

An analysis of students' levels of sports commitment at a school of physical education and sports

Mehmet Yildirim

Faculty of Sport Sciences, Yozgat Bozok University, Turkey.

Accepted 14 April, 2021

ABSTRACT

The aim of this study is to examine sports commitment levels of the students studying in the school of physical education and sports. The universe of the research consists of students studying in different programs at the School of Physical Education and Sports at Yozgat Bozok University in the 2019-2020 academic year. The sample of the research consists of 360 students determined by using the sampling technique among the students studying in different programs at the School of Physical Education and Sports at Yozgat Bozok University. As a data collection tool in the research, information on the demographic characteristics of the participants was obtained through the "Personal Information Form". The data for determining the level of loyalty of the participants were obtained through the "Sports Commitment Scale", which was adapted to Turkish by Sırgancı, Ilgar and Cihan (2019) developed by Schaufeli and Bakker (2004). Normality analyzes were carried out before starting the analysis of the data. In statistical analysis, frequency, percentage, arithmetic mean, t-test, ANOVA analysis and multiple comparison tests were used. As a result of the analyzes carried out; There were statistically significant differences between levels of the sports commitment according to the variables of the class, the year of sports and doing active sports under license (p < .05). 1st and 2nd Those who study in the classroom have a higher level of commitment to sports than those in grade 3, those who have 7 years or more to do sports for 1 year or less, and those who still do not do sports under license. According to gender, department and sports branch variables, no statistically significant differences were found between sports commitment levels (p > 1.05).

Keywords: Sports, university, sports commitment.

E-mail: mehmet2682@hotmail.com.

INTRODUCTION

In today's rapidly changing and developing world, the attractiveness of sports activities has integrated sports into our lives to make it an indispensable part of our social environment. While sports was at first seen as a defense mechanism which was designed for helping people survive in the nature, millions of people nowadays are directly or indirectly interested in sports activities (Tükenmez, 2009; Çini, 2018). Having undergone a process of interaction and change since the beginning of humanity, sports contributes to individuals' physical and mental development and brings social groups together. Sports can be defined as a group of activities which encourage them to compete with each other within the framework of certain rules, to make physical efforts, to

win and to achieve success (Yamaner, 2001; Yerlikaya, 2019).

Young and dynamic individuals in a society develop their physical skills thanks to sports. In addition, sports also enables them to spend their leisure time, make new friends, socialize in a number of different fields, improve their character development and learn to take responsibility (Koç, 2005; Scanlan et al., 1989). According to Cihan and Ilgar (2018), sports activities play a vital role in the development of young individuals' life abilities. Similar to young individuals, adults are also interested in sports in order to lead a healthy life, improve their social lives and develop their abilities. However, most adults do not attach sufficient importance to sports activities in their daily lives (Roberts, 2001).

The important role of sports in human socialization was known even before the 1960s. However, in the second half of the 20th century, it gained even more importance in the economic and political world (Houlihan, 2003). Following this period, technological developments have made people's lives easier, which also brought about the problem of physical immobility. The same technological developments also broadened the perspective of sports facilities by making them available for active use, thus contributing to the development of sport industry. As a result, sports activities started to attract people's attention and the rate of participation in such activities has gradually increased. In this way, a healthy lifestyle has come to the forefront for individuals of all ages, and amateur and professional sports have become popular in terms of making friends, bodybuilding, spending leisure time, weight control, seeking approval, fun, new activities, an attractive body, stress relief and physical strength (Downward and Riordan, 2007; Kılbaş, 2004; Sücüllü, 2019; Koç, 1994; Demir, 2003; Özdilek et al., 2007; Gill et al., 1985). Thousands of people take part in sports activities in different branches in different parts of the world, which is an indication of the universal aspect of sports (Dever, 2010). While people who join sports activities for a healthier lifestyle aim to reach a higher level of physical and mental happiness, those who join sports activities for performance goals usually aim to achieve the best result as an objective of the performance sports in question. Athletes who take part in performance sports are exposed to an extreme level of competition anxiety and stress at a both physical and mental level to achieve a certain success, which affect them psychologically. This eventually creates a certain sense of obligation against their respective sports branch, which can also be considered as a type of commitment (Sücüllü, 2019; Kelecek and Göktürk, 2017).

The concept of commitment, which is a positive factor for sportive success, can be defined as a kind of energy, vigor, determination, competence, positive feeling and a satisfactory mental state directed towards an individual's goals (Schaufeli et al., 2002; Maslach and Leiter, 1997). Another definition of commitment is an individual's intimacy, acceptance, embracement and dedication towards other individuals within an organization for organizational goals and a feeling of harmony and integrity (O'Reilly and Chatman, 1986; Balay, 2014). The concept of sports commitment, which approaches sports from a holistic perspective, can be defined as a cognitive and affective process which heavily influences an athlete's sportive career from a number of angles such as self-confidence, determination, efforts, satisfaction and energy in order for him/her to display a good performance against various obstacles throughout his/her life (Lonsdale et al., 2007; Lonsdale et al., 2007; Hodge et al., 2009). Sports commitment is an element which causes an athlete to guit a sports branch or encourages him/her to continue it and affects his/her sportive

performance. Therefore, the relationship between sports commitment and other concepts such as basic psychological needs, motivation, commitment, inner stimuli and burnout has so far been analyzed in several studies (Curran et al., 2015; DeFreese and Smith, 2013; Hodge et al., 2009; Kristensen, 2013; Lonsdale et al., 2009; Busseri et al., 2011; Haugaasen et al., 2014).

In the light of the information above, it was observed in the literature review that studies in Turkey usually dealt with athlete burnout, while seldom attention has been paid to the concept of sports commitment so far. The interaction among motivation, commitment and burnout plays an important role in the analysis of current sportive performance in Turkey. Therefore, in particular, young athletes' levels of sports commitment must be studied and analyzed for future studies in order to help these athletes participate in sports activities, display higher sportive performances and adopt sports as a philosophy of life. In this respect, the present study aims to analyze students' levels of sports commitment at a school of physical education and sports.

The following research questions will be answered in the present study:

Are there any statistically significant differences among students' levels of sports commitment at a school of physical education and sports in terms of:

- gender
- grade level
- departmentsports branch
- duration of sports experience
- being a licensed athlete?

METHOD

In this section, the population, sample, data collection and analysis tools and methods of the present study are described.

Study group

The population of the present study consists of students studying at different departments of School of Physical Education and Sports at Yozgat Bozok University during the 2019-2020 academic year. The sample of the study consists of 360 students selected from different departments of School of Physical Education and Sports at Yozgat Bozok University using convenience sampling method.

Data collection tools

The participants' demographic data were obtained using a "Personal Information Form" (gender, grade level, department, sports branch, duration of sports experience and being a licensed athlete). Their levels of sports commitment were measured using "Sports Commitment Scale" adapted to Turkish context by Sırgancı et al. (2019) from the Spanish version adapted to athletes by Guillen and Martinez-Alvarado (2014). The original scale was Utrecht Work Engagement Scale (UWES) developed by Schaufeli and Bakker (2004).

Sports commitment scale

Adapted to Turkish context by Sırgancı et al. (2019), sports commitment scale consists of 15 items and 3 subdimensions (Vigor, Dedication and Absorption). The scale is scored between 1 and 5 as 1- Almost never, 2- Rarely, 3- Sometimes, 4- Often, and 5- Always. The reliability coefficients of three sub-dimensions, i.e. vigor, dedication and absorption, were calculated as .79, .80 and .82, respectively. The reliability coefficient of the scale was calculated as .91. However, in the present study, the reliability coefficient of the scale was calculated as .90. Therefore, the scale was reliable for the purposes of the present study.

