

The relationship between leisure satisfaction, physical activity level and healthy life-style behaviors of sport science students during the COVID-19 pandemic

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Abstract

Background and Study Aim The purpose of the study was to determine the relationship between leisure satisfaction, physical activity levels and healthy life-style behaviors of sport science students during the COVID-19 pandemic in distance education.

Material and Methods In total, 218 sport science students participated in this study voluntarily. The short form of International Physical Activity Questionnaire was administered for the determination of physical activity level of distance education students. Their physical activity levels were categorized as inactive, minimally active, and physically active by using Metabolic Equivalent Term method. Health-promoting Life-style Profile Questionnaire was used with self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management subscales. The leisure satisfaction scale was administered for the determination of leisure satisfaction.

Results: Results of Pearson's Product Moment Correlation Analyses indicated that there were positive significant correlations between "HLSB" and three sub-dimensions of "IPAQ" (MIA, VIA and Total). It was found positive correlation between "HLSB" and all sub-dimensions of "LSS" (Psychological, Educational, Social, Relaxation, Physiological and Aesthetical). Also, a significant positive correlation was found between four sub-dimensions of "LSS" (Social, Relaxation, Physiological and Aesthetical) and one sub-dimensions of "IPAQ" (W). It was observed that one sub-dimensions of "LSS" which is "Aesthetical", and a positive correlation between all sub-dimensions of "IPAQ" was found.

Conclusions: The findings of the present study indicated that healthy life-style behaviors were indicators of LSS and IPAQ and also aesthetical was found between IPAQ of sport science students.

Keywords: sport science students, leisure satisfaction, healthy life-style behaviors, physical activity

Introduction

In today's world, with the development of technology, the concept of time has become more important, and methods of utilizing time and the value of being effective increase every single day. Because individuals who use their time efficiently are both contended in their personal and family lives and they perform successfully at work. Therefore, the effective use of time can help students of sports science fulfill their academic and sportive responsibilities, attain the level of success that is expected of them and achieve personal satisfaction.

Higher education, within the university setting, some institutions offer only distance education, while others provide both distance and conventional education. And also distance education students physical activity levels dramatically decrease from adolescence to adulthood, as people get older. Especially, late adolescence and university years are seemed to be very critical period for the increased level of risky health behaviors such as irregular meals and sleep patterns, inactivity, bad eating habits and risk-taking behaviors like illicit drug, alcohol and tobacco use [1]. The development an individual's health may be provided by having and controlling better health status,

and by reaching a fully healthy potential. In order to reach this target, the individual should keep away from violence, not smoke cigarettes, avoid communication problems with his/her family, not use drugs, control a healthy weight, and limit alcohol intake, etc. [2]. Individuals who turn such behaviours into attitudes are healthy individuals as long as they keep being healthy and aim to even improve their health status. Behaviours that are developed to be healthy may be behaviours that the individual believes in and he/she applies in his/her life in order to remain healthy and keep away from sickness [3]. Healthy lifestyle behaviour is the control of all the behaviours and attitudes that affect health and arrangement of all the behaviours suitable for a healthy life [4]. Within this composition of behaviours, physical activity is nowadays becoming more prominent.

As it is known, immobility plays an important role in disability, and increases mortality risks. Today, it is an undeniable fact that regular physical exercise prevents or at least retards some chronic diseases [5, 6]. Furthermore, for a healthy society the individual should give importance to undertaking endeavours to protect his/her health. For this reason, depending on the relationship between activity levels and health, it is important to determine the frequency, duration, intensity and type of physical activity required for a healthy lifestyle [7]. In this sense, individuals begin

to consciously increase their physical activity, become healthier, and their leading of a healthy life increase their quality of life. If the physical activity of individuals during their studentship years become a habit, it will help them to lead a healthy life in their future life after graduation. In this sense, the students' knowledge and application of the aspects of healthy life and physical activity will give him/her an advantage in terms of quality of life. The results obtained in our research show that in general, the average points for healthy lifestyle behaviour of the students are at medium levels. This result may be put in a "good" category for our country which is a developing one. However, the sample in our research is made up of sports science students, therefore, we can say fairly that the healthy, intellectual, and cognitive capabilities expected from university education have not been sufficiently obtained. It is observed both in the media and in research that healthy lifestyle behaviours are debated all over the world and that endeavours are made, and efforts are spent in order to turn it into a habit. If individuals want to have a healthy future or if it is their aim to increase the quality of their life, it is necessary that they should adapt these behaviours to fit their lives. Therefore, having habits of physical activity from childhood onwards, making physical exercise an essential part of one's life and at least increasing daily physical activity are all important factors with respect to maintaining one's health and decreasing the risk of health threats that individuals may face in the future.

