make recommendations. Health literacy plays a crucial role in highlighting the significance of seeking, comprehending, and communicating health-related information through various processes [13].

Health literacy is the cognitive and social skills of individuals to access health information, understand the information, and reflect it on their behaviors to maintain their healthy state [14]. Health literacy enables the sharing of responsibility between health professionals and individuals receiving health services and the ability of both parties to understand each other during communication [15]. Low health literacy impacts health outcomes and costs through three main areas: access to health services, self-care, and communication with healthcare providers [11].

In the United States, a highly developed nation, it was found that 53% of adults possess moderate health literacy, 36% have inadequate health literacy, and 22% demonstrate basic health literacy skills [16]. A study in Turkey revealed that 24.5% of participants had inadequate health literacy, 40.1% had problematic health literacy, and 27.9% had adequate health literacy, with only 7.6% exhibiting excellent health literacy [17].

Health literacy can be analyzed by classifying it into three dimensions. These are functional, communicative, and critical health literacy [18]. Functional health literacy is based on basic reading and writing ability and means that individuals can read health-related materials [15]. Communicative health literacy refers to an individual's cognitive and social skills for interacting with health professionals. At this level, individuals can engage in various health activities and apply their knowledge when their health conditions change. [19]. In the dimension of critical health literacy, individuals can evaluate their health-related knowledge through a critical filter and can understand and interpret the social, political, and economic dimensions of health [20].

Self-conscious individuals' self-awareness and awareness of their behaviors may mean that they are also aware of their health-related behaviors. In this context, it is predicted that individuals with high self-consciousness can also recognize their health-related behaviors, read, and learn to change and improve their behaviors in this regard, which can positively affect their health literacy levels. The importance of health literacy in sports sciences is important both in the performance dimension and in the instructive dimension in order not to put the health of individuals at risk. Based on all these, this study aimed to determine the self-

consciousness levels and health literacy levels of sports sciences faculty students and to examine the relationship between self-consciousness levels and health literacy levels.

2 Method

In this study, the relational survey model was used to determine the relationship between self-consciousness levels and health literacy of sports sciences faculty students. The relational survey model is the examination of the relationship between two or more variables without intervening in the variables [21].

2.1 Study group

The sample group of the study consists of the students of the Faculty of Sport Sciences studying at state universities. The convenience sampling method was used to determine the sample group. With this method, it is aimed to save time, easy accessibility, and financial savings [22]. The study group of research consists of 214 volunteer participants, 107 women and 107 men.

2.2 Data Collection Tools

2.2.1 Personal Information Form

The personal information form used in the study was developed by the researchers. In the personal information form, there are questions such as age, gender, grade level, and department of study.

2.2.2 Self-consciousness Scale

In the study, the Self-Consciousness Scale developed by Fenigstein et al. [5] and adapted to Turkish language and culture by Rugancı [23] was used to measure the self-consciousness levels of the participants. The scale consists of 12 items and is a 5-point Likert scale (5=Strongly Agree, 4=Agree, 3=Disagree, 2=Disagree, 1=Strongly Disagree). The Cronbach alpha values of the questions related to private self-consciousness and general self-consciousness in the scale were found to be 0.61 and 0.83, respectively.

2.2.3 Health Literacy Scale

In the study, the "Health Literacy Scale- Short Form" developed by Duong et al. [24] and adapted to Turkish language and culture by Karahan Yılmaz and Eskici [25] was used to measure the health literacy levels of the participants. The scale consists of 12 items and there are no reverse coded items. The form is scaled on a 4-point Likert scale (4=Strongly Agree, 3=Agree, 2=Disagree and 1=Strongly Disagree). Cronbach alpha value of the scale was found as 0,856.

2.3 Data Collection

Before the data were collected, the necessary permissions for the scales to be used were obtained from the researchers who developed or adapted the scales. The data of the study were collected through an online form containing the scales. The participants who

volunteered to participate in the study were given the necessary information about the research before the data were collected.

2.4 Analysing The Data

In the research, it was determined that the skewness and kurtosis values of the data fell within the range of ± 1 , indicating a normal distribution. [26]. Accordingly, Independent T-test and One-Way ANOVA analyses were used to determine the differences between the groups. Pearson Correlation was used to determine the relationship between variables and Linear Regression analysis was used to determine the predictive power of the relationship.

3 Results

Table 1. The skewness and kurtosis values of the self-consciousness scale and the health literacy scale.

	Skewness	Kurtosis
Self-Consciousness	,197	-,542
Health Literacy	-,042	,468

When Table 1 is examined, it is concluded that the data related to self-consciousness and health literacy are in the range of +1 and -1 and show normal distribution.

Table 2. Correlation table for the relationship between age and self-consciousness and health literacy

		Self-Consciousness	Health Literacy
Age	r	,002	,040
	p	,974	,556
	N	214	214

No relationship was found between age variable and self-consciousness and health literacy ($p < 0.05$).

Table3. Table for t-test analysis of gender variable

Variable gender		N	\bar{x}	SD	t	p
Self-consciousness	Male	107	3,3754	,66187	-2,0823	,039
	Woman	107	3,5576	,61764		
Health Literacy	Male	107	3,0358	,48579	-0,1531	,878
	Woman	107	3,0452	,40296		

When the table is examined, the self-consciousness level of individuals differs in favour of women according to gender variable [$p < 0,05$]. However, no statistical difference was found in the health literacy variable according to gender [$p > 0,05$].

