## PAPER DETAILS

TITLE: The Effect of Sport on Life Skills of Athlete-Students in Different Education Levels: Mixed

Research Approach

AUTHORS: Aynur YILMAZ

PAGES: 1233-1243

ORIGINAL PDF URL: https://dergipark.org.tr/tr/download/article-file/1109581

| Araştırma Makalesi / Research Article

# Sporun Farklı Eğitim Kademelerindeki Sporcu-Öğrencilerin Yaşam Becerilerine Etkisi: Karma Araştırma Yaklaşımı

# The Effect of Sport on Life Skills of Athlete-Students in Different Education Levels: Mixed Research Approach

## Aynur Yılmaz<sup>1</sup>

### **Anahtar Kelimeler**

yaşam becerisi sporcu-öğrenci

spor

karma araştırma yakınsayan paralel

## **Keywords**

life skills athlete-students sports mixed method convergent parallel design

Başvuru Tarihi/Received 26.04.2019

Kabul Tarihi /Accepted

#### Öz

Çalışmanın amacı sporun sporcu-öğrencilerin yaşam becerilerine olan katkılarının incelenmesidir. Araştırmaya 2018-2019 Eğitim-öğretim yılında farklı eğitim kademelerinde öğrenim gören yaşları 11 ile 24 arasında değişen düzenli olarak spor yapan 141'i erkek ve 78'i kadın olmak üzere toplam 219 sporcu-öğrenci katılmıştır. Araştırma karma araştırma yaklaşımlarından birisi olan yakınsayan paralel deseni ile tasarlanmıştır. Çalışmanın nicel verileri "Kişisel Bilgi Formu" ile "Sporun Yaşam Becerilerine Etkisi" ölçeği aracılığıyla elde edilirken; nitel veriler "Açık Uçlu Soru Formu" ile elde edilmiştir. Nicel verilerin analizinde parametrik testlerden (bağımsız gruplar t-testi, One-Way ANOVA, Pearson Korelasyon Analizi) faydalanılmıştır. Nitel veri analizinde ise içerik analizi tekniği kullanılmıştır. Elde edilen verilere göre sporun yaşam becerilerine etkisinde cinsiyetin önemli bir değişken olduğu ve sporun kadınların yaşam becerilerine olan katkısının erkeklere oranla daha yüksek olduğu bulgusu elde edilmiştir. Ayrıca spor branşının da anlamlı farklılık gösterdiği tespit edilmiştir. Atletizm ile ilgilenen sporcu-öğrencilerin sporun yaşam becerilerine olan etkisinin tenis ile ilgilenenlerden daha yüksek olduğu saptanmıştır. Spor yaşı ile sporun yaşam becerilerine etkisi arasında herhangi bir ilişki tespit edilmemiştir. Araştırmanın nitel bölümünde ise sporun bireylere sağlık, psikolojik/ruhsal, kişilik, fiziki ve bilişsel gelişim açıdan önemli katkılar sağladığı katılımcıların ifadelerinde yer almıştır. Bu nedenle, sporun toplumun her kesiminden insanlara sunacağı önemli katkılar olduğu dikkate alındığında; sporun bireylerin yaşamlarında yer edinmesine fırsat sağlayacak uygulamalara özellikle yer verilmelidir.

#### Abstract

The aim of the study is to examine the contribution of sports to the life skills of athletes-students. In the 2018-2019 academic year, a total of 219 athletes-students, 141 of whom are men and 78 of them are women who regularly study at different educational levels, aged between 11 and 24, participated in the study. The research was designed with a converging parallel pattern, one of the mixed research approaches. While the quantitative data of the study was obtained through the "Personal Information Form" and "The Effect of Sports on Life Skills" scale; qualitative data were obtained through the "open-ended question form". Parametric tests (independent groups t test, One-Way ANOVA, Pearson Correlation Analysis) were used in the analysis of quantitative data. In qualitative data analysis, content analysis technique was used. According to the data obtained, it was found that gender is an important variable in the effect of sports on life skills and the contribution of sports to women's life skills is higher than that of men. In addition, it was determined that the sports branch showed a significant difference. It was determined that the effect of athletes-students who are interested in athletics on the life skills of sports is higher than those who are interested in tennis. There is no relationship between sports age and the effect of sports on life skills. In the qualitative part of the research, it was stated in the statements of the participants that sports contributed significantly to individuals in terms of health, psychological / spiritual, personality, physical and cognitive development. Therefore, considering that sports have important contributions to people from all walks of life; Special applications should be given to the applications that will enable sports to take place in individuals' lives.

<sup>&</sup>lt;sup>1</sup> Trabzon University, Faculty of Sport Science, Department of Sports Management, Trabzon, TURKEY; https://orcid.org/0000-0001-7562-9469

## **INTRODUCTION**

Life skills are defined as the skills required dealing with the demands and challenges of everyday life (Hodge and Danish, 1999). In addition, it is defined life skills as "those internal personal assets, characteristics and skills such as goal setting, emotional control, self-esteem, and hard work ethic that can be facilitated or developed in sport and are transferred for use in non-sport settings" (Gould and Carson, 2008a). The World Health Organization (WHO, 1999) defines life skills as the ability for adaptive and positive behavior that enables individuals to deal effectively with the demands and challenges of everyday life. Life skills may include physical (e.g., healthy diet), behavioral (e.g., goal setting), or cognitive aspects (Danish, Taylor, Hodge and Heke, 2004). An implicit assumption in this definition is that life skills help a young person not only succeed in the sport he or she is playing, but also help the individual once he or she transfers the skills to non-sport settings in which they are used successfully (Gould and Carson, 2008b).