In this sense, increasing people's awareness of their physical activity also increases the quality of life for individuals, and makes them healthier. If physical activity habits are engrained in people's lives during their school years, then this will be a foundation for a healthy life in their future years. In this sense, if students know about the aspects of a healthy lifestyle and physical activity and if they apply these factors, this will provide them with advantages in their quality of life [8]. This study which has been designed within this context will be a basis for sport science students so that they can exhibit healthy behaviours and be good role models for their athletes to ensure that society grows old healthily. In this context, in order for the individual to be healthy, exhibit a healthy life-style and increase his/her life quality, he/she should increase his/her level of physical activity. In order that the individual can lay the foundation for a healthy life, he/she should make physical activity and exercise a habit in his/her student years at school so that this will have a lasting impact on him/her. The role of the elementary school teacher is very important in this respect, because his/her students who are in childhood usually consider him/her as a role model. In this sense, the fact that students perceive a healthy life-style and that they apply it in their daily lives will provide them with advantages from the viewpoint of a healthy life. Regular physical activity is a key health behavior from a public health perspective, as it has a remarkable impact on health. In respect to upper respiratory tract infection (URTI), caused by pathogens like COVID-19, physical activity may ameliorate pathological out-comes, by promoting the release of

stress hormones responsible for reducing excessive local inflammation within the respiratory tract and by inducing the secretion of anti-inflammatory cytokine. Several evidences have also demonstrated that physical activity can be effective in ameliorating the mental well-being and having the potential to prevent symptoms of mental health disorder such as depression and anxiety [9].

The concept of leisure time is defined as time spent away from compulsory duties such as sleeping, working, and eating and what is important is that people spend their leisure time more efficiently with quality activities [10]. Leisure time is generally referred to in correlation with positive concepts such as happiness, entertainment, and satisfaction, and is seen as an element that can bring about a positive lifestyle [56]. Leisure activities are important as they stimulate cultural and economic development, increase work efficiency, and support education and academic competence. In other words, leisure time is when individuals feel free and can express themselves [11]. Leisure time is a very comprehensive concept associated with tourism, artistic and cultural activities, and especially physical activity [12, 13].

Leisure satisfaction is the positive perceptions or feelings formed as a result of engaging in leisure activities [14]. This concept is also defined as the positive emotions that individuals attain as a result of satisfying their needs through recreational activities [15]. Additionally, leisure satisfaction indicates the level of fulfillment individuals perceive from leisure activities [16]. Leisure satisfaction significantly affects an individual's perception of life satisfaction [17] and is an active component of increasing quality of life and experiencing positive feelings towards life itself [18]. The concept of leisure satisfaction can contain a wide range of variables, which is demonstrated by the fact that the demographic, socio-cultural, educational, psychological, and economic factors that influence it [18, 19] differ among individuals. The literature review shows that regular participation in leisure activities leads to higher satisfaction as well as multivariate improvement in individuals [20-22].

The positive correlation between leisure satisfaction and job satisfaction, motivation, quality of life, education level, and life balance [18, 23, 24] emphasizes how important, productive, and effective leisure time activities are for the individual.

The objective of this study was to determine the relationship between leisure satisfaction, physical activity levels and healthy life-style behaviors of sport science students during the COVID-19 pandemic in distance education.

Material and Methods

Participants

In the study, two hundred eighteen male and female (male – n=128; female – n=90) students at Faculty of Sport Science in Bartın University participated voluntarily. Before data collection, the students were given information comprehensibility of the questions. Health-promoting life-style behaviors and physical

activity data were obtained with the questionnaire form by mailing with students.

