Sportive Life Satisfaction Scale: Adaptation Study to Turkish Culture[i]

Mustafa Barış SOMOĞLU[1] , Hamit CİHAN[2]

[1]Milli Eğitim Bakanlığı, Gümüşhane/Türkiye

[2]Trabzon Üniversitesi, Spor Bilimleri Fakültesi, Trabzon, Türkiye

Abstract

This study is aimed at adapting the Sportive Life Satisfaction Scale into Turkish culture. To this end, "Personal Information Form", "Sportive Life Satisfaction Scale", "Satisfaction with Life Scale" and "Athlete Identity Scale" were employed in this study to collect data. The sample was made up of a total of 239 students, 52 females (21.8%) and 187 males (78.2%) studying in Trabzon sports high school in the 2019-2020 academic year. In this study, criterion validity, construct validity (Confirmatory Factor Analysis, Explanatory Factor Analysis) and content validity analyzes were performed to determine validity; Cronbach Alpha Internal Consistency and test-retest reliability analyzes were used to assess the reliability. As a result of content validity analysis, the scale was found to represent the construct (CVI=0.96). Exploratory factor analysis showed that a one-factor structure best fit the data (81.730%), Confirmatory Factor Analysis showed that fit indices were found to be at an excellent level ($\chi^2/sd== 1.780$), RMSEA=0.057, RMSE=0.0112, GFI=0.986, NFI=0.992, RFI= 0.984, CFI=0.996 and IFI = 0.996). Criterion validity correlation analyzes showed a close (r=0.68) relationship between the Athlete Identity Scale and the Sportive Life Satisfaction Scale, while there was a moderate (r=0.50) significant relationship between the Life Satisfaction Scale and the Sportive Life Satisfaction Scale. The values obtained from the results of Cronbach's Alpha (0.87) and Test-Re-Test (r=0.89) reliability analyzes showed that the scale is a reliable tool. In the study, it was observed that SLSS is a valid and reliable tool to validate the sample of sports high school students and it determines the sportive life satisfaction levels of student-athletes at a sports high school.

Keywords: Sport; Student, Satisfaction, Validity, Reliability.

Corresponding Author:
Mustafa Barış SOMOĞLU
barissomoglu@gmail.com

Sportif Yaşam Doyumu Ölçeği: Türk Kültürüne Adaptasyon Çalışması

Öz

Çalışmanın amacı Sportif Yaşam Doyumu Ölçeği'nin Türkçeye uyarlanmasıdır. Araştırmada veri toplama aracı olarak "Kişisel Bilgi Formu", "Sportif Yaşam Doyumu Ölçeği", "Yaşam Memnuniyeti Ölçeği" ve "Sporcu Kimliği Ölçeği" kullanılmıştır. Araştırmanın örneklem grubu, Trabzon'da 2019-2020 eğitim-öğretim yılında Trabzon spor lisesinde okuyan 52 kadın (%21,8), 187 erkek (%78,2) olmak üzere toplam 239 öğrenciden oluşmaktadır. Sportif Yaşam Doyumu Ölçeği'nin Türkçeye adaptasyonun yürütüldüğü bu çalışmada, geçerlik belirlemeye yönelik, benzer ölçek (ölçüt) geçerliği, yapı geçerliği (Doğrulayıcı Faktör Analizi, Açımlayıcı Faktör Analizi) ve kapsam (içerik) geçerliği; güvenirlik değerlendirmesi için Cronbach Alfa İç Tutarlılık ve test-tekrar-test güvenirliği analizleri kullanılmıştır. Uygulanan kapsam geçerliği analizi sonucunda ölçeğin kapsamı temsil ettiği (KGİ=0,96) saptanmıştır. Açımlayıcı Faktör Analizi tek faktörlü yapıyı desteklediği (%81,730), Doğrulayıcı Faktör Analizi ($\chi^2/sd== 1,780$, RMSEA=0,057, SRMR=0,0112, GFI=0,986, NFI=0,992, RFI= 0,984, CFI=0,996 ve IFI= 0,996) uyum indekslerinin mükemmel düzeyde olduğu tespit edilmiştir. Benzer ölçek geçerliği korelasyon analizleri ise Sporcu Kimliği Ölçeği ile Sportif Yaşam Doyumu Ölçeği arasında yükseğe yakın (r=0,68) ve Yaşam Memnuniyeti Ölçeği ile Sportif Yaşam Doyumu Ölçeği arasında orta düzeyde (r=0,50) anlamlı ilişki olduğu görülmüştür. Güvenirlik analizleri Cronbach Alfa (0,87), Test-Tekrar- Test (r=0,89) sonuçlarından elde edilen değerler ise ölçeğin güvenilir bir araç olduğunu göstermiştir. Çalışma SYDÖ'nün lise öğrencileri örneklemi açısından geçerli ve güvenilir bir ölçme aracı olduğu ve spor lisesinde öğrenim gören öğrenci sporcuların spora özgü yaşam doyum düzeylerini belirlediği gözlenmiştir.

Anahtar kelimeler: Spor, Öğrenci, Memnuniyet, Geçerlik, Güvenirlik.

Introduction

Scientists, philosophers, scholars and psychologists have sought answers for the reasons that make people happy since the existence of humans. With this quest and the science of psychology that has developed in recent centuries, important measurement tools have been developed to determine the relationship between individuals' lives and their psychological states (happiness, psychological well-being, subjective well-being, satisfaction, contentment etc.). One of these measurement tools is the satisfaction with life scale (Diener, 1984). There are three subcomponents to subjective well-being; happiness in one's life, as well as positive and negative emotions. Life satisfaction emphasizes the cognitive aspect of subjective well-being, whereas positive and negative emotions express the emotional aspects of subjective well-being (Diener, 1984).

Satisfaction is the state of meeting needs, demands and wishes occurring once certain basic biological, physiological and spiritual needs are satisfied in order to re-establish harmony in the organism (Akandere, Acar and Baştuğ, 2009). The concept of life satisfaction is expressed as "the state of being good in different aspects such as morale, pleasure and happiness" (Diener, Emmons, Larsen and Griffin, 1985). On the other hand, sportive life satisfaction is the application of the concept of life satisfaction to sports. From this perspective, "sports life satisfaction" can be defined as "making a positive evaluation of all aspects of sport," which includes "getting pleasure, happiness, and satisfaction from these aspects" and "perceiving the sportive life conditions, expectations, needs, wishes, and desires within the framework of the criteria determined by the individual."

It is very important for an individual to feel mentally and physically healthy (Pavot, Diener, Colvin and Sandvik, 1991). Considering the benefits of sports, it is known that it has many benefits such as making people happy, feeling good and getting pleasure. Sport is a way of life and plays an important part in getting satisfaction from life. People's high level of life satisfaction is associated with the following criteria: the individual enjoys daily life activities, develops goals related to his life and has a sense of responsibility for his past life, believes in himself that he can achieve his goals, has a positive body image and a positive outlook towards life. (Neugarten, 1961). When these criteria are examined, most are possible to be achieved through sports.

According to the research, people who have a high level of life satisfaction live lives that are psychologically, socially, and physically healthy. They also have more positive relationships, function better in their social lives, have a consistent personality, and have a mindset that is open to personal development (Diener, Suh, Lucas and Smith, 1999). According to Merkel (2013), sports participation has gained widespread acceptance as an activity that can result in positive physical and mental effects. There is a high correlation between participation in sports and life satisfaction. It has

been stated that elderly people who actively participate in sports activities are fitter and healthier, overcome stress, tensions and have a positive attitude towards their work, and their life satisfaction rates increase depending on the frequency of exercise (Heinzelmann and Bagley, 1970). Exercising at least once a week is associated with higher subjective well-being than exercising several times a month or a year, and subjective well-being increases as time spent in sport increases (Marsh, MacKay, Morton, Parry, Bertranou, Lewsie, Sarmah, and Dolan, 2010).

When the research on life satisfaction is looked at, it is stated that satisfaction with life scale has been used in more than 4,000 studies over the last 20 years since its development (Gouveia, Milfont, Da Fonseca and Coelho, 2009). Satisfaction with Life Scale (SWLS) has been culturally adapted for different age groups in many cultures such as Arabia (Abdallah, 1998), America (Oishi, 2006), China (Sachs 2004; Ye 2007; Osihi, 2006), Czech Republic (Lewis et al., 1999), France (Blais et al., 1989; Fouquereau and Rioux 2002), Portugal (Neto, 1993), Russia (Balatsky and Diener 1993), Spain (Atienza et al., 2000, 2003; Pons et al., 2000, 2002), Brazil (Gouveia et al., 2009), Canada (Blais et al., 1989; Slocum -Gori et al., 2009), the Netherlands (Arrindell et al., 1999), Norway (Vittersø et al., 2005; Clench-Aas et al., 2011), Sweden (Hultell and Gustavsson 2008), Taiwan (Wu and Yao 2006), Israel (Anaby et al., 2010), Malaysia (Swami and Chamorro-Premuzic, 2009), England (Shevlin et al., 1998; Shevlin and Bunting, 1994) and Turkey (Bekmezci and Mert, 2018; Dağlı and Baysal, 2016; Durak, Durak and Gencaz 2010; Köker 1991; Sahranç, 2007; Yetim, 1991). A cultural adaptation study of the life satisfaction scale for sports in different cultures has not been encountered yet.

It has been used to determine life satisfaction levels of many different groups such as children, adolescents, adults, the elderly, undergraduate students, outpatients, pregnant women, and immigrants (Gouveia et al., 2009). The life satisfaction scale is used to determine the life satisfaction of individuals in researches in the field of sports. These studies report that different age groups and individuals from different fields determine the life satisfaction levels. The results obtained from the studies give an idea about the general life of the individuals and do not reflect their satisfaction specific to sports life. When viewed from this perspective, it can be seen that a measurement tool that is more tailored to sport-specific life satisfaction is required. For this purpose, Mangan (2018) used the life satisfaction scale in her study by adapting it to sports. In the study, she created a sport-specific life satisfaction scale by adapting sport-specific items. "In most ways, my life is close to my ideal," for instance, is the first item on the scale was modified for use in sports: "In most ways, my sports life is close to my ideal." In the adaptation phase, Mangan (2018) conducted a reliability study on the scale and stated that the scale was reliable. However, the scale's construct validity was not examined. The adaptation of the sportive life satisfaction scale, which has been tested for validity and reliability

and has a wider application area due to its short form, is expected to fill a significant psychological measurement gap in the Turkish literature, according to the current study. In order to accomplish this, the purpose of the study is to test the sportive life satisfaction scale's validity and reliability among sports high school students.

Materials And Methods

Research Model

The study was conducted with the most commonly used scanning method in quantitative research approach. In the research, "purposive sampling method" was used as the sampling method, and it was aimed to select information-rich situations to conduct deep research with this method (Tashakkori and Teddlie, 2003).

Universe and Sample / Study Group

The sample is made up of a total of 239 student-athletes (52 females 21.8%- 187 males 78.2%) with an average age of 15.69, studying at the sports high school in Trabzon. 205 (85.8%) of the study group are a member of a sporting organization (licensed), while 34 (14.2%) do sports without license (unlicensed). While 120 (50.2%) participants are interested in team sports, 119 (49.8%) are interested in individual sports. While 147 (61.5%) students participate in school sports teams, 92 (49.8%) students do not.

Data Collection

The Sportive Life Satisfaction Scale: Diener, Emmons, Larsen, and Griffin (1985) developed the (SWLS), which Mangan (2018) adapted for sports. This 7-point Likert scale includes 5 items. Mangan (2018) stated that the research group consisted of 172 (84% female and 15% male) participants in the study conducted on student-athletes of the National College Athletes Association. According to Diener and others (1985), the scale's internal consistency was 0.87 and the factor analysis revealed that a single factor accounted for 66% of the total variance. Mangan (2018) conducted a reliability analysis and adapted the sports-specific items of the satisfaction with life scale.The Cronbach coefficient for internal consistency was found to be 0.89 by Mangan (2018).

Contentment with Life Scale: The scale, developed by Lavallee, Hatch, Michalos, and Mckinley (2007), was adapted into Turkish by Akın and Yalnız in 2015. The 7-point Likert type scale has 5 items, and its internal consistency reliability coefficient is .73, and the item-total correlation coefficients are between .31 and .61. Items 3 and 4 are reverse coded, the scale allows for a total score between 5 and 35, a higher score indicates greater life satisfaction, while a lower score indicates less satisfaction.

Athlete Identity Scale: Brewer and Cornelius' (2001) scale for determining an individual's level of athletic identity was translated into Turkish by Öztürk and Koca (2013). The scale allows for 49 as the highest possible score, while the lowest possible score is 7. A person with a higher score indicates a stronger sense of athletic identity. The coefficient of internal consistency revised scale (original) was .81, the correlation with the previously developed 10-item scale was .96, and the test-retest reliability coefficient was reported .89, which was administered with a one-week interval. The scale consists of three factors (social identity, exclusivity, negative affectivity).

Translation Process of the Measurement Tool into Turkish

Cross-cultural scale adaptation includes the steps such as translation into the target language, synthesis, translation into the source language, seeking expert opinion, pilot study and finalization. In the present study, the method of translation-back translation was utilized. (Brislin, 1986). In order to adapt the scale to a new language and culture, the first is to translate the scale into Turkish (target language) and then back into English (source language). It is recommended that those proficient in the the field should perform the translation (at least two expert translators) (Brislin, 1986; Hambleton and Patsula, 1999). Within the scope of the adaptation studies of SLSS, the items of the scale were translated into Turkish by three foreign language experts from Karadeniz Technical University, Department of English Language and Literature (DELL), and ten senior students from the DELL. At the next stage, the approval of three foreign language experts from the DELL was obtained, and the conformity of the Turkish version of the scale to our culture was determined through recommendations of two professionals with doctoral degrees in Turkish Language and Literature and Turkish languages and three different Turkish teachers. In addition, the translated versions of the scale were presented to the foreign language expert, and they were found to be appropriate by getting full points from their evaluations. Next, the linguistic and cultural appropriateness of the scale items were evaluated by experts in the fields of sports sciences and Turkish language, and the scale was translated back into the source language. The back translation into the source language was carried out by three professionals with doctoral degrees teaching at the DELL at Karadeniz Technical University and no significant differences were found. The conformity of the SLSS to the Turkish language was completed by taking the evaluation of four faculty members in the field of sports sciences. To determine the linguistic equivalence of the scale, the original form of the scale was used for two weeks to 64 senior students studying DELL at Karadeniz Technical University in the fall semester of 2018-2019, and then the students were administered the translated Turkish version. In the final stage, the scale was tested on 48 high school students doing sports. It was pre-tested whether the questions were understandable and answerable, and the adaptation process was carried out after this positive pilot study (Annex 1).

Data Analysis

Regarding reliability assessment of this adaptation study of SLSS, criterion validity, construct validity and content validity, Cronbach Alpha Internal Consistency, test-retest reliability and statistical bottom-up item analyzes of 27% groups of scorers were performed construct validity is used to reveal whether the items that make up a test developed to reveal a specific feature measure that feature or to what extent they are related to that feature (Heffner, 2020). Three methods were used for construct validity in this study. The first method is the correlation analysis of the items between the scores of the SLSS. It is suggested that the correlation coefficients between the items should be above 0.30 (Tabachnick and Fidell, 2015). The correlation between the five items of the SLSS was tested with the Pearson Correlation Coefficient. The second method, EFA revealed the factor structure. At the last stage, CFA was performed and the test was modeled as confirming a single factor structure. The total data obtained in the study were randomly divided into two sets, and EFA analysis was performed with one set of data and CFA analysis with the other set. The reason for applying EFA in the current study is to evaluate the factor structure of the original SLSS for Turkish population, and the reason for using CFA is to test the suitability (confirming/not confirming) of the factor structure of the original (real) scale on high school student athletes. Since SLSS is a scale that was previously developed and used abroad, its suitability for Turkish culture was verified by CFA. $\chi2$ /sd, RMSEA, GFI, AGFI, CFI, NFI, SRMR and IFI fit index criteria were used to evaluate EFA and CFA findings. In order for the CFA results to be acceptable, the goodness-of-fit indices for the model must be at appropriate values. "Goodness of Fit Index (GFI)", "Normed Fit Index (NFI)", "Relative Fit Index (RFI)", "Comparative Fit Index (CFI)" and "Incremental Fit Index (IFI)" values higher than 0.90 are acceptable for fit, values close to 1 indicates excellent fit, and values close to 0 indicates no fit. In addition, it is stated that "Root Mean Square Error (RMSE)" and "Root-Mean Squared Errors of Approximate Errors (RMSEA)" values below 0.05 are a good fit, values below 0.10 are acceptable, and the ratio of chi-square value to degrees of freedom less than 5 is an indicator of good fit (Kline, 2015). In this study, Exploratory Factor Analysis was performed with SPSS 25 and Confirmatory Factor Analysis with AMOS 24 program.

The test-retest method is the reliability method mostly used for psychological tests in determining reliability. This method shows the consistency of the scale over a certain period of time. The scale, which does not have a certain level of reliability, does not give valid results when applied in different time intervals (Büyüköztürk, 2017; Heffner, 2020). In the current study, SLSS was applied to the study group with an interval of 23 days. For the analysis performed with lower-upper 27% groups of scorers, unrelated samples were determined with t-test.

The statistical programs AMOS 24 and IBM SPSS 25 for the social sciences were utilized for the analysis of the relevant participant data. The data evaluation criteria in these programs include frequency, mean and standard deviation in math; t-test for groups that are separate, content validity (Lawshe Technique) index for validity analysis, criterion validity, EFA and CFA findings; for the evaluation of the reliability, item analysis methods were applied through Test-retest method, Cronbach's alpha internal consistency reliability coefficient and Pearson correlation analysis. p= .05 was accepted statistically significant.

Compliance with Research Ethics Standards

In order to initiate the data collection procedure, the ethics committee approval report (article 81614018-000-E.1167) dated 23.09.2019 was received from the Scientific Research and Publication Ethics Committee. Permission to use the questionnaire was obtained from the "Ministry of National Education, General Directorate of Innovation and Educational Technologies" (the letter numbered 81576613/605.01/21829202 dated 05.11.2019). Participants were informed before the study was conducted and the researchers' approval was obtained. The present study was conducted in accordance with the Declaration of Helsinki in 2008. In addition, during the current research, "Higher Education Institutions Scientific Research and Publication Ethics Directive" has been acted upon.

Findings

When the scores obtained from the scale were examined, the arithmetic mean was 4.80 and the standard deviation was 1.68. -0.625 skewness and -0.759 kurtosis values between ±2 indicates normal distribution (Tabachnick and Fidell, 2015).

Linguistic Equivalence

Correlation analysis was applied to determine the linguistic equivalence of SLSS. The two forms of the scale (English and Turkish) were found to have a significant positive correlation (r= 0.97, p<.01). The correlation coefficients of the scale items between the translations applied for linguistic equivalence were found to be the lowest 0.88 and the highest 0.97 (Table 1).

Table 1

Correlations between English and Turkish Translations of Scale Items

SLSS Items/Application	r
SLSS1 Turkish/English	0,97**
SLSS2 Turkish/English	0,90**

SLSS3 Turkish/English	0,92**
SLSS 4 Turkish/English	0,96**
SLSS 5 Turkish/English	0,88**
SLSS Turkish/English	0,97**

SLSS Validity Study

"Content validity, criterion validity, confirmatory and exploratory factor analyzes" were applied to determine the validity of the SLSS. Content validity is the inclusion of items with higher representation power of the topic rather than irrelevant items (Ayre and Scally, 2013). Content validity analysis was performed by applying the Lawshe Technique, and content validity ratios (CVR) were reached for the 5 expressions of the SLSS. Each of the items was presented to the opinions of experst with the options of "appropriate-not appropriate-rectified" and the results were obtained with the formula (Number of experts expressing "appropriate"/Total number of experts=N)-1, and thus content validity ratios were determined. In this technique, instead of using CVR for its sub-items, the content validity index (CVI) can be used for the total scale. The CVI is determined by the average of the CVRs of the remaining items when the items with low CVRs are discarded. At a significance level of 0.05, the lowest value to be reached for CVI is 0.62 within the range of ± 1 when the number of experts is 10 (Yurdugül, 2005; Lawshe, 1975). When the Content Validity Criterion (CVC) is taken into consideration, the CVI score that was obtained for the five SLSS expressions is satisfactory (0.96>0.62) (Table 2).

It was stated that the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) coefficient and the Barlett (Sphericity) Sphericity test could be used to determine whether or not data were suitable for factor analysis (Büyüköztürk, 2017). It is suggested that the value of the KMO coefficient for the sample size should be between 0.80-0.90 and the sphericity test should be significant at the .05 level (Büyüköztürk, 2017; Çokluk, Şekercioğlu and Büyüköztürk, 2010). In the present study, the KMO coefficient was .91 and the statistically significant sphericity test result was $\chi 2$= 1081.092, df= 10, (p<.01), which demonstrates the data's suitability for factor analysis. The fact that the eigenvalue for the items of the scale is greater than 1 after the EFA indicates that it has a single-factor structure. The line chart indicates that there is a break after the 1st factor and the scale is one-dimensional (Figure 1).

Figure 1. Factor Line Chart of SSLS

The total explained variance was determined to be 81,730% as a result of the EFA findings. This finding obtained as a result of EFA is also an indication that the scale belongs to a single (general) factor. Researchers say that it is acceptable for the variance to be 30% or higher in non-multifactorial scales (Hambleton and Patsula, 1999; Heffner, 2020). It was found that item common variance of the scale (communalities) was between 0.79 and 0.85, and the scale's item factor loads ranged from 0.88 to 0.92 (Table 2). Researchers stated that the factor load value is acceptable up to 0.30 and ideal to be 0.45 or higher (Büyüköztürk, 2017).

The kurtosis and skewness values of item 1 (-0.639/0.722), item 2 (-0.332/-0.788), item 3 (-0.588/-0.859), item 4 (-0.540/-0.656) and item 5 (-0,587/-0,886) show normal distribution. Considering the fit indices for CFA, the chi-square value to degree of freedom ratio (8,898 / 5 = 1.780) was found to be less than 5 and to be a good fit. RMSEA= 0,057, RMSE= 0,0112, GFI=0 ,986, NFI= 0,992, RFI= 0,984, CFI=0 ,996 and IFI= 0,996 are at acceptable levels. $0.05 \leq RMSEA \leq .0.10$ is acceptable, while a RMSE less than 0.5 indicates a perfect fit. NFI, AGFI GFI, CFI and IFI indices greater than 0.95 indicate that it perfectly confirms the single-factor structure (Table 2). When the CFA fit indices were examined, it was determined that the results showed good fit and were suitable for the model. Figure 2 provides the model with standardized parameter estimates for the items of the scale.
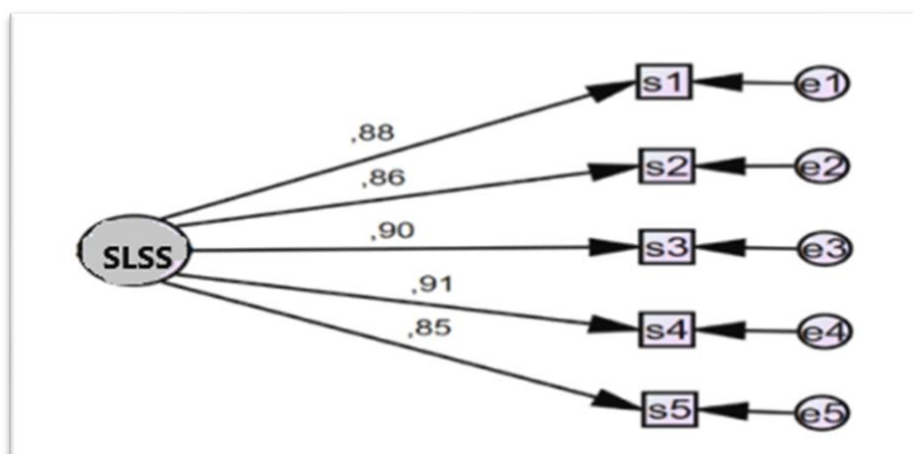
Figure 1. Confirmatory Factor Analysis Model

In order to establish the criterion validity, expert opinions were sought in the field. In line with this, criterion validity of the scale was satisfied. CLS and AIS were taken as criteria for criterion validity. A moderately significant relationship at the .50 level was found between the SLSS and CLS. In addition, a moderately significant correlation (.68) was found between the SLSS and the AIS.

Table 2

SLSS Validity Analysis Results

Content Validity Analysis Results				
SLSS Items	N	CVR	CVI	CVC
Item	10	1		
Item	10	0,8	0,96	0,62
Item	10			
Item	10	1		
Item	10	1		
Exploratory Factor Analysis Results				
Item	Eigenvalue	Variance (%)	Factor Common Variance	Factor Load Value
1	4,086	81,730	0,82	0,90
2	,300	6,005	0,80	0,89
3	,238	4,762	0,85	0,92
4	,209	4,716	0,85	0,92
5	,166	3,326	0,79	0,88
Preliminary CFA Findings for SLSS				
Index	Perfect Fit Criterion	Acceptable Fit Criterion	Finding	Result
χ^2 **/sd**	0-2	2-3	1.78	Perfect

RMSEA	≤ .05	≤ .08	0.57	Acceptable
CFI	≥ .95	≥ .90	0.99	Perfect
IFI	≥ .95	≥ .90	0.99	Perfect
GFI	≥.90	≥ .85	0.99	Perfect
AGFI	≥.90	≥ .85	0,96	Perfect
NFI	≥ .95	≥ .90	0,99	Perfect
RMSE	≤ .05	≤ .10	0,01	Perfect

SLSS Reliability Study

Certain statistical procedures were applied for the reliability study of the Sportive Life Satisfaction Scale such as "Cronbach's alpha coefficient, test-retest method and item analysis for upper and lower 27% of the scorers". The SLSS's Cronbach alpha internal consistency reliability coefficient was found to be 0.87.

The scale's test-retest reliability was applied with 23-day intervals to 215 (1st application) and 239 (2nd application) participants studying at Trabzon sports high school. The discrepancy in the number of participants is due to incomplete and incorrect coding of some data in the first application. The analysis revealed that there was a highly significant positive correlation (r= 0.89, p<0.01) between the two test-retest reliability applications.

The item-total correlation was examined to determine the item differences of 27% of upper and lower groups. The analysis revealed that the SLSS's item-total correlations scored between.89 and.92, and that the t-values were statistically significant (p<.001). The differences between the 27% items in the upper and lower SLSS groups were determined by examining the item-total correlation. This finding shows that the SLSS can be distinguished as a result of the item-total correlations and the analysis of the item scores of the lower-upper 27%, the reliability of the items is high, and it is seen in the t-test results that it exemplifies the same behavior (Table 3) (Büyüköztürk, 2017).

Table 3

Reliability Analysis Results of SLSS

SLSS Item Analysis Results			
Item	Item-Total Correlation	t (Lower%27-Upper%27)	p
1	0,91**	-25,098 **	0,00**
2	0,89**	-25,828 **	0,00**
3	0,92**	-28,642 **	0,00**
4	0,92**	-23,599 **	0,00**

5	0,89**	-23,693 **	0,00**

**p<0,01

Discussion and Result, Recommendations

Linguistic equivalence studies are carried out to ensure consistency between the original Turkish text (Hambleton and Bollwark, 1999). The scale reflects the original form, as determined by the analysis for linguistic equivalence. Dağlı and Baysal (2016) found the linguistic equivalence relationship to be 0.92 in their study of adapting the Satisfaction with Life Scale into Turkish. The high correlation for linguistic equivalence can be interpreted as retaining the original form.

The SLSS items represented the scope to be measured, as determined by the content validity analysis. When the content validity ratios are taken into consideration, the content validity index (CGI) value for the 5 expressions is at an acceptable level (Lawshe, 1975).

EFA resulted in the consolidation of the scale items into a single factor with an eigenvalue greater than 1. The total explained variance was gathered under a single factor, and the common variance of the items (communalities) and factor loadings of the scale items were within the appropriate range. Dağlı and Baysal (2016) calculated the KMO value of the SWLS as 8,869 and the sphericity test result as $\chi2= 528,329$, (p<.01, sd=10) in their adaptation study. It was stated that the total variance explained was consistent with its original form and was explained by a single factor of 68.389%. Bekmezci and Mert (2018) stated that the scale tested the single factor structure and the explained variance was 66.98%, whereas Sahranç (2007), who adapted the SWLS to Turkish culture, stated that the scale tested the single-factor structure and the explained variance was 67,044%. In their study where Clench-Aas, Nes, Dalgard and Aarø (2011) adapted the SWLS into Norwegian culture found that the variance explained in a single factor was 74 %. Adaptation studies in the constructivist literature showed that factor analysis studies using both explanatory and confirmatory factor analysis validated a single dimension (Gouveia et al., 2009; Swami and Chamorro-Premuzic, 2009). In the current study, it can be said that EFA produced consistent and suitable results.

The model fits well, as demonstrated by the confirmatory factor analysis's findings. In their adaptation of Contentment with Life Scale to Turkish culture, Bekmezci and Mert (2018) determined that the fit index values were among acceptable values. Durak, Durak, and Gencaz (2010) stated in their study of adapting SWLS that the CFA results showed good fit indices. It was stated that the results of the CFA performed in the adaptation studies of SWLS in foreign cultures also showed good fit (Gouveia et al., 2009; Swami and Chamorro-Premuzic, 2009). The SWLS and the AIS were found to have similar criterion validity as a result of the Criterion Validity. Durak, Durak, and Gencaz

(2010) stated that the scales used as a criterion in the adaptation study of SWLS predicted the scale as a criterion. It can be said that the SLSS met the criteria for the similar criterion scale.

The Cronbach's alpha internal consistency analysis revealed that SLSS was a reliable measurement instrument with a high reliability coefficient. In the Turkish adaptation of SWLS by Dağlı and Baysal (2016), the Cronbach alpha internal consistency reliability coefficient was 0.88, and it was 0.86 in the Turkish version of Contentment with Life Scale by Sahranç (2007), and the Cronbach alpha internal consistency reliability coefficient was 0.87 in the Bekmezci and Mert's (2018) adaptation of SWLS. Mangan (2018) found the Cronbach α coefficient for internal consistency as 0.89 in her study, in which she adapted life satisfaction to sports. Swami and Chamorro-Premuzic (2009) found the Cronbach α coefficient of SWLS adapted to the Malaysian language as 0.83, and the Cronbach α coefficient of SWLS adapted to the Norwegian culture as 0.91 by Clench-Aas, Nes, Dalgard and Aarø (2011). In this present study, it is safe to state that the scale meets the internal consistency reliability scale criteria.

According to the results of the test-retest analysis, it was observed that there was a high level of positive correlation between the two applications of the SLSS. In his study of adapting SWLS into Turkish, Köker (1991) performed test-retest every three weeks to determine the reliability and found the correlation between the tests to be highly reliable at a rate of 0.85. In the adaptation study of SWLS by Dağlı and Baysal (2016), the test-retest reliability result, which was carried out with 2-week intervals, was found 0.97. It can be said that the current research provides test-retest reliability.

The t-test results were found to be significant for all items, and it was determined that the scale's items were reliable and intended to measure similar behaviors. The item-total correlation analysis was conducted for the lower and upper groups. It was determined that the item-total correlations of the SLSS had high values and the t-values were at a significant level. The fact that the item correlations are greater than 30 and the t-test results are significant for all items in the scale are indicators of high reliability (Büyüköztürk, 2017).

It was determined that the SLSS, which evaluates the sportive life satisfaction of athlete students, is an appropriate tool for the Turkish population following the validity and reliability analyses on sports high school students. In this study, it was concluded that the validity and reliability ratios of SLSS were at an acceptable level, and it can be recommended to be used by researchers in the field of sports, trainers, physical education and sports teachers, and sports experts in terms of its economic, useful and time-saving qualities. It is seen that sports affects students' sportive life satisfaction in a positive way. Students must therefore participate in sports activities and competitions

as well as work toward their participation in sports. Families, teachers and administrators should support and encourage students for sports and should be encouraged to act consciously in this regard

SPORTİF YAŞAM DOYUM ÖLÇEĞİ								
Her sorunun karşısında bulunan; (1) Kesinlikle Katılmıyorum (2) Katılmıyorum (3) Kısmen Katılmıyorum (4) Kararsızım (5) Kısmen Katılıyorum (6) Katılıyorum (7) Kesinlikle Katılıyorum anlamına gelmektedir.								
1	Spor hayatım birçok yönden idealimdekine yakın	1	2	3	4	5	6	7
2	Spor hayat şartlarım mükemmel	1	2	3	4	5	6	7
3	Sporcu öğrenci olarak hayatımdan memnunum	1	2	3	4	5	6	7
4	Hayatımda şimdiye kadar sporcu öğrenci olarak antrenörümle birlikte istediğim önemli şeyleri elde ettim	1	2	3	4	5	6	7
5	Eğer tekrar karar vermem gerekirse, tekrar aynı antrenör eğitiminde sporcu olmayı tercih ederdim.	1	2	3	4	5	6	7

Appendix 1. Turkish translation of scale items

Etik Kurul İzin Bilgileri

Etik değerlendirme kurulu: Sosyal ve Beşeri Bilimler Bilimsel Araştırma ve Yayın Etik Kurulu

Etik değerlendirme belgesinin tarihi:23.09.2019

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Araştırmacıların Katkı Oranları Beyanı

Araştırmanın tüm aşamalarında iki yazar da eşit katkıda bulunmuştur.

Çatışma Beyanı

Yazarların araştırma ile ilgili bir çatışma beyanı bulunmamaktadır.

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