Table 4. ANOVA analysis of the class variable

	Grade Level	N	\bar{x}	SD	F	p	Source of Difference
Self-Consciousness	1	66	3,44	,61	3,749	,012	2-4
	2	51	3,26	,60			
	3	36	3,49	,57			
	4	61	3,66	,72			
	Total	214	3,47	,65			
Health Literacy	1	66	3,05	,38	1,003	,392	
	2	51	2,97	,42			
	3	36	3,01	,41			
	4	61	3,11	,54			
	Total	214	3,04	,45			

When Table 4 was examined, it was concluded that the levels of self-consciousness differed according to the grade level variable and that this difference was due to the 2nd and 4th grade undergraduate students. No difference was found in health literacy levels according to the class level variable ($p < 0,05$).

Table 5. Table for ANOVA analysis of the department variable

		N	\bar{X}	SD	F	p	Source of Difference
Self-Consciousness	Physical Education and Sports Teaching	42	3,61	,68	3,436	,018	PEaST-CE
	Sport Management	79	3,54	,67			
	Coaching Education	85	3,30	,59			
	Recreation	8	3,75	,51			
	Total	214	3,47	,65			
Health Literacy	Physical Education and Sports Teaching	42	3,20	,57	3,202	,024	PEaST-CE
	Sport Management	79	2,99	,41			
	Coaching Education	85	2,99	,39			
	Recreation	8	3,24	,40			
	Total	214	3,04	,45			

According to the table, it was concluded that there was a significant difference in both self-consciousness levels and health literacy levels according to the department variable and that these differences were between the physical education teaching department and the coaching education department.

Table 6. Correlation analysis of self-consciousness and health literacy

		Self-Consciousness	Health Literacy
Self-Consciousness	r	1	,289**
	p		,000
	N	214	214
Health Literacy	r	,289**	1
	p	,000	
	N	214	214

The correlation analysis concluded that there is a significant positive relationship between self-consciousness and health literacy ($p < 0.05$).

Table 7. Regression analysis of self-consciousness and health literacy

Dependent Variable: health literacy					
Variables	B	Standard Error	β	t	p
(Constant)	2.349	.160		14.679	.000
Self-consciousness	.200	.045	.289	4,398	.000
R ² =.084, adj.R ² =.079					
F=19,344, p=.000				Method: Enter	

As a result of the regression analysis, it was concluded that the level of self-consciousness predicted health literacy at a low level of 7.9%.

4 Conclusion

In the study, the effect of the self-consciousness level of individuals receiving undergraduate education in a higher education institution in the field of sports sciences on health literacy was examined. In this context, department, class and gender variables were also examined in the focus of dependent and independent variables. The related results were evaluated within the scope of the literature and presented in this section.

According to Table 2 no significant relationship was found between self-consciousness and age. Titrek et al. [27] concluded that self-consciousness differed significantly according to age in their study with university students. Table 2 shows that there is no significant relationship between age and health literacy. Unlike the findings of the study, İnkaya and Tüzer [28] concluded that there was a significant relationship between age and health literacy levels. Deniz [29], in his study on e-health literacy, found that there was a significant difference in the health literacy levels of individuals according to the age variable. It is thought that this difference between other studies and our study may be the age range differences of the individuals in the sample group representing the population.

An examination of Table 3 reveals a significant difference in self-consciousness levels between genders, with women scoring higher. Titrek et al. [27] found in their study that there was a significant difference in self-consciousness levels among pre-service teachers based on gender, with men showing higher levels. A similar result to this study is similar to Titrek's [30] study İlgar and Parlak [9] determined in their study that the gender variable did not significantly affect self-consciousness levels.

When Table 3 is examined, it is concluded that the gender variable does not make a significant difference in the health literacy levels of individuals. Deniz [29] concluded in his study that there was a significant difference in favour of women on health literacy according to gender variable. A finding similar to our research was found in the study conducted by İnkaya and Tüzer [28]. Likewise, the study by Ertaş et al. [31] concluded that there was a significant difference in health literacy levels based on the gender variable. It is believed that the varying results arise from the differences between the sample groups in these two studies and the sample group of our research.

When Table 4 was examined, it was concluded that the health literacy levels of individuals differed significantly according to the class variable. This difference was found

to be in favour of the 4th grade students between the 2nd and 4th grade students participating in the study. Accordingly, it can be predicted that as the class level increases, the health literacy level of individuals may increase. In Table 4, it was concluded that there was no significant difference in self-consciousness levels according to the class variable. Accordingly, it can be said that the class level does not make a difference in the self-consciousness levels of individuals.

When analyzing Table 5, it was discovered that there was a significant difference in self-consciousness levels based on the department variable. This difference was found to be between the physical education teaching department and the coaching education department. It was concluded that there was a significant difference between the health literacy levels of the individuals and the department variable and this difference was between the physical education teaching department and the coaching education department. It is believed that this difference may be attributed to the pedagogy courses taken in the department of physical education and sports teaching.

Table 6 shows that the correlation analysis of the relationship between health literacy levels and self-consciousness levels among students of the Faculty of Sport Sciences revealed a significant positive relationship between these two variables. In Table 7, in the regression analysis conducted to determine the predictivity of the relationship between self-consciousness levels and health literacy levels of sports sciences faculty students, it was concluded that self-consciousness predicted health literacy at the level of 7.9%. It is thought that the reason for this predictiveness is due to the nature of self-consciousness. Increasing the level of self-consciousness of individuals is a factor that increases awareness in various fields. It can be stated that the related situation is positive in the subjective world of the individual. For this reason, these days when the preparations for the transition of individuals studying at the undergraduate level to new curricula following today's educational understanding are being made, it is thought that an update to the curriculum programs, including the relevant features, will contribute

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