Research Design

We utilized the descriptive survey model for research purposes. Descriptive survey models are conducted on the whole population or a group or sample to make a general judgment in a population composed of many elements [57].

Data Collection Tools

The Leisure Satisfaction Scale (LSS)

The “Leisure Satisfaction Scale (LSS)” developed by Beard and Ragheb [14] now the short form, which is the form used Hawkins et al. [25]. It was adapted into Turkish by Gökçe and Orhan [26] a 5-point likert scale and the scores go from “1 – Almost never true” to “5 – Almost always true”. There are 24 items on the scale and 6 sub-dimensions, namely Psychological, Educational, Sociological, Physical, Relaxation, and Aesthetic. The findings of the item analysis conducted on the Turkish validity of the measurement tool confirmed the six-factor structure of the scale. Although many methods are recommended for content validity, according to [27] the item, reliability, and validity analyses conducted following the production of the measurement tool actually prove the content validity of the tool. The internal consistency coefficient for the Turkish validity and reliability study of LSS was 0.90 for the general total, 0.77 for the psychological sub-dimension, 0.77 for the educational sub-dimension, 0.76 for the sociological sub-dimension, 0.80 for the relaxation sub-dimension, 0.79 for the physical sub-dimension, and 0.79 for the aesthetic sub-dimension. Since this result is between 0.60-0.80, which [28] stated as quite reliable, it means that LSS has internal consistency reliability.

Health-promoting life-style profile scale

The participants were asked to provide information about the demographic factors, such as age, gender, and education. Health-promoting Life-style Profile Scale was used for collecting data on their health behaviors. Health-promoting life-style profile scale was developed by Walker et al. [29] and composed of 48 items and 6 subscales and consists of questions about health-promoting behaviors. The subscales were on self-actualization (SA), health responsibility (HR), exercise (E), nutrition (N), interpersonal support (IS), and stress management (SM). The total score reflects the healthy life-style behavior. Four more items were added to the scale, and now the scale is composed of 52 items [30]. Each respondent was asked to rate each item on likerts’ 1 to 4 response scale where 1 corresponds to never, 2 sometimes, 3 often, 4 regularly. Alpha coefficient reliability of the scale was 0.92, and alpha coefficient reliability of the subscales varied from 0.70 to 0.90. The reliability of the scale for Turkish population was tested by Esin [4] and Akça [31]. Alpha coefficient reliability of the scale was 0.91 in Esin’s study and 0.90 in Akça’s study.

International Physical Activity Questionnaire (IPAQ)

IPAQ is a validated instrument to determine physical activity level of the participants [32]. IPAQ measures the

frequency, duration, and level of intensity of physical activity in the last seven days across all contexts and allows for the calculation of metabolic equivalents (MET). MET presents the weekly amount of physical activity. It is a product of frequency, duration, and intensity of the physical activity performed in the last seven days. Physical activity level was measured as hours per week (MET-hours/week) calculated according to the existing guidelines [33]. Based on the self-reported MET, frequency, and intensity of the physical activity, people can be classified into groups having low, moderate and high level of physical activity. Inactive (sedentary, low) group included the participants who reported lower than 600 MET-min/week of exercise. Minimally active (moderate level of physical activity) group included the participants who reported 601-3,000 MET-min/week of exercise, and physically active group (high, recommended level) included the participants who reported more than 3,000 MET-min/week of exercise. In this study, PA levels of the participants were evaluated through Turkish short version of IPAQ [34]. Translation and validation study of Turkish version for the university students indicated an evidence for construct validity, criterion validity (accelerometer-IPAQ short form) ($r=0.30$), and test-retest stability ($r=0.69$) [34].

Statistical Analysis

Means, standard deviations and range variability values are given as descriptive statistics, and the relationship between leisure satisfaction, healthy life-style behaviors and physical activity level was evaluated by Pearson’s Product Moment Correlation Analysis. All analyzers were executed in SPSS for Windows (version 16.0) and the level of statistical significance was set at $p<0.05$.

