Correlation between Life Satisfaction, Body Satisfaction and Mental Well being in University Students doing Sports

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Abstract--- This study sought to evaluate the correlation between life satisfaction, body satisfaction and mental well being in university students doing sports. In line with the study purpose, the method of the quantitative study was correlational screening model. In the study, the researcher used the survey technic as data collection method and conducted the study on voluntary basis. The target population of the study comprised students receiving education within the body of İstanbul Gelişim University School of Physical Education and Sports and the sample comprised 260 students doing sports actively who were chosen via the simple random sampling method. The researcher applied "the Life Satisfaction Scale", "the Body Satisfaction Scale" and "the Mental Well Being Scale", as well as a personal information form to the participants. He identified the data acquired on the IBM SPSS 25.0 package program and performed relevant analyses via this program. The researcher used the Spearman's Correlation and regression analyses as statistical procedures. As a consequence, the researcher found that the School of Physical Education and Sports students had a good level of life satisfaction, body satisfaction perception and mental well being. There was a weak correlation between life satisfaction and body satisfaction in a positive direction and a moderate correlation between life satisfaction and mental well being in a positive direction. Life satisfaction had a positive impact on the total body satisfaction score, subscale scores and the mental well being level. Life satisfaction played a key role in the development of body satisfaction and mental well being of university students doing sports actively. Life satisfaction was considered a determinant variable in explaining body satisfaction and mental well being level.

Keywords--- Mental Well Being, Life Satisfaction, Student, Sports.

I. Introduction

Happiness and keys which provide it have been a subject explored by humans throughout history. Today the diversification of technological developments and their impact on human life have caused changes in people's lives and taken concepts to a different dimension. Life satisfaction, a concept which was mentioned for the first time by Neugarten in 1961, is described as an outcome created by comparing the expectations and opportunities of individuals (Özer and Karabulut, 2003). Researchers have tried to explain the concept of life satisfaction as a person's subjective well being, healthiness and happiness. However, there is no clear definition (Diener et al. 1985). Karatepe and Baddar (2006) defined life satisfaction as an emotional phenomenon emerging from evaluation of life. According to researchers who think from the perspective of cognitive theory, life satisfaction expresses people's convenience for the standards of living conditions (Diener et al. 1985). According to

researchers who do research from the perspective of affective theory, life satisfaction is a comparison of positive and negative emotions in the process of getting satisfaction from life (Frish, 2006). In general terms, individuals who have more positive emotions than negative emotions, enjoy life and have an optimistic point of view are expected to have higher life satisfaction (Çakar and Karataş, 2017). Adolescence which is accepted to be one of the most important periods of human life is a period in which emotional, social and mental stages are assessed. Adolescence is a period in which physical changes that are believed to affect social activities, cognitive capacities and sense of self occur (Harter, 1990). In this context, the process of accepting personality in a social circle is another factor accompanied by physical changes. However, as adolescents' area of interest is their body, changes that occur in adolescents during this period are perceived to be defects (Harris, 1987). In addition, the concept of body image which is important not only for adolescents but also for adults comes to the fore. Body image is our thoughts about our bodies which direct humans at specific points of life (Ertürk, 2006). When the image is positive, individuals believe that their appearance is the only determinant of their personality traits and abilities and ignore things like eating and gaining weight. A negative body image will emerge when a person is criticized by other people. People with a negative body image find themselves less attractive than others and feel ashamed of their appearance (Doğan, 2010). Body satisfaction is feeling content about the present body and having a positive point of view about the self despite inadequate and incomplete body sizes. It is actually possible to define body satisfaction as a person's overall satisfaction about his/her body in terms of size, shape and weight.

Mental well being is a phrase used for expressing the presence of mental health for every person who exists in social life. According to the World Health Organization, mental well being enables the person to be productive and useful in working life, overcome stress by making the right decisions, fulfil his/her tasks in social life and become useful for his/her society. Mental well being expresses having a positive self-evaluation, being happy during tasks and procedures despite specific limitations, establishing intimate and proper communication with other people, acting autonomously and independently and having a purpose and meaning in life (Cited from Keyes, Shmotkin and Ryff, 2002 by Sarı and Yıldırım, 2017).

The pleasure people within the sports sector take from life affects their body satisfaction level and plays a cognitively significant role in their emotions and thoughts. Therefore, people use many methods to have a healthy, delicate and better body (Mülazımoğlu-Ballı and Aşçı, 2004). They use methods such as surgical intervention, medication, acupuncture, diet, exercise and physical activity in order to reach appropriate body levels and preserve their physical properties. Physical activity which is among the primary methods recommended for a healthy body is usually preferred by people. This is mainly because people have begun to do physical activities less often in their daily life and adapted to a motionless life together with the development of technology (Bulut, 2010). Although Covid-19 which has affected the whole world has restricted sportive and physical activities, the correlation between the living standards, appearance, personality traits, abilities and mental well being of university students doing sports actively is an object of interest. Therefore, the present study sought to evaluate the correlation between life satisfaction, body satisfaction and mental well being in university students doing sports.