Data analysis

The data obtained from the present study was analyzed using SPSS 18.0 package program. These data must be prepared for a detailed statistical analysis prior to the data analysis. Kurtosis and skewness coefficients occupy an important position in this process (Şimşek, 2007). A skewness and kurtosis coefficient between (+-2) and (+-7), respectively, point to a normal data distribution (West et al., 1995; Şencan, 2005; Şimşek, 2007). It was found that skewness and kurtosis values of the scale in the present study were between -.034 and -1.922 and .270 and 4.557, respectively, indicating a normal data distribution. Parametric tests were used for the statistical analysis.

In order to analyze the data obtained from the present study, frequency and percentage analysis were used to describe the participants' demographic features. T-test and ANOVA analysis were used to find statistically significant differences among the participants' levels of sports commitment in terms of their demographic features. Finally, multiple comparison tests (Scheffe and Tamhane T2) were used based on variance homogeneity. The level of statistical significance was accepted as 0.05.

RESULTS

The findings related to the participants' demographic features are given in Table 1.

According to Table 1, 138 participants (38.3%) were

female, while 222 of them (61.7%) were male. 179 participants (49.7%) were freshman students, 66 of them (18.3%) were sophomore students, 59 of them (16.4%) were junior students, and 56 of them (15.6%) were senior students. While 70 participants (19.4%) studied at the department of physical education and sports teaching, 165 (45.8%) and 125 (34.7%) of them studied coaching education and sports management, respectively. 181 participants (50.3%) were engaged in individuals sports, whereas 179 of them (49.7%) were engaged in team sports. 47 students (13.1%) had a sports experience of 1 year or less, 86 of them (23.9%) had a sports experience of 1-3 year(s), 103 of them (28.6%) had a sports experience of 4-6 years, and, finally, 124 of them (34.4%) had a sports experience of 7 years or over. While 105 participants (29.2%) were licensed athletes, 255 of them (70.8%) did not have an athlete license.

The findings related to the participants' mean subdimension and total scale scores are given in Table 2.

It can be understood from Table 2 that dedication was considered as the most important sub-dimension by the participants. Mean total scale score was calculated as 62.13. Thus, it can be suggested that the participants' levels of sports commitment were high.

T-test findings related to the participants' mean total scale scores in terms of gender are given in Table 3.

In Table 3, no statistically significant differences were observed between the participants' mean total scale scores in terms of gender (p > .05).

ANOVA findings related to the participants' mean total scale scores in terms of grade level are given in Table 4.

As can be seen in Table 4, there were no statistically significant differences among the participants' mean total scale scores in terms of grade level (p < .05). It was also observed that freshman and sophomore students had a higher level of sports commitment compared to junior students.

ANOVA findings related to the participants' mean total scale scores in terms of department are given in Table 5.

Table 5 demonstrates that no statistically significant differences were found among the participants' mean total scale scores in terms of department (p > .05).

T-test findings related to the participants' mean total scale scores in terms of sports branch are given in Table 6.

It is evident in Table 6 that no statistically significant differences were observed between the participants' mean total scale scores in terms of sports branch (p > .05).

ANOVA findings related to the participants' mean total scale scores in terms of duration of sports experience are given in Table 7.

It can be understood from Table 7 that some statistically significant differences were observed among the participants' mean total scale scores in terms of duration of sports experience (p < .05). It was found that the participants who had a sports experience of 7 years

		Ν	%
Gender	Female	138	38.3
Gender	Male	222	61.7
	Freshman	179	49.7
Crede level	Sophomore	66	18.3
Grade level	Junior	59	16.4
	Senior	56	15.6
	Physical education and sports teaching	70	19.4
Department	Coaching education	165	45.8
	Sports management	125	34.7
Sporte bronch	Individual sports	181	50.3
Sports branch	Team sports	179	49.7
	Less than 1 year	47	13.1
Duration of anorta experience	1-3 year(s)	86	23.9
Duration of sports experience	4-6 years	103	28.6
	7 years and over	124	34.4
Daing a licensed athlat-	Yes	105	29.2
Being a licensed athlete	No	255	70.8

Table 1. The findings related to the participants' demographic features.

 Table 2. The findings related to the participants' mean sub-dimension and total scale scores.