Results

The leisure satisfaction, physical activity levels and healthy life-style behaviors of sport science students during the COVID-19 pandemic in distance education in Bartın University as assessed in this study are displayed in Table 1, 2, 3 and 4 respectively. Table 3 shows the correlations between healthy life-style behaviors and physical activity level.

Descriptive characteristics of the subjects across body composition are shown in Table 1. Table 1 shows the average, standard deviation and range variability values of the body composition of sport science students during the COVID-19 pandemic in distance education in Bartın University. According to this table, the highest rate was reached in BMI for male and the lowest rate in female university students. Results indicated that the subjects have normal body mass index.

Table 2 indicates the average values of physical activity of the university students proved that the students had physical active group. As expected, male students had better scores when compared to the female students in all parameters listed. The mean values for physical activity were in the physically active group for both male and female students. The mean values for physical activity were in the physically active group for male but the mean values for physical activity were in the moderate level of

Table 1. Average, standard deviation and range variability values of the body composition of the sport science students

Participants	Age (years)		Body Weight (kg)		Height (cm)		BMI (kg/m ²)	
	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Sport Science Students (n=218)	21.53	1.91	68.42	13.72	172.73	8.71	22.72	3.20
	Min.	Max	Min	Max	Min	Max	Min	Max
	18	29	44	128	150	193	17.9	35.45
Male Students (n=128)	21.64	1.85	75.63	12.44	178.32	6.08	23.73	3.41
	Min.	Max	Min	Max	Min.	Max	Min	Max
	19	26	44	128	156	193	18.08	35.45
Female Students (n=90)	21.38	1.99	58.28	7.85	164.85	4.95	21.43	2.60
	Min.	Max.	Min.	Max.	Min	Max	Min	Max.
	18	27	45	78	150	176	17.99	27.30

BMI: Body mass index, kg: kilogram, cm: centimetre, m²: square meter, min: minimum, max: maximum

Table 2. Average, standard deviation and range variability values of the physical activity of the sport science students

Participants	W		MIA		VIA		T		Physical Activity
	Mean	STD	Mean	STD	Mean	STD	Mean	STD	
Sport Science Students (n=218)	899.85	1125.12	586.51	878.66	1644.22	1934.28	3130.58	2931.83	Physically Active Group (3000 - >MET-dk/week)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
	0	7276	0	3000	0	11520	0	12076	
Male Students (n=128)	1004.6	1286.7	641.2	1014.3	1995	2161.8	3640.9	3187.4	Physically Active Group (3000 - >MET-dk/week)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
	0	7276	0	6300	0	11520	0	12076	
Female Students (n=90)	750.75	828.00	509.66	635.37	1145.33	1422.83	2404.75	2356.50	Moderate Level of Physical Activity (600-3000MET-dk/week)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
	0	3118	0	3000	0	7560	0	8398	

W: Walking, MIA: Moderate Intensity Activity, VIA: Vigorous Intensity Activity, Total: T

physical activity group.

Table 3 shows the healthy lifestyle behaviors of the sport science students. According to this table, the highest rate was reached in self-actualization sub-scale and the lowest rate in exercise. This finding depicts the contradictory attitude of university students towards exercise.

Table 4 shows the leisure satisfaction of the sport science students. According to this table, the highest rate was reached in relaxation sub-scale and the lowest rate in aesthetic.

As seen in Table 5, Results of Pearson's Product Moment Correlation Analyses indicated that there were positive significant correlations between "HLSB" and three sub-dimensions of "IPAQ" (MIA, VIA and Total) and was positive correlation between "HLSB" and all sub-dimensions of "LSS" (Psychological, Educational, Social, Relaxation, Physiological and Aesthetical). Also, a significant positive correlation was found between

four sub-dimensions of "LSS" (Social, Relaxation, Physiological and Aesthetical) and one sub-dimensions of "IPAQ" (W). At the end of this table result observed that, one sub-dimensions of "LSS" which is "Aesthtetical", a positive correlation was found between all sub-dimensions of "IPAQ".

Discussion

This study explored the relationship between leisure satisfaction, physical activity levels and healthy life-style behaviors of sport science students during the COVID-19 pandemic in distance education.