II. Method

Study Model

In the study, the researcher used the correlational screening model which is a research model aiming to determine the covariance presence and degree of multiple variables

(Karasar, 2017). The researcher used the survey technic as data collection method and collected data from the participants online on voluntary basis. He applied "the Life Satisfaction Scale", "the Body Satisfaction Scale" and "the Warwick-Edinburgh Mental Well Being Scale", as well as a descriptive information form created by the researchers to the participants.

Target Population and Sample

In line with the purpose of the study, the target population of the study comprised students receiving education within the body of İstanbul Gelişim University School of Physical Education and Sports. The sampling method used was the simple random sampling method which gives an equal and random opportunity to the entire population to be included in the sample and helps to obtain study results easily and quickly (Yazıcıoğlu and Erdoğan, 2004). The sample of the study (n=260) comprised voluntary participants.

Data Collection Tools

This section mentioned the descriptive information form created to determine the demographic characteristics of the participants who took part in the study, as well as the Life Satisfaction Scale, the Body Satisfaction Scale and the Warwick-Edinburgh Mental Well Being Scale.

Descriptive Information Form

The researcher asked the participants to answer five questions including the gender, age, department, grade and branch variables.

The Life Satisfaction Scale

Developed by Diener, Emmons, Larsen and Griffin (1985), the Life Satisfaction Scale (LSS) had a unidimensional structure and five items. Adapted into Turkish by Dağlı and Baysal (2016), the scale had answers ranging from strongly disagree to strongly agree. The Life Satisfaction Scale had no reversely coded questions and subscales. Dağlı and Baysal (2016) found the Cronbach's Alpha internal consistency coefficient of the scale to be 0.85.

The Body Satisfaction Scale

Avolos, Tylka and Wood-Barcalow (2005) developed the Body Satisfaction Scale. Adapted into Turkish by Bakalım and Taşdelen-Karaçay (2016), the five point likert scale had nine items. The lowest and highest possible scores obtainable from the scale were nine and 45, respectively. The scale had two factors. The Cronbach's Alpha internal consistency coefficient of the scale was .92. The scale had no reversely coded items. Items 1,2,3,4,5,8 and 9 constituted the body satisfaction subscale, while items 6 and 7 constituted the investment in body image subscale.

The Mental Well Being Scale

Tennant et al. (2007) developed the Mental Well Being Scale. Adapted into Turkish by Keldal (2015), the five point likert scale had 14 items. The lowest and highest possible scores obtainable from the scale were 14 and 70, respectively. The studies on the reliability of the scale which had a one factor structure found the Cronbach's Alpha coefficient of the scale to be .89 (Keldal, 2015).

Data Analysis

The researcher introduced the data acquired from the descriptive information form, the Life Satisfaction Scale, the Body Satisfaction Scale and the Warwick-Edinburgh Mental Well Being Scale to the IBM SPSS 25.0 package program and performed relevant analyses via this

program. He tested normal distribution of the scores by assessing normal distribution curves, Skewness-Kurtosis values, normal distribution curves via histograms and the Kolmogorov-Smirnov test which is used when the group size is greater than 50. The data of the total scales and subscales was normally distributed. The researcher used the Spearman's Correlation and regression analyses as statistical procedures.

Table 1: Demographic Characteristics of the Participants

		Frequency	Percentage
Gender	Female	85	32.7
	Male	175	67.3
	Total	260	100.0
Age	18-22 years	225	86.5
	23-27 years	28	10.8
	28 years and above	7	2.7
	Total	260	100.0
Department	Coaching Training	71	27.3
	Sports Management	41	15.8
	Exercise and Sports Sciences	30	11.5
	Exercise and Sports Sciences for the Handicapped	91	35.0
	Recreation Training	27	10.4
	Total	260	100.0
Grade	Freshman	56.5	56.5
	Sophomore	16.9	16.9
	Junior	12.7	12.7
	Senior	13.8	13.8
	Total	260	100.0
Branch	Individual Sports	139	53.5
	Team Sports	121	46.5
	Total	260	100.0

Examining Table 1, 32.7% of the participants were female, 67.3% were male, 86.5% were aged 18 to 22 years, 10.8% were aged 23 to 27 years and 2.7% were aged 28 years and above, 27.3% studied coaching training, 15.8% studied sports management, 11.5% studied exercise and sports sciences, 35% studied exercise and sports sciences for the handicapped and 10.4% studied recreation training, 56.5% were freshman, 16.9% were sophomore, 12.7% were junior and 13.8% were senior and 53.5% did individual sports and 46.5% did team sports.