	N	x	Sd
Vigor	360	3.88	.72
Dedication	360	4.31	.64
Absorption	360	4.22	.66
Total Score	360	62.13	8.98

Table 3. T-test findings related to the participants' mean total scale scores in terms of gender.

	Gender	Ν	x	Sd	t	р
Sports Commitment	Female	138	62.09	8.63	060	050
	Male	122	62.15	9.21	060	.952

Table 4. ANOVA findings related to the participants' mean total scale scores in terms of grade level.

	Group	Ν	x	Sd	Var. K.	КТ	df	KO	F	р	Diff.
Sports Commitment	Freshman	179	62.83	9.41	Between	994.64	3	333.21			
	Sophomore	66	63.34	7.67	Within	27991.22	356	78.62	4.238	.006	1.2<3
	Junior	59	58.42	9.49	Total	28990.86	359				
	Senior	56	62.35	7.55							

and over had a higher level of sports commitment.

T-test findings related to the participants' mean total scale scores in terms of being a licensed athlete are

given in Table 8.

Table 8 indicates that there were some statistically significant differences between the participants' mean

Table 5. ANOVA findings related to the participants' mean total scale scores in terms of department.

	Group	Ν	x	Sd	Var. K.	КТ	df	KO	F	р	Diff.
Charte	Teaching(1)	70	62.50	8.84	Between	90.588	2	45.29			
Sports	Coaching (2)	165	61.58	9.53	Within	28900.27	357	80.95	560	.572	-
commitment	Management (3)	125	62.64	8.33	Total	28990.86	359				

Table 6. T-test findings related to the participants' mean total scale scores in terms of sports branch.

	Sports branch	Ν	x	Sd	t	р
Sporto commitment	Individual	181	61.90	9.39	100	.626
Sports commitment	Team	488	.020			

Table 7. ANOVA findings related to the participants' mean total scale scores in terms of duration of sports experience.

	Group	Ν	x	Sd	Var. K.	КТ	df	КО	F	р	Diff.
	Less than 1 year (1)	47	58.65	9.49	Between	840.76	3	280.25			
Sports	1-3 year(s) (2)	86	61.45	10.08	Within	28150.10	356	79.07	3.544	.015	4>1
Commitment	4-6 years (3)	103	62.78	8.58	Total	28990.86	359				
	7 years and over (4)	124	63.37	7.97							

total scale scores in terms of being a licensed athlete (p < .05). It was observed that the participants who had a license athlete had a higher level of sports commitment compared to those who did not.

DISCUSSION AND CONCLUSION

Young individuals, who occupy a vital position in sportive performances in Turkey, need to participate more in sports activities and adopt sports as a philosophy of life in order to display a higher performance. Therefore, the analysis of these individuals' sports commitment has been a significant and popular research topic in the existing literature.

The present study attempted to analyze students' levels of sports commitment at a school of physical education and sports. To this aim, using convenience sampling method, the sample of the study consisted of 360 students selected from different departments of School of Physical Education and Sports at Yozgat Bozok University during the 2019-2020 academic year.

It was demonstrated in the present study that dedication was considered as the most important subdimension by the participants, as manifested by their mean scale sub-dimension scores. In addition, their mean total scale scores (X = 4.31) indicated that their levels of sports commitment were high (X = 62.13).

It was found in the present study that there were no statistically significant differences between the participants' mean total scale scores in terms of gender (p > .05). It can be argued that female and male students

experience very similar feelings when they practice training, focus on the training, absorb the training principles, motivate themselves for training, and feel impatient and willing for the training, all of which account for the similarity in their levels of sports commitment in the present study. In a similar study, Uzunlar and Efdal (2019) did not also report any statistically significant differences between two genders in terms of their levels of sports commitment and the impact of sports on their lifestyle, which overlaps with the findings of the present study. On the other hand, Sivrikaya and Biricik (2019) conducted a study on two genders' levels of sports commitment and reported that female athletes had a higher level of sports commitment compared to male athletes in vigor and dedication sub-dimensions. However, Yerlikaya (2019) stated that male athletes had a statistically higher level of sports commitment compared to female athletes in vigor sub-dimension. Kelecek and Göktürk (2017) too analyzed young female footballers' levels of sports commitment and found a higher level of sports commitment in them, and reported that the highest sub-dimensions scores were obtained in vigor and dedication sub-dimensions. In a similar vein, in a study on young elite footballers, Haugaasen et al. (2014) found statistically significant differences in favor of female footballers. However, Cini (2018) analyzed football supporters' mean Commitment Index subdimension scores and reported that male football supporters had a statistically higher mean score compared to female football supporters in team subdimension. The findings of these studies contradict with those of the present study.