It is important to find out the relationship between physical activity and healthy life-style behavior as the results would convey the need for more efficient opportunity of physical activities in student's life. Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. Physical

Table 3. Average, standard deviation and range variability values of the healthy life style behavior of the sport science students

Participants	Self Realization (SR)		Health Responsibility (HR)		Exercise (E)		Nutrition (N)		Interpersonal Support (IS)		Stress management (SM)		Healthy Life Style Behavior (HLSB)	
	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Sport Science Students (n=218)	41.98	6.22	27.14	6.08	14.85	3.47	18.98	5.72	22.74	3.71	20.88	4.06	146.31	21.76
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	16	52	13	40	5	20	6	24	16	28	10	28	54	192
Male Students (n=128)	42.69	6.29	27.67	6.04	15.46	3.56	19.64	6.96	23.32	3.68	21.67	3.93	149.98	22.07
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	16	52	15	40	8	20	6	24	17.9	28	14	28	54	192
Female Students (n=90)	40.97	6.00	26.37	6.10	14.00	3.46	18.03	3.02	21.93	3.61	19.74	4.00	141.08	20.30
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	28	51	13	40	5	20	12	24	16	28	10	27	82	190

Table 4. Average, standard deviation and range variability values of the Leisure Satisfaction Scale (LSS) of the sport science students

Participants	Psychological (PSY)		Educational (EDU)		Social (SOC)		Relaxation (REL)		Physiology (PHY)		Aesthetic (AES)		Leisure Satisfaction Scale (LSS)	
	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Sport Science Students (n=218)	3.65	0.80	3.87	0.82	3.75	0.78	3.97	0.78	3.62	0.78	3.62	0.77	3,74	0.78
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	1	5	1	5	1	5	1	5	1	5	1	5	1	5
Male Students (n=128)	3.66	0.88	3.93	0.86	3.81	0.85	3.94	0.84	3.65	0.81	3.65	0.81	3.77	0.84
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	1	5	1	5	1	5	1	5	1	5	1	5	1	5
Female Students (n=90)	3.64	0.69	3.80	0.74	3.66	0.67	4.01	0.69	3.59	0.75	3.57	0.65	3.75	0.69
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	1	2.5	2	5	2	5	2.5	5	1.25	5	2.5	5	1	5

Table 5. The relationship between leisure satisfaction, physical activity levels and healthy life-style behaviors of sport science students

Variables	PSY	EDU	SOC	REL	PHY	AES	LSS	W	MIA	VIA	T
SR	.307**	.338**	.372**	.358**	.257**	.395**	.397**	.140*	.210**	.294**	.310**
HR	.150*	.192**	.195**	.137*	.209**	.240**	.220**	-.025	.186**	.216**	.189**
E	.226**	.264**	.288**	.268**	.400**	.290**	.340**	.116	.266**	.321**	.336**
N	.142*	.168*	.159*	.120	.196**	.168*	.187**	.069	.087	.163*	.160*
IS	.334**	.321**	.418**	.336**	.364**	.413**	.428**	.123	.129	.202**	.219**
SM	.272**	.283**	.284**	.270**	.202**	.289**	.314**	.103	.209**	.270**	.281**
HLSB	.310**	.342**	.373**	.327**	.341**	.393**	.409**	.104	.248**	.325**	.328**
W	.102	.126	.140*	.138*	.149*	.141*	.156*	1	.222**	.273**	.630**
MIA	.078	.095	.115	.105	.102	.211**	.138*	.222**	1	.350**	.616**
VIA	-.025	.006	-.001	.027	.079	.176**	.050	.273**	.350**	1	.869**
T	.046	.081	.088	.102	.140*	.233**	.134*	.630**	.616**	.869**	1

*p<0.05; ** p<0.01; PSY – Psychological; EDU – Educational; SOC – Social; REL – Relaxation; PHY – Physiology; AES – Aesthetic; LSS - Leisure Satisfaction Scale.

inactivity (lack of physical activity) has been identified as the fourth leading risk factor for global mortality (6% of deaths globally). Regular physical activity and exercise help improve physical fitness (aerobic fitness, muscular fitness, flexibility, and body composition) of individuals and, therefore, promote a healthy life-style [35]. Also, regular physical activity and exercise help improve physical fitness of individuals, thus promoting a healthy life-style.

Sedentary life-style leads to a greater risk of developing coronary heart disease, hypertension, high blood lipid profile, type 2 diabetes, obesity, and some forms of cancer, like colon and breast cancer. Many studies reported that engaging in physical activity and exercise on regular basis lowers blood pressure, improves lipoprotein profile, C-reactive protein, and other CHD biomarkers, enhances insulin sensitivity, and plays an important role in weight management [36-38]. On the other hand, physical inactivity and lack of exercise result in many problems including threatening or limiting a healthy life. Although some students were found to be a similar physically active, but body fat percentage were high due to their diet. Body fat percentage can differ according to age, nutrition, race, environmental factors and gender. On the other hand, health and physical fitness improves quality of life. It is known fact that modern technology results in a sedentary lifestyle [39, 40].

The present study depicted that distance education sport science students in Bartın University are physically active group in terms of physical activity level and have an average score in healthy life-style behaviors and leisure satisfaction. But Özkan [41] found that distance education students in Hoca Ahmet Yesevi University are minimally active in terms of physical activity level and have an average score in healthy life-style behaviors. Türkmen et al. [42] and Çelik et al. [43] reached to similar findings in their researches, which were carried on students in Çanakkale 18 Mart University and Bartın University in Turkey. Besides another study which focused on the university students' physical activity levels found that 50% of them were inactive or exercising below the recommended level [44]. In another study carried out in Turkey, Nacar et al. [45], found that even the Sports High Schools do not have sufficient sport facilities for the students. Therefore, it is difficult to expect the students to have awareness of healthy lifestyle behaviors without the existence of necessary conditions [41].

Although the LSS total score and total score averages of all sub-dimensions were close according to the gender variable, the results proved to be in favor of the male participants. Studies conducted by Acar and Yılmaz [46] on the leisure satisfaction of university students, by Aydın and Yaşartürk [47] on elite athletes studying at university, by Serdar and Demirel [48], on sports science students, by Uluç, Duman, and Acar [49], with university students, by Yaşartürk [50] on sports science students, and by Yaşartürk and Bilgin [51], on university students competing in handball are in line with this study. According to the gender variable, the average scores of men in LSS and its sub-dimensions were higher than that of women. Additionally,

when Doğan, Elçi, and Gürbüz [52] examined the average scores according to the gender variable in their study, they found that women got higher scores in educational and physical sub-dimensions, while men got higher scores in psychological, sociological, relaxation, and aesthetic sub-dimensions. In a study conducted on physical education and sports teaching students Erdemli and Yaşartürk [53] examined the average scores according to the gender variable and reported that results were in favor of women in the psychological and physical sub-dimensions and in favor of men in the education, sociological, relaxation, and aesthetic sub-dimensions. Cengiz and Yaşartürk [54] examined the average scores according to the gender variable in their study on fitness participants and found that women got higher scores in the physical and sociological sub-dimensions, and men in the psychological, education, relaxation, and aesthetic sub-dimensions. Hadi, Erdem, and Duman [55] did not find a significant difference between individuals participating in recreational sports activities in terms of gender variables in LSS and its sub-dimensions. Results of other studies in the literature present similarities with our study, which shows that men attain more satisfaction than women as a result of leisure activities. The findings show that leisure activities significantly affect participants and leisure satisfaction will increase as the frequency of participation in such activities increases.

Conclusions

In conclusion the satisfaction sports science students attain from leisure activities will improve academic self-efficacy through individual and active participation, make students more mentally resistant during the COVID-19 pandemic and increase their motivation for education and healthy living.

Recommendations

Sports science students are recommended to do mental activities as well as physical activities, in order to develop healthy lifestyle habits during the pandemic period, as it will help them become less vulnerable to COVID-19.

During the pandemic, doing physical activities at home will be just as productive, therefore, sports science students are recommended not to disregard the importance of being active.

The satisfaction sports science students acquire from leisure activities will improve their living standards and it is recommended that they undertake various activities that will increase their motivation, particularly during the pandemic.

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