The interest in life skills development through sport, especially in children and youth, clearly exists today, with most contemporary youth sports organizations having social-emotional development as one of their primary goals (Gould and Carson, 2008b). Thus, children and adolescents will have learned the basic knowledge, skills and values they will need during their lives. Participation in sports has an impact on many areas of development of individuals. In studies investigating the effect of participation in sport on individual development areas, it was determined that sportive activities provide character development (Jones and Lavallee, 2009), cooperation (Orlick, 2006) and social responsibility (Hellison, 2011). In addition, it was found that they improve the properties such as communication skills, teamwork, time management, leadership and self-efficacy (Camiré and Trudel, 2013).

Sport affects the life skills of individuals of all ages. The most popular leisure activity for young people sport has been proposed as an ideal setting for the development of life skills (Hansen and Larson, 2007). In the studies, it was determined that sports develop the young people's teamwork, goal setting, time management, emotional skills, communication, social skills, leadership and problem solving and decision making (Cronin and Allen, 2017). Johnston et al. (2013) analyzed 34 papers on PYD through sport and showed that these eight life skills were cited a total of 95 times across these publications. These particular life skills are important as they are related to a range of positive outcomes including: workplace productivity and success academic achievement, sport and exercise performance, overall health and psychological/spiritual wellbeing (Brackett and Mayer, 2003; Cronin and Allen, 2017; Özkara, 2018). World Health Organization (1999) has suggested that such life skills are important for preparing adolescents for the future and ensuring their healthy development. Research suggests that young people develop their life skills through extracurricular activities such as music, drama, and sport (Larson, 2000, Yılmaz, 2018b). These activities also increase self-confidence, reduces the depression (Gore, Farrell & Gordon, 2001) and anxiety symptoms, as well as reducing depression, especially in women with low academic success (Fredricks and Eccles, 2006). In addition, adolescents participating in the activities were found to have higher self-esteem, lower depression and anxiety compared to those who did not (Guest and Mcree, 2009).

To date, the vast majority of life skills research has focused on determining if life skills are or can be developed through sports participation. Much less research has been conducted on how life skills are taught to young people (Gould and Carson, 2018b). In the literature, the studies examining the effects of sport on life skills were found abroad (Cope, Bailey Parnell and Nicholls, 2017; Goudas and Giannoudis, 2008; Hardcastle, Tye, Glassy and Hagger, 2014; Hayden et al., 2015; Jones and Lavallee, 2009; Kendellen and Camire, 2017), whereas there were limited studies (Açak and Düz, 2018; Özkara and Kalkavan, 2015) in Turkey. However, individuals who are aware of the significant impact of sport on their life skills can increase their quality of life by taking the sport to the center of their lives. The aim of this study is to determine the opinions of the individuals doing sports actively about the benefits of sports. For this purpose, the following sub-problems were answered.

- 1. Does the mean score of the participants from the Scale of Effects of Sports on Life Skills and its sub-dimensions vary according to gender and sport branch variables?
- 2. Is there a significant relationship between the age and sports history and the mean score of the participants from the Scale of Effects of Sports on Life Skills and its sub-dimensions?
- 3. What are the opinions of the participants about the benefits of sports to them? Which areas of development do sports benefit?

## **METHOD**

## Research Design

In this study, the convergent parallel design (Giannaki, 2005; Creswell and Plano Clark, 2011) was used which is one of the mixed research models that provide the closeness or consistence of the results obtained from different methods and designs. In this design, qualitative and quantitative data are collected at the same time. The results of the two methods are generally considered together during the interpretation stage (Creswell, 2009).

## **Study Groups**

A total of 219 participants, 141 (64.4%) female and 78 (35.5%) male, who do sports regularly and are aged between 11 and 24 (mean= 16.61+3.65), participated in the study in 2018. Criterion sampling technique from the purposeful sampling methods was used in the study group selection. The participants' status of doing sports regularly and actively was asked for criterion. 25 of the participants (11.4%) engage athletics, 30 (13.7%) in basketball, 18 (8.2%) in boxing, 40 (18.3%) in football, 37 (% 16.9) in field hockey, 22 (10%) in tennis and 47 (21.5%) in volleyball. Their sports history varies between 1 and 15 years and it has an average value of 5.52 + 3.14.

### **Data Collection Instruments**

The In the research, "Personal Information Form", "Effect of Sport on Life Skills Scale" and "Open-ended Question Form" were used as data collection tools.

Personal Information Form: In the study designed to determine the effect of sports on life skills of athletes; Personal Information Form, which includes variables such as gender, age, sports branch and sport age, which are important in terms of explaining the subject, have been prepared.

Effect of Sport on Life Skills Scale: The effect of sports on life skills scale, which was developed by Cronin and Allen (2017) and adapted to Turkish by Açak and Düz (2018), is a 5-point Likert-type scale with seven dimensions and 31 items. The lowest score that can be obtained from the scale is 31 and the highest score is 155. The reliability coefficient of the scale is 0.92. The reliability coefficients calculated for the sub-dimensions are 0.92.