Table 2: Skewness-Kurtosis and Kolmogorov-Smirnov Test Significance Level of the Scale Scores

	Subscales	N	Skewness	Kurtosis	P
The Life Satisfaction Scale	Total Life Satisfaction	260	-.125	-.412	.001*
The Body Satisfaction Scale	Body Satisfaction	260	-.390	-.114	.000**
	Body Image	260	-.274	-.640	.000**
	Total Body Satisfaction	260	-.330	-.220	.012*
The Mental Well Being Scale	Mental Well Being	260	-.668	1.006	.004*

p<.050*; p<.001**

Examining the Kolmogorov-Smirnov test results in Table 2, there were no deviations from normalcy in the scores obtained from the scales. The Kolmogorov-Smirnov analysis was only one of the analyses performed for determining whether the data was normally distributed or not. Examining the normal distribution curves, there were no deviations from normalcy. Büyüköztürk (2018) stated that the variables would be normally distributed in the case that their skewness kurtosis value was in the range of ±1. Tabachnick and Fidell (2013) stated that the variables would be normally distributed in the case that their skewness kurtosis value was in the range of ±1.5. Accordingly, the data was normally distributed.

III. Findings

Table 3: Descriptive Analysis of the Answers Given By the Participants to the Scales

Subscales	N	Minimum	Maximum	X±Sd
Total Life Satisfaction	260	1.00	5.00	14.31±2.19
Body Satisfaction	260	2.00	5.00	28.07±2.88
Body Image	260	1.67	5.00	7.18±2.02
Total Body Satisfaction	260	1.89	5.00	35.24±2.05
Mental Well Being	260	1.57	5.00	53.74±3.56

Examining Table 3, the participants' total Life Satisfaction Scale score was 14.31±2.19, Body Satisfaction Scale body satisfaction subscale score was 28.07±2.88, Body Satisfaction Scale body image subscale score was 7.18±2.02, total Body Satisfaction Scale score was 35.24±2.05 and total Mental Well Being Scale score was 53.74±3.56.

Table 4: Correlation between Life Satisfaction, Body Satisfaction and Mental Well Being

		Body Satisfaction	Body Image	Total Body Satisfaction	Mental Well Being
Total Life Satisfaction	r	.307	.192	.273	.496
	p	.000**	.002*	.000**	.000**

p<.050*; p<.001**

Examining Table 4, there was a weak correlation between the life satisfaction and body satisfaction subscale scores (r=.307; p=.000), between the life satisfaction and body image scores (r=.192; p=.002) and between the total life satisfaction and body satisfaction scores (r=.276; p=.000) in a positive direction. There was a moderate correlation between the life satisfaction level and mental well being (r=.496; p=.000) in a positive direction.

Table 5: Regression Analysis Related to Predicting the Body Satisfaction and Mental Well Being Level

	B	Standard Error B	β	T	p	
Constant (Body Satisfaction)	3.272	.140		23.430	.000**	R= .307 R^2= .094
Life Satisfaction	.243	.047	.307	5.177	.000**	$F_{(1.258)}$ =26.801
	B	Standard Error B	β	T	p	
Constant (Body Image)	3.498	.159		22.066	.000**	R= .192 R^2=. 037
Life Satisfaction	.167	.053	.192	3.142	.002*	$F_{(1.258)}$ =9.875
	B	Standard Error B	β	T	p	

	B	Standard Error B	β	T	p	
Constant (Total Body Satisfaction)	3.293	.142		23.165	.000**	R= .273 R²=. 075 F $_{(1.258)}$ =20.851
Life Satisfaction	.218	.048	.273	4.566	.000**	
	B	**Standard Error B**	**β**	**T**	**p**	
Constant (Total Mental Well Being)	2.803	.118		23.823	.000**	R= .496 R²= .246 F $_{(1.258)}$ =84.096
Life Satisfaction	.362	.039	.496	9.170	.000**	

$p<.050$*; $p<.001$**

Examining Table 5, there was a significant correlation between life satisfaction and body satisfaction (R=.307; R²=.094; p<.001). With standardized regression coefficient (β)=.307; t= 5.177, p=.000 values, life satisfaction affected body satisfaction in a positive direction. The R²=.094 value obtained as a result of the statistical analysis demonstrated that the life satisfaction level explained nearly 9% of body satisfaction. There was a significant correlation between life satisfaction and body image (R=.192; R²=.037; p<.001). With standardized regression coefficient (β)=.192; t= 3.142, p=.002 values, life satisfaction affected body image in a positive direction. The R²=.037 value obtained as a result of the statistical analysis demonstrated that the life satisfaction level explained nearly 3.7% of body image. There was a significant correlation between the total life satisfaction and body satisfaction scores (R=.273; R²=.075; p<.001). With standardized regression coefficient (β)=.273; t= 4.566, p=.000 values, life satisfaction affected the total body satisfaction score in a positive direction. The R²=.075 value obtained as a result of the statistical analysis demonstrated that the life satisfaction level explained nearly 7.5% of body satisfaction. There was a significant correlation between life satisfaction and mental well being (R=.496; R²=.246; p<.001). With standardized regression coefficient (β)=.496; t= 9.170, p=.000 values, life satisfaction affected mental well being in a positive direction. The R²=.246 value obtained as a result of the statistical analysis demonstrated that the life satisfaction level explained nearly 24.6% of mental well being.

IV. Discussion and Conclusion

The School of Physical Education and Sports students had a good level of life satisfaction, body satisfaction perception and mental well being. It is possible to explain this situation with the fact that the individuals in the sample group were students and were doing sports actively. Examining the literature, a study conducted by Yaşartürk (2016) with elite sporters found that the sporters had a high level of life satisfaction. A postgraduate study conducted by Turak (2021) to examine the impact of regular exercise on specific physical fitness parameters and life satisfaction stated that there was a decrease in the life satisfaction of individuals who had done sports previously and an increase in the life satisfaction of those who had not. A study conducted by Yılmaz and Altınok (2009) found that school administrators had a moderate level of life satisfaction. A study conducted by Hacıoğlu (2017) determined that the mean life satisfaction of students doing sports actively was higher than those not doing sports. A study conducted by Duman et al. (2020) with university students stated that the students had a good level of mental well being. Studies conducted with similar sample groups as the findings of the present study are inadequate. In general terms, studies in the literature conducted with students or sporters have also found that life satisfaction, body satisfaction and mental well being are at a good or high level, which is in agreement with the findings of the present study.

There was a weak correlation between the life satisfaction and body satisfaction subscale scores, between the life satisfaction and body image scores and between the total life satisfaction and body satisfaction scores in a positive direction and a moderate correlation between the life satisfaction level and mental well being in a positive direction. Therefore, as the life satisfaction level increased, body perception and mental well being of the students increased, which demonstrated that the rate of pleasure the students took from life affected their body satisfaction. Sense of life satisfaction provided by the phenomenon of sports to sporters will bring along body satisfaction. Examining the literature, a study conducted by Karademir et al. (2013) with weight lifters found a low correlation between life satisfaction and body satisfaction in a positive direction. A postgraduate study conducted by Sarıkadıoğlu (2016) with adults found a significant correlation between the life satisfaction, body perception and psychological resilience levels in a positive direction. A study conducted by Şahin (2019) with university students found a significant correlation between the mean life satisfaction and mental well being scores.

The present study determined that life satisfaction affected the body satisfaction, body image subscale scores and the total body satisfaction score in a positive direction. Life satisfaction explained 9% of body satisfaction, 3.7% of body image and 7.5% of the total body satisfaction score, respectively. As a matter of fact, life satisfaction was considered a determinant variable in body perception of the students. Therefore, living standards, quality of life and life satisfaction were a noteworthy factor for physical appearance. The present study determined that life satisfaction affected mental well being in a positive direction and the life satisfaction level explained nearly 24.6% of mental well being. Life satisfaction was a significant variable for mental well being. Mental well being allows a person to perceive himself/herself positively, be pleased with himself/herself even when he/she is aware of his/her own limitations, establish proper relationships, act autonomously and independently, have a purpose and meaning in life, realize his/her capacity and try to develop constantly (Cited from Keyes, Shmotkin and Ryff, 2002 by Sarı and Yıldırım, 2017). In order for individuals to be mentally good, they clearly need to reach a certain level of life satisfaction.

As a consequence, the School of Physical Education and Sports students had a good level of life satisfaction, body satisfaction perception and mental well being. There was a weak correlation between life satisfaction and body satisfaction in a positive direction and a moderate correlation between life satisfaction and mental well being in a positive direction. Life satisfaction affected the total body satisfaction score, subscale scores and mental well being level in a positive direction. Life satisfaction played a key role in the development of body satisfaction and mental well being of the students doing sports actively. Life satisfaction was considered a determinant variable in explaining body satisfaction and mental well being level.

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