It was observed in the present study that there were no statistically significant differences among the participants' mean total scale scores in terms of grade level (p < .05). It was found that freshman and sophomore students' levels of sports commitment were higher compared to junior students. Although it was expected to obtain a level of commitment in direct proportion to the students' grade levels, their grade levels' were found to be inversely proportional to their levels of sports commitment. This can be attributed to the fact that various concerns such as department and other post-graduate exams brought about by higher grade levels decreased the students' levels of sports commitment. It is also likely that various problems such as making friends from the opposite sex, isolating oneself from external environment, depression and loneliness may have reduced their levels of sports commitment. Yerlikaya (2019) reported that age was inversely proportion to the participants' bicycle use, which also reduced their levels of sports commitment. Similarly, Cini (2018) inferred from football supporters' mean Commitment Index sub-dimension scores that football supporters at the age of 21 or younger had a statistically higher mean score compared to those at the age of 27 or older in sports branch sub-dimension. The findings of this study overlaps with those of the present study. On the other hand, Sivrikaya and Biricik (2019) compared the participants' levels of sports commitment and did not find any statistically significant differences in vigor and enthusiasm sub-dimensions, while they found that the athletes aged between 23 and 25 had a higher level of sports commitment compared to the athletes aged between 19 and 22 in trust sub-dimension and that the athletes aged between 19 and 22 had a lower level of sports commitment compared to those aged 18 or under and aged between 23 and 25 in dedication subdimension. Yamaner et al. (2019) did not report any statistically significant differences among participants' levels of sports commitment and the impact of sports on their lifestyles in terms of age. The findings of these studies contradict with those of the present study.

It was indicated in the present study that there were no statistically significant differences among the participants' mean total scale scores in terms of department (p > .05). It can be stated that as all participants studied at different departments, a sports department could not be considered as a factor that affected the students' levels of sports commitment negatively or positively. In other words, the department as an independent variable is not a decisive element which is likely to influence the students' willingness for training, levels of concentration during the trainings, inherent meaning of sports activities or enthusiasm for regular and long training sessions. No studies overlapping or contradicting with this finding were found in the existing literature.

It was understood from the present study that there were no statistically significant differences between the

participants' mean total scale scores in terms of sports branch (p > .05). It can be suggested that various factors such as decreasing pleasure from trainings in a sports branch, a low level of concentration, a lack of immersion, losing interest in a sports branch, decreasing popularity of a sports branch in a social environment and the belief that a sports branch does not contribute an individual's personal development may have caused the participants to spend less time on sports activities, which detracted them from their respective sports branch and thus decreased their levels of sports commitment. As a result, individuals may have lost their sensitivity towards sports activities in general. Yamaner et al. (2019) found no statistically significant differences among the participants' levels of sports commitment and the impact of sports on their lifestyles in terms of their sports branch. In a similar vein, Sivrikaya and Biricik (2019) did not observe any statistically significant differences among the participants' mean sports commitment scale sub-dimension scores in terms of their sports branch. The findings of these studies contradict with those of the present study. However, no studies contradicting with this finding were found in the existing literature.

It was observed in the present study that there were some statistically significant differences among the participants' mean total scale scores in terms of duration of sports experience (p < .05). It was found that the participants who had a sports experience of 7 years and over had a higher level of sports commitment. It can be easily argued that a high duration of sports duration improves an individual's knowledge in a sports branch. which eventually increases their confidence in that branch and contributes to their level of sports commitment positively. Sivrikaya and Biricik (2019) compared the participants' mean sports commitment scale sub-dimension scores in terms of their duration of sports experience and reported that they found no statistically significant differences in enthusiasm subdimension, while there were statistically significant differences in trust, dedication and vigor sub-dimensions. It was stated that in trust sub-dimension, the athletes with a sports experience of 5-6 years had a lower level of sports commitment compared to those with different durations of sports experiences. It was also reported that in dedication sub-dimension, the athletes with a sports experience of 3-4 years had a higher level of sports commitment compared to those a sports experience of 5-6 years. Finally, it was found that in vigor sub-dimension, the athletes with a sports experience of 3-4 years had a higher level of sports commitment compared to those with a sports experience of 2 years or less. These findings partially overlap with the findings of the present study. On the other hand, Yerlikava found (2019) no statistically significant differences between the duration of sports experience and sports commitment subdimensions. Similarly, Yamaner et al. (2019) did not find any statistically significant differences between the

participants' levels of sports commitment and the impact of sports on their lifestyles in terms of their ages. These findings contradict with the findings of the present study. Therefore, no studies overlapping with the results of the present study were found in the existing literature.

It was found in the present study that there were some statistically significant differences between the participants' mean total scale scores in terms of being a licensed athlete (p < .05), as the participants who had a license athlete had a higher level of sports commitment compared to those who did not. It can be stated that the participants who have a license in their respective sports branch and participate in sports activities regularly take pride in being a licensed athlete. In addition, they are more likely to be enthusiastic and challenge their abilities and limits during training sessions, to be physically more enduring against long training sessions, to be more energetic, and to concentrate on the training session easily and keep away from distractions. Thus, their sports branch bears a more positive meaning for them and helps them gain self-confidence as a result of their experiences in their respective sports branches and overcome various difficulties in these processes thanks to their physical and mental skills. As a result, their levels of sports commitment increase compared to their past. No studies overlapping or contradicting with the findings of the present study were found in the existing literature.

Several studies in the existing literature (Curran et al., 2015; Lonsdale et al., 2007; Valbuena et al., 2016) reported that when athletes make certain efforts to improve their personal development and participate in sports activities by their own will, it affects their levels of sports commitment positively. In addition, it was underlined that individuals with a high level of sports commitment directed their efforts towards and dedicated themselves to their individual goals.

A lack of detailed studies on athletes' sports commitment makes it difficult to compare the findings of the present study with other findings in the existing literature. Therefore, it can be suggested that an in-depth analysis of the concept of sports commitment in future studies from a theoretical and practical perspective will contribute to the current literature on sports psychology in Turkey.

In conclusion, the findings obtained from the present study demonstrated that various variables such as gender, department, grade level, sports branch, duration of sports experience and being a licensed athlete play a decisive role in determining sports commitment subdimensions, i.e. vigor, dedication and absorption.

Based on the findings of the present study, the following recommendations can be made for future studies:

- Various measures can be taken in order to increase athletes' levels of sports commitment and facilitate their process of commitment, and enable them to enjoy their personal development in the field of sports.

- In the process of developing sports commitment, internal and external factors affecting athletes can be minimized as a measure.

- In the process of sports commitment, coaches must pay close attention to an athlete's problems, training loads, the meaning of sports, motivations for participating in sports events, dedication to a specific sports branch, perception of success, communication with coaches, team spirit and many other related concepts. Thus, various measures can be taken for the complete fulfillment of athletes' trainings.

- Considering that sports is one of the greatest industrial fields in today's world in which people take part for different recreational and professional purposes, their levels of sports commitment must be taken into account when future studies select a certain population and sample for data collection.

REFERENCES

- Balay, R. (2014). Yönetici ve Öğretmenlerde Örgütsel Bağlılık. Pegem Akademi, Ankara.
- Busseri, M. A., Costain, K. A., Campbell, K. M., Rose-Krasnor, L., and Evans, J., (2011). Brief report: engagement in sport and identity status. Journal of Adolescent Health, 34(5): 1087-1091.
- Cihan, B. B., and Ilgar, A. E. (2018). Spor Yapan ve Spor Yapmayan (Sedanter) Lise Öğrencilerinin Meraklılık Düzeylerinin Belirlenmesi. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 19(2): 1649-1660.
- Curran, T., Hill, A. P., Hall, H. K., and Jowett, G. E. (2015). Relationships between the coach-created motivational climate and athlete engagement in youth sport. Journal of Sport and Exercise Psychology, 37: 193-198.
- Çini, N. G. (2018). Profesyonel futbol takımı taraftarlarının çevrimiçi (online) spor tüketim güdüleri ve bağlılık noktaları arasındaki ilişki. Yüksek Lisans Tezi, Ege Üniversitesi, Sağlık Bilimleri Enstitüsü, İzmir.
- **DeFreese**, J. D., and **Smith**, A. L. (**2013**). Teammate social support, burnout and self-determined motivation in collegiate athletes. Psychology of Sport and Exercise, 14: 258-265.
- Demir, C. (2003). Demografik özellikler ile sağlanan imkânların sportif faaliyet tercihleri üzerine etkileri: Üniversite gençliğine yönelik bir uygulama. 1. Gençlik, Boş Zaman ve Doğa Sporları Sempozyumu, Türk Hava Kurumu Basım Evi İşletmeciliği, Ankara.
- **Dever**, A. (**2010**). Spor Sosyolojisi Tarihsel ve Güncel Boyutlarıyla Spor ve Toplum. İstanbul: Başlık Yayın Grubu.
- **Downward**, P., and **Riordan**, J., (**2007**). Social interactions and the demand for sport: An economic analysis. Contemporary Economic Policy, 25(4): 518–537.
- Gill, D. L., Gross, J. B., and Huddleston, S. (1985). Participation motivation in youth sports. International Journal of Sport Psychology, 14: 1–14.
- Guillen, F., and Martinez-Alvarado, J. R. (2012). The Sport Engagement Scale: An Adaptation of the Utrecht Work Engagement Scale (UWES) for the Sports Environment. Universitas Psychologica, 13(2), 15-24.

Haugaasen, M., Toering, T., and Jordet, G., (2014). From childhood to senior professional football: a multi-level approach to elite youth football players' engagement in football-spesific activities. Psychology of Sport and Exercise, 15: 336-344.

Hodge, K., Lonsdale, C., and Jackson, S. A. (2009). Athlete

engagement in elite sport: An exploratory investigation of antecedents and consequences. The Sport Psychologist, 23: 186-202.

- Houlihan, B. (2003). Sport in Society. A Student Introduction. London: Sage.
- Kelecek, S., and Göktürk, E. (2017). Kadın Futbolcularda Sporcu Bağlılığının Sporcu Tükenmişliğini Belirlemedeki Rolü. Başkent Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, 2(2): 162-173.
- Kılbaş, Ş. (2004). Rekreasyon, Boş Zamanı Değerlendirme. Ankara: Nobel Yayın Dağıtım.
- Koç, S. (2005). Beden Eğitimi ve Sporda Beceri Gelişimi. İstanbul: Morpa Kültür Yayınları.
- Koç, Ş. (1994). Spor Psikolojisine Giriş. İzmir: Saray Medikal Yayıncılık.
- Kristensen, J. A. (2013). Motivation and athlete engagement. A cross-sectional study in youth ice hockey players. Norwegian School of Sport Sciences, Department of Coaching and Psychology.
- Lonsdale, C., Hodge, K., and Rose, E. (2009). Athlete burnout in elite sport: A self-determination perspective. Journal of Sport Sciences, 27(8): 785-795.
- Lonsdale, C., Hodge, K., and Jackson, S. A. (2007). Athlete engagement: II. Development and initial validation of the athlete engagement questionnaire. International Journal of Sport Psychology, 38: 471-492.
- Lonsdale, C., Hodge, K., and Raedeke, T. D. (2007). Athlete engagement: I. A qualitative investigation of relevance and dimentions. International Journal of Sport Psychology, 38: 451-470.
- Maslach, C., and Leiter, M. P. (1997). The truth about burnout: How organizations cause personal stress and what to do about it. San Francisco. John Wiley & Sons, Inc.
- **O'Reilly**, C. A., and **Chatman**, J. (**1986**). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. Journal of Applied Psychology, **71**(3): 492.
- Özdilek, Ç., Demirel, M., and Harmandar, D. (2007). Dumlupınar ve Sakarya üniversitelerinde öğrenim gören beden eğitimi ve spor yüksekokulu öğrencilerinin boş zaman etkinliklerine katılım nedenleri ve düzeylerinin karşılaştırılması. International Journal of Human Sciences, 4(2): 1-13.
- Roberts, G. C. (2001). Advances in Motivation in Sport and Exercise. Human Kinetics.
- Scanlan, T. K., Stein, G. L., Ravizza, K. (1989). An in-depth study of former elite figure skaters: II. Sources of enjoyment. Journal of Sport and Exercise Psychology, 11: 65-83.
- Schaufeli, W. B., and Bakker, A. B. (2004). Test manual for the Utrecht Work Engagement Scale (Unpublished manuscript). Utrecht University, The Netherlands.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., and Bakker, A. B. (2002). The measurement of engagement and burnout: a two sample confirmatory fator analytic approach. Journal of Happiness Studies, 3: 71-92.
- Sırgancı, G., Ilgar Araç, E., and Cihan, B. B. (2019). Spora Bağlılık Ölçeğinin Geçerlik ve Güvenirlik Çalışması. Gençlik Araştırmaları Dergisi, 7(17): 5-19.
- Sivrikaya, M. H., and Biricik, Y. S. (2019). Milli Takım Düzeyindeki Elit Kayakçıların Sporcu Bağlılık Düzeylerinin İncelenmesi, 2. Uluslararası Rekreasyon ve Spor Yönetimi Kongresi, 26-31.
- Sücüllü, U. (2019). Spora bağlılık ölçeğinin Türkçeye uyarlanması ve geçerlik güvenirlik çalışması. Yüksek Lisans Tezi, Pamukkale Üniversitesi, Eğitim Bilimleri Enstitüsü, Denizli.
- Şencan, H. (2005). Sosyal ve Davranışsal Ölçümlerde Güvenilirlik ve Geçerlik. Ankara: Seçkin Yayınları.

- Şimşek, O. F. (2007). Yapısal Eşitlik Modellemesine Giriş, Temel İlkeler ve Lisrel Uygulamaları. Ankara: Ekinoks Yayınları.
- Tükenmez, M. (2009). Toplum Bilim ve Spor. İstanbul: Kaynak Yayınları.
- Valbuena, M. J. D., Saunders, J., and Rice, V. (2016). Athlete engagement: A qualitative investigation of the US American athlete. Philippine Journal of Psychology, 49(1): 95-119.
- West, S. G., Finch, J. F., and Curran, P. J. (1995). Structural Equation Models with Nonnormal Variables and Remedies. Akt: Hoyle, R.H. (Ed.) (1995). Structural Equation Modeling: Concepts, Issues and Applications, Sage: London.
- Yamaner, F. (2001). Beden Eğitimi ve Sporda Temel İlkeler. Bursa: Ekin Kitapevi Yayıncılık
- Yamaner, F., Uzunlar, H., and Efdal, A. (2019). Spor Bilimleri Fakültesi Öğrencilerinin Spora Bağlılık Düzeyi İle Sporun Yaşam Becerilerine Olan Etkileri Arasındaki İlişki Düzeyinin Belirlenmesi, 11. Uluslararası Spor Camiası Sempozyumu Tam Metinleri, 23-31.
- Yerlikaya, G., (2019). Bisikletçilerin sporcu bağlılıklarının incelenmesi. Yüksek Lisans Tezi, Abant İzzet Baysal Üniversitesi, Sosyal Bilimler Enstitüsü, Bolu.

Citation: Yildırım, M. (2021). An analysis of students' levels of sports commitment at a school of physical education and sports. African Educational Research Journal, 9(2): 367-374.