The construct validity and reliability of the scale were tested in the present study. The Cronbach Alpha internal consistency coefficient calculated on the data collected in this study was found to be 0.95. The reliability values for the sub-dimensions of the scale were calculated as 0.91 for "Time management", 0.93 for "Communication", 0.90 for "Leadership" dimension, 0.89 for "Team work", 0.90 for "Social skills" dimension, 0.88 for "Emotional skills" and 0.93 for "Goal Setting". In order to provide evidence for the construct validity of the scale, the fit indices obtained as a result of Confirmatory Factor Analysis were calculated as  $\chi^2/df=1.58$ , RMSEA=0.07, GFI=0.89, AGFI= 0.87, CFI=0.95, NFI= 0.94, IFI=0.95, PNFI= 0.84. These values indicate that the seven-factor structure of the scale was also confirmed in the current study group. The item factor load values of the 7-factor structure consisting of 31 items are between 0.57, and 0.82, whereas the t values for the items vary between 12.18 and 17.105. In the literature, the t value should be greater than 1.96 .05 level; If it is greater than 2.58, it shows that it is meaningful at .001 level (Jöreskog and Sörbom, 1993; Kline, 2011).

Open-ended Question Form: Open-ended questions were included in the data collection tool in order to examine in detail the contribution of sport to the living areas and development of the individual. Before the interview form was prepared, studies on the subject were examined (Brunelle, Danish and Forneris, 2007; Burton, Naylor and Holliday, 2001; Botyin and Griffin, 2004) and a semi-structured interview form was prepared containing the questions that serve the purpose of the research. In order to ensure the validity of the questions and test the intelligibility of the questions, the questions were presented to the expert opinion. In order to provide evidence for the validity of the questions in the interview form, a total of 3 experts, 1 in the field of Turkish education and 2 in the subject area, were presented to the opinion. Each item was rated as "necessary", "corrected" or "unnecessary and evaluated by experts. Consensus among experts was calculated in data analysis. The two experts analyzed the data independently. Conflicts have been resolved by negotiating between encoders. The formula of agreement correlation coefficient between the researchers [Consensus/(Consensus + Dissensus)x100] was used, which was revealed by Miles and Huberman (1994). The reliability coefficient formulated by Miles and Huberman (1994) was examined and the reliability coefficient was found to be 94%. Examples of open-ended questions included in the data collection tool are:

- What does sport mean to you?
- Explain the importance of sport in your life.
- What are the benefits of sports for you? Please specify.
- What kind of contribution do you think your sports branch has to your personality? Please explain.

## **Data Analysis**

The data obtained from the research were analyzed by SPSS 22 Statistical Package Program. Frequency, arithmetic mean, standard deviation, t-test, One-Way ANOVA, and Pearson Correlation test were used in statistical analysis of data. It was decided whether the data provide the conditions of parametric tests by evaluating Skewness and Kurtosis values and Levene test results (Büyüköztürk, 2008). According to this hypothesis, if skewness values are within ± 1 and kurtosis values are within ± 2 ranges, this indicates a problematic situation (Tabachnick and Fidell, 2007). In addition, Confirmatory Factor Analysis was performed for the validity of the measurement tools. For this purpose, Lisrel 8.8 package program was used. Content analysis was used for the analysis of qualitative data.

## **FINDINGS**

In the quantitative part of the study, which was designed on the basis of convergent pattern, it was aimed to examine the mean scores obtained from general and sub-dimensions of Effect of Sports on Life Skills Scale in terms of some variables. In the qualitative part, the benefits of sports to the participants were discussed. The distribution of the scores obtained from the measurement tools is shown in Table 1.

## **Quantitative Results**

Tablo 1. Measurement tool score distributions

Dimensions	Number of Items	n	x	Sd	Skewness	Kurtosis	Min.	Max.
Time management	4	219	4,32	0,59	-1,02	0,71	1,75	5,00
Communication	4	219	4,31	0,59	-0,93	0,56	1,75	5,00
Leadership	5	219	4,31	0,56	-0,79	-0,16	2,40	5,00
Team work	6	219	4,41	0,54	-1,17	1,13	2,00	5,00
Goal Setting	4	219	4,30	0,61	-1,01	0,58	2,00	5,00
Social Skills	4	219	4,27	0,65	-1,06	0.90	1,50	5,00
Emotional Skills	4	219	4,42	0,46	-1,13	0,79	2,00	5,00
Scale (Total)	31	219	4,33	0,36	-0,76	0,09	2,60	5,00

According to the findings in Table 1, it was found that the mean score of the participants from the effect of the sports on the life skills scale was 4.33±0.36. The mean score of time management from the sub-dimensions was found to be 4.32±0.59, the mean score of communication sub-dimension to be 4.31±0.59, the mean score of the leadership dimension to be 4.31±0.56, the mean score of the teamwork dimension to be 4.41±0.54, the mean score of goal setting dimension to be 4.30±0.61, the mean score of social skill dimension to be 4.27±0.65 and the mean score of emotional skills dimension to be 4.42±0.46. Considering that the mean score to be obtained from the scale is between 1 and 5, it can be said that participants has obtained scores from the effect of the sport on the life skills scale and its sub-dimensions. Skewness and kurtosis values obtained from the general and sub-dimensions of the scale show that the measurement tool has a normal distribution. Therefore, parametric tests were used in the quantitative part of the study.

Tablo 2. Results of t-test analysis for the effects of sport on life skills according to gender

Gender	Fem	ale	Ma	ale		
Gender	(n=1	.41)	(n=	78)		
	x	Sd	x	Sd	t	р
Time management	4,35	0,63	3,97	0,74	4,07	0,00
Communication	4,32	0,61	4,01	0,77	3,23	0,00
Leadership	4,33	0,60	3,99	0,71	3,78	0,00
Team work	4,34	0,56	4,07	0,72	4,27	0,00
Goal Setting	4,35	0,64	3,94	0,74	4,28	0,00
Social Skills	4,28	0,62	3,97	0,75	2,97	0,00
Emotional Skills	4,36	0,53	4,07	0,76	4,34	0,00
Scale (Total)	4,46	0,30	4,10	0,49	4,75	0,00

p<.05

The results of independent groups test conducted to determine whether the gender variable has an impact on the effect of the sports on the life skills showed that gender had an impact upon effect on the life skills of the participants of the sports (p < .05). In the general and sub-dimensions of the scale, it was determined that females had higher mean scores than males. The interpretation that females can relate sport more to life skills can be said in line with these findings.

Tablo 3. Correlation analysis for the relationship between the mean score from the effects of sport on life skills scale and its sub-dimensions and the age variable

		Age	
Dimensions	N	r	р
Time management	219	0,03	0,60
Communication	219	0,08	0,23
Leadership	219	0,10	0,13
Team work	219	0,09	0,16
Goal Setting	219	0,07	0,27
Social ability	219	0,01	0,88
Emotional Skills	219	-0,00	0,96
Scale (Total)	219	0,06	0,31

According to the findings in Table 3, there was no significant relationship between age variable and the effect of sport on life skills (p> .05). This means that the age variable has no effect on the participants to make the sports life skills.

Tablo 4. One-way variance analysis results for determining whether the effect of sport on life skills show differences according to their sports branches of participants

Class	1 (n=	25)	2 (n=		3 (n=		4 (n=4	40)		5 :37)		6 :22)	7 (n=4	47)		
	χ	Sd	x	Sd	Ā	Sd	Ā	Sd	x	Sd	x	Sd	x	Sd	F	р
Time management	4,61	0,28	4,08	0,84	4,50	0,49	4,46	0,43	4,30	0,52	3,98	0,71	4,28	0,59	2,88	,01
Communication	4,47	0,53	4,09	0,74	4,54	0,46	4,22	0,60	4,42	0,50	4,06	0,61	4,40	0,51	1,98	,07
Leadership	4,60	0,37	4,14	0,63	4,48	0,44	4,38	0,44	4,27	0,63	4,05	0,68	4,30	0,53	2,08	,05
Team work	4,60	0,38	4,21	0,71	4,42	0,52	4,58	0,32	4,44	0,51	4,14	0,62	4,39	0,49	1,99	,06
Goal Setting	4,56	0,39	4,33	0,63	4,27	0,69	4,39	0,44	4,19	0,64	3,92	0,89	4,36	0,50	1,97	,07
Social Skill	4,36	0,61	4,20	0,73	4,54	0,45	4,40	0,53	4,20	0,63	4,01	0,69	4,24	0,67	1,20	,30
Emotional Skills	4,68	0,31	4,27	0,67	4,51	0,45	4,65	0,29	4,33	0,60	4,14	0,65	4,27	0,53	2,59	,01
Scale (Total)	4,55	0,28	4,19	0,57	4,47	0,46	4,44	0,35	4,31	0,47	4,04	0,61	4,33	0,41	2,44	,02

p<.05; 1=Athletics; 2=Basketball; 3=Martial sports; 4=Football; 5=Hockey; 6= Tennis; 7= Volleyball

When the findings in Table 4 were taken into consideration, it was determined that a significant difference was found in general of the effect of sports on life skills scale and the dimensions of time management and emotional skills according to the sports branch of the participants. As a result of the post-hoc analysis conducted to determine between which groups there was the difference, it was found that those carrying out athletics (4.55±0.28) had higher scores than those playing tennis (4.04±0.61).

Tablo 5. Correlation analysis for relationship between sport age variable and the mean score from the general and subdimensions of the effect of sports on life skills scale

		Sports age	
Dimensions	N	r	р
Time management	219	0,79	0,24
Communication	219	0,10	0,12
Leadership	219	0,10	0,11
Team work	219	0,14	0,03*
Goal Setting	219	0,09	0,16
Social Skill	219	0,06	0,32
Emotional Skills	219	-0,03	0,65
Scale (Total)	219	0,10	0,10

According to Table 5, there was no significant relationship between sports history and the general and sub-dimensions of effect of sports on life skills scale, except for team work dimension (p> .05). However, it was found that there was a low positively significant relationship between the sub-dimension of the team work and the sports age. This can be explained as an increase in teamwork skills as the sports age increases.

## **Qualitative Results**

In order to examine the effects of sport on the life skills of the participants, in the qualitative part of the research, they were asked about the benefits of sports for them. As a result of the content analysis, it was determined that sport contributed to different development areas of the participants. These areas of development are examined in 7 categories: "Physical Development", "Psychological/Spiritual Development", "Social Development", "Cognitive Development", "Personality Development", "Health Development" and other fields. The opinions of the participants included in the category of the effect of sport on physical development are presented in Table 6.

Tablo 6. Participants' opinions on the effect of sport on physical development

Category	Opinions	f	
	Height growth	19	
	Fit body	10	
	Providing weight control	8	
Dhysical Dayalanmant	Skill development	7	
Physical Development	Condition acquisition	6	
	Endurance development	3	
	Total	53	

Table 6 shows the participants' opinions on the contribution of sport to the development of physical development. Participants stated that the sport provided most the height growth as a physical development f(19). This opinion is followed by the opinions that sports provide a fit body f(10) and weight control. They also asserted that the sport gave them a good condition and increased their endurance coordination skills. Here are a few participants' opinions on these findings:

P58: "Physically, I feel more comfortable. My appearance is better and I can breathe physiologically better. I can run well. I feel energetic. I've got a strong look through sports".

P125: "I can say that thanks to sports, I have achieved especially a height growth and weight control. So the sport gave me a good appearance. In this case, my self-confidence has improved."

