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Editor

Doç. Dr. Özgür Karataş

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Chapter 1

THE RELATIONSHIP BETWEEN THE SELF-EFFICACY LEVELS AND EMOTIONAL INTELLIGENCE OF B2-B3 VISUALLY IMPAIRED INDIVIDUALS

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1. Introduction

Individuals with inborn or acquired disabilities encounter various challenges and obstacles in their daily lives. In addition to these obstacles, prejudice increases the condition of marginalization and being obstructed. This situation causes disabled individuals to become isolated from social life. Without any doubt, visually impaired individuals encounter numerous problems in social life. All the social life fields such as education, employment, culture and art, and sports should be open to all individuals, regardless of disability, with complete and equal rights.

Before defining the concept of emotional intelligence, it is important to mention what “emotion” and “intelligence” are. While Frijda (1986) defines emotion as “being ready for change or natural motion control and passive action preparation including the maintenance of relationships based on environment and/or inner elements”, Barutçugil (2002) explains emotion as “a motion emerging with the explanatory behaviors and physiological changes in emotions and mental attitude”.

Damasio (1999) defines intelligence as “a concept emerging from various mental activities and the collaborative operation of several systems consisting of these activities. Humans are rational and emotional beings. Thus, when the relationship between emotion and intelligence is examined, it can be observed that emotional and mental processes operate correspondingly. Hence, it is possible to explain the phenomena of human beings as adding rationalist intelligence on an already existing emotional structure.

Emotional intelligence is a concept consisting of three harmonizing skills as paying attention to the emotions of self and others, regulating emotions and using these emotions in problem-solving. Furthermore, this concept is defined along with skills such as common emotions of people, communication skills, perspective on humanity, kindness, and grace (Metek, & Akpınar, 2013). Self-efficacy belief determines how individuals feel, think, motivate themselves, and behave (Bandura, 1982). It is reported that as the self-efficacy level increases, the motivation increases as well and the comprehension of self-efficacy level supports individuals to determine what they can do with their skills and knowledge they possess (Pössel, Baldus, Horn, Groen, & Hautzinger, 2005; Zulkosky, 2009).

When the literature is examined, it was observed that numerous studies were conducted about emotional intelligence (Dalbudak, & Çelik, 2019; Karaoğlu, Turan, & Pepe, 2016, and Turan, Pepe, & Bahadır, 2015) and Self-Efficacy (Turan, Karaoğlu, Kaynak, & Pepe, 2016; Pekel, & Çimen, 2017 and Dalbudak, & Musa, 2019 Turan, & Koç, 2018; Turan, Koç, Ulucan, & Yüce, 2020). However, there were not any studies examining the emotional intelligence and self-efficacy variables on athletes and visually impaired individuals.

2. Method

2.1. Research model

The study was conducted with a descriptive and correlational survey model. These survey models can be defined as “...research models that

aim to determine the existence and/or level of covariance between two or more variables” (Karasar, 2007).

2.2. *Forming the voluntary groups*

A total of 262 voluntary individuals with b2-b3 visual impairment participated in the research as 104 females and 158 males.

Table 1: Demographic features

		n	%
Gender	Male	158	60.3
	Female	104	39.7
Athlete	Yes	126	48.1
	No	136	51.9
Disability Status	Inborn	161	61.5
	Acquired	101	38.5
Level of Vision	b2	107	40.8
	b3	155	59.2

2.3. *Data collection tools*

Personal information form, emotional intelligence, and self-efficacy scales were used as data collection tools.

2.4. *Personal information form*

“Personal Information Form” developed by the researcher regarding the demographic features of the participants and including four questions as gender, the status of being athlete, disability status, and level of vision was used as a data collection tool.

2.5. *Emotional intelligence scale*

Schutte emotional intelligence scale which was developed by Schutte et al. (1998), revised by Austin et al. (2004), and adapted to Turkish by Tatar et al. (2011) was used. The Revised Schutte emotional intelligence scale consists of 41 items aimed at determining the emotional intelligence levels. The test was prepared as a five-point Likert type with response statements from 1 to 5. These statements are “strongly disagree= 1, disagree= 2, neither agree nor disagree= 3, agree= 4, strongly agree= 5”. The Cronbach alpha internal consistency coefficient of the scale was determined as 0.87 by calculating the total score correlations and Cronbach Alpha internal consistency coefficients. In the study conducted by Austin et al. (2004) consisting of 500 participants, the internal consistency coefficient of the scale was determined as 0.85. In the same study, it was stated that the internal consistency coefficients of the scale varied between 0.66 and 0.90

and this result was consistent with the results of other researchers. In the present study, the total Cronbach Alpha value of the emotional intelligence scale was determined as 0.857.

2.6. Self-Efficacy scale

In the reliability and validity examination of the Self-Efficacy Scale which was developed by Sherer et al. in 1982 and adapted to Turkish by Gözüml and Aksayan in 1999, the Cronbach Alpha internal consistency coefficient was determined as .81 and test-retest reliability was determined as .92 for the same sample. Self-Efficacy Scale is a self-assessment scale consisting of 23 items and 5-point Likert type answers for each item (1-“strongly disagree”, 2-“disagree”, 3-“neither agree nor disagree”, 4-“agree”, 5-“strongly agree”) and the given score is taken as the basis for each item. However, items of 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, 17, 18, 20, and 22 are scored reversely. The scale has four sub-factors as; Initiating behavior including items of 2, 11, 12, 14, 17, 18, 20, and 22; Maintaining behavior including items of 4, 5, 6, 7, 10, 16, and 19; Completing behavior including items of 3, 8, 9, 15, and 23; and Overcoming obstacles including items of 1, 13, and 21. Thus, the minimum obtainable score from the scale is 23 and the maximum is 115. A high score from the scale indicates that the Self-Efficacy perception of the individual is at a good level (Gözüml, & Aksayan, 1999). The total Cronbach Alpha value of the self-efficacy scale was determined as 0.798 in the present study.

2.7. Statistical analysis

IBM SPSS (Statistical Package for the Social Sciences) statistics package program was used in data analysis. The arithmetic mean and standard deviation values of participants from the scales were presented as $X \pm Sd$. While Independent T-Test was used for gender and being an athlete status in order to reveal the difference between the scores obtained from the scales, Pearson Product-Moment Correlation analysis was applied in order to reveal the relationship between the scales.

3. Findings

Table 2. Emotional intelligence and self-efficacy scores

	N	$X \pm Sd$
Emotional Intelligence	262	3.5850 \pm .48027
Initiating Behavior	262	4.0706 \pm .61512
Maintaining Behavior	262	4.1020 \pm .64675
Completing Behavior	262	4.4557 \pm .69532
Overcoming Obstacles	262	3.7761 \pm 1,01201

	N	X±Sd
Emotional Intelligence	262	3.5850±.48027
Initiating Behavior	262	4.0706±.61512
Maintaining Behavior	262	4.1020±.64675
Completing Behavior	262	4.4557±.69532
Total Self-Efficacy	262	4.1255±.53980

As can be seen in Table 2, the mean of participants from emotional intelligence dimension is 3.58, mean from initiating behavior sub-dimension is 4.07, the mean from maintaining behavior sub-dimension is 4.10, the mean from completing behavior sub-dimension is 4.45, the mean from overcoming obstacles is 3.77, and the mean of total self-efficacy score is 4.12.

Table 3. T-Test findings according to gender

	Gender	N	X±Sd	T	P
Emotional Intelligence	Male	158	3.60±0.51	0.48	0.63
	Female	104	3.57±0.44		
Initiating Behavior	Male	158	4.14±0.55	2.24	0.03
	Female	104	3.97±0.69		
Maintaining Behavior	Male	158	4.14±0.62	1.04	0.30
	Female	104	4.05±0.69		
Completing Behavior	Male	158	4.48±0.65	0.80	0.43
	Female	104	4.41±0.76		
Overcoming Obstacles	Male	158	3.88±0.94	2.14	0.03
	Female	104	3.61±1.10		
Total Self-Efficacy	Male	158	4.18±0.47	2.02	0.04
	Female	104	4.04±0.62		

There is a significant difference in favor of males between the initiating behavior $t(260)=2.24$, $p<0.05$), overcoming obstacles $t(260)=2.14$, $p<0.05$), and total self-efficacy $t(260)=2.02$, $p<0.05$) scores. There is not a significant difference between females and males in terms of emotional intelligence, maintaining behavior, and completing behavior scores ($p>0.05$).

Table 4. T-Test findings according to being athlete

	Being an Athlete	N	X±Sd	T	P
Emotional Intelligence	Yes	126	3.6976±.40732	3.744	.000
	No	136	3.4806±.51914		

Initiating Behavior	Yes	126	4.1190±.57638	1.228	.221
	No	136	4.0257±.64785		
Maintaining Behavior	Yes	126	4.1735±.62769	1.729	.085
	No	136	4.0357±.65931		
Completing Behavior	Yes	126	4.4476±.74121	-.181	.856
	No	136	4.4632±.65261		
Overcoming Obstacles	Yes	126	3.8307±.98860	.840	.402
	No	136	3.7255±1.03429		
Total Self-Efficacy	Yes	126	4.1694±.53007	1.271	.205
	No	136	4.0847±.54744		

A significant difference was determined in favor of athletes in emotional intelligence scores ($t(260)=3.744$, $p<0.05$). However, there was not a significant difference between athletes and non-athletes in self-efficacy scores and its sub-factors ($p>0.05$).

Table 5. T-Test findings according to disability status

	Disability Status	N	X±Sd	T	P
Emotional Intelligence	Inborn	161	3.5293±.48255	-2.391	.018
	Acquired	101	3.6738±.46531		
Initiating Behavior	Inborn	161	4.0233±.68010	-1.577	.116
	Acquired	101	4.1460±.48800		
Maintaining Behavior	Inborn	161	4.0506±.66210	-1.629	.105
	Acquired	101	4.1839±.61589		
Completing Behavior	Inborn	161	4.4634±.67949	.224	.823
	Acquired	101	4.4436±.72311		
Overcoming Obstacles	Inborn	161	3.6791±1.05665	-1.969	.048
	Acquired	101	3.9307±.92053		
Total Self-Efficacy	Inborn	161	4.0824±.58337	-1.637	.103
	Acquired	101	4.1941±.45632		

A significant difference was observed in favor of individuals with an acquired disability in emotional intelligence scores ($t(260)=-2.391$, $p<0.05$) and overcoming obstacles scores ($t(260)=-1.969$, $p<0.05$). However, there was not a significant difference in self-efficacy scores and other sub-factors according to the disability status ($p>0.05$).

Table 6. T-Test findings according to level of vision

	Level of Disability	N	X±Sd	t	P
Emotional Intelligence	B2	107	3.5259±.57555	-1.661	.098
	B3	155	3.6258±.39851		
Initiating Behavior	B2	107	4.1824±.53615	1.423	.156
	B3	155	4.0861±.54052		
Maintaining Behavior	B2	107	4.1390±.58563	1.499	.135
	B3	155	4.0234±.63223		
Completing Behavior	B2	107	4.1869±.63295	1.774	.077
	B3	155	4.0433±.65169		
Overcoming Obstacles	B2	107	4.4953±.66918	.765	.445
	B3	155	4.4284±.71367		
Total Self-Efficacy	B2	107	3.7664±.97367	-.129	.897
	B3	155	3.7828±1.04072		

There was not a significant difference in emotional intelligence scores $t(260)=-1.661$, $p>0.05$), self-efficacy scores $t(260)=-.129$, $p>0.05$), and all the sub-factors according to the level of vision.

Table 7. Correlation analysis of emotional intelligence and self-efficacy scores

		1	2	3	4	5	6
1. Emotional Intelligence	r	1					
	P						
	N	262					
2. Total Self-Efficacy	R	-.023	1				
	P	.705					
	N	262	262				
3. Initiating Behavior	R	-.031	.897**	1			
	P	.618	.000				
	N	262	262	262			
4. Maintaining Behavior	R	-.046	.814**	.658**	1		
	P	.458	.000	.000			
	N	262	262	262	262		
5. Completing Behavior	R	-.028	.662**	.467**	.358**	1	
	P	.649	.000	.000	.000		
	N	262	262	262	262	262	
6. Overcoming Obstacles	R	.055	.663**	.531**	.361**	.272**	1
	P	.374	.000	.000	.000	.000	
	N	262	262	262	262	262	262

As a result of the correlation analysis, no significant relationship was determined between emotional intelligence and self-efficacy scores and its sub-factors ($p>0.05$).

4. Discussion and conclusion

The main aim of the research is to examine the relationship between emotional intelligence and self-efficacy levels of b2-b3 visually impaired individuals. A total of 262 individuals, 104 females and 158 males, voluntarily participated in the study in order to examine this relationship.

According to the obtained findings:

There is a significant difference in favor of males between the initiating behavior $t(260)=2.24$, $p<0.05$), overcoming obstacles $t(260)=2.14$, $p<0.05$), and total self-efficacy $t(260)=2.02$, $p<0.05$) scores. There is not a significant difference between females and males in terms of emotional intelligence, maintaining behavior, and completing behavior scores ($p>0.05$). When the literature is examined, several studies can be found suggesting a significant difference in the certain dimensions of self-efficacy and its sub-dimensions according to the gender variable (Dalbudak, & Musa, 2019; Brink, Alsen, Herlitz, Kjellgren, & Cliffordson, 2012; Britner, & Pajares, 2006; Creed, & Patton, 2003; Scholz, Gutierrez- Dona, Sud, & Schwarzer, 2002). The scores of males are different from females in initiating behavior, overcoming obstacles, and overall self-efficacy. This situation is considered to originate from the fact that males can be in the forefront and express themselves in society.

The significant difference in overcoming obstacles according to the gender is considered to originate from the fact that males are more robust than females in struggling against external negativities and females are more emotional than males.

It is considered that the difference in initiating behavior emerges as a result of being different by the visually impaired males than the women, proving themselves and making their presence felt in society, and being at the forefront in society. The results of the study conducted by Dalbudak and Çelik (2019) indicate that there is not a difference in emotional intelligence between the genders (Dalbudak, & Çelik, 2019). Tok (2008) also states that there is not a difference in emotional intelligence between the genders (Tok, 2008). Harrod and Scheer (2005) determined that young females have a higher emotional intelligence level than males (Harrod, & Scheer, 2005). The findings in the study conducted by Barret et al. (2000) indicate that females have a higher emotional intelligence level than males in terms of emotional awareness and expressing emotions (Barrett, Lane, Sechrest, & Schwartz, 2000). It can be stated that the reason for the absence of the emotional intelligence difference between males and females originates from the similar socialization processes and emotions of both genders. It can be stated visually impaired females and males are social and both genders successfully express their emotions.

A significant difference was determined in favor of athletes in emotional intelligence scores $t(260)=3.744$, $p<0.05$). However, there was not a significant difference between athletes and non-athletes in self-efficacy scores and its sub-factors ($p>0.05$). The emotional intelligence of visually impaired athletes who efficiently use emotional intelligence is higher than non-athletes. In the study conducted

by Yaşar (2010) examining the relationship between emotional intelligence and athlete performance, a positive relationship was determined between emotional intelligence and performance (Yaşar, 2010). In the study conducted by Tok (2008) on the examination of emotional intelligence and personal features in high-level performance athletes and sedentary, it was determined that high-level performance athletes had a higher overall emotional intelligence score than the sedentary (Tok, 2008). It is considered that emotional intelligence affects sports and this situation originates from using emotional intelligence better than non-athletes.

A significant difference was observed in favor of individuals with an acquired disability in emotional intelligence scores ($t(260)=-2.391$, $p<0.05$) and overcoming obstacles scores ($t(260)=-1.969$, $p<0.05$). However, there was not a significant difference in self-efficacy scores and other sub-factors according to the disability status ($p>0.05$). Dalbudak (2019), determined that there was not a significant difference between disability status and emotional intelligence (Dalbudak, 2019) and this result contradicts with the present study. It can be stated that inborn or acquired disability affects emotional intelligence. Dalbudak and Musa (2019) determined that self-efficacy causes a significant difference in the behaviors of individuals with inborn and acquired disability (Dalbudak, & Musa, 2019). The sub-items of self-efficacy contradicts with the present study. It is considered that the type of disability affects overcoming obstacles of self-efficacy and there is not a difference in self-efficacy levels according to inborn or acquired disability.

There was not a significant difference in emotional intelligence scores ($t(260)=-1.661$, $p>0.05$), self-efficacy scores ($t(260)=-.129$, $p>0.05$), and all the sub-factors according to the B2-B3 level of vision. A significant difference was not observed between B2-B3 visually impaired individuals in emotional intelligence, self-efficacy, and subdimensions. According to the study conducted by Dalbudak (2019), a significant difference was not determined between emotional intelligence and level of vision (Dalbudak, 2019). Özkan and Akı (2016) determined a significant difference between the self-efficacy levels of individuals with visually impaired individuals and partially sighted individuals (Özkan, & Akı, 2016). Dalbudak and Musa (2019) determined a significant difference between the b1, b2, b3 levels of vision of visually impaired individuals of different ages (Dalbudak, & Musa, 2019) and this result does not comply with the results of the present study. It can be stated that emotional intelligence, self-efficacy, and subdimensions are not related to b2 and b3 level of vision.

As a result of the correlation analysis, no significant relationship was determined between emotional intelligence and self-efficacy scores and its sub-factors ($p>0.05$). Salovey and Mayer (1990) defines emotional intelligence as “a set of default skills used to contribute to the emotions of an individual to motivate, plan, and succeed and to efficiently regulate and express the emotions of self or others” (Salovey, & Mayer, 1990). Individuals who can efficiently use emotional intelligence can establish empathy and have self-awareness, strong social skills, self-regulation, and high motivation. These individuals can reach rapid and efficient solutions by approaching the problems they encounter more positively (Salovey, & Mayer, 1990). Bandura (1986) defines self-efficacy belief as judgments about the organization and presentation skills that would provide individuals to

reach a certain performance. Self-efficacy is the belief of individuals for succeeding in a certain task. Self-efficacy is a belief (Bandura, 1986).

Efficacy connotes that the level of possessing the required knowledge, skills, attitudes to carry out a role, performing the expected roles in expected quality and quantity, and acquiring the necessary knowledge and skills to perform a behavior (Üstüner, Demirtaş, Cömer, & Özer, 2009). In the present study, it was acknowledged that there is not a significant difference between self-efficacy and emotional intelligence when the self-efficacy is discussed as the ability to express the emotions, thoughts, and needs. It is considered that self-efficacy does not possess the qualifications that would create a significant difference with emotional intelligence. Since there are not any studies similar to the present study in the literature, supportive findings could not be found.

Suggestions

- In future studies, it is suggested to evaluate the emotional intelligence and self-efficacy of b2-b3 visually impaired athletes and non-athletes with other disabled individuals.
- Furthermore, it is suggested that a new study should be conducted evaluating how b2-b3 visually impaired athletes and non-athletes and other disabled individuals use emotional intelligence and how they are affected.
- In future studies, the relationship between emotional intelligence and other psychological parameters should be examined by using Schutte emotional intelligence scale.
- Visually impaired individuals and other disabled individuals should be motivated to perform different exercises and physical activities.

Reference

- Frijda, N. H. (1986). *The emotions*. New York: Cambridge University Press.
- Barutçugil, İ. (2002) *Organizasyonlarda duyguların yönetimi*, İstanbul: Kariyer Yayınları.
- Damasio, A. R. (1999). *Descartes'in yanılgısı*. İstanbul, Varlık Yayınları.
- Mete, F., & Akpınar, K. D. (2013). Dil öğretimi ve duygusal zekâ. *Eğitim ve Toplum*, 2(5): 73-85.
- Bandura, A. (1982). Self-Efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.
- Pössel, P., Baldus, C., Horn, A., Groen, G., & Hautzinger, M. (2005). Influence of general self-efficacy on the effects of a school-based universal primary prevention program of depressive symptoms in adolescents: A randomized and controlled follow-up study. *Journal of Child Psychology and Psychiatry*, 46(9), 982-994.
- Zulkosky, K. (2009). Self-Efficacy: A concept analysis. *Nursing Forum*, 44(2), 93-102.
- Dalbudak, İ., & Çelik S. (2019). Investigation of aggression and emotional intelligence characteristics of the students from faculty of sport sciences and state conservatory of Turkish music, *International Education Studie*, Vol. 12(9),117-129.
- Karaoğlu, B., Turan, M. B., & Pepe, O. (2016) *Beden eğitimi ve spor yüksekokulu öğrencilerinin yaratıcılık düzeyleri ile duygusal zekâ seviyelerinin incelenmesi*, *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 1(2), 85-99.
- Turan, M. B., Pepe, O., & Bahadır, Z. (2015). Investigating self-efficacy levels of physical education and sports teachers in terms of some variables. *Science Movement and Health* 15(2), 158-163.
- Turan, M. B., Karaoğlu, B., Kaynak, K., & Pepe, O. (2016) *Özel yetenek sınavlarına giren adayların genel öz-yeterlilik düzeylerinin bazı değişkenlere göre incelenmesi*, *Spor Bilimleri Araştırmaları Dergisi*, 1(1), 17-26.
- Pekel, A., Çimen, K. (2017). Relationship between “self-efficiency“ competence levels and constant sportive self-respect levels of football players (Sample of Istanbul European Side). *Physical Education of Students*, 21(5), 200.
- Dalbudak, İ., & Musa, M. (2019) *Analysis of self-efficacy-sufficiency levels of individuals with visual impairment according to some variables*. *International Education Studies*, 12(10), 75-88.

- Karasar, N. (2007). Bilimsel araştırma yöntemi, (17.Baskı), Ankara, Nobel Yayın Dağıtım, 49-53.
- Tok, S., (2008). Performans sporcusu ve spor yapmayan üniversite öğrencilerinde duygusal zekâ ile kişilik özelliklerinin karşılaştırılması, Doktora Tezi, İzmir Ege Üniversitesi Sağlık Bilimleri Enstitüsü.
- Gözüm, S., & Aksayan, S. (1999). Öz-etkililik-yeterlik ölçeğinin türkçe formunun güvenilirlik ve geçerliliği, Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi, 2(1), 21-34.
- Brink, E., Alsen, P., Herlitz, J., Kjellgren, K., & Cliffordson, C. (2012). General self-efficacy and health related quality of life after myocardial infarction. *Psychology, Health & Medicine*, 17(3), 346- 355.
- Britner, S. L., & Pajares, F. (2006). Sources of science self-efficacy beliefs of middle school students. *Journal of Research In Science Teaching*, 43(5), 485-499.
- Creed, P. A., & Patton, W. (2003). Predicting two components of career maturity in school based adolescents. *Journal of Career Development*, 29(4), 277-290.
- Scholz, U., Gutierrez- Dona, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? *European Journal of Psychological Assessment*. 18(3), 242-251.
- Harrod, N. R., & Scheer, S. D. (2005). An exploration of adolescent emotional intelligence in relation to demographic characteristics. *Adolescence*, (40), 503-512.
- Barrett, L. F., Lane, R. D., Sechrest, L., & Schwartz, G. E. (2000). Sex differences in emotional awareness. *Personality And Social Psychology Bulletin*, (26), 1027- 1035.
- Yaşar, M. (2010). Duygusal zekâ ve sporcu performansı ilişkisi: Kayseri’de bir araştırma. Yüksek Lisans Tezi, Kayseri, Erciyes Üniversitesi, Sosyal Bilimler Enstitüsü.
- Dalbudak, İ. (2019). 18- 20 Yaş arası spor yapan ve yapmayan b2 ve b3 görme engelli bireylerin duygusal zekâ ve saldırganlık düzeyleri bakımından incelenmesi, *Beden Eğitimi ve Spor Anabilim Dalı, Sağlık Bilimleri Enstitüsü, Muğla Sıtkı Koçman Üniversitesi, Muğla*.
- Özkan, E., & Akı, E. (2016). Az gören ve görme engelli bireylerin öz yeterlilikleri ve baş etme becerileri arasındaki ilişki, *Ergoterapi ve Rehabilitasyon Dergisi*, 4(2), 81-88.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, (9), 185–211.
- Bandura, A. (1986). *Social foundations of thought and action: A Social Cognitive Theory*. Englewood Cliffs Prentice Hall, 30.
- Üstüner, M., Demirtaş, H., Cömer, M., & Özer, N. (2009). Ortaöğretim öğretmenlerinin öz-yeterlik algıları, Mehmet Akif Ersoy Üniversitesi

Eğitim Fakültesi Dergisi, 9(17), 1-16.

Turan, M. B., & Koç, K. (2018). The impact of self-directed learning readiness on critical thinking and self-efficacy among the students of the school of physical education and sports. *International Journal of Higher Education*, 7(6), 98-105.

Turan, M, Koç, K , Ulucan, H , Yüce, M . (2020). Spor bilimleri fakültesi öğrencilerinin ruhsal zekâ düzeylerinin bazı değişkenlere göre incelenmesi. *Beden Eğitimi ve Spor Bilimleri Dergisi*, 14(1), 25-37.



Chapter 2

CHANGE OF DIRECTIONS AND AGILITY: RELATIONS TO PHYSICAL FITNESS LEVELS AND BIOMECHANICS

Çağlar EDİS¹

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Changes of direction runs (Cod) are very important for many sports branches and are associated with many physical fitness skills (1). Cods have different names in the literature. As a common definition; Cod are defined as sudden movement changes in all body segments made in rapidly changing directions (2). When the difference between Cod and agility is examined, agility is defined as applied against unplanned conditions, while Cod is defined as pre-planned change of run conditions (3). The role of the running games in the soccer game is very important. In order to perform effectively in a soccer competition, athletes must run at high intensity and at high speed (4). In 90 minutes of soccer competitions, soccer players run different directions with high intensity direction changes between approximately 1200 and 1400 (5). Due to the nature of the soccer game, many different directional movement practices are very important for athletes to be successful against their opponents. Due to the necessity to perform successfully in games, researching the relationship between Cod ability and different physical fitness levels and developing training programs according to the results has an important place in the literature (5). There are many researches on the relationship of Cod ability with other physical fitness levels. In research; Cod skills and their relationships with strength, postural control and kinematic factors are frequently included in the research topics.

Strength Characteristics and Cod

In the relations between strength characteristics and Cod skill; during sudden decelerations and rotation after sudden accelerations, the athletes need concentric and eccentric strength characteristics in the acceleration phases by reacting again. In studies conducted, it is stated that the imbalance between anthropometric structures, power and muscles strength is related to T-running performance, but the relationship between them has r^2 value between 0.45 and 0.48 (6). In one of the most detailed studies investigated in terms of strength, in the relations between the two different (T-test and 505) Cod performance of the athletes with the maximal dynamic back squat, isometric mid tight pull, eccentric and concentric only back squat and a countermovement jump in female athletes; It has been determined that maximal dynamic, isometric, concentric, and eccentric strength properties are related to Cod performance. As a result of the study, it was revealed that the eccentric power qualities of female athletes are important for Cod performance (7). In a similar study, it was found that 1 repetition maximal squat strength, vertical jump and broad jump quality of female athletes were associated with T-test times, whereas male athletes T-test times only associated with broad jump features (8). In a different study applied on the Cod performances of women, jump tests were not as-

sociated with Cod performances, whereas relative strength was associated with 505-run performances of athletes. In the relations between bilateral force differences and Cod (T-Test) performance; While the concentric leg muscle at 240 degrees/sec and 30 degrees/sec eccentric strength qualities were associated with T-test performance, no relation was found between concentric 60 and 180 degrees/sec. However, the athletes who performed the Cod test more successfully showed that their bilateral differences were eccentric and the concentric strength qualities at 240 degrees/sec were less than the other group. As a result, the need for high-intensity run of Cod skill is tested by testing athletes with 240 degrees/sec of concentric muscle strength and eccentric muscle strength ratios producing too much power (9). When look at these measurements, the fact that the measurements were made with the device reveals reliable results. In different study, it mentioned that leg extensor force and explosive strength, elastic strength and maximal strength qualities on jump platforms only 17% related results with Cod performance. However, the devices and measurement methods used in this research seem to be very different (10). In another study, it was determined that 505 test, 1 maximal repetition, peak power and power development ratio were related to 505 test. Among the many test applied in the study, the peak power and total power output of the qualities that best describe the results of 505 test were detected (r^2 0.60-0.67) (11). In other studies in the literature, it is stated that power characteristics and cod skills are related (12). However, it is still necessary to relate different strength and power methods to different Cod performances for many research topics to be researched. Because, while the reactive power qualities (drop jump) explains the Cod performance in the studies conducted, it states that this situation may be caused by the need for a fast response with the athlete running in different directions during the change of direction from the eccentric phase to the concentric phase (13). When examine the common features of the researches, it is seen that reactive power for a good Cod skill, explosive concentric contraction and eccentric power qualities for a stopping are appropriate for the athletes to perform in a shorter time. Therefore, the bilateral force differences should be closed while training the athletes, and after obtaining the appropriate muscle strength, the reactive concentric power and eccentric power qualities should be developed.

Postural Control and Cod

There are different concepts in the literature on the definitions of balance, postural control and stabilization, as in Cod and Agility. When examine the descriptions of definitions, balance; positioning the center of body mass and center of gravity on the same point, stabilization; the ability of an athlete who has achieved his balance to maintain his equilibrium state

against the pressure exerted by external forces, postural control; it means regaining the balance impaired by external forces (14). In the literature, the starting point of the studies on balance is seen as ligament injuries, and the improvement of balance or postural control, the appropriate of the neuromuscular system working well and the increase in the harmony between the brain and extremities, indicates that the movements occurring in the spatial space are perceived by the brain and the motor movement accordingly protects the athletes against injuries. (15). In competitions, athletes must act at a high intensity in order to perform well. High intensity motion patterns can cause injuries. It is observed that postural control should be ensured especially in situations with reversing runs and falling to the ground after jumping, and a well-formed control is important for reducing injury risks (16, 17). In the mechanical examinations of the motion patterns, it is mentioned that the rectus femoris muscle should work at the appropriate level in order to end the contact with the ground more softly and in a shorter time (18, 19). Similarly, the importance of a appropriate balance level is indicated for the athletes to finish the stopping phase after acceleration in a balanced and short way and move the whole body in a different direction (20, 21). However, there are conclusions on this subject in the literature that contain different correlation relationships. In the studies, it is seen that the correlation relations of female athletes and male athletes produce different results. While both static and dynamic balance test results were found to be related to Cod skills in female athletes, only static balance scores were found to be related in male athletes (20). In a different study, it is mentioned that the results of the balance test applied with a manual test are in relation with the Cod skills of the soccer players in the prepubescent period (22). When examine the literature, although the effect of balance on Cod is emphasized, it is seen that the studies on this subject are very limited and insufficient.

Kinematic factors and Cod performance

In order to improve the Cod performance on this subject many researchers have been conducted in the literature. Learning the kinematics of a movement is very important in terms of applying training programs to which muscle groups and under what conditions. When examine the researches on the kinematics of Cod; It was determined that the athletes who applied the turning skill from a 75 degree angle were in relation with the peak concentric ankle power levels ($r = 0.77$). This rate was found to explain 59% of the total number of subjects included in the study. In addition, in this research, peak ankle plantar flexor moment ($r = 0.65$) and shorter ground contact times processes were found to be effective in the rotation application skills of the athletes, and in this study, the decrease of the pelvic

lateral tilt in the knee flexor phase positively affects the performance of the maneuvering athlete. In addition, in this study, they concluded that peak lateral torso rotations allow the ankle to produce a better level of power by turning the body to the desired angle (23). In another study, it mentioned that ground contact time should be very short and ground push muscles must produce high power in order to perform better in Cod skill. If these two features appear properly, athletes can perform Cod skills in a shorter time (24). According to the results obtained from these researches, it will improve the rotation of the trunk muscles within the training programs to be applied to athletes, and the application of horizontal and forward push muscle groups and explosive power training instead of vertical jump training can enable the athletes to gain more speed mechanically.

Result

While Cod and Agility are different, it is concluded that balance, and eccentric power, dept jump and jump training can be effective to improve these qualities. However, we still think that a lot of research and testing methods and devices should be used to determine the relationship between cod or agility performance clearly with different physical fitness levels. This skill has a critical value for many sports branches. It is the most desired feature to be developed by coaches. All research applied to understand the Cod and agility performance of the sports world; in short, they concentrate on training programs that include bilateral, eccentric contraction and jump ability studies and postural control studies for the development of this skill.

Kaynaklar

1. Jones, P., Bampouras, T., & Marrin, K. (2009). An investigation into the physical determinants of change of direction speed. *Journal of Sports Medicine and Physical Fitness*, 49(1), 97-104.
2. Sheppard, J. M., & Young, W. B. (2006). Agility literature review: Classifications, training and testing. *Journal of sports sciences*, 24(9), 919-932.
3. Brughelli, M., Cronin, J., Levin, G., & Chaouachi, A. (2008). Understanding change of direction ability in sport. *Sports medicine*, 38(12), 1045-1063.
4. Little, T., & Williams, A. (2003). *Specificity of acceleration, maximum speed and agility in professional soccer players* (pp. pp-144). London, UK:: Routledge.
5. Bangsbo, J. (1992). Time and motion characteristics of competitive soccer. *Science and football*, (6), 34-42.
6. Chaouachi, A., Manzi, V., Chaalali, A., Wong, D. P., Chamari, K., &

- Castagna, C. (2012). Determinants analysis of change-of-direction ability in elite soccer players. *The Journal of Strength & Conditioning Research*, 26(10), 2667-2676.
7. Spiteri, T., Nimphius, S., Hart, N. H., Specos, C., Sheppard, J. M., & Newton, R. U. (2014). Contribution of strength characteristics to change of direction and agility performance in female basketball athletes. *The Journal of Strength & Conditioning Research*, 28(9), 2415-2423.
 8. Peterson, M. D., Alvar, B. A., & Rhea, M. R. (2006). The contribution of maximal force production to explosive movement among young collegiate athletes. *The Journal of Strength & Conditioning Research*, 20(4), 867-873.
 9. Lockie, R. G., Schultz, A. B., Jeffriess, M. D., & Callaghan, S. J. (2012). The relationship between bilateral differences of knee flexor and extensor isokinetic strength and multi-directional speed. *Isokinetics and exercise science*, 20(3), 211-219.
 10. Marković, G., Sekulić, D., & Marković, M. (2007). Is agility related to strength qualities?-Analysis in latent space. *Collegium antropologicum*, 31(3), 787-793.
 11. Swinton, P. A., Lloyd, R., Keogh, J. W., Agouris, I., & Stewart, A. D. (2014). Regression models of sprint, vertical jump, and change of direction performance. *The Journal of Strength & Conditioning Research*, 28(7), 1839-1848.
 12. Thomas, C., Comfort, P., Jones, P. A., & Dos'Santos, T. (2017). A Comparison of isometric midhigh-pull strength, vertical jump, sprint speed, and change-of-direction speed in academy netball players. *International journal of sports physiology and performance*, 12(7), 916-921.
 13. Young, W. B., Miller, I. R., & Talpey, S. W. (2015). Physical qualities predict change-of-direction speed but not defensive agility in Australian rules football. *The Journal of Strength & Conditioning Research*, 29(1), 206-212.
 14. Pollock, A. S., Durward, B. R., Rowe, P. J., & Paul, J. P. (2000). What is balance?. *Clinical rehabilitation*, 14(4), 402-406.
 15. Alentorn-Geli, E., Myer, G. D., Silvers, H. J., Samitier, G., Romero, D., Lázaro-Haro, C., & Cugat, R. (2009). Prevention of non-contact anterior cruciate ligament injuries in soccer players. Part 2: a review of prevention programs aimed to modify risk factors and to reduce injury rates. *Knee surgery, sports traumatology, arthroscopy*, 17(8), 859-879.
 16. Erkmen, N., Taşkin, H., Sanioğlu, A., Kaplan, T., & Baştürk, D. (2010). Relationships between balance and functional performance in football players. *Journal of Human Kinetics*, 26, 21-29

17. Šimek, S., Milanović, D., & Jukić, I. (2007). The effects of proprioceptive training on jumping and agility performance. *Kinesiology: International journal of fundamental and applied kinesiology*, 39(2.), 131-141.
18. Hrysomallis, C. (2011). Balance ability and athletic performance. *Sports medicine*, 41(3), 221-232
19. Kean, C. O., Behm, D. G., & Young, W. B. (2006). Fixed foot balance training increases rectus femoris activation during landing and jump height in recreationally active women. *Journal of sports science & medicine*, 5(1), 138.
20. Sekulic, D., Spasic, M., Mirkov, D., Cavar, M., & Sattler, T. (2013). Gender-specific influences of balance, speed, and power on agility performance. *The Journal of Strength & Conditioning Research*, 27(3), 802-811.
21. Sporis, G., Jukic, I., Milanovic, L., & Vucetic, V. (2010). Reliability and factorial validity of agility tests for soccer players. *The Journal of Strength & Conditioning Research*, 24(3), 679-686.
22. Hammami, R., Granacher, U., Pizzolato, F., Chaouachi, M., & Chtara, M. (2017). Associations between Change of Direction, Balance, Speed, and Muscle Power in Prepubescent Soccer Players. *J Athl Enhanc* 6: 6. of, 6, 2.
23. Marshall, B. M., Franklyn-Miller, A. D., King, E. A., Moran, K. A., Strike, S. C., & Falvey, É. C. (2014). Biomechanical factors associated with time to complete a change of direction cutting maneuver. *The Journal of Strength & Conditioning Research*, 28(10), 2845-2851.
24. Dos' Santos, T., Thomas, C., Jones, P. A., & Comfort, P. (2017). Mechanical determinants of faster change of direction speed performance in male athletes. *Journal of strength and conditioning research*, 31(3), 696-705.



Chapter 3

SMALL-SIDED GAME EXTERNAL FACTORS

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In modernized and developing soccer training, coaches every time change their training methods and games, thus aiming to increase the technical-tactical and physical capacities of soccer players (1). Recently, soccer small-sided games (Ssg) are often preferred by coaches to provide both technical-tactical and physical capacity development at the same time (2, 3, 4). The fact that these games are directed towards the branch specific to running endurance training is applied by the athletes more enjoyably and applied in their technical skills with higher motivation (5). In addition to motivation, in order to ensure the success of a team, the players in the team need to develop cooperation with each other and in this mean, Ssg are an important training method. How the cooperation between the soccer players, strategy and mentality are implemented in different forms by team coaches (6). In this case, Ssg provide an opportunity an ideal training environment for coaches. However, there are many different types of games in Ssg, and each game has different technical and physiological results (7). In order to prefer to the games to be applied according to the purpose and goal, it is very important for the coaches to know the results of these games very well, to reach their strategies and the results they want to achieve. Therefore, in this prefer, it will be mentioned what kind of different Ssg provide an opportunity, and coaches will be able to predict what kind of gains they can get from which type of game and Ssg according to the results they achieve.

Number of Players and Effects of Ssg

There are many studies in the literature that are applied in different player numbers in different sizes. In Ssg, the number of players reveals different physiological and technical skill results. In the researchers conducted on this subject, it was found that the games played with the number of 1 vs. 1, 2 vs. 2, 3 vs. 3 and 4 vs. 4 players produced different physiological and technical skill application results. As stated in the researches; It is seen that the number of players decreases and that the physiological parameters increase, the games played with the number of 1 vs. 1 and 2 vs. 2 players have higher heart rate, blood lactate and perceived exertion (Borg-CR10 or CR20) levels than the games played with the number of 3 vs. 3 and 4 vs. 4 players has been specified (8). In other studies, it was found that the games played with 4 vs. 4 players with the goal rule on the goals of normal standard revealed higher value physiological results than the games played with 6 vs. 6 players' game (9). In a different study, it has been stated that the games played with the number of 3 vs. 3 players have higher heart rate (more than 85%) and more technical skill than the games played with the number of 9 vs. 9. In addition to physiological results, it has been stated that soccer players are in contact with more balls in a small area in techni-

cal skills, and more ability to dribble past from technical skills, especially in games played in a large area (10). Again in a similar study, 3 vs. 3 and 6 vs. 6 players and large and small, the motivation of the trainer, the number of athletes, heart rate and blood lactate amount were investigated. It found that it revealed more physiological values 3 vs. 3 game than 6 vs. 6 games and motivations of the trainer cause more physiological stress than played without coach encouragements. At the same time, it is stated in this research that games played with the same number of players in a large area reveal more physiological stress results (11). The common point in the literature is that as the game areas and the number of players decrease, the intensity of the game increases and technical skill practices increase.

However, the above studies have examined different player numbers and different field size variables. Another side of the games is what kind of physiological and technical skill application results of SSGs played in different sizes with the same number of players. In researches, keeping the number of players stable and expanding the size of the game area that they have different physiological and technical skill application results. In researches on this subject; in the study where the games played with 3 vs. 3 and 4 vs. 4 players in the small, medium and large area, the heart rate and perceived exertion (Borg-CR10 or CR20) values were examined, it was found that the games in the large field in 3 vs. 3 games had higher values than the physiological stresses of the games in the small and medium areas. In games played with the number of 4 vs. 4 players, it was found that games played in large area cause more intense physiological stress than games in small area (12). In a similar study, it was stated that athletes covered more distance and had more physiological load in the games played with 5 vs. 5 players in the large field. In technical skill applications, it is stated that the number of technical skill applications in a large area is less, and the number of technical skill applications increase as the area small (13). In researchers, they mentioned that physiological stress in athletes increased by increasing the field size by 10 meters and keeping the player numbers stable (14). When the common point of the researches is examined; the increase in distance results in more total distance and sprint distance, and in parallel, the athletes are under more physiological stress. At the same time, it is seen that the dribbling technical skills are applied more often than the games played in the small field in parallel with the large areas. As a result of the Ssg, the pressure of the opponent is felt more; the technical skills of the soccer players to pass and play very quickly, and naturally, they cover less distance and apply less sprints reduce the physiological stress in the athletes. Regarding the game sizes that can be transferred to the field from the researches in the literature: calculating the sizes as m^2 individual area to the soccer players and $100 m^2$ area per athlete: large, $75 m^2$ area: medium and $50 m^2$ area is studied in the fields of working as small field size (12, 15).

With and without Goalkeeper and Different Goal Rules Games

In soccer practice, many game formats are implemented by coaches. Some of these rules appear to be in the form of 1, 2 and unlimited ball touch with and without Goalkeeper, small goals, position games and man-marking games. It is seen that the games played with or without goalkeeper reveal different physiological and technical skills. In research; Playing 2 vs. 2, 3 vs. 3 and 4 vs. 4 games with and without goalkeeper, the heart rate and blood lactate results were examined, and without goalkeeper games were found to cause more physiological stress (16). In a similar study, it was found that the games played without goalkeepers with 1 vs. 1, 2 vs. 2, 3 vs. 3 and 4 vs. 4 footballers played more Ssg with more physiological load. However, it was stated that 3 vs. 3 and 4 vs. 4 games have higher results in terms of heart rate (8). In another study, it was mentioned that the inclusion of goalkeepers in games with 3 vs. 3 players decreased the intensity of the game and the high intensity runs decreased and revealed a lower heart rate (17). When the common points in the researches are examined, it is stated that the goalkeepers are included in the game and the athletes do not reveal more shooting skills to remove the ball from their feet and do not such as tackles. However, when the field size and with and without goalkeeper games are examined in a different study in the literature; It is seen that in games that are applied in small, medium and large areas, only without goalkeeper games played in small areas have high contact opponent team players (28x20 m; 560 m²). As the reason for this situation; the increase of the playing field was stated as the removal of soccer players from the idea of scoring goals, and it was also interpreted that the intensity of the game could prevent the game from increasing in large games since it was necessary to reveal more defense games in the goalkeeper and not to score goals (18). Goal rules studies of small goals, which are among other training methods, also have different physiological results and technical skill results. While the games played with the number of 4 vs. 4 players reveal higher physical stress than the games played with the 6 vs. 6 players, it was also revealed that playing games with the small-goal rule created higher intensities in the games with 4 vs. 4 players compared to the regular goal rules games. It has been stated that this type of effect does not occur in 6 vs. 6 player games. In games played with the positioning tactic according to the ball, it was also determined that the games played with 4 vs. 4 players revealed higher physiological values than the games played with the other two rules. However, an effect did not reveal in 6 vs. 6 games (19). In contrast to this research, they stated that the goal of applying small goals rules in the Ssg with fewer players had higher training intensity compared to normal goal rules games (20). In a similar study, the effects of 3 vs. 3, 5

vs. 5 and 7 vs. 7 players, based on small goal, goalkeeper and game position, have effect on the number of athletes' heart rate and distance traveled. Confirmation of athletes according to the position in the heart rate results shows that they have higher heart rates than the other two games. In addition, while goalkeeper games and goal-scoring games were determined to decrease workout of athletes, it was stated that athletes had more acceleration in these two types of games (games containing goals) (21). The reason for all these effects was determined by the normal goal rule due to the reason that the athletes applied more ease technical skills during the games and applied the ability to shoot at the moments they had difficulty. However, it is stated that the size of the goals to be scored does not have an effect on the physiological stress of the game when another game that is common in the large area is applied, it is mentioned that the athletes must approach the opponent first because of the distance to the goal in the large area.

When different uses of ball contact numbers are examined; in the games played with 4 vs. 4 players, it was found that the free ball contact rule reduced the high-intensive runs, while the athletes applied more technical skills such as tackles. In games played with one-touch and two-touch rule, it was found that athletes performed more sprints while applying technical skills insufficient. In free ball contact games, it is that the athletes applied more unsuccessful passes and the ball losses are higher. In short, the limitations of the number of contacts of athletes causes higher heart rate while causing more sprints, while free games are seen to cover more distance and less sprints. In other words, while free ball contact games are seen as aerobic exercise, limitations of ball contact are seen as anaerobic exercises (22).

Another rule applied in the games is man-marking. Man-marking is frequently applied by many coaches in order to neutralize the well-skills players of the opposing team. It was revealed that playing games with the man-marking in the games played with the number of 3 vs. 3 players with the man-marking increased the physical load by 4.5% compared to the games played without the man-marking. In the research, it indicated that the application of man-marking while making defense only, the necessity to go on the man-marking replay because the physiological load of the athletes to increase (23).

Coach Verbal Motivation

The verbal motivation to be given to the athletes during the games affects the performance of the athletes. In researches on this subject; it was found that the motivation of the coach was increased in the number of athletes' perceived exertion (Borg-CR10 or CR20), heart rate and blood lactate in the large and small area with 3 vs. 3, 4 vs. 4, 5 vs. 5 and 6 vs. 6

players. In the findings of the study, it was found that games played with 3 vs. 3 players revealed more physiological stress than games played 6: 6. At the same time, in this study, it is stated that games played in a larger area with the same number of players produce more physiological results (11).

Other Game Rules and Ssg

Applying different rules in games provides different physiological and technical results. In order for the games to intensify the intended aims, it is necessary to know what kind of acute effects the games will play with whatever rule they play. In research; Playing 2 vs. 2, 3 vs. 3 and 4 vs. 4 games with and without goal, heart rate and blood lactate results were examined. Games without goalkeeper cause more physiological stress, while games played as 2 vs. 2 have higher physiological results than other games, and it has been stated that the use of 2 vs. 2 games as anaerobic adaptation should also be used if more stress is desired (16).

Practical Implications and Advice

- 5 vs. 5 and 6 vs. 6 games with an area of 50 m² per player can be applied as adaptation training and the beginning of the season and after recovery sessions.
- Small field and free ball touch games can be used to adapt the athletes to the more intensive games.
- To increase the intensity of the games, larger areas, verbal motivations, man-marking and limitations of the number of the contact with the ball can be used to intensify the games.
- In order to increase physiological stress in games, games can be implemented in a larger area with fewer players (1: 1-2: 2-3: 3-4: 4).

REFERENCESS

1. Dellal, A., Hill-Haas, S., Lago-Penas, C., & Chamari, K. (2011). Small-sided games in soccer: amateur vs. professional players' physiological responses, physical, and technical activities. *The Journal of Strength & Conditioning Research*, 25(9), 2371-2381.
2. Impellizzeri, F. M., Marcora, S. M., Castagna, C., Reilly, T., Sassi, A., Iaia, F. M., & Rampinini, E. (2006). Physiological and performance effects of generic versus specific aerobic training in soccer players. *International journal of sports medicine*, 27(06), 483-492.
3. Owen, A. L., Wong, D. P., Paul, D., & Dellal, A. (2012). Effects of a periodized small-sided game training intervention on physical performance in elite professional soccer. *The Journal of Strength & Conditioning Research*, 26(10), 2748-2754.
4. Dellal, A., Chamari, K., Pintus, A., Girard, O., Cotte, T., & Keller, D. (2008). Heart rate responses during small-sided games and short intermittent running training in elite soccer players: a comparative study. *The Journal of Strength & Conditioning Research*, 22(5), 1449-1457.
5. Hill-Haas, S. V., Coutts, A. J., Rowsell, G. J., & Dawson, B. T. (2009). Generic versus small-sided game training in soccer. *International journal of sports medicine*, 30(09), 636-642.
6. Katis, A., & Kellis, E. (2009). Effects of small-sided games on physical conditioning and performance in young soccer players. *Journal of sports science & medicine*, 8(3), 374.
7. Hill-Haas, S. V., Dawson, B., Impellizzeri, F. M., & Coutts, A. J. (2011). Physiology of small-sided games training in football. *Sports medicine*, 41(3), 199-220.
8. Köklü, Y., Aşçı, A., Koçak, F. Ü., Alemdaroglu, U., & Dündar, U. (2011). Comparison of the physiological responses to different small-sided games in elite young soccer players. *The Journal of Strength & Conditioning Research*, 25(6), 1522-1528.
9. Katis, A., & Kellis, E. (2009). Effects of small-sided games on physical conditioning and performance in young soccer players. *Journal of sports science & medicine*, 8(3), 374.
10. Owen, A. L., Wong, D. P., McKenna, M., & Dellal, A. (2011). Heart rate responses and technical comparison between small-vs. large-sided games in elite professional soccer. *The journal of strength & conditioning research*, 25(8), 2104-2110.
11. Rampinini, E., Impellizzeri, F. M., Castagna, C., Abt, G., Chamari, K., Sassi, A., & Marcora, S. M. (2007). Factors influencing physiological responses to small-sided soccer games. *Journal of sports sciences*, 25(6), 659-666.

12. Köklü, Y., Albayrak, M., Keysan, H., Alemdaroğlu, U., & Dellal, A. (2013). Improvement of the physical conditioning of young soccer players by playing small-sided games on different pitch size–special reference to physiological responses. *Kinesiology: International journal of fundamental and applied kinesiology*, 45(1), 41-47.
13. Casamichana, D., & Castellano, J. (2010). Time–motion, heart rate, perceptual and motor behaviour demands in small-sides soccer games: Effects of pitch size. *Journal of sports sciences*, 28(14), 1615-1623.
14. Owen, A., Twist, C., & Ford, P. (2004). Small-sided games: The physiological and technical effect of altering pitch size and player numbers. *Insight*, 7(2), 50-53.
15. Lacome, M., Simpson, B. M., Cholley, Y., & Buchheit, M. (2018). Locomotor and heart rate responses of floaters during small-sided games in elite soccer players: Effect of pitch size and inclusion of goalkeepers. *International journal of sports physiology and performance*, 13(5), 668-671.
16. Köklü, Y., Sert, Ö., Alemdaroğlu, U., & Arslan, Y. (2015). Comparison of the physiological responses and time-motion characteristics of young soccer players in small-sided games: The effect of goalkeeper. *The Journal of Strength & Conditioning Research*, 29(4), 964-971.
17. Mallo, J., & Navarro, E. (2008). Physical load imposed on soccer players during small-sided training games. *Journal of sports medicine and physical fitness*, 48(2), 166.
18. Hulka, K., Weisser, R., & Belka, J. (2016). Effect of the pitch size and presence of goalkeepers on the work load of players during small-sided soccer games. *Journal of human kinetics*, 51(1), 175-181.
19. González-Rodenas, J., Calabuig, F., & Aranda, R. (2015). Effect of the game design, the goal type and the number of players on intensity of play in small-sided soccer games in youth elite players. *Journal of human kinetics*, 49(1), 229-235.
20. Casamichana, D., Castellano, J., González-Morán, A., García-Cueto, H., & García-López, J. (2011). Physiological demand in small-sided games on soccer with different orientation of space. *Int J Sport Sci*, 7(23), 141-154.
21. Castellano, J., Casamichana, D., & Dellal, A. (2013). Influence of game format and number of players on heart rate responses and physical demands in small-sided soccer games. *The Journal of Strength & Conditioning Research*, 27(5), 1295-1303.
22. Dellal, A., Lago-Penas, C., Wong, D. P., & Chamari, K. (2011). Effect of the number of ball contacts within bouts of 4 vs. 4 small-sided soccer games. *International Journal of Sports Physiology and Performance*, 6(3), 322-333.

23. Ngo, J. K., Tsui, M. C., Smith, A. W., Carling, C., Chan, G. S., & Wong, D. P. (2012). *The effects of man-marking on work intensity in small-sided soccer games. Journal of sports science & medicine, 11(1), 109.*



Chapter 4

THE MEANING OF SPORTS FOR ELEMENTARY SCHOOL STUDENTS IN TURKEY AND THE CZECH REPUBLIC: A STUDY OF WRITING AND DRAWING

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Introduction

The benefits of enhanced physical activity (PA) for children's development are well documented. Researchers report a relationship between a lack of physical activity and obesity (Biddle, Gorely & Stensel, 2004). In addition, self-esteem, social interaction and fewer symptoms of depression are commonly reported benefits of PA (Eime, Young, Harvey, Charity & Payne, 2013). The concept of sports differs from physical activity, because it includes elements such as competition, victory, defeat, and rules. It has been shown that sports participation has physical, psychological and social benefits for children (Eime, Young, Harvey, Charity & Payne, 2013).

Findlay and Coplan (2008) found in a study that social skills and self-esteem are related to sports participation in elementary school children. In addition, they identify a significant decrease in anxiety for shy children who participate in sports. Another study emphasizes that participation in sports protects against hopelessness and suicidal tendencies, due to its psychosocial benefits (Taliaferro, Rienzo, Miller, Pigg & Dodd, 2008). The study of Snyder et al. (2010) of adolescents who were athletes and non-athletes with a health-related quality of life showed that athletes have higher physical functioning, general health, social functioning, mental health, and mental composite scores, while their bodily pain scores are lower. According to another study, positive team sports involvement diminishes the risk of symptoms of depression (Boone & Leadbeater, 2006).

Hallal et al. (2012), attempting to determine the global level of physical activity, reported that 31.1% of adults worldwide are physically inactive, with percentages ranging from 17.0% in southeast Asia to about 43% in the Americas and the eastern Mediterranean. One reason for the low level of physical activity may be a lack of sports participation in childhood. Studies show that individuals who participate in sports during childhood have higher physical activity levels when they become adults (Tammelin, Näyhä, Hills & Järvelin, 2003). One reason for the low participation of children in sports may be a distorted perception of sports. Determining children's perceptions of sports and whether a distortion exists in this regard can thus potentially increase participation in sports and thus overall levels of health.

Method

This paper uses phenomenography to reveal elementary school students' conception of sports and to determine whether differences exist between students in Turkey and in the Czech Republic. Phenomenography is a method used to measure how people perceive the world around them (Marton, 1981, 1986).

Participants

17 elementary school students (3rd grade, 8-10 years old, 8 boys and 9 girls) were recruited from Brno, Czech Republic. 21 elementary school students (3rd grade, 8-9 years old, 12 boys and 9 girls) were recruited from Ankara, Turkey.

Procedures and Measures

Because the languages of the two countries differ, the students' cognitive structures were investigated using the technique of writing and drawing (Boddington, King & McWhirter, 2014; Dugdill, Crone & Murphy, 2009)

The students were instructed to write and make a drawing of what comes to mind when they hear the word "sports". The questionnaires given to the students in the Czech Republic were prepared in Czech and were then translated into English by a researcher who knows both English and Czech well. The students wrote and drew for an average of 40 minutes with no restrictions on the materials used.

Analytic Strategy

Phenomenographic analysis was carried out by following the steps defined by Bruce (1999). These are: becoming familiar with the data; identifying relevant parts of the data; comparing extracts, to find sources of variation or agreement; grouping similar segments of data; articulating preliminary categories; and constructing labels for the categories and determining the logical relationships between the categories (Bruce, 1999).

As an initial step, the data of students who did not produce both writing and drawing were excluded from the study. The pages produced by each participant were then numbered, and similar writing and drawing results were collected together. Main categories were created along with sub-categories, to identify similar writing and drawing data. Some drawing and writing examples are shown in Table 3. Separate writing and drawing codes and frequencies are given for girls and boys.

Findings

Categories	Sub-categories	Drawing Frequency		Writing Frequency	
		Girl	Boy	Girl	Boy
Sport Types (43.2%)	Floorball	1	-	1	-
	Kick Boxing	-	2	-	2
	Swimming	1	1	-	-
	Ice Skating	1	-	1	-
	Motor Sports	-	2		2
	Soccer	-	2	1	1
	Equestrian Sports	1	-	1	-
	Rugby	-	1	-	2
	Tennis	-	1	-	1
	Ice Hockey	-	1	1	1
	Judo	-	-	-	2
	Handball	1	-	1	-
	Total	5	10	6	11
		15		17	
Sports Environment (20.2%)	Outdoors	3	5	-	-
	Spectators	1	-	-	-
	Cloudy/sunny	2	1	-	-
	Brand/Athlete's name	1	2	-	-
		7	8	-	-
Total		15		-	
Sports Equipment (20.2%)	Soccer Goal	3	3	-	-
	Ice Skating Equipment	1	-	-	-
	Hockey Stick	1	-	-	-
	Ball	1	3	-	-
	Tennis Racket	-	1	-	-
	Ice Skates	-	1	-	-
	Scoreboard	-	1	-	-
Total		6	9	-	-
		15		-	

Athlete's Face (16.2%)	Happy	5	4	-	-
	Sad	-	2	-	-
	Angry	-	1	-	-
	Neutral	1	1	-	-
	Total	5	7	-	-
		12		-	

Table 1 Results from student's writing and drawing concerning the concept of "sports" in the Czech Republic

Students' writing and drawings in the Czech Republic suggest four main categories: "Sport Types (43.2%)", "Sports Environment (20.2%)", "Sports Equipment (20.2%)" and "Athlete's Face (16.2%)"

Examination of the table shows that both boys and girls have more writing and drawing results in the Sports Type category. In this category, boys have more drawing and writing frequency than girls. Boys also have more drawing frequency than girls in the Sports Environment, Sports Equipment and Athlete's Face categories. There is no writing data, however, in these categories.

Soccer (4), Kick boxing (4), and motor sports (4) have the highest frequency in the Sports Types category. In addition, the writing and drawing frequencies for ice hockey (3) and rugby (3) are higher than for floorball (2), swimming (2), ice skating (2), equestrian sports (2), tennis (2), or handball (2).

The Outdoors sub-category has the highest frequency (8) in the Sports Environment category. Brand/athlete name (3) and cloudy/sunny (3) drawing frequencies are higher than spectators (1).

Soccer goal (6) and ball (4) sub-categories have the highest frequencies in the Sports Equipment category. Ice skating equipment (1), hockey stick (1), tennis racket (1), ice skates (1,) and scoreboard (1) frequencies are the same in drawing frequency.

The happy (9) sub-category has the highest frequency in the Athlete's Face category. The drawing frequency of sad (2) and neutral (2) frequencies are higher than that of angry (1).

Categories	Sub-categories	Drawing Frequency		Writing Frequency	
		Girl	Boy	Girl	Boy
Sports Types (%49,5)	Gymnastics	-	-	1	-
	Ballet	-	-	2	-
	Basketball	2	5	4	5
	Judo		-	1	-
	Taekwondo	1	-	1	-
	Swimming	1	1	3	2
	Soccer	-	2	3	5
	Tennis	-	-	1	1
	Ice skating	1	1	2	1
	Volleyball	-	-	-	1
	Running	2	-	3	1
	Cycling	1	-	-	-
	Total	8	9	22	16
Sports Environments (%20,1)		17		37	
	Outdoor area	4	8	-	-
	Green space	-	2	-	-
	Cloudy/sunny	2	5	-	-
	Spectators	-	1	-	-
	Total	6	16		
Sports Equipment (%17,4)		22		-	
	Basketball hoop	1	4	-	-
	Soccer goal	-	2	-	-
	Ball	2	7	-	-
	Scoreboard	-	1	-	-
	Swimming cap-swim goggles-swimsuit	-	1	-	-
	Medal	1	-	-	-
		4	15	-	-
	Total	19		-	

Other Thoughts About Sports (%12,8)	Fun	-	-	2	6
	Game	1	-	1	-
	Education	-	-	1	-
	Increase in height	-	-	1	-
	Foot growth	-	-	-	1
	Turkish flag	-	1	-	-
	Total	1	1	5	7
		2		12	

Table 2 Students' writing and drawing findings concerning the concept of "sports" in Turkey

Students' writing and drawing findings in Turkey suggest four main categories: "Sports Types (49.5%)", "Sports Environment (20.1%)", "Sports Equipment (17.4%)" and "Other Thoughts About Sports (12.8%)"

Examination of the table shows that both boys and girls have more writing and drawing findings in the Sports Types main category. In this main category, boys have more drawing frequency, while girls have more writing frequency. Boys have more drawing frequency than girls in the Sports Environment and Sports Equipment categories. Boys and girls have the same writing frequency in the Other Thoughts About Sport category. Boys also have more writing frequency in this category.

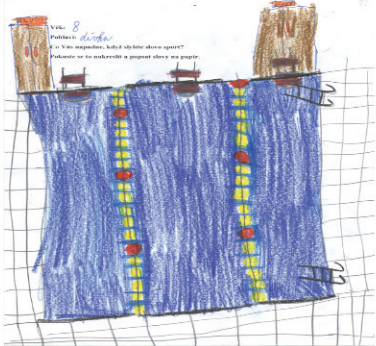



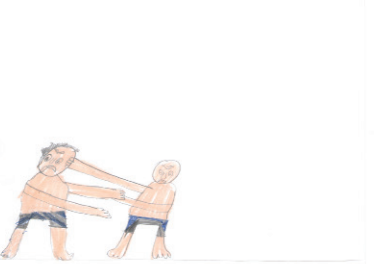

The Basketball sub-category has the highest frequency (16) in the Sports Types category. Soccer (10), swimming (7), and running (6) have higher frequencies than ice skating (5), ballet (2), Taekwondo (2), tennis (2), gymnastics (1), judo (1), and volleyball (1).

The Outdoor area (12) sub-category has the highest frequency in the Sports Environment category. The Cloudy/sunny (7) frequency is higher than Green Space (2) and Spectators (1).

The Ball sub-category has the highest frequency (9) in the Sports Equipment category. The Basketball hoop (5) and Soccer goal (2) frequencies are higher than Swimming cap-swim goggles-swimsuit (1) and medal (1).

The Fun (8) sub-category has the highest frequency in the Other Thoughts about Sports category. The Game sub-category has a higher frequency (2) than education (1), increase in height (1), foot growth (1), and Turkish flag (1).

Table 3 Some drawing examples

Czech Republic	Turkey
 <p>Yazı: 8 Publisy: basket Çizim: basket Pekente ne ne okuyabiliriz? basket oyunu ne peyge</p>	 <p>Yazı: 8 Publisy: basket Çizim: basket Pekente ne ne okuyabiliriz? basket oyunu ne peyge</p>
 <p>Yazı: 9 Publisy: futbol Çizim: futbol Pekente ne ne okuyabiliriz? futbol oyunu ne peyge</p>	 <p>Yazı: 9 Publisy: futbol Çizim: futbol Pekente ne ne okuyabiliriz? futbol oyunu ne peyge</p>
 <p>Yazı: 10 Publisy: judo Çizim: judo Pekente ne ne okuyabiliriz? judo oyunu ne peyge</p>	 <p>Yazı: 10 Publisy: yüzme Çizim: yüzme Pekente ne ne okuyabiliriz? yüzme oyunu ne peyge</p>

Discussion and Result

The drawing and writing results show that the main category “Sports types” was the most frequent expressions of sports by the participants in both Turkey and the Czech Republic. While “basketball” is the most common sports type for Turkish students, “motor sports” and “kick boxing” are among Czech students. In addition, “gymnastics”, “cycling”, and “judo” are the sport types referenced most often by Turkish students, while “floorball”, “swimming”, “ice skating”, “equestrian sports”, “tennis”, “judo”,

and “handball” were the least mentioned by Czech students. A study conducted in Turkey reported that children frequently drew football, running, swimming, and gymnastics as a sport type (Usta & Şahin, 2016). When the current research results are examined, similar subcategories appear. Other research shows that when the children were asked about the sports types they wanted to participate in, girls responded mostly by naming gymnastics, ballet, and ice skating, while boys preferred more active sports such as soccer (Aydoğan, Özyürek & Akduman, 2015). A similar result can be extracted from the present research, since ice skating and gymnastics were referenced more frequently by girls. Boys also have more writing and drawing frequency in the soccer type than girls. The current findings appear to resemble those in related literature. Due to cultural differences, students in the Czech Republic and Turkey referred most frequently to different sports. But judo is among the least referenced sports types in both countries. One reason for the difference may be exposure to the sports type in question.

The “sports environment” category is the most frequently referenced “outdoor area” sub-category, and also the most frequently referenced sub-category for students in both countries. The “cloudy/sunny” and “spectator” sub-categories are also shared. Unlike in the Czech Republic, students in Turkey wrote and drew in the “green field” frequency sub-category. Unlike students in Turkey, students in the Czech Republic have “brand/athlete’s name” sub-categories of writing and drawing frequency. In general, children in both countries seem to have similar perceptions about sports. In another study, outdoor area elements were frequently included in children’s drawings related to the place where the sport was performed (Usta & Şahin, 2016). The literature on the current research finding is parallel.

The third common category is “sports equipment”. While for students in Turkey the highest frequency sub-category is “ball”, in the Czech Republic the highest frequency sub-category is “soccer goal”. The “ball” sub-category ranks second in the drawing frequencies of students in the Czech Republic. For students in Turkey, “soccer goal” occupies the second rank of sub-categories. Common sub-categories are found for both countries. According to another research result, when children were asked “What is used for sports?”, the most common answer is a soccer ball (Sarıkabak, Recep & Ayrancı, 2018).

The “Other Thoughts about Sports” category in the analyses of students in Turkey is not included in the results from the Czech Republic. Instead, students in the Czech Republic were found to have the category “Athlete’s face”. The most common notion that sport suggests for students in Turkey is “fun”. In addition, ideas such as game, education, increase in

height, foot growth, and Turkish flag were expressed by students in Turkey. The most frequently expressed athlete's face in the Czech Republic is happiness. While sad and neutral expressions come in second place, the least common athlete's face is anger. One might conclude that children perceive athletes positively. Violent elements were also found in the drawings of one child.

In conclusion, primary school students between 8 and 10 years old in Turkey and the Czech Republic have a similar perception of the concept "sports". Although there are violent elements in children's pictures in the Czech Republic, there is nothing of this sort in children's pictures in Turkey.

References

- Aydoğan, Y., Özyürek, A., & Akduman, G. G. (2015). The views of preschool children about sports. *International Journal of Sport Culture and Science*, 3(Special Issue 4), 595-607. Doi: 10.14486/IJSCS441
- Biddle, S. J., Gorely, T., & Stensel, D. J. (2004). Health-enhancing physical activity and sedentary behaviour in children and adolescents. *Journal of Sports Sciences*, 22(8), 679-701. <https://doi.org/10.1080/02640410410001712412>
- Boddington, N., King, A., & McWhirter, J. (2014). Understanding personal, social, health and economic education in primary schools. London: Sage. <https://doi.org/10.4135/9781473921610>
- Boone, E. M., & Leadbeater, B. J. (2006). Game on: Diminishing risks for depressive symptoms in early adolescence through positive involvement in team sports. *Journal of Research on Adolescence*, 16(1), 79-90. <https://doi.org/10.1111/j.1532-7795.2006.00122.x>
- Bruce, C. S. (1999). Phenomenography: opening a new territory for library and information science research. *The New Review of Information and Library Research*, 5(1), 31-48. Retrieved from <http://eprints.qut.edu.au/57651/1/57651.pdf>
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98. <https://doi.org/10.1186/1479-5868-10-98>
- Findlay, L. C., & Coplan, R. J. (2008). Come out and play: Shyness in childhood and the benefits of organized sports participation. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, 40(3), 153-161. <https://doi.org/10.1037/0008-400X.40.3.153>

- Hallal, P. C., Andersen, L. B., Bull, F. C., Guthold, R., Haskell, W., Ekelund, U., & Lancet Physical Activity Series Working Group. (2012). Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet*, 380(9838), 247-257. [https://doi.org/10.1016/S0140-6736\(12\)60646-1](https://doi.org/10.1016/S0140-6736(12)60646-1)
- Marton, F. (1981). Phenomenography describing conceptions of the world around us. *Instructional Science*, 10(2), 177-200. <https://doi.org/10.1007/BF00132516>
- Marton, F. (1986). Phenomenography a research approach to investigating different understandings of reality. *Journal of Thought*, 28-49. Retrieved from <http://www.jstor.org/stable/42589189>
- Sarıkabak, M., Recep, A. A., & Ayrancı, M. (2018). Examining views of primary school children aged 6-7 on sports. *CBU Journal of Physical Education and Sport Sciences*, 13(2), 405-417.
- Snyder, A. R., Martinez, J. C., Bay, R. C., Parsons, J. T., Sauers, E. L., & McLeod, T. C. V. (2010). Health-related quality of life differs between adolescent athletes and adolescent nonathletes. *Journal of Sport Rehabilitation*, 19(3), 237-248.
- Taliaferro, L. A., Rienzo, B. A., Miller, M. D., Pigg Jr, R. M., & Dodd, V. J. (2008). High school youth and suicide risk: exploring protection afforded through physical activity and sport participation. *Journal of School Health*, 78(10), 545-553. <https://doi.org/10.1111/j.1746-1561.2008.00342.x>
- Tammelin, T., Näyhä, S., Hills, A. P., & Järvelin, M. R. (2003). Adolescent participation in sports and adult physical activity. *American Journal of Preventive Medicine*, 24(1), 22-28. [https://doi.org/10.1016/S0749-3797\(02\)00575-5](https://doi.org/10.1016/S0749-3797(02)00575-5)
- Usta, S. Y., & Şahin, F. T. (2016). Sports in children's drawings. *International Journal of Sport Culture and Science*, 4 (Special Issue 1), 214-227.



Chapter 5

IMPACT OF SPORTS ON THE ECONOMY AND HEALTH

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Introduction

During the onset of the 21st century, the sport was thought to be an entertaining activity (Kerr et al., 2015). The primary role of the spectator and participant sport was to entertain people after work (Delaney & Madigan, 2015). During this time, the government was not deeply involved in the sport-events. This resulted in the poor organization of the sport-events and poor administration and marketing. For the funds raised through the events, only the players and the organizers would benefit (Houlihan & Malcolm, 2015; Heere et al., 2013). This led many scholars to only focus on determining the impact of the sporting events on the financial stability of the players or sportspersons and the organizer. Most of the studies carried out during the time only indicate that sports increase the body activity of the players hence making them more physically fit (Alegi & Bolsmann, 2013; Evens, T., Iosifidis & Smith, 2015; Agha & Taks, 2013; Özkara, 2018; Yilmaz, 2013). Generally, the studies offer a firm stand on the fact that sports improve the health of the sportspersons (Özkara et al., 2016; Özbay et al., 2018; Farhud, 2015). Very few studies focused on providing knowledge on the impact that sports have on the spectators, the hosting cities and towns, and the country at large. For those studies which have had a closer look on the impact of sports on the spectators, they only focus on the entertainment that was associated with the sports events (Peeters, Matheson & Szymanski, 2014; Masterman, 2014; Abrahams et al., 2013).

In the present world, every decision made in the sports industry is influenced by commercial interest. The sport-events are well organized, administered, and marketed more like a business (Shank & Lyberger, 2014). Players in all kinds of sports have emerged as the richest individuals in the society. The rating of the sport-events has been based on the ticket sales, television audience share, websites hits, media coverage, concession sales, and sponsor revenue (Brittain, 2016; Haudenhuyse, Theeboom & Nols, 2013). Also, losses and wins have all been important (Sailes, 2017). They have been influencing the different measurement standards. Governments have joined the sports industry and diverted a great percentage of their expenditure to the development of sporting facilities so as to maximize the returns from the sporting events (Bale & Maguire 2013). The growth of the sport into a business has resulted in significant changes in the government revenues and the growth of the economy (Hargreaves, 2014). The expanding sports industry has increasingly absorbed the labor force reducing the unemployment rate in the country and resulting in a more balanced economy. Governments have used the money gained from the sporting events to finance development projects (Dauncey & Hare, 2014). Generally, sporting events in the present era have been associated with increased revenue gain by the government which is then used in the development of the economy hence leading to increased economic growth (Bales & Sang, 2013).

Current studies on the impacts of sports have been focused on the developed countries such as the U.S., Germany, England, and France. The studies have brought to light the fact that sports have had a positive impact on the growth of the economy (Needleman, et al., 2013; Jones & Jones, 2014). This has been reflected in the increased revenue gain by the government and the players and the increased employment rate. The expansion of the sports industry has led to the development of tax policies that impose more tax on the players and treat the sport-clubs as companies. The huge tax obtained from the industry has been used by the governments in the developed countries to finance development projects and hence improved economic growth (Sailes, 2017). The revenue has also been used in the financing of health projects and hence improved health in the developed countries (Aryankhesal et al., 2018; Smith-Swan & Parent, 2013). Generally, the studies on the impact of sports on the economic development and health of the developed countries have offered a firm stand on the fact that sports lead to increased economic growth rate and improvements in the health.

From the above analysis, it is clear that the impact of sports on the economic growth and health of the developing countries has been neglected. Developing countries have also turned their interest into the improvement of the sports industry so as to achieve the same levels achieved by the developing countries (Jarvie, 2014; Leeds, Von Allmen & Matheson, 2018; Özkara, 2019). However, researchers have not channeled much of their attention and resources in the determination of the existing relationship between increased investment in sporting facilities and the economic growth and health of the countries. Only a few systematic reviews have been conducted in the study of the impact of sports on the economic growth and health of the developing countries. This systematic review will focus on the African countries so as to bring to light the impact of the sports on the health and the economy of the developing world.

Materials & Methods

Studies on the on the impact of sports on the economy and health in the developing world and which were published between September 2013 and September 2018 were searched in Proquest and PubMed. The studies were not limited to the journal articles but also included the master's theses and doctoral theses. To ensure that only the relevant studies were identified, the following terms were researched: Continent-related (Africa, African, developing world, and colonized), sport-related (football, Olympics, volleyball, netball, basketball, hockey, hockey-ice, and badminton), intervention-related (health, healthcare organizations, developments, economic growth, revenue, taxation, and policy) and participant-related (men, women, youths and military).

(1) controlled trials in both randomized and non-randomized experiments; (2) outcomes were assessed based on the economic growth rate of the country, life expectancy, number of public health facilities, money diverted to the health sector, and the annual increase in the number of development projects; (3) the durations of the different interventions were not less than six months; (4) availability of the full text. Studies only published in other languages other than English were excluded. Studies which looked at Africa in relation to other continents were also excluded. Finally, studies with unclear or complicated statistical interventions were excluded.

To ensure that more relevant articles were obtained, the articles appearing on the reference lists of the articles obtained were also included in the review. To also capture articles which have not yet been published but they contain relevant information about the impact of sports on the economic and health developments of the African countries, the search was done on the government websites for the African countries. Many of these studies only focused on individual countries and hence they could not give a clear picture of the impact of sport on the continent. Therefore, this inclusion criterion did not provide any studies to be included in the final review.

In the evaluation of the quality of the studies, the following components were considered: the cofounders, methods employed in the collection of the data, the design of the study, blinding, bias evident in the selection, and the loss to follow up. The quality of the study could only be weak, moderate, or strong. The decision on the quality of the study was based on the rating given to the evaluation components. If none of the components received a weak rating, the study qualified to be of a strong quality. If one of the evaluation components received a weak rating, the studies overall quality was categorized as moderate. The overall quality of the study would only be weak if more than one evaluation components received a weak rating.

Year of publication, the size of the different samples that were used, the targeted population, the period of intervention, the author, the location, intervention components, theoretical framework, sampling method and the age of those who participated in the games or who were interviewed were extracted for the analysis. Only those studies whose outcomes between the intervention and the control groups have a p-value ranging above 0.05 were considered to be statistically significant.

For those strategies of intervention for which the economic growth rate and the life-expectancy had been used as outcome measures, a thorough meta-analysis was conducted. The outcomes of the meta-analysis were the changes in the economic growth rate and in the life expectancy. In the performance of meta-analysis, the sample size, SD (Standard de-

viation), and the average value or the mean from each study were used. Studies which lacked SD were not excluded; the change in the SD was calculated from the SE (Standard error) at a 95% level of confidence. Corr of 0.9 was used in the calculation of the SD change in the control group. For the case of the intervention, Corr of 0.85 was used.

The effective studies obtained were grouped based on the population targeted (those that only relied on responses from Africans vs. those that relied on responses from players regardless of their continent of origin). For heterogeneity assessment, the L-squared statistic was employed. For studies whose statistic was not less than 0.05, they were excluded. For the meta-analysis, review manager 5.3 was employed. STATA was used for heterogeneity test. The hypothesis was said to be statistically significant if the P-value was less than 0.05 for a one-sided test and 0.025 for a two-sided test.

Results

Pubmed and Proquest initially gave a total of 3,250 potential articles. After the application of the inclusion criteria, only thirteen articles made it to the end. For the thirteen articles that met the inclusion criterion, ten were journal articles (Peeters, Matheson & Szymanski, 2014; Needleman, et al., 2013; Li, Blake & Thomas, 2013; Kerr et al., 2015; Jones & Jones, 2014; Heere et al., 2013; Haudenhuyse, Theeboom & Nols, 2013; Giampiccoli, Lee, & Nauright, 2015; Bale & Sang, 2013; Abrahams, et al., 2013) two were master's theses (Brittain, 2016; Hargreaves, 2014), and one was a doctoral thesis (Sailes, 2017). The Fisher's Exact Test between the journal articles and the theses was equal to one. This implies that there was no statistical significance between the journal articles and the theses. The flow chart shown in Appendix 1 gives a summary of the selection criterion.

For the thirteen studies, six were published in 2013 (Needleman, et al., 2013; Li, Blake & Thomas, 2013; Heere et al., 2013; Haudenhuyse, Theeboom & Nols, 2013; Bale & Sang, 2013; Abrahams, et al., 2013), three in 2014 (Peeters, Matheson & Szymanski, 2014; Jones & Jones, 2014; Hargreaves, 2014), two in 2015 (Giampiccoli, Lee, & Nauright, 2015; Nauright, 2015), one in 2016 (Brittain, 2016) and one in 2017 (Sailes, 2017). This implies that a more research on the impact of sports on health and economic development of the African nations was done in the year 2013. Four of the thirteen studies employed theoretical framework as the socio-ecological framework.

Majority of the studies (more than 50%) used many interventions ((Peeters, Matheson & Szymanski, 2014; Needleman, et al., 2013; Li, Blake & Thomas, 2013; Kerr et al., 2015; Jones & Jones, 2014; Heere et

al., 2013; Haudenhuyse, Theeboom & Nols, 2013; Giampiccoli, Lee, & Nauright, 2015; Bale & Sang, 2013; Abrahams, et al., 2013). For those that employed just a single intervention, they used economic growth rate and the life-expectancy as outcome measures (Peeters, Matheson & Szymanski, 2014; Kerr et al., 2015; Jones & Jones, 2014; Heere et al., 2013; Giampiccoli, Lee, & Nauright, 2015; Sailes, 2017; Bale & Sang, 2013; Abrahams, et al., 2013).

Eight of the thirteen studies had a weak quality (Peeters, Matheson & Szymanski, 2014; Needleman, et al., 2013; Li, Blake & Thomas, 2013; Kerr et al., 2015, Sailes, 2017; Giampiccoli, Lee, & Nauright, 2015; Bale & Sang, 2013; Abrahams, et al., 2013). The remaining five studies were overly rated to be of a moderate quality (Jones & Jones, 2014; Heere et al., 2013; Haudenhuyse, Theeboom & Nols, 2013; Brittain, 2016; Hargreaves, 2014). None of the thirteen studies qualified to have a strong quality. However, the quality seems to change with the currency of the articles.

For the five studies that had used a single intervention, only two employed RCTs (Jones & Jones, 2014; Heere et al., 2013). The p-value of the Chi-square test between the quality of the effective and non-effective treatment studies was equal to 0.764. This implies that the difference was statistically insignificant. Comprehensive studies that employed economic growth rate and life-expectancy were found to be more effective.

Economic growth rate emerges as the best measure of the economic growth of the continent due to the sporting events. On the other hand, life expectancy is the best measure of the changes brought about by increased investment in sporting facilities in the health sector.

This study offers the best review of the impact of sports on the economic development of the developing world. This is due to the fact that higher quality studies have been used. The study can be used in the development of policies governing the taxation of players and clubs in Africa and other countries in the developing world.

Increased investment in the sporting facilities leads to increased growth rate and more improvements in the health (Haberfeld & Sheehan, 2013; Darby, 2013; Giampiccoli, Lee & Nauright, 2015). This is due to the fact that the sporting events generate more income which goes to the government budget through the existing taxation policy. The government then uses these revenues in the funding of development projects and hence increased the growth and development of the economy. Also, the increased revenue leads to the diversion of a higher amount of funds to the development of the health facilities which result in improved health of the country in question (Coalter, 2013; Li, Blake & Thomas, 2013).

From the articles reviewed, it is clear that economic growth rate is the best measure that can be adopted in the determination of impact that increased investment in the sporting facilities has had on the economy of the developing world. This is due to the fact that the revenues that are gained from the sporting events are used in the funding of the development projects which translate to increase in GDP and hence increased the growth of the economy. Improved health results in increased life expectancy. This implies that life expectancy is the best measure that can be relied upon in the determination of the impact that the increased investment in the sporting activities has had on the health of a country.

The study has various limitations. One, none of the studies qualified to be of higher quality. This implies that the studies reviewed had a higher binding bias. Secondly, due to the few studies were done on the impact of sports on the economy and health of the developing world, such interventions components as the increase in the healthcare facilities and the development of the economy could not be tested. Finally, international studies employ different designs, interventions, and contents (Shipway & Fyall, 2013). This implies that the results of the study cannot be compared with international study results.

There is insufficient information based on the impact of sports on the economy and health of the developing world. For the available studies, it is clear that increased investment in the sporting activities results in increased economic growth and improved health. This is due to the fact that the increased spending results in increased number of sports events. These events generate more revenue which is used by the government in the financing of growth, development, and health projects. However, more research needs to be done so as to determine the impact that increased spending on the sporting activities has had on the increment in the number of health facilities and the developments of the economy in such areas as living standards and income inequality.

REFERENCES

- Abrahams, S., Mc Fie, S., Patricios, J., Posthumus, M., & September, A. V. (2013). Risk factors for sports concussion: an evidence-based systematic review. *Br J Sports Med*, bjsports-2013
- Agha, N., & Taks, M. (2015). A theoretical comparison of the economic impact of large and small events. *I. J. of Sport Finance*, 10(3): 199-216
- Alegi, P., & Bolsmann, C. (2013). *South Africa and the global game: football, apartheid and beyond*. Routledge

- Aryankhesal, A., Etemadi, M., Mohseni, M., Azami-Aghdash, S., Nakhaei, M (2018). Catastrophic Health Expenditure in Iran: A Review Article. *Iranian Journal of Public Health*, 47(2): 166-177
- Bale, J., & Maguire, J. (2013). *The global sports arena: Athletic talent migration in an interdependent world*. Routledge
- Bale, J., & Sang, J. (1994). Out of Africa: the "development" of Kenyan athletics, talent migration and the global sports system'. *The global sports arena: Athletic talent migration in an interdependent world*, 206-225
- Brittain, I. (2016). *The paralympic games explained*. Routledge
- Coalter, F. (2013). *Sport for development: What game are we playing?* Routledge
- Darby, P. (2013). *Africa, football and FIFA: politics, colonialism, and resistance*. Routledge
- Dauncey, H., & Hare, G. (2014). *France and the 1998 World Cup: The national impact of a world sporting event*. Routledge.
- Delaney, T., & Madigan, T. (2015). *The sociology of sports: An introduction*. McFarland
- Evens, T., Iosifidis, P., & Smith, P. (2013). *The political economy of television sports rights*. Springer
- Farhud, D. (2015). Impact of lifestyle on health. *Iranian J. of Public Health*, 44(11): 1442-1444
- Giampiccoli, A., Lee, S. S., & Nauright, J. (2015). Destination South Africa: Comparing global sports mega-events and recurring localized sports events in South Africa for tourism and economic development. *Current Issues in Tourism*, 18(3): 229-248
- Haberfeld, M. R., & Sheehan, D. (Eds.). (2013). *Match-fixing in international sports: Existing processes, law enforcement, and prevention strategies*. Springer Science & Business Media
- Hargreaves, J. (2014). *Sport, Culture, and Ideology (RLE Sports Studies)*. Routledge
- Haudenhuyse, R., Theeboom, M., & Nols, Z. (2013). Sports-based interventions for socially vulnerable youth: Towards well-defined interventions with easy-to-follow outcomes? *International Review for the Sociology of Sport*, 48(4): 471-484
- Heere, B., Walker, M., Gibson, H., Thapa, B., Geldenhuys, S., & Coetzee, W. (2013). The power of sport to unite a nation: The social value of the 2010 FIFA World Cup in South Africa. *European Sports Management Quarterly*, 13(4): 450-471
- Houlihan, B., & Malcolm, D. (Eds.). (2015). *Sport and society: a student introduction*. Sage
- Jarvie, G. (2014). *Class, Race, and Sport in South Africa's Political Economy (RLE Sports Studies)*. Routledge

- Jones, P., & Jones, A. (2014). Attitudes of Sports Development and Sports Management undergraduate students towards entrepreneurship: A university perspective towards best practice. *Education+ Training*, 56(8/9): 716-732
- Kerr, Z. Y., Yeargin, S. W., Valovich McLeod, T. C., Mensch, J., Hayden, R., & Dompier, T. P. (2015). Comprehensive coach education reduces head impact exposure in American youth football. *Orthopedic journal of sports medicine*, 3(10): 2325967115610545
- Leeds, M. A., Von Allmen, P., & Matheson, V. A. (2018). *The economics of sports*. Routledge
- Li, S., Blake, A., & Thomas, R. (2013). Modelling the economic impact of sports events: The case of the Beijing Olympics. *Economic Modelling*, 30 (2013): 235-244
- Masterman, G. (2014). *Strategic sports event management*. Routledge.
- Needleman, I., Ashley, P., Petrie, A., Fortune, F., Turner, W., Jones, J., ... & Clough, T. (2013). Oral health and impact on the performance of athletes participating in the London 2012 Olympic Games: a cross-sectional study. *Br J Sports Med*, bjsports-2013
- Özkara, A. B. (2018). Physical education in EU schools and Turkey: A comparative study. *Comparative Professional Pedagogy*, 8(2), 101-106.
- Özbay, S., Ulupinar, S., & Özkara, A. B. (2018). Agility Performance in Sports. *Journal of National Sport Sciences*, 2(2), 97-112.
- Özkara, A. B., Kalkavan, A., & Çavdar, S. (2016). An investigation of anxiety levels of hearing impaired Turkish national young athletes. *International Journal of Sports Research*, 6(2).
- Özkara, A. B. (2019) Investigation of entrepreneurship qualifications of sports high school students. *MANAS Journal of Social Studies*, 8(1), 1304-1312.
- Peeters, T., Matheson, V., & Szymanski, S. (2014). Tourism and the 2010 World Cup: Lessons for developing countries. *Journal of African Economies*, 23(2), 290-320
- Sailes, G. A. (2017). Betting against the odds: An overview of black sports participation. In *African Americans in sports* (pp. 23-36). Routledge.
- Sailes, G. A. (2017). *African Americans in Sports*. Routledge
- Shank, M. D., & Lyberger, M. R. (2014). *Sports marketing: A strategic perspective*. Routledge
- Shipway, R., & Fyall, A. (Eds.). (2013). *International sports events: Impacts, experiences, and identities*. Routledge
- Smith-Swan, S., & Parent, M. M. (2013). *Managing major sports events: Theory and practice*. Routledge
- Yılmaz, A. (2018). Attitudes towards physical education course and extracurricular sport activities of parents, 12 (1), 48-64



Chapter 6

OBESITY AND PHYSICAL ACTIVITY IN CHILDREN

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Introduction

Over the past 20 years, the prevalence of obesity among the middle-level students in England increased substantially. According to 2018 data of the world health organization (WHO) England is the third country with the highest rate of obesity in the European continent, After Turkey and Malta. Many of the systematic reviews about the effectiveness of physical activity on the reduction of the problem of obesity amongst the middle-level students were conducted for Europe and U.K. This leaves England's case unaddressed. England is the third country with the highest rate of obesity in the European continent, After Turkey and Malta. This systematic review study seeks to fill the knowledge gap. In this research, two databases, PubMed and ProQuest were used in the identification of both the non-randomized and randomized controlled trials that examined the effectiveness of different interventions in preventing and treating obesity. From the ten studies which are finally selected, it is found that the most commonly used interventions were health education and physical activities. However, physical activities are found to be the most effective intervention that can be used in the treatment and prevention of obesity among the middle-level students in England.

Obesity is proving to be a major threat to the human health in both the developing and the developed nations (Mei et al. 2016; Özkara et.al. 2015). Over the recent decades, the prevalence of obesity among the middle-level students (students aged between 11 and 14 years) has significantly increased. In the year 2013, for example, the prevalence of obesity and overweight among the female middle-level students in the high-income countries was 22.6%. This is a very high percentage compared to the 16.2% obtained in 1980. The conditions are not only prevalent amongst the female students; from the year 1980 to the year 2013, the prevalence of obesity and overweight among the male middle-level students increased from 16.9% to 23.8% (Feng et al. 2017). The problem is also common in the middle and low-income countries. However, its prevalence among the middle-level students is very low compared to the level in the high-income countries. In the year 2013, the prevalence of obesity and overweight in the countries was 12.9% and 13.4% for male and female middle-level students respectively (Donnelly et al. 2016).

Over the past period of 20 years, the prevalence of obesity amongst the middle-level students in England has increased substantially. This has led the researchers to the conclusion that schools offer an ideal environment for increased weight among the students. Moreover, schools have been used in the delivery of the obesity interventions to the students due to the fact that they spend the most of their waking time there (more than eight hours daily). Research shows that middle-level students who live in

deprived areas in England are at a higher risk of becoming obese; 26.2% of the students aged between 11 and 14 years and who live in the most deprived areas are obese. This is a relatively higher percentage compared to the 12.8% of the students aged between 11 and 14 years who live in deprived areas (Van Hecke et al. 2016; Sallis et al. 2016; Poitras et al. 2016). It is clear from the statistics that the students who reside in areas that are most deprived are twice as likely to develop obesity problems.

Obesity amongst the children aged between 11 and 14 years is associated with a great number of adverse health effects (Guinhouya, Samouda & De Beaufort 2013; Flegal et al. 2013; Lachat et al. 2013; Konstabel et al. 2014; Ma et al. 2013). These effects include sleep problems, asthma, inactivity, high blood pressure, inflammation, and negative self-image (Cain et al. 2013; Hinckson & Curtis 2013; Mitchel et al. 2013; Malik et al. 2013). Moreover, upon developing these health effects, the students are again exposed at a higher risk of developing non-communicable diseases in their later stages of life. To reduce both the health disorders associated with the children and the chronic non-communicable diseases, early intervention is recommended (Gallus et al. 2015; Dobbins et al. 2013). More research needs to be done on the ways through which obesity can be prevented and controlled so as to save not only the students at their younger age but also during their later stages of development (Özbay et al. 2018; Özkara, 2018; Williams et al. 2014; Hamer et al. 2013). Being a high-income country, England has its middle-level students exposed at a higher risk of developing the health effects and the chronic non-communicable diseases later in their lives.

Several systematic reviews have been used to study the effectiveness of physical activities in the avoidance of obesity amongst the middle-level students. Some of the reviews have demonstrated the fact that the physical activities effectively reduce BMI among the children and also help avoid the development of the obesity disorder. Many of these reviews refer to the U.S., African Countries, or Europe as a whole. This has resulted in a lack of the studies regarding the effectiveness of the physical activities in England. This systematic review focuses on England alone so as to come up with the best results based on the effectiveness of physical activities in preventing and controlling obesity among the middle-level students.

Materials & Methods

Studies on the interventions based on school whose publication dates range between January 2013 and August 2018 were searched in PubMed and Proquest. Included in the review were the Doctoral theses, master's theses, and journal articles. To identify the relevant studies, the terms that follow were searched from all the fields: Country-related (England, Britain,

British, and English), weight-related (BMI, adiposity, overweight, obesity, weight, and fat), intervention-related (physical activity, behavior, diet, prevention, exercise, environment, strategy, education, policy, sedentary), Participant-related (girl, boy, middle-aged, middle-level, young students, child, and adolescence).

Both the reviewed and original articles' reference lists were manually checked so as to identify more publications. Moreover, for the identification of the unpublished articles, search was done in the clinicaltrials.gov. However, they all failed to meet the inclusion criterion.

The Effective Public Health Practice Project Quality Assessment Tool got used in the evaluation of the quality of the studies included. In the assessment, the following components were keenly evaluated: bias of selection, cofounders, methods of data collection, study design, loss to follow up and blinding (Deeks et al., 2003). Each of these components was rated as of weak, moderate, or strong quality. If none of the components has a weak rate, the overall quality of the study was given a strong rate. If one component had been rated weak, the overall quality was moderate ad weak if more than one component had been rated as weak. There was weak 1 studies category (for which only two components had been rated weak) and weak 2 (for those studies for which more than two components had a weak rating).

For analysis, the data that follows was extracted: publication year, the gender that participated, group's sample size, the age of the participant or the school grade, population targeted, duration of intervention, location, and author, components of the intervention, the main anthropometric outcomes, randomized method and the theoretical framework.

A study only qualified to be a statistically significant improvement if one or more anthropometric outcomes between the control groups and the intervention had a p-value less than 0.05.

For each of the intervention strategies for which BMI had been used as the measure of the outcome, a meta-analysis was thoroughly conducted. The meta-analysis outcomes were the BMI changes from the intervention groups' baseline in comparison with the control groups' changes. For meta-analysis, information regarding the size of the sample, the standard deviation or SD and the mean were extracted from each study. For those studies which lacked the SD, the SE or the standard error at 5% significance level was used in the calculation of the change in the SD. For the calculation of the change in the SD in the control group and intervention, Corr of 0.89 and 0.8 were used respectively.

All the effective studies were primarily grouped on the basis of the target population (the treatment studies which had recruited only the obese middle-level school students vs. such which had recruited the students regardless of their weight). L-squared statistic was used in the assessment of heterogeneity. The test led to the removal of studies whose l-squared was greater than 50%. A review manager 5.3 was used in the performance of a meta-analysis. SPSS was used in performing the heterogeneity test. For a two-sided test, a p-value of less than 0.025 led to the decision that the null-hypothesis was significant.

Results

Initially, potential articles totaling to 12,356 were identified from PubMed and Proquest. The flow chart for the selection is shown here below. In the end, only ten articles met the inclusion criteria (Xu, Wen & Rissel 2015; Williams et al. 2013; Van et al. 2016; Sallis et al. 2016; Poitras et al. 2016; Mei et al. 2016; Hamer et al. 2015; Brown et al. 2015; Cain et al. 2013; Danielson et al. 2013). There was no statistical significance between the 8 journal articles (Xu, Wen & Rissel 2015; Van et al. 2016; Sallis et al. 2016; Poitras et al. 2016; Mei et al. 2016; Brown et al. 2015; Cain et al. 2013; Danielson et al. 2013) and the two masters theses (Hamer et al. 2015; Williams et al. 2013) (The Fisher's Exact Test was equal to 1).

For the ten studies, a total of 821 students in England with ages between 11 and 14 years were included. 30% of the studies were published in the year 2016 (2016; Sallis et al. 2016; Poitras et al. 2016; Mei et al. 2016) and the rest before 2016 (Xu, Wen & Rissel 2015; Williams et al. 2013; Van et al. 2016; Sallis et al. 2016; Poitras et al. 2016; Mei et al. 2016; Hamer et al. 2015; Brown et al. 2015; Cain et al. 2013; Danielson et al. 2013). This implies that more research on the review of the intervention was conducted before the year 2016. Only 10% of the ten studies used the theoretical framework as a socio-ecological framework (Williams et al. 2013).

Majority of the studies (70%) had used multiple components and comprehensive interventions (Xu, Wen & Rissel 2015; Van et al. 2016; Sallis et al. 2016; Mei et al. 2016; Hamer et al. 2015; Cain et al. 2013; Danielson et al. 2013). The most commonly applied strategies for comprehensive intervention in England involved HE and PA. For the single interventions, the largest proportion went to the PA (30%) (Mei et al. 2016; Hamer et al. 2015; Cain et al. 2013) which was followed by HE with only (20%) (Xu, Wen & Rissel 2015; Danielson et al. 2013).

Overlay, the greatest percentage of the studies (80%) only qualified a weak rating (Xu, Wen & Rissel 2015; Williams et al. 2013; Sallis et al.

2016; Poitras et al. 2016; Mei et al. 2016; Hamer et al. 2015; Cain et al. 2013; Danielson et al. 2013). The remaining studies were rated moderately (Van et al. 2016; Brown et al. 2015). None of the studies qualified to be rated as of strong quality. However, there was a clear trend from the assessment of the studies' quality; in the recent decade, there was a significant improvement in the studies' quality.

For all the obesity treatment studies, only 40% were RCTs. 50% had applied comprehensive interventions while the other 50% used the single component interventions. The difference between the quality of the non-effective and the effective treatment studies was not statistically significant (The Chi-Square test was, $p = 0.482$). Comprehensive interventions that used the physical activity were more effective (90%).

This study reviews systematically four interventions of obesity. Comparing the prevention to the treatment studies, the prevention ones were less effective. Moreover, the interventions that used physical activities alone were very effective compared to those that applied such treatments as health education alone.

This is one of the best reviews of obesity interventions among the middle level students in England. This is due to the fact that all the interventions based on school, regardless of whether they were RCTs or not were searched in national and international databases and the best studies selected based on effectiveness and quality. This review also gives the best policies that can be adopted in the development of childhood control and prevention policies in England and other high-income nations.

Health education and physical activity seems to be the best available alternatives which can be applied in England in the effort to prevent and control obesity among the middle-level students. Another available alternative is the dietary improvement which seems to be ineffective in most of the parts in England (Hamer et al. 2015; Xu et al. 2015, Holfelder et al. 2014; Behrens et al. 2014; Cunningham et al. 2014). However, there seems to be insufficient research and hence inadequate data on the effectiveness of dietary improvement in the prevention and controlling of overweight. Therefore, more research needs to be done on the intervention so as to determine whether it could effectively help in the saving of the young population from the health problem.

The effect sizes of the prevention studies on the BMI were relatively smaller than the treatment studies. This is also confirmed by the different international meta-analysis. Moreover, obese and overweight middle-level students have a larger BMI baseline and they are more prone to be affected by the obesity's consequences compared to the children with normal weight. To improve prevention studies' effectiveness in England,

children's adherence and the development of the intervention components studies that are more effective should be considered (Casazza et al. 2013; Brown et al. 2015; Choi et al. 2013).

Based on the results of this study, comprehensive interventions which involved the component of physical activity were more effective in both the prevention as well as the treatment studies. Additionally, the studies were supported by different international reviews. Therefore, for effective control and prevention of the childhood obesity among the middle-level students, multiple components with comprehensive interventions should be applied.

There were several limitations of the study. First, many of the studies included had a weak quality rating as they had an insufficient selection and binding bias. Secondly, due to the insufficiency of studies, such intervention components as dietary improvement could not be subjected to test. Thirdly, the intervention effects obtained in this study cannot be used in a comparative analysis with the interventions obtained in international studies. This is due to the fact that the international studies use different contents, intervention components and study design (Blüher 2014; Danielson et al. 2013).

There are many intervention studies on middle-level students' obesity in Europe. However, very few are specifically focused on the students from England. Prevention studies are less effective than the treatment studies. Comprehensive interventions that involved physical activity alone showed the greatest effect on the BMI. Therefore, physical activity can be effectively used in the effort to save the middle-level students in England from obesity and its related health consequences. More quality researches should be conducted so as to confirm the effectiveness of other interventions such as health learning and dietary improvement in the prevention and treatment of obesity.

REFERENCES

- Behrens, G., Jochem, C., Keimling, M., Ricci, C., Schmid, D., & Leitzmann, M. F. (2014). The association between physical activity and gastroesophageal cancer: systematic review and meta-analysis. *European journal of epidemiology*, 29(3), 151-170.
- Blüher, M. (2014). Mechanisms In *Endocrinology*: Are metabolically healthy obese individuals really healthy? *European journal of endocrinology*, EJE-14.
- Brown, T., Smith, S., Bhopal, R., Kasim, A., & Summerbell, C. (2015). Diet and physical activity interventions to prevent or treat obesity in South Asian children and adults: a systematic review and meta-analysis. *International journal of environmental research and public health*, 12(1), 566-594.
- Cain, K. L., Sallis, J. F., Conway, T. L., Van Dyck, D., & Calhoun, L. (2013). Using accelerometers in youth physical activity studies: a review of methods. *Journal of Physical Activity and Health*, 10(3), 437-450.
- Casazza, K., Fontaine, K. R., Astrup, A., Birch, L. L., Brown, A. W., Bohan Brown, M. M., ... & McIver, K. (2013). Myths, presumptions, and facts about obesity. *New England Journal of Medicine*, 368(5), 446-454.
- Choi, J., Joseph, L., & Pilote, L. (2013). Obesity and C-reactive protein in various populations: a systematic review and meta-analysis. *Obesity Reviews*, 14(3), 232-244.
- Cunningham, S. A., Kramer, M. R., & Narayan, K. V. (2014). The incidence of childhood obesity in the United States. *New England Journal of Medicine*, 370(5), 403-411.
- Danielsen, K. K., Svendsen, M., Mæhlum, S., & Sundgot-Borgen, J. (2013). Changes in body composition, cardiovascular disease risk factors, and eating behavior after an intensive lifestyle intervention with a high volume of physical activity in severely obese subjects: a prospective clinical controlled trial. *Journal of obesity*, 2013.
- Deeks, J. J., Dinnes, J., D'Amico, R., Sowden, A. J., Sakarovich, C., Song, F., ... European Carotid Surgery Trial Collaborative Group. (2003). Evaluating non-randomised intervention studies. *Health Technology Assessment (Winchester, England)*, 7(27), 1-173.
- Dobbins, M., Husson, H., DeCorby, K., & LaRocca, R. L. (2013). School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18. *The Cochrane Library*.
- Donnelly, J. E., Hillman, C. H., Castelli, D., Etner, J. L., Lee, S., Tomporowski, P & Szabo-Reed, A. N. (2016). Physical activity, fitness, cognitive function, and academic achievement in children: a

- systematic review. *Medicine and science in sports and exercise*, 48(6), 1197.
- Feng, L., Wei, D. M., Lin, S. T., Maddison, R., Mhurchu, C. N., Jiang, Y., & Wang, H. J. (2017). Systematic review and meta-analysis of school-based obesity interventions in mainland China. *PloS one*, 12(9), e0184704.
- Flegal, K. M., Kit, B. K., Orpana, H., & Graubard, B. I. (2013). Association of all-cause mortality with overweight and obesity using standard body mass index categories: a systematic review and meta-analysis. *Jama*, 309(1), 71-82.
- Gallus, S., Lugo, A., Murisic, B., Bosetti, C., Boffetta, P., & La Vecchia, C. (2015). Overweight and obesity in 16 European countries. *European journal of nutrition*, 54(5), 679-689.
- Guinhouya, B. C., Samouda, H., & De Beaufort, C. (2013). Level of physical activity among children and adolescents in Europe: a review of physical activity assessed objectively by accelerometry. *Public health*, 127(4), 301-311
- Hamer, M., Bell, J. A., Sabia, S., Batty, G. D., & Kivimäki, M. (2015). Stability of metabolically healthy obesity over 8 years: the English Longitudinal Study of Ageing. *European journal of endocrinology*, 173(5), 703-708.
- Hamer, M., Lavoie, K. L., & Bacon, S. L. (2013). Taking up physical activity in later life and healthy aging: the English longitudinal study of aging. *British journal of sports medicine*, by sports-2013
- Hinckson, E. A., & Curtis, A. (2013). Measuring physical activity in children and youth living with intellectual disabilities: a systematic review. *Research in developmental disabilities*, 34(1), 72-86.
- Holfelder, B., & Schott, N. (2014). Relationship of fundamental movement skills and physical activity in children and adolescents: A systematic review. *Psychology of Sport and Exercise*, 15(4), 382-391.
- Konstabel, K., Veidebaum, T., Verbestel, V., Moreno, L. A., Bammann, K., Tornaritis, M., ... & Wirsik, N. (2014). Objectively measured physical activity in European children: the IDEFICS study. *International Journal of Obesity*, 38(S2), S135-S143
- Lachat, C., Otchere, S., Roberfroid, D., Abdulai, A., Seret, F. M. A., Milesevic, J., ... & Kolsteren, P. (2013). Diet and physical activity for the prevention of noncommunicable diseases in low-and middle-income countries: a systematic policy review. *PLoS medicine*, 10(6), e1001465
- Ma, Y., Yang, Y., Wang, F., Zhang, P., Shi, C., Zou, Y., & Qin, H. (2013). Obesity and risk of colorectal cancer: a systematic review of prospective studies. *PloS one*, 8(1), e53916

- Malik, V. S., Willett, W. C., & Hu, F. B. (2013). Global obesity: trends, risk factors and policy implications. *Nature Reviews Endocrinology*, 9(1), 13.
- Mei, H., Xiong, Y., Xie, S., Guo, S., Li, Y., Guo, B., & Zhang, J. (2016). The impact of long-term school-based physical activity interventions on body mass index of primary school children—a meta-analysis of randomized controlled trials. *BMC Public Health*, 16(1), 205
- Mitchell, E. A., Beasley, R., Björkstén, B., Crane, J., García-Marcos, L., Keil, U., & ISAAC Phase Three Study Group. (2013). The association between BMI, vigorous physical activity and television viewing and the risk of symptoms of asthma, rhinoconjunctivitis and eczema in children and adolescents: ISAAC Phase Three. *Clinical & Experimental Allergy*, 43(1), 73-84.
- Özbay, S., Ulupinar, S., & Özkara, A. B. (2018). Agility Performance in Sports. *Journal of National Sport Sciences*, 2(2), 97-112.
- Özkara, A. B. (2018). Comparative Research on Inclusive Education in England, Germany, France and Turkey from the Perspective of Physical Activity. *Comparative Professional Pedagogy*, 8(4), 31-38.
- Özkara, A., Kalkavan, A., & Çavdar, S. (2015). Examination of the life satisfactions levels of students receiving education in sports sciences. *International Journal of Sport Culture and Science*, 3(Special Issue 3), 336-346.
- Poitras, V. J., Gray, C. E., Borghese, M. M., Carson, V., Chaput, J. P., Janssen, I., ... & Sampson, M. (2016). A systematic review of the relationships between objectively measured physical activity and health indicators in school-aged children and youth. *Applied Physiology, Nutrition, and Metabolism*, 41(6), S197-S239
- Prince, S. A., Saunders, T. J., Gresty, K., & Reid, R. D. (2014). A comparison of the effectiveness of physical activity and sedentary behaviour interventions in reducing sedentary time in adults: a systematic review and meta-analysis of controlled trials. *Obesity Reviews*, 15(11), 905-919.
- Sallis, J. F., Bull, F., Guthold, R., Heath, G. W., Inoue, S., Kelly, P., ... & Lancet Physical Activity Series 2 Executive Committee. (2016). Progress in physical activity over the Olympic quadrennium. *The Lancet*, 388(10051), 1325-1336.
- Van Hecke, L., Loyen, A., Verloigne, M., Van der Ploeg, H. P., Lakerveld, J., Brug, J., ... & Deforche, B. (2016). Variation in population levels of physical activity in European children and adolescents according to cross-European studies: a systematic literature review within DEDIPAC. *International Journal of Behavioral Nutrition and Physical Activity*, 13(1), 70.

- Williams, A. J., Henley, W. E., Williams, C. A., Hurst, A. J., Logan, S., & Wyatt, K. M. (2013). Systematic review and meta-analysis of the association between childhood overweight and obesity and primary school diet and physical activity policies. *International Journal of Behavioral nutrition and Physical activity*, 10(1), 101
- Xu, H., Wen, L. M., & Rissel, C. (2015). Associations of parental influences with physical activity and screen time among young children: a systematic review. *Journal of obesity*, 2015.



Chapter 7

LEISURE CONSTRAINTS OF VOLLEYBALL AND FOOTBALL REFEREES AND THEIR METHODS OF COPING WITH THEM

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INTRODUCTION

Sports, which is one of the most important social interaction factors is today considered a social, cultural and economic sector. Especially team sports are followed with interest all over the world. The determining effect of the referees in sports activities and management is indisputable. Therefore, the referee appears as one of the fundamental actors of sports.

Although the referee means the person whom the two parties resort to, or the person who is consulted, is expert in his occupation and has the right to use discretion in order to solve the problems between the teams, he/she is defined as the person in practice for enforcement of the game rules, even in the sports, in order to direct or manage a game, without neglecting the rights of the parties by adhering to the principles of impartiality and neutrality (Cel, 1994).

In sports, a person ready to impose the rules of competition, by adhering to the principles of impartiality in order to protect the rights of the two parties competing with each other, is called a “referee”. It is called “arbitrating/refereeing” he/she performs in the competition with activities and provisions as well as the methods used (Karakaş, 1981). Refereeing should be considered as an act of managing correctly and regularly, which have physical, psychological and cognitive aspects. Arbitrating requires technical knowledge, experience, learning, competence, personality, power and concentration (Orta,2000). Arbitrating contains such skills as knowledge of rules, intelligence, consistency, sound stance, self-confidence, communication and managing (Çobanoğlu, 2018). It is not possible to be a good referee just by learning the rules very well, but it is not expected to have a good referee in people with weak rule knowledge but physical appearance and courage, either. A good referee should be able to master the rules, be aware of his duty, be confident, manage fairly and stand strong against pressure while keeping his motivation. A referee must feel ready for psychomotor reaction and emotion. The referees are the players and manage a fair game (Uzunkara,2007: 17-18).

Referees have also their own private lives outside competitions. They can use their leisure time with recreational activities that lead to reform. Leisure time is the time left over from one’s work life. All people have the right to leisure time, in particular to reduce working hours to appropriate times, and paid leave from time to time (İnsan Hakları Evrensel Bildirisi, 24. madde, Akt; Özbey, Çelebi, 2011: 251). Leisure activities are aimed at physical and spiritual relaxation as desired during the period remaining from the work life (Karuç, 2018: 2).

Referees do mostly passive activities such as watching television and sports competitions, reading books and newspapers. They are also known

to spend their leisure time on activities that require active participation (Karaküçük and Ermihan, 1996). Volleyball and football referees have different features due to the management of play and physical space difference. While one is dynamic, the other is more stable. While football referee requires intense physical effort, volleyball referee does not. While football is performed in a wide and open field, volleyball is done in smaller and closed spaces. Despite all these differences, refereeing can be considered as one of the most difficult and stressful jobs in all branches.

Constraint can be defined as the intellectual or performative, with one or more negative factors affecting the motivation in a negative sense and therefore not participating in a leisure activity or decreasing the recurrence of participating in leisure activities (Jackson, 1988).

According to Jackson (1993), situations that prevent people from participating in any activity do not actually have an effective impact on their participation in that activity. As a matter of fact, it has contributed greatly to the theory of coping with leisure constraints. (Hubbard and Mannell, 2001; Jackson and Rucks, 1995). Overcoming, reducing or adapting to constraints that people face participating in an activity in their leisure time is called coping (Scott, 1991; Crawford, Jackson and Godbey, 1991). This provides serious advantages in overcoming this problem when people face constraints (Little, 2000; Samdahl and Jekubovich, 1997; Henderson and Bialeschki, 1993).

Leisure constraints and coping strategies are very important for participating in activities. While high level of participation in activities decreases with increasing leisure time constraints, strategies to cope with them in order to participate in activities are seen to increase (Hubbard and Mannell, 2001).

The aim of this paper is to analyze Leisure Constraints (LC) and Strategies to Cope with Leisure Constraints (SCLC) of football and volleyball referees in terms of some variables. From this aspect, responses to the following questions are sought:

1. Is there a significant difference between average scores of the LC and its sub-dimensions and the SCLC and its sub-dimensions?
2. Is there a significant difference between the SCLC and its sub-dimensions average scores according to marital status?
3. Is there a significant difference between the LC and its sub-dimensions and the SCLC and its sub-dimensions according to place of residence?
4. Is there a significant difference between the SCLC of the referees

and its sub-dimensions Mean Rank scores according to period of arbitration, doing active sports, and interest in other sports?

5. Is there a significant difference between the average scores of LC and its sub-dimensions of the referees according to their participation in the weekly free time and leisure activities?

METHOD

Research Design

Correlational research design was used in our study. This design is an investigation model that aims to measure whether there is any relation between multiple variables or the level of the relation (Büyüköztürk, Çakmak, Akgün, Karadeniz and Demirel, 2014; Fraenkel and Wallen, 2006; Karasar, 1999).

Population-Sample (Research Group)

Volleyball and football referees working in the provinces of Gümüşhane and Hatay participated in the research. The data were obtained from 27 volleyball referees and 26 football referees in 2019 using a questionnaire and scale. All of the referees filled out the surveys on a voluntary basis.

Data Collecting Tools

Descriptive Questionnaire: This contains totally 12 questions concerning socio-demographic and professional aspects such as gender, age, branch, marital status, educational status, place of residence, period of arbitration, whether there is an active athlete, whether the referee is interested in other sports, welfare status, weekly leisure time and leisure time assessment items.

LC Questionnaire: In our study, “Leisure Constraints Questionnaire-18” was used, which was developed by Alexandris and Carroll in 1997 and adapted to Turkish by Karaküçük, Gürbüz (2007) and whose short version was adapted to Turkish by Gürbüz, Öncü and Emir (2012). The original one consists of 6 sub-dimensions and 27 items. In our study, the short-version of the leisure constraints questionnaire was used consisting of 6 sub-dimensions and 18 items. The sub-dimensions of this questionnaire consist of lack of knowledge, friends, individual psychology, time, lack of interest and facility with three items each. While the internal reliability coefficients (Cronbach Alfa) varied between .65 and .86 for the sub-dimensions of the questionnaire, the internal reliability coefficient (Cronbach Alfa) for the entire questionnaire was found .85. (Gürbüz et al., 2012). In our study, the internal reliability coefficient (Cronbach Alfa) for the entire questionnaire was .86, whereas it was for the sub-dimensions of

the questionnaire .81, .87, .77, .66, .69 and .78, respectively.

SCLCS: The original scale was developed by Hubbard and Mannell in 2001 and was adapted to recreational campus sports by Elkins (2004). The scale whose validity was measured by Beggs, Elkins and Powers (2005) was adapted to Turkish by Yerlisu Lapa (2014). The original scale consists of 6 sub-dimensions and 31 items. The sub-dimensions of this scale are skills acquisition strategies, time management strategies, internal validation strategies, interpersonal relations, financial management and physical fitness strategies. The Turkish version of the scale consists of 6 sub-dimensions and 27 items. While the Cronbach Alpha reliability coefficient varied between .70 and .77 for the sub-dimensions, it was .81 for the entire scale (Yerlisu Lapa, 2014). In our study, the Cronbach Alpha reliability coefficient for the entire scale was found .89. The internal consistency coefficients for the sub-dimensions of the scale were .92, .69, .55, .74, .75, .81, respectively and since the internal consistency coefficient of the internal validation was low, no analysis was conducted for these sub-dimensions.

Data Analysis

Since the parametric test conditions were not met, calculations were made with Kruskal Wallis H in more than two comparisons and Mann Whitney U test in binary comparisons. According to the Kruskal Wallis H test results, there was a significant difference and in this caseMann Whitney U test was conducted to reveal the source of the difference.

FINDINGS

Table 1. Friend sub-dimension scores of LC of the referees

	N	Mean Rank	Sum of Ranks	Z	p
Football Referee	26	22,08	574,00	2,309	.021*
Volleyball Referee	27	31,74	857,00		
Total	53				

*p < .05

In Table 1, it is seen that the mean rank (22,08) of the football referees is lower than that (31,74) of the volleyball referees in terms of friend sub-dimension. This difference is found to be statistically significant (Z = 2.309, p < .05). Volleyball referees are found to have higher scores according to friend sub-dimension of the LC.

Table 2. Finance sub-dimension scores of SCLC of the referees

	N	Mean Rank	Sum of Ranks	Z	p
Football Referee	26	31,65	823,00	2,165	.030*
Volleyball Referee	27	22,52	608,00		
Total	53				

*p < .05

In Table 2, it is seen that the mean rank of the football referees (31.65) is higher than that of the volleyball referees (22.52) and the difference is statistically significant ($Z = 2.165$, $p < .05$). It is understood that football referees have higher scores in SCLC finance sub-dimension.

Table 3. Interpersonal sub-dimension scores of SCLC according to marital status of the referees

	N	Mean Rank	Sum of Ranks	Z	p
Married	12	18,79	225,50	-2,104	.035*
Single	41	29,40	1205,50		
Total	53				

*p < .05

Married referees' SCLC Interpersonal sub-dimension mean rank (18,79) is smaller than that of the single referees (29,40) and the difference is statistically significant ($Z = 2.104$, $p < .05$). Single referees have a higher score in the SCLC Interpersonal sub-dimension.

Table 4. Individual Psychology sub-dimension scores of Leisure Constraints according to the place of residence of the referees

	N	Mean Rank	X ²	Sd	p	MWU
District	7	35,00	7,925	2	.019*	District-Province
Province	29	21,66				Province-Metropolitan
Metropolitan	17	32,82				
Total	53					

*p < .05

The results of Kruskal Wallis H test of LC - Individual Psychology sub-dimension according to the place of residence of the referees are shown in Table 4. The results of the analysis suggest a significant differ-

ence between the mean rank of these sub-dimension scores ($X^2(2) = 7.925$, $p < .05$). Mann Whitney U test was conducted to determine the reason for the difference. The test results show a significant difference from the LC - Individual Psychology scores between the district and the province, between the Province and the Metropolitan. The mean rank of the referees living in the province was lower than that of the referees living in the district and metropolitan.

Table 5. Friend sub-dimension scores of LC according to the period of arbitration of the referees

	N	Mean Rank	X^2	Sd	p	MWU
Less than 5 years (1)	30	24,72	7.011	2	.030*	1-2, 2-3
6-10 years (2)	11	37,73				
More than 10 years (3)	12	22,88				
Total	53					

* $p < .05$

The results of the Kruskal Wallis H test of the LC - friend sub-dimension of the respondents according to period of arbitration are given in Table 5. The results of the analysis show a significant difference between the mean rank of these sub-dimension scores of the referees ($X^2(2) = 7.011$, $p < .05$). Mann Whitney U test was conducted to determine the reason for the difference. The test results show that referees with six to 10 years of seniority have a significantly lower mean rank scores than those with seniority of 5 years or less and with more than 10 years of seniority in terms of friend scores of LC.

Table 6. SCLC Interpersonal sub-dimension scores according to period of arbitration of the referees

	N	Mean Rank	X^2	Sd	p	MWU
Less than 5 years (1)	7	26,90	7,921	2	.019*	2-3
6-10 years (2)	29	36,55				
More than 10 years (3)	17	18,50				
Total	53					

* $p < .05$

The results of the Kruskal Wallis H test of the SCLC Interpersonal sub-dimension according to period of arbitration are given in Table 6. The results of the analysis show a significant difference between the mean rank scores of this subdimension of the referees ($X^2(2) = 7.921$, $p < .05$). Mann Whitney U test was conducted to determine the reason for the difference. The test results show that the mean rank scores of those arbitrating for

more than 10 years are significantly lower than the SCLC Interpersonal sub-dimension scores of those arbitrating for less than five years and between 6 and 10 years

Table 7. SCLC Skills Acquisition sub-dimension scores according to being active sports of the referees

	N	Mean Rank	Sum of Ranks	Z	p
Yes	37	30,16	1116,00	-2,278	.023*
No	16	19,69	315,00		
Total	53				

*p < .05

SCLC skills acquisition sub-dimension mean rank scores (30,16) of the referees doing active sports are higher than those (19.69) of the referees not doing any sports and the difference is statistically significant ($Z = 2.278$, $p < .05$). It is seen that the referees engaged in active sports have a higher score in the SCLC skills sub-dimension.

Table 8. Physical Fitness sub-dimension scores of SCLC according to interest in other sports of the referees

	N	Mean Rank	Sum of Ranks	Z	p
Individual Sports	14	24,75	346,50	-2,252	.024*
Team Sports	24	16,44	394,50		
Total	38				

*p < .05

When the SCLC Physical Fitness sub-dimension is examined according to the referees' interest in other sports branches, the mean rank score of the referees doing individual sports is found (24.75) and that of those performing team sports is (16.44). The difference between these scores is found to be statistically significant ($Z = 2.252$, $p < .05$). It is seen that the referees performing individual sports have a higher score in the Physical Fitness sub-dimension of SCLC.

Table 9. Lack of Knowledge sub-dimension scores of LC according to the Referees' Weekly Leisure

	N	Mean Rank	X ²	Sd	p	MWU
1) Less than 6 hours	16	26,88	11,696	2	.003*	1-2, 2-3
2) 6-9 hours	11	13,91				
3) More than 10 hours	26	32,62				
Total	53					

*p < .05

Kruskal Wallis H test results of LC Lack of Knowledge sub-dimension scores of the referees according to their weekly leisure are given in Table 9. The results of the analysis show a significant difference between Mean Rank scores of this sub-dimension ($X^2 (2) = 11.696, p < .05$). In order to determine the source of this difference, Mann Whitney U test was applied and the test results show that the mean scores of the referees with 6 to 9 hours are lower than those with less than 6 hours and significantly lower than Lack of Knowledge sub-dimension scores of LC of those with more than 10 hours.

Table 10. Lack of Knowledge sub-dimension scores of LC of the Referees' evaluation of free time

	N	Mean Rank	Sum of Ranks	Z	p
Participating in one activity	19	20,97	398,50	-2,156	.031*
Participating in more than one activity	34	30,37	1032,50		
Total	53				

*p < .05

When the lack of knowledge sub-dimension of LC is examined, it is determined that the mean rank scores of the referees participating in more than one activity (30.37) is higher than those of the referees participating in only one activity (20.97). This difference is statistically significant ($Z = 2.156, p < .05$). The referees participating in more than one activity have higher scores in lack of knowledge sub-dimension of LC.

DISCUSSION AND CONCLUSION

In friend sub-dimension of LC, volleyball referees seem to have more constraints compared to football referees. In one study conducted by Sabancı (2016) on the faculty members, statistically significant difference was seen in the "lack of friends" sub-dimension according to their participation in leisure activities. In the study conducted by Özşaker (2012), "lack of friends" sub-dimension was found to be effective on participating in leisure activities. Therefore, it can be suggested that the volleyball referees feel the lack of friends at the point of evaluating their spare time more than the football referees. In general, it is thought that football is more common than volleyball and its performance is effective on this difference.

In SCLC finance sub-dimension, it is understood that football referees are more effective than volleyball referees in dealing with constraints. In the researches conducted (Can, 2010; Okumuş, 2002; Bodur, 1988; Kandaz, Gelen and Hergüner, 2007; Drakau et al., 2006), the results show similarity with the ones in our study. In addition, Gratton in his study (2000)

states the most important criterion for participation of the individual in the recreational activities is “money”. In fact, what is meant by money is the individual’s ability to afford the budget spent on the sports facilities, transportation, food and beverage consumed at the time of participation.

It indicates whether there is a disposable income of the countries for the leisure activities allocated from the gross national product per person. Individuals’ participation in recreational activities by allocating budget is directly related to income level (Karaküçük and Gürbüz,2007). In the study conducted by Hawkins et al (1999), it is concluded that the constraints to participation in recreational activities will disappear with the increase in income level. The fact that the income obtained from the competitions directed by football referees is higher compared to the volleyball referees may have been relatively effective in getting such a result.

It has been determined that married referees’ SCLC Interpersonal sub-dimension scores are lower than those of the single referees and the difference is statistically significant.

It can be said that single referees have more problems with SCLC than married referees. This may be due to the fact that married referees are more experienced in developing social relationships and making friends. The relevant literature shows similarity with our findings. For example, in his study, Thrane (2000) found correlation between one’s marital status and participating in recreative activities. The results show that married individuals cannot find spare time for leisure activities from taking care of their home and children. Similarly, Lee and Bhargava (2004) analyzed the factors that prevented participation in leisure activities, and it was concluded that married individuals had less time to participate in recreational activities than single individuals. The results show similarity with our findings. In the sub-dimension of LC-Individual psychology, the referees residing in the province have more problems than those residing in the district and metropolitan. This result is similar to the results obtained in the study (Yaşartürk, Uzun, İmamoğlu and Yamaner 2016), which examines the constraints to participation of women in recreational activities, who do not engage in sports and physical activities.

According to the period of arbitration, it is found that those who have arbitrated between 6-10 years are better in LC - friend sub-dimension and have fewer problems than those who do so less or more than this period. This difference may be due to the problem of adaptation to the arbitration in those with low seniority, and to the level of satisfaction in those with more than 10 years of service. Similar results are observed in the SCLC - Interpersonal sub-dimension. Social life involves individuals sharing differently. Due to their socio-cultural characteristics, employees can interact

spending time together with different individuals outside work. (Fink and Wild, 1995). Especially by getting rid of the monotony and boredom of the workplace, spending time in different activities with their close friends can help individuals relax psychologically and sociologically. Turning to different and interesting activities reduces the tension and stress work causes while mutual interaction with spouse and friends positively affects satisfaction with social life and the moment experienced (Demir et al., 2013; Sabiston and Crocker, 2008). Some human needs are also met such as loving, being loved, respected, accepted, and intimacy with the individuals and social groups they interact with because of their human relationships. Therefore, leisure activities are also considered as an important process that contributes to social integration (Tezcan, 1993) Significant difference is reported between the ones whose work experience is defined as less and those that can be defined as a lot in terms of feeling the friend effect among the referees who have medium level experience. It is seen that the effect of friends is higher in those with more seniority than those who have less or middle level. It is seen that having a little or a lot of work experience causes not to find friends for leisure activities. It may be thought that the lack of experience or a lot of experience may cause constraints to leisure activities due to the increase in responsibility.

Has and Öztürk (2016) in their study found statistically significant differences between the years of service of employees in the health sector and the constraints to participation in leisure activities. In their study, Hubbard and Mannell (2001) stated that this was a disadvantage for the participation of the people with lack of friends, as they could not find any friends or did not have similar understanding and habits to participate in the activities.

The SCLC Skill sub-dimension mean rank score of the referees doing sports actively is found to be higher than that of the referees not doing active sports, and the difference is statistically significant. It can be pointed out that the referees engaged in active sