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The Effect of Leisure Literacy on Leisure Exercise in University Students

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Abstract: Within the scope of the research, which aims to determine the leisure literacy and leisure exercise levels of the university students who volunteer in sports organizations, it is aimed to analyze the relationship and the differences of certain variables with measurement tools, as well as to examine the relationship and impact between leisure literacy and leisure exercise. In this context, 207 sports organization volunteers who participated in the study participated in the data collection, as well as a demographic information form, as well as the "Leisure Literacy Scale" and "Leisure-Time Exercise Scale" was used. In this study, the internal reliability coefficient for the Leisure literacy scale was .94 and .70 for the leisure exersice questionnaire. Descriptive statistics, independent sample t test, one-way analysis of variance (ANOVA) test and Tukey (HSD-LSD) test and Pearson Correlation test and regression analysis were used for data analysis. The findings reveal that participants have high leisure literacy (81.25 ± 14.04) and men exhibit more active leisure exercise levels, certain variables change leisure literacy and leisure exercise levels. On the other hand, positive strong relationships between leisure literacy and leisure exercise were determined, and leisure literacy was found to have a positive effect on leisure exercise level. As a result of the research, it can be stated that the volunteer participants who take part in sports organizations and evaluate their leisure time actively, the literacy knowledge, background and action level for their leisure time is an important factor that makes individuals spend their leisure by exercising.

Keywords: *Sports organization, volunteer, university students, leisure literacy, leisure time exercise.*

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Introduction

Literacy is a concept related to the perception, understanding and understanding of the life in which a person lives and the objects and events within this life and placing a meaning in all relations in his social life. Today, literacy is more than an action with writing symbols, it is an educational term that expresses many mental skills, communication skills and attitudes using language. Literacy is an indicator of one's success in society (school success, professional success, life success) as well as one of the most important criteria that show the development status of their society (Asici, 2009). Literacy; remembering is an important element that is conceptualized as a means of understanding, interpretation, creation and communication (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2019). The feature of being a communicative symbol that is meaningful by the society appears as a feature that motorizes literacy, renews and makes it meet the needs of the age. Because the expectations and values of the society show a different feature in every age; social acceptance and meanings change according to the characteristics of the age. Therefore, literacy is conceptualized as a skill required by the age in this sense (Kurudayoglu & Tuzel, 2010).

In addition to the regular literacy perceived by the society, new literacy elements have started to be mentioned. In addition to health, media, technology, information literacy, new literacy aspects such as physical and visual literacy have begun to take place in daily life. Recently, leisure literacy, a new direction of literacy, has come to the fore. In parallel with the developments in literacy-related concepts, the concept of literacy in various fields has been shown similar attention (Arslan, 2013; Bjorgen & Erstad, 2015; Candy, 2003; Livingstone, 2004; Roetert et al., 2018; Webber & Johnston, 2000; Whitehead, 2001).

Practitioners and researchers from various disciplines (eg health, justice, education and recreation) state that many people who can take advantage of leisure or recreation opportunities in their communities lack leisure literacy. Leisure literacy refers to the knowledge, skills and confidence to participate in leisure time, which is personally motivating and

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promotes health. Subtracting these results from leisure and recreation experiences means that individuals should be "equipped for the journey. Its primary importance is leisure literacy. Leisure literacy refers to knowledge and skills to understand and experience leisure time". Leisure literacy can be achieved through leisure education (Hutchinson & Robertson, 2012). Since the concept of literacy is adopted to understand leisure time, leisure literacy can be explained as an individual's point of view and value, which leads to the participation or selection of one's leisure activities (Dai et al., 2019).

The development of leisure literacy can be supported by formal and informal education. Leisure activities are part of programs in schools where the education curriculum is followed (Eldeniz Cetin & Cay, 2019) as well as an important part of life. In this way, education is the only tool by which the moral values can be instilled, the talents are increased and the knowledge is built between individuals. It also helps the individual's harmonious development. A well-trained person does everything effectively and efficiently (Hamid & Parvez, 2020). Education, however, is one's innovative perspective also contributes to being positive (Kurtipek & Gungor, 2019a) and the leisure is a very valuable component of community development, and awareness of its advantages and benefits is important. Leisure literacy should be a social goal because community development depends, among other things, on the personal development of its members (Sivan & Ruskin, 2000).

Leisure literacy; to be aware of the benefits, preferences and possibilities of leisure and leisure activities and to transform this awareness into action / practice. In other words, to have a life style in which leisure literacy is transformed into behavior and the right leisure activities are turned into behavior. A leisure literate individual; knows how to acquire the knowledge and skills needed to participate in the right leisure time activities and use these knowledge and skills in the development of himself and the society; is a person who has skills in various types of leisure time activities and can actively participate in the types of activities where he can achieve positive gains (Arslan, 2018).

These active participation providers coincide with Stebbins' (1982; 1996; 2001; 2004; 2007; 2009; 2015) serious leisure theory. Participants who take part in sports organizations voluntarily are the best examples of leisure time using volunteering activities. At this point, volunteering activities (Stebbins, 2013), which are considered both as a job and voluntary engagement, have the ability to combine work and leisure time. Serious leisure is defined as "systematic pursuit of an amateur, hobbyist, or volunteer activity sufficiently substantial, interesting, and fulfilling for the participant to find a (leisure) career there acquiring and expressing a combination of its special skills, knowledge, and experience" Stebbins, 2007b). Serious leisure is a systematic pursuit of amateur, hobby or voluntary activity, it is important, interesting and satisfying for the participant to find a leisure career out there that acquires and expresses a combination of special skills, knowledge and experience. Due to the pronounced emotion expressed in this definition of having a career, this kind of leisure time activity is sometimes called a "career volunteer" (Stebbins, 2009).

Volunteering is a social initiative or a civil initiative, only by coming from within and believing that it is true, without the expectation of a material response or an expectation of another interest, to improve the quality of life of individuals other than their family or immediate environment, to achieve a goal that is generally considered to be of interest to the public. It can be defined as supporting the activities within the community organization (Gungor, 2014; Kara, 2012; 2004; Palabiyik, 2011; Stebbins, 2004, 2009; 2013; Yonten Balaban & Coban Ince, 2015). Volunteers perform different functions in many subjects in daily life. Primarily human and society; health, education, culture, environmental protection, social services, sports and aid, traffic, park, disabled people, women and children, library, assistance to the elderly, and those targeting the poor and the poor and other services. Leisure and extracurricular organizations are structures where systematic divisions of labor are required freedom to choose (Kurtipek & Gungor, 2019b; Sejtanic & Lalic, 2016). Volunteers working in the organizations evaluate their personal qualities for the success of the organization with their own wishes (Kara, 2012). Within the scope of volunteering activities, it is possible to have knowledge and knowledge about certain activities within the organization. One of the mentioned information and experiences is physical exercise skill. While the individual maintains an active life through activities, on the other hand, the ability to be physically active, which he can transfer to his daily life with the motivation of volunteering activities, is revealed. In this context, physical exercise may be defined as a subset of physical activities that are planned and purposeful attempts to improve health and wellbeing (Bauman, 2004; Carpersen, 1985; Edward, 2002). Exercise involves physical movement that increases the rate of energy expenditure and is engaged in for the purpose of getting fit (Lumpkin, 2017).

Exercise that takes place in physical activity; they are specially designed and repeated actions that are planned for fitness or to improve health. It may include the whole body or some related parts. The main purpose of planned structured physical activity / exercise is to increase physical fitness (Polat, 2016). Inadequate physical activity is one of the leading risk factors for death worldwide. Globally, one in every 4 adults is not active enough. Over 80% of the world's adolescent population is physically inadequate (World Health Organizations [WHO], 2018). The importance of physical exercise in leisure time in the light of the data appears. The recommended exercise level for adults aged 18-64 is 75 minutes per week and moderate intensity (World Health Organizations [WHO], 2018). Increasing physical exercise of leisure time is an important goal of public health programs in the developed world (Stephoe et al., 1997). Significant health benefits can be achieved by adults, including moderate physical activity, in weekly routines (for example, often 30 minutes of brisk walking, 15 minutes of running or 45 minutes of volleyball, if not every day of the

week). Regular physical activity improves health by reducing the risk of premature death, dying from heart disease, developing type 2 diabetes, developing high blood pressure, or developing colon cancer. Daily, moderate physical activity helps reduce blood pressure in people who already have high blood pressure, reduces feelings of depression and anxiety, helps weight control, helps older adults move stronger and better without falling, and promotes psychological well-being (Lumpkin, 2017) Physical inactivity is an independent risk factor for cardiovascular disease and diabetes. High level of moderate / strong physical activity is associated with positive health outcomes (Gando & Muraoka, 2015).

With leisure literacy, it will be inevitable for individuals who have become aware of the importance of spending leisure time efficiently. Therefore, leisure literacy levels of individuals who take part in active activities such as sports organizations, and therefore how leisure literacy affects leisure physical exercise levels were tried to be evaluated within the scope of the research. The relationship between the participants' leisure physical exercise levels and their leisure time, as well as how certain variables change these levels, are other elements that are aimed to be examined in the research.

Method

The research was prepared with quantitative method and survey model was used. Survey model; It is a research approach that aims to describe a situation in the past or still as it exists. The event, individual or object that is the subject of the research is tried to be defined in its own conditions and as it is. No effort is made to change or influence them in any way. There is something to be known and is there. The important thing is to be able to "observe" it appropriately (Karasar, 2008: 77). In this context, it was tried to determine what leisure literacy and leisure exercise levels of university students who volunteer in sports organizations, and how the some variables changes these levels, as well as whether leisure literacy level had an impact on leisure exercise.

Sample

The sample group who is university students and also working as volunteer in Turkey Automobile Sports Federation from Ankara, Antalya, Eskisehir, Istanbul and Konya depending on the provincial boards are involved to research. The participants consist of 207 volunteers working in sports organizations such as off road and wrc and rally sports. Descriptive information obtained with the demographic questionnaire is given below.

Tablo 1. Descriptive statistics about the participants (N=207)

	Variable	**f**	**%**
Gender	Male	136	65,7
	Female	71	34,3
Age	Below 21 years	61	29,5
	21-25 years old	80	38,6
	26 years old and above	66	31,9
Daily leisure time	Less than 1-2 hours	32	15,5
	1-2 hour	48	23,2
	3-4 hour	103	49,8
	5 hours and more	24	11,6
Leisure adequacy	Adequate	126	60,9
	Unadequate	81	39,1
Efficient leisure	Yes	119	57,5
	No	88	42,5
Duration of volunteering	Less than 1 year	37	17,9
	1 year	35	16,9
	2 year	57	27,5
	3 year	43	20,8
	4 years and over	35	16,9

The majority of the participants are male (65.7%), 21-25 years old (38.6%), having 3 to 4 hours of daily leisure (49.8%), It consists of participants, who find their leisure adequate (60.9%), who stated that they had efficient leisure time (%57.5), and that they have been involved in volunteering activities for 2 years (27.5%).

Instrument

The data were obtained through face to face questionnaire collection technique during organizations. Of the 256 data obtained, 207 of the complete responses were evaluated. In addition to the personal information form, "Leisure Literacy Scale" developed by Arslan (2018) was used to collect the data. The measurement tool consists of 3 sub-

dimensions and 21 questions: basic leisure literacy, functional leisure literacy and actional leisure literacy. In this study, the internal reliability coefficient for the leisure literacy scale was .94.

On the other hand, "Leisure-Time Exercise Scale", which is developed by Godin and Shephard (1985) and validity and reliability study was adapted to Turkish by Yerlisu Lapa et al., (2016) is used to measure the level of leisure time exercise of individuals volunteering in sports organizations. The measurement tool was designed in the form of a total score by determining the challenging, moderate and mild exercises performed in the leisure time by asking the participants to evaluate the last 7 days in at least 15 minutes or more. The internal reliability coefficient for the leisure exercise questionnaire was .70.

Analysis of the data

According to the skewness and kurtosis tests conducted for the distribution of the data obtained in the study, it was observed that the data did not deviate from the values of +3, -3 (Cohen, 2010) and similarly, other normality tests supported this finding. Therefore, since the data were determined to be normally distributed, the data were analyzed by parametric tests. While analysis; descriptive statistics, independent sample T test, one-way analysis of variance (ANOVA) test, Tukey (HSD-LSD) test, Pearson Correlation test and regression analysis were used for in-group comparisons. The significance value was determined as $p<0.05$ in the measurements. Findings obtained in accordance with the analyzes made in the research are given below.

Results

In this section, the analysis made with the data obtained within the scope of the research is given. In this context, descriptive statistics for measurement tools and comparisons with some variables are given below.

Table 1. Arithmetic mean and standard deviation values for measurement tools (N=207)

	Min.	Max.	$\bar{x}$	SD
Leisure literacy	21	105	81,25	14,04
Basic leisure literacy	10	50	42,37	8,59
Functional leisure literacy	8	40	27,67	5,15
Actional leisure literacy	3	15	11,2	2,65
Leisure –time exercise	0	119	37,76	25,17

As a result of the analysis, in which the arithmetic mean and standard deviation values for leisure literacy and leisure time exercise levels were determined, the participants showed a high level of leisure literacy (81.25 ± 14.04), the highest leisure literacy mean was in the basic leisure literacy sub-dimension (42.37 ± 8.59), and the lowest leisure literacy average was obtained in the sub-dimension of the actional leisure literacy (37.76 ± 25.17). Leisure time exercise remained below average (37.76 ± 25.17), but the analysis below includes a detailed description of leisure time exercise by gender.

Table 2. Distribution of leisure time exercise levels by gender (N=207)

	Male	Female	Total
Not sufficiently active	23	7	30
Moderately active	20	14	34
Active	93	50	143
Total	136	71	207

In the crosstab analysis, it is possible to say that male participants are more active than female participants. While 23 male participants who were not active enough were included in the study, this rate was 7 among women. In the moderately active group, it was determined that 20 men were moderately active and 14 of the women were moderately active. This rate shows that participants who actively participate in sports in leisure times have higher participation than all other groups, and that individuals who volunteer in sports organizations spend a very active leisure time. While 93 participants in men stated that they are actively evaluating their leisure time, it is revealed that 50 participants, the majority of women, are evaluating an active leisure time.

Table 3. Comparison of measurement tools and sub-dimensions by gender

	Gender	N	x̄	SD	t	p
Leisure literacy	Male	136	79,94	14,59	-1,875	0,062
	Female	71	83,77	12,65		
Basic leisure literacy	Male	136	40,86	8,74	-3,616	0,000*
	Female	71	45,28	7,54		
Functional leisure literacy	Male	136	27,88	5,38	-0,823	0,412
	Female	71	27,26	4,71		
Actional leisure literacy	Male	136	11,19	2,65	-0,088	0,930
	Female	71	11,22	2,65		
Leisure-time exercise	Male	136	39,63	28,71	1,485	0,139
	Female	71	34,18	15,96		

**p<0,05*

According to the independent sample t test findings between gender and leisure literacy and leisure time exercise, a significant relationship was determined between the participants' basic leisure literacy and gender variable (t = -3,616; p = 0.05). According to this; It was determined that female participants ($\bar{X}$ = 45.28 ± 7.54) showed higher basic leisure literacy average than male participants ($\bar{X}$ = 40.86 ± 8.74). When the leisure literacy was examined, it was found that women at all sub-dimensions achieved higher levels of leisure literacy than men, although there was no statistically significant difference. Although there is no statistically significant relationship between leisure-time exercise and gender, it is observed that men's leisure-time exercise scores are higher than women.

Table 4. Comparison of measurement tools and sub-dimensions by age

	Age	N	x̄	SD	F	p
Leisure literacy	21<	61	82,96	10,57	1,517	0,222
	21-25	80	79,15	17,53		
	26>	66	82,22	11,80		
	Total	207	81,25	14,04		
Basic leisure literacy	21<	61	44,18	7,04	2,816	0,062
	21-25	80	40,77	10,93		
	26>	66	42,65	6,05		
	Total	207	42,37	8,59		
Functional leisure literacy	21<	61	27,96	3,87	0,943	0,391
	21-25	80	27,06	5,64		
	26>	66	28,15	5,56		
	Total	207	27,67	5,15		
Actional leisure literacy	21<	61	10,81	2,03	0,934	0,395
	21-25	80	11,31	2,95		
	26>	66	11,42	2,76		
	Total	207	11,20	2,65		
Leisure-time exercise	21<	61	39,60	22,96	0,853	0,428
	21-25	80	39,11	27,45		
	26>	66	34,43	24,26		
	Total	207	37,76	25,17		

**p<0,05*

According to the ANOVA test findings in Table 4 between the participants' age variable and measurement tools, leisure literacy and leisure time exercise did not change significantly. However, the findings revealed that the levels of Total leisure literacy and basic leisure literacy were higher in the lowest age group. On the other hand, when the functional and actional leisure literacy was examined, the average of the highest age group was higher than the other age groups. Based on this finding, the fact that discursive literacy, knowledge and knowledge are acquired at a young age can only be deduced from the implementation at a later age. From the leisure time exercise dimension, it is seen that leisure time exercise levels are more common in the group under the age of 21. Assessment of leisure time with exercise can be associated with students under the age of 21 who have partially more leisure time.

Table 5. Comparison of measurement tools and sub-dimensions by daily leisure time

	Daily leisure	N	x̄	SD	F	p
Leisure literacy	Less than 1 hour	32	75,84[b]	12,95	2,828	0,040*
	1-2 hours	48	80,18	13,83		
	3-4 hour	103	83,68[a]	12,51		
	7 and more	24	80,16	19,59		
	Total	207	81,25	14,04		
Basic leisure literacy	Less than 1 hour	32	39,00[b]	7,22	3,407	0,019*
	1-2 hours	48	41,20	8,36		
	3-4 hour	103	44,06[a]	8,15		
	7 and more	24	41,95	11,0		
	Total	207	42,37	8,59		
Functional leisure literacy	Less than 1 hour	32	26,43	5,51	1,782	0,152
	1-2 hours	48	27,54	5,76		
	3-4 hour	103	28,40	4,25		
	7 and more	24	26,45	6,54		
	Total	207	27,67	5,15		
Actional leisure literacy	Less than 1 hour	32	10,40	2,89	1,437	0,233
	1-2 hours	48	11,43	2,62		
	3-4 hour	103	11,21	2,36		
	7 and more	24	11,75	3,40		
	Total	207	11,20	2,65		
Leisure-time exercise	Less than 1 hour	32	41,18	31,79	0,611	0,609
	1-2 hours	48	37,66	22,01		
	3-4 hour	103	35,80	22,32		
	7 and more	24	41,83	32,57		
	Total	207	37,76	25,17		

**p<0,05; a>b>c>*

According to the analysis findings, it was determined whether the daily leisure time changes with the level of leisure literacy and leisure time exersice, according to the findings of leisure literacy Total scores (F = 2.828; p <0.05) and basic leisure literacy (F = 3.407; p <0.05) A significant difference was determined according to the daily leisure time. As a result of examining the intra-group differences performed with Tukey HSD and LSD tests, there was a significant difference between the participants who had less than 1 hour and 3-4 hours of daily leisure time in both significant differences. Accordingly, it was found that participants who stated that they had 3 to 4 hours of leisure time per day showed more positive leisure literacy than those who stated that they had less than 1 hour of leisure time. At the same time, it is seen that there is a significant difference between the importance levels of leisure literacy according to the participants' daily leisure time. When the relations between the groups were analyzed, it was observed that the participants, who described the daily leisure time as 3 to 4 hours, gave more importance to leisure literacy compared to other groups. It was determined that daily leisure time has a significant but small effect value on leisure literacy ($\eta 2$ = 0.040), and similarly has a significant but small effect on leisure exercise ($\eta 2$ = 0.009).

Table 6. Comparison of measurement tools and volunteering category variable

	Volunteering category	n	x̄	SD	t	p
Leisure literacy	National	95	80,91	13,44	-0,32	0,749
	International	112	81,54	14,58		
Basic leisure literacy	National	95	42,98	8,5	0,944	0,346
	International	112	41,85	8,66		
Functional leisure literacy	National	95	26,84	4,21	-2,162	0,032*
	International	112	28,38	5,76		
Actional leisure literacy	National	95	11,08	2,68	-0,592	0,555
	International	112	11,3	2,63		
Leisure-time exercise	National	95	38,04	24,5	0,144	0,886
	International	112	37,53	25,83		

**p<0,05*

There is a statistically significant relationship between functional leisure literacy and volunteer task category according to the t test findings made between participants' sports organizations and leisure literacy and leisure time exercise (t = -2,162; p < 0.05). Accordingly, it was determined that the participants who were mostly involved in international sports organizations ($\bar{X}$ = 28.38 ± 5.76) had higher levels of functional leisure literacy than those who took part in sports

organizations at the national level ($\bar{X}$ = 26.84 ± 4.21).Table 7. Relationship analysis between measurement tools and sub-dimensions

	Leisure literacy	Basic leisure literacy	Functional leisure literacy	Actional leisure literacy	Leisure-time exercise
Leisure literacy	1				
Basic leisure literacy	0,931**	1			
Functional leisure literacy	0,818**	0,592**	1		
Actional leisure literacy	0,689**	0,537**	0,468**	1	
Leisure-time exercise	0,182**	0,143*	0,182**	0,148*	1

* p>0,05; ** p>0,01

According to Pearson Correlation analysis results, a significant relationship was found between the relationship between leisure literacy and leisure time exercise. Weakly positive between total leisure literacy and leisure time exercise (r = 0.182; p < 0.05), positive strength between basic leisure literacy and leisure time exercise (r = 0.931; p < 0.05), functional leisure literacy and A positive strong (r = 0.818; p < 0.05) relationship was found between leisure time exercise and finally a strong positive (r = 0.689; p < 0.05) relationship between actional leisure literacy and leisure time exercise.

The conditions examined for further analysis. First conditions is verified according to Field (2009) the predictor variables for the regression analysis, should not correlate too highly as in the table 7(r = 0.182; p < 0.05). The second condition has been tested by the determination of the extreme values in the data set, the total score and mahalanobis distance were calculated. Mahalanobis distance is used to detect the presence of extreme values that make it difficult to meet the linearity and normality in regression analysis. Since the outliers are not less than 0.01 from the data set according to Mahalanobis distance calculation (1 - CDF.CHISQ (MAH_1,4), the data set has been verified. The obtained conditions formed the basis for the regression analysis test between the measurement tools and the regression analysis was started in table 8.

Table 8. Results of simple linear regression analysis of the effect of leisure time exercise on leisure literacy

	B	**Std. Error**	**β**	**t**	**p**
Basic leisure literacy	0,074	0,269	0,025	0,276	0,783
Functional leisure literacy	0,65	0,427	0,133	1,523	0,129
Actional leisure literacy	0,688	0,794	0,072	0,866	0,387
R=0,197	R^2=0,024				
$F_{(2,721)}$=0,046	p<0.001				

Dependent Variable: Leisure time exercise

According to the regression analysis findings in which the effect of leisure time exercise on leisure literacy was examined, no statistically significant effect was determined. Although not statistically significant, leisure time exercise; basic leisure literacy (β = 0,025, t = -0,276; p< 0,05), functional leisure literacy (β = 0,133, t = 1,523, p < 0,05) and actional leisure literacy (β = 0,072, t = 0,866, p < 0,05) tends to increase the values for sub-dimensions. According to the findings; In addition to being statistically insignificant on leisure literacy types, leisure time exercise has a minor effect (R = 0.197).

Discussion

Research findings reveal that participants have a high level of leisure literacy (81.25 ± 14.04) and men exhibit more active leisure exercise levels, certain variables change leisure literacy and leisure exercise levels. On the other hand, positive strong relationships were determined between leisure literacy and leisure exercise, and leisure literacy was found to have a positive effect on leisure exercise level. In a study, it was revealed that the questionnaire measuring the leisure literacy of Chinese tourists developed in Asia and the analysis of leisure literacy in the same study would have different results in different cultural infrastructures. The findings also shed light on research that leisure literacy may be the mediator of the impact of leisure education on leisure satisfaction. The study also suggests that with the development of leisure literacy, participation in leisure activities will increase and will create leisure satisfaction (Dai et al., 2019). In this context, the importance of literacy is outstanding. While participating in social activities and leisure activities in many areas of life, the importance of literacy is important for participation in the social world (Barton, 2001). Based on the assumption that basic literacy may affect participation in leisure activities, another study examined the interrelationship between basic literacy level participation in leisure activities and cognitive functions between

older adults with low and high literacy. After four years of research, older adults with high literacy levels were found to participate more in leisure activities afterwards, so a conclusion supporting the research findings is revealed (Lifshitz-Vahav et al., 2017). On the other hand, it is supported by the literature that leisure education practices carried out to improve leisure literacy positively affect participation in leisure activities (Caldwell et al., 2004, Dunn & Wilhite, 1997; Jordan et al., 2018) and the findings in question parallel to the increase in literacy level, leisure time coincides with the finding that the level of physical exercise increases. It is observed that the literature on leisure literacy is limited. So much so that there are studies that see leisure literacy in the form of reading books in leisure time (Braten et al, 1999; Love & Hamston, 2003; Nippold et al., 2005; Tsai, 2007). However, leisure literacy involves not only having knowledge and equipment but also using this infrastructure in practice. Therefore, it is thought that the current research will contribute to leisure literacy research.

In another research that supports that physical education activities like sports organizations will increase the physical literacy of individuals and thus leisure literacy; It is stated that physical education offers a unique opportunity for children to learn the physical literacy and the physical skills and knowledge necessary for participation in sports and recreation (McFee & Tomlinson, 1997). Therefore, the knowledge, skills and equipment obtained play an active role in raising generations who are aware of the importance of active leisure time.

Research findings revealed that men exhibit a more active leisure physical exercise level than women. In a study, the research findings showing that women are more inactive than men show that the participants have a low level of leisure time physical activity, 24% of women and 6% of men define themselves as inactive (Ainsworth et al., 1992). In another study, it was also determined that men exhibit more leisure time exercise levels than women (Symons Downs et al., 2013). 4521 men and 4952 women participants were included in another study conducted to investigate the effects of social, economic and family conditions on the participation in weekly leisure exercises. The excess of daily working hours, namely insufficient leisure time, was an important factor in restricting participation in leisure time exercise. It is also possible to say that women's participation is less than men (Popham & Mitchell, 2006). In the research findings; although there is no significant difference, a finding is found in parallel with the finding that the participants with the highest leisure time show a higher level of leisure exercise compared to other leisure time.

The research findings show that 93 men and 50 women out of 207 participants performed weekly leisure exercises at a severe level. In the study, which is one of the researches suggesting that leisure time exercise, especially weekly active exercise participation affects many parameters, it was determined that there was a positive positive relationship between oxygen capacity and being doing severe leisure time exercise (Godin & Shephard, 1985). It is supported by the literature that participation in leisure exercise also increases well-being (Hartman et al., 2019; Lutz, 2007; Rabinowits et al., 1992). At the same time, another study investigating the relationship between moderate physical activity levels and well-being and health benefits shows that low to moderate exercise levels are associated with a range of health benefits, as well as well-being for women (Brown et al., 2000). The finding that increased leisure exercise level is associated with positive mood also stands out in their research in Giacobbi et al., 2005. In another study, it was determined that the environment of friends involved in activities such as volunteering activities is a significant predictor of participation in leisure exercise (Okun et al., 2002). In the light of all these findings, it is possible to say that many factors change and affect the level of leisure time exercise.

Conclusion

As a result of the study, it can be stated that the volunteer participants who take part in sports organizations and evaluate their leisure time actively, the literacy knowledge, knowledge and action level for their leisure time, is an important factor that makes individuals spend their leisure time by exercising. It is thought that awareness and participation in leisure activities will increase with increasing leisure literacy. As a result of the research, it is revealed that knowledge and awareness of leisure time increases the situation of turning to things useful for individuals such as leisure exercise. In this context, the increase in leisure literacy provides a significant gain towards the autonomous and beneficial use of leisure time. Leisure literacy and leisure exercise are considered to be important elements to be delivered to individuals. As conclusion, it can be said that the increase in the level of leisure literacy brings individuals to positive points such as leisure exercise and is an issue to be emphasized. In the literature, leisure literacy and the quantitative inadequacy of physical exercise activities in leisure time, which constitute an important part of our lives, are observed. It can be said that leisure literacy is an area that should be supported by illuminating it with more academic studies. Identifying leisure literacy and leisure physical exercise rates in different groups, and designing leisure programs and planning to serve the need and purpose, strengthening the infrastructures of individuals towards leisure by awareness, knowledge and action, is a very important approach for human life.

Recommendations

It remains one of the areas that haven't been studied much on leisure literacy and has not been thoroughly analyzed. In this context, quantitative studies can be carried out by increasing the number of sample groups, and qualitative studies can also investigate the factors affecting leisure literacy. In addition to this, when the concept of literacy, which is the basis of knowledge, skill and experience, is viewed from the evaluation of leisure time, awareness raising studies

should be conducted on the importance of effective and efficient leisure time. At this point, by designing leisure literacy programs, it will be very meaningful to increase the level of knowledge, skills and awareness of the participants, and to evaluate the leisure time activities, which are quite passive in this context, with leisure exercises, which is one of the active leisure time activities, to create individual and social benefits. Research on different groups can reveal the level of leisure literacy by referring to different educational levels, gender, socio-economic levels. In parallel, recreation programs can be designed in practice. At the same time, the transfer of leisure literacy information within the scope of extracurricular activities is of great importance in gaining the habit of spending leisure time with meaningful activities such as exercise. In this context, collaboration with different educational institutions can be achieved to increase leisure literacy and parallel leisure exercise levels.

Limitations

The research was limited to 207 university students studying in Ankara and volunteering in sports organizations. The research is also limited to the answers given to the questions in the measurement tools.

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