P172: "It supports physical and physiological development. It offers the opportunity to improve my sports skills. So I have a chance to see things I can and can't do. In short, I have the opportunity to set my own limits".

In addition to the physical development of sports, there are the participant's opinions that sport affects more than one area of development. These include social development. The opinions of the participants about effect of sport on social development are given in Table 7.

Tablo 7. Participants' opinions on the effect of sport on social development

Category	Opinions	f
	Having new friendships	27
	Social life	24
	Being a role model in society	4
	Team work	3
Social Development	A sense of sharing	3
	Communication skills	2
	Gaining respect / status in society	2
	Total	65

Participants stated that sport has a positive effect on social development. According to the findings in Table 7, it is seen that sports has effects such as building new friendship f (27), providing social life f (24), being a role model in society f (4), teamwork f (3) and gaining the sense of sharing f (3) the ability to improve communication skills. Some of the participants' opinions are presented below:

P17: "Above all, my social environment has developed. I've made new friends. Especially since my sport is a team sport, our friendship ties are strengthening. I learned to be able to share, to be able to act in unity and together thanks to the sport I do".

P53: "Sport contributes to many areas of development. Thanks to the sport, I have seen that you can be a respected individual in society. I had the opportunity to show people the moral values that sport has gained. So sport can reveal a good role model figure".

P128: "We are developing ourselves, building different friends. We are intertwined with our team-mates and we are able to express ourselves, providing us with the chance to find new environments like family. It makes us a person with responsibility".

Another area of development that sports can provide to the individual is psychological / spiritual development. It was determined that the participants stated that the sport provides psychological comfort, keeping the person away from stress and maintaining mental health. The opinions of the participants on the effect of sports on psychological / spiritual development are shown in Table 8.

Tablo 8. Participants' opinions on the effect of sport on psychological/spiritual development

Category	Opinions	f
	Happiness/Being happy	25
	Gaining self-confidence	10
	Psychological relief (Staying away from stress)	8
	Increase in psychological resistance	5
Psychological / Spiritual	Entertainment	4
Development	Increase in sense of success	2
	Concentration	2
	Motivation development	2
	Total	58

Table 8 presents the opinions of the participants on the effect of sports on psychological development. The statements that sport develops a sense of happiness f(25), increases self-confidence f(10), provides psychological relieve by keeping away from stress f(8) and it increases psychological resistance f(5), individuals have fun through sports f(4), and it increases sense of success f(2), and provides a better concentration f(2) and increase in motivation f(2) are present among the participants' opinions. The opinions of the participants about the contribution of sports to psychological/spiritual development are given below:

P195: "Sport provides psychologically positive development. It contributes to us to be psychologically healthy. It offers us a life free from stress. He teaches that we need to work patiently in case of challenges. As we work, we see that the obstacles disappear one by one.".

P81: "It's a spiritual comfort. My self-confidence increases because I feel happier as I realize that I've developed my skills in a branch where I'm talented and feel that I'm in a respectable position. I can protect and maintain my health and I can look at life more positively. This makes me happy".

P97: "Sport is a source of motivation for me. It makes me happy to see how I can improve and optimize my achievements in sports or any other skill. It also indicated the importance of regular and disciplined work to achieve something".

Opinions of the participant showed that sports affect the cognitive development as well as multiple areas of development. The opinions of the participants about the effect of sports on cognitive development are given in Table 9.

Tablo 9. Participants' opinions on the effect of sports on cognitive development

Category	Opinions	f
	Learning the rules	4
	Critical Thinking	3
Cognitive Development	Development of discernment	2
Cognitive Development	Gaining a positive perspective on life	2
	Ability to make fast decisions	1
	Total	13

Table 9 presents the opinions of the participants on the effect of sports on cognitive development. The participants' opinions were obtained for the facts that sport provides the ability to learn sports rules f(4), develops critical thinking skills f(3), gives the ability to make reasoning f(2), gains a positive perspective for life f(2) and develops the ability to make fast decisions f(1). Some of the participants' opinions on the benefits of sports for the cognitive development of the person are given below.

P22: "I'm a planned person, I use my time properly, and I'm learning new things through sports. I'm learning knowledge skills and rules specific to sports. It provides reasoning to make inferences on the next position during the competition."

P93: "I can think analytically during the match and make a quick decision based on the existing situation. We can make the next move with the eyes and facial expressions together with our team so that we can take action. In other words, we are able to read the game correctly and gain the ability to make moves."

P165: "It provides critical thinking skills. This skill is reflected in life positively. I have the ability to cope with a number of situations we encounter in daily life."

It was also stated by the participants that sport contributed significantly to cognitive development, which is another area of development. The opinions of the participants about the effect of sport on the health of the individual are shown in Table 10.

Tablo 10. Participants' opinions on the effect of sports on health

Category	Opinions	f
	Being healthy	94
	Being energetic	14
	Regular sleep	4
Effect on Health	Keeping away from harmful habits	3
Effect off fleattif	Providing correct breathing	3
	Keeping away from bad habits	2
	Regular and balanced nutrition	2
	Total	122

Participants took a great deal of attention to the effects of sport on the individual's health. Participants stated that sport offers a healthy life f(94), enable individual to be energetic f(14), forms the sleep pattern f(4), keeps away from harmful habits (smoking, alcohol, gaming addiction, etc.) f(3), provides the correct breathing (inspiration and expiration) f(3), improves regular and balanced nutrition f(2) and keeps away the bad friends from their surroundings f(2). Some of the participants' opinions on the subject are as follows:

P12: "First of all, sport affects our health positively. It gives you a good physical appearance. It balances weight because it provides regular and balanced nutrition. It keeps you healthy and fit".

P63: "Sport protects our health. It develops the cardiovascular system and increases the oxygen use capacity. And it provides the right breathing".

It was also stated by the participants that sport contributed significantly to personality development, which is another area of development. The opinions of the participants about the effect of sport on personality development are shown in Table 11.

Tablo 11. Participants' opinions on the effect of sports on personality development

Category	Opinions	f
	Provision of discipline	6
	Gaining a sense of responsibility	3
	Strong character	2
Personality Development	Being patient	2
	Being planned and programmed	2
	The ability to express oneself	2
	Total	17

According to Table 11, the effect of sport on personality development can be said to vary. Participants who expressed that sports are important in personality development, stated that sport enables individual to be disciplined f(6), to gain sense of responsibility f(3), to have a strong character f(2), to be patient f(2), to be a planned and programmed person f(2) and to obtain the ability to express oneself f(2). Some of the participants' opinions about the effect of sports on personality development are given below.

P218: "First of all, I have learned to act in accordance with specific plans and programs. The obligation to follow certain rules in sports and the discipline provided by sports helped me in many cases in my daily life. This situation contributes to the success of both school and social life."

P10: "We are developing ourselves, we know different friends, we are intertwined with our teammates, it provides us with the opportunity to get to know new environments like family and we can express ourselves better and it makes us have responsibility".

Tablo 12. Participants' opinions on the effect of sport on other development areas

Category	Opinions	f
	Using time effectively	6
	Valuing the leisure time	3
Other Davidenment Areas	Financial gain	2
Other Development Areas	Quality and regular life	2
	Acquiring profession	2
	Total	15

According to Table 12, participants stated that sport contributed to different development areas. Especially, it was stated that sport has many benefits, such as using time effectively f(6) valuing leisure time f(3), financial gain f(2), having quality life f(2) and acquiring the sport as a profession f(2). Some of the opinions of participants about the benefits of sports are given below.

P167: "The sport offers the opportunity to spend my time after school with a useful activity. I'm doing an activity that makes me happier, instead of playing computer games or spending time with friends after school".

P51: "I see sports as a profession that will provide a livelihood for my life. I make as much effort as possible to develop in the sports branch to carry out my job well".

P32: "Sports is shaping my perspective on life. I see sports among the indispensable elements of my life. Thanks to sports, I look at life more positively and my life energy is rising".

## **DISCUSSION**

In the study designed with a mixed research approach in order to determine the contribution of sport to the life skills of individuals, the mean score obtained from the scale was found to be 4.33 ± 0.56. Considering the mean score (between 1 and 5) that can be taken from the scale, it can be said that the opinions of the participants about the effect of sport on life skills are high. Considering that the mean scores obtained from the sub-dimensions of the scale were between 4.27 and 4.42, it was observed that the participants have a high mean score in the sub-dimensions explaining the effect of sport on life skills. The sub-dimensions that make up the theoretical structure of the scale (time management, communication, leadership, teamwork, goal setting, social skills and emotional skills) explain the effect of sport on life skills. In the qualitative part of the research, similar categories (psychological, cognitive, social, personality, physical and health development) were obtained in the content analysis conducted for the sport benefits to the participants. In particular, participants emphasized the effect of sport on health. In the quantitative part, communication dimension, which is one of the sub-dimensions of the scale, includes the items such as communicating with others, verbal expressions of people and attention to body languages. In the explanations about the benefits of sports to the participants; sport was determined to have benefits such as social life, acquiring new friendships and gaining the ability of communication. In addition to this, there are some items in the dimension of teamwork such as working together for the success of the team or the group, performing the task individually for the success of the team and taking into account the suggestions of the team or group members. Participants stated that sport contributed to team work, improved the sense of sharing and cooperation. The 20-year-old participant (female) playing volleyball for six years expressed the contribution of sport to social development as follows: "I've made new friends. Especially since my sport is a team sport, our friendship ties are strengthening. I have learned to be able to share, to be able to move in unity and together, thanks to the sport I do". Collaboration, unity and solidarity in team sports are more important than individual sports. So much so that the 17-year-old (female) playing football for two years stated the contribution of the sport to her as follows: "Thanks to this sport, I learned to move in unity and solidarity with my friends. I understood the importance of acting in harmony and sharing responsibilities for the success of the team". From this point of view, it can be said that the structure of sports branch influences the personality development of the participants. Jonesa and Lavalleeb (2008) stated in their study on participation in sport and perceived life skills that personality has a positive effect on life skills. In the study, it was determined that the skills of the athletes who have perfectionist tendency and enjoy struggling with failures, who are hardworking, who are aware of their own skills and who play tennis, affect the success in sport. It was figured out that having the ability to manage the failure has given the ability to manage such situations in daily life, has developed the ability to overcome and manage the failure situations in the sport. It was found in our study that sport increased some of the participants' psychological resistance, that it develops the skills of coping with winning and losing situations, having patience and responsibility. While Cronin and Allen (2017) examined the effects of sport on life skills, they suggested the results that are parallel to the above mentioned development areas by the participants. While developing a measurement tool that can measure the effect of sport on life skills, it is based on teamwork, goal setting, interpersonal communication and leadership.

The effect of sport on life skills showed a significant difference in favor of females according to gender variable. The mean score of females  $(4.46 \pm 0.30)$  was higher than that of males  $(4.10 \pm 0.49)$ . A similar situation was found in the sub-dimensions of the scale. This shows that the effect of sport on life skills is higher for females. Female participants stated that sport contributed to many life skills or development areas. The female participant playing football regularly for ten years stated the contribution of the sport on many areas of development as follows: "First of all, sport has a positive effect on my general and mental health. My self-confidence is increasing because I have developed myself in this branch (football) and discovered my skills. So I'm happy with my work. I feel like I have a respectable place in society. We also understand how to act in society, what we should do in the next position by collaborating with teammates and using body language and so we can understand each other". According to the opinions of the participants, it is seen that sport supports health, psychological, social and cognitive development. While providing female participants' weight control in terms of the effect of on the life skills of the sport, and including the physical development features such as fit body and skill development, male participants stated that sport provides height growth, condition, stamina and fit body. This shows that both groups attach importance to the physical appearance. An 18-year-old female participant playing volleyball for ten years stated the effect of sport on life skills as follows: "I can say that thanks to sports, I have achieved especially a height growth and weight control. So the sport gave me a good appearance. In this case, my self-confidence has improved". Danish, Taylor, Hodge, and Heke (2004) examined the effect of sport on youth development, suggesting that sport affects young people's physical development, such as a healthy diet. Catalano, Berglund, Ryan, Lonczak and Hawkins, (2004) reported that sport can affect life skills such as the cognitive development of sport like problem solving and goal-setting, the psychological development like coping with success and failure and performing under pressure and the time management. In the study on the effect of sports on the life skills of high school students, Laura et al. (2015) obtained the opinions that sport develops the social, emotional and academic self-efficacy and the ability to work with others. Pratt and Eitzen (1989) revealed in the study on the life skills of trainers that gender is an important factor. In the studies on the effect of sport on life skills, gender variables were included in a limited number. This can be explained by the fact that sport contributes to many areas of development of every individual, female or male. Regarding influence the development of sports in adolescents, Carreres-Ponsoda et al. (2012) found that psychosocial skills such as pro-social behavior, perceived self-efficacy, personal responsibility and social responsibility were higher for females.

There was a significant difference between the sports branches of the participants and the effect of sports on life skills in favor of the athletes carrying out athletics (4.55 ± 0.28) in the overall scale and in the dimensions of time management and emotional skills. When the athletics branch is considered as the basis of many sports branches, it can be said that it contributes to many areas of development. In particular, it provides the development of basic motor skills, locomotor, gross and fine motor skills and equilibrium skills. Athletes engaged in athletics stated that sports provides socialization, communication skills, healthy living, patience, to feel fit, to build new friendships, discipline, to gain skills and to be a strong character. In the quantitative part of the study, it was seen that the participants engaging in athletics included the time management, which is the sub-dimension of the scale and was used in the quantitative dimension, in qualitative dimension. The male participant engaging in athletics for 6 years stated that sport provides time management: P167: "The sport offers the opportunity to spend my time after school with a useful activity. I'm doing an activity that makes me happier, instead of playing computer games or spending time with friends after school". Sport offers an opportunity for individuals to evaluate their leisure time effectively. In the study of Yılmaz (2018) on the expectations of parents from extracurricular sports activities, it was concluded that sport is useful for children to value their leisure time and keeps children away from bad habits (computer and digital games) and friends.

## **CONCLUSION AND SUGGESTION**

The effect of sport on personality development emerged in the current study. In addition, the personality structure of the person has an effect on success in sports. In terms of being disciplined, patient planned and programmed and reflecting extravert personality, sport makes a significant contribution to the individual. Taking into account the contributions of sports to individuals,

it is important to provide services that can offer sport to the service of people in every part of the society. It is also a phenomenon that sports should be at the center of people's lives. Therefore, from a young age, practices should be made to make the sport a habit and a lifestyle. As a result of the study, it was determined that sport has a positive effect on life skills. It develops social skills such as communication skills, social life, sharing, acting in unity and solidarity (cooperation), recognition of new friends and environments, teamwork. In addition to this, it supports psychological/spiritual development such as psychological endurance, psychological comfort, self-confidence, motivation, concentration, happiness and fun. The sport keeps the weight under control, enables individual to have a fit body and positively affects physical development.

It has been revealed in the current study, as in many studies that sports contribute to many areas of development of individuals. Sports should be made a part of their lives as an activity that individuals will do throughout life.

It is determined that the sports branch has positive effects on individuals' life skills. For this reason, children should be given the opportunity to get to know different sports activities where they can provide experience. In the study, it was determined that students interested in athletics had higher life skills. If the work with the exploratory sequential pattern was designed, the reasons for this situation could be revealed in detail. In another study, the effect of sport on life skills can be examined with a study designed in a different pattern.

### **REFERENCES**

- Açak, M., & Düz, S. (2018). Sporun Yaşam Becerilerine Etkisi Ölçeğinin Türk kültürüne uyarlanması. İnönü Üniversitesi Eğitim Bilimleri Enstitüsü Dergisi, 5(9),74-86. doi: 10.29129/inujgse.360711
- Brunelle, J., Danish, S.J., & Forneris, T. (2007). The impact of a sport-based life skill program on adolescent prosocial values. *Applied Developmental Science*, 11(1), 43-55.
- Burton, D., Naylor, S., & Holliday, B. (2001). *Goal setting in sport: Investigating the goal effectiveness paradox*. R. Singer, H. Hausenblas, & C. Janelle (Eds.) içinde, Handbook of sport psychology, pp.497-528.
- Botvin, G.J., & Griffin, K.W. (2004). Life skills training: Empirical findings and future directions. *The Journal of Primary Prevention*, 25(2), 211-232. doi: 10.1023/B:JOPP.0000042391.58573.5b.
- Camiré, M., & Trudel, P. (2013). Using high school football to promote life skills and student engagement: Perspectives from Canadian coaches and students. *World Journal of Education*, *3*(3), 40–51. doi:10.5430/wje.v3n3p40.
- Carreres-Ponsoda, F., Carbonell, A.E., Cortell-Tormo, J.M., Fuster-Lloret, V., & Andreu-Cabrera, E. (2012). The relationship between out-of-school sport participation and positive youth development. *Journal of Human Sport & Exercise*, 7(3), 671–683. doi:10.4100/jhse.2012.73.07.
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: research findings on evaluation of positive youth development programs. *The Annals of the American Academy of Political and Social Science*, 591, 98-124.
- Cope, E., Bailey, R., Parnell, D., Nicholls, A. (2017) Football, sport and the development of young people's life skills. Sport in Society, 20(7), 789-801, doi: 10.1080/17430437.2016.1207771
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. (Third Edit.). California: Sage Pub.
- Creswell, J.W., & Plano Clark, V.L. (2011). Designing and conducting mixed methods research. Sage Pub.
- Cronin, L.D., & Allen, J. (2017). Development and initial validation of the Life Skills Scale for Sport. *Psychology of Sport and Exercise*, 28, 105-119
- Danish, S. J., Taylor, T., Hodge, K., & Heke, I. (2004). Enhancing youth development through sport. World Leisure Journal, 46, 38-49.
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42(4),698-713. http://dx.doi.org/10.1037/0012-1649.42.4.698.
- Giannakaki, M. S. (2005). Using mixed-methods to examine teachers' attitudes to educational change: the case of the skills for life strategy for improving adult literacy and numeracy skills in England. *Educational Research and Evaluation*, 11(4), 323-348.
- Gould, D., & Carson, S. (2008a). Personal development through sport. In O.Bar-Or & H. Hebestreit (Eds.) The encyclopedia of sports medicine the child and adolescent athlete, Oxford: Blackwell Science.
- Gould, D., & Carson, S. (2008b). Life skills development through sport: current status and future directions. *International Review of Sport and Exercise Psychology*, 1(1),58-78.
- Gore, S., Farrell, F., & Gordon, J. (2001). Sports involvement as protection against depressed mood. *Journal of Research on Adolescence*, 11, 119-130.
- Guest, A. M., & McRee, N. (2009). A school-level analysis of adolescent extracurricular activity, delinquency, and depression: The importance of situational context. *Journal of Youth and Adolescence*, *38*(1), 51-62.
- Hansen, D. M., & Larson, R. W. (2007). Amplifiers of developmental and negative experiences in organized activities: Dosage, motivation, lead roles, and adult youth ratios. *Journal of Applied Developmental Psychology*, 28,360-374. http://dx.doi.org/10.1016/j.appdev.2007.04.006.
- Hayden, L.A., Whitley, M.A., Cook, A.L., Dumais, A., Silva, M., & Scherer, A. (2015). An exploration of life skill development through sport in three international high schools. *Qualitative Research in Sport, Exercise and Health, 7*(5), 759-775, http://dx.doi.org/10.1080/2159676X.2015.1011217
- Hellison, D. (2011). Teaching personal and social responsibility through physical activity. 3rd ed. Champaign, IL: Human Kinetics.

- Hodge, K., & Danish, S. (1999). *Promoting life skills for adolescent males through sport*. In A. M. Horne, & M. S. Kiselica (Eds.), Handbook of counseling boys and adolescent males: A practitioner's guide. Thousand Oaks, CA: Sage. http://dx.doi.org/10.4135/9781452220390.n4.
- Larson, R.W. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55(1), 170-183. http://dx.doi.org/10.1037/0003-066X.55.1.170.
- Jones, M.I., & Lavallee, D. (2009) Exploring perceived life skills development and participation in sport. *Qualitative Research in Sport and Exercise*, 1(1), 36-50, doi: 10.1080/19398440802567931
- Jöreskog, K. G., & Sörbom, D. (1993). LISREL 8: Structural equation modeling with the simplis command language. Lincolnwood: Scientific Software International, Inc
- Kendellen, K., & Camiré, M. (2017) Examining the life skill development and transfer experiences of former high school athletes. *International Journal of Sport and Exercise Psychology*, 15(4), 395-408, doi: 10.1080/1612197X.2015.1114502
- Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. M. Williams & W. P. Vogt (Eds.), Handbook of methodological innovation in social research methods (pp. 562-589). London: Sage.
- Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Sage.
- Orlick, T. (2006). Cooperative games and sports, joyful activities for everyone. 2nd ed. Champaign, IL: Human Kinetics.
- Özkara, A.B. (2018) Physical education in Eu schools and Turkey: A comparative study. Comparative Professional Pedagogy, 8(2), 101-106.
- Özkara, A.B. & Kalkavan, A. (2015) Social entrepreneurial characteristics of pre-service physical education teachers. *The International Journal of Sports Research*, 6(1), 59-74.
- Pratt, S. R., & Eitzen, D. S. (1989). Differences in coaching philosophies between male coaches of male and female basketball teams. *International Review for the Sociology of Sport*, 24(2), 151-159.
- Tabachnick, B. G., & Fidell, L. S. (2007). Multivariate analysis of variance and covariance. Using multivariate statistics. Boston: Allyn and Bacon
- Yılmaz, A. (2018a) Parent expectations towards participation to extracurricular sport activity of high school students. *Pedagogics Psychology Medical-Biological Problems of Physical Training and Sports*, 22(4), 216-225.
- Yılmaz A. (2018b). Ebeveynlerin beden eğitimi dersi ve ders dışı sportif etkinliklere yönelik tutumları. Niğde Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi, 12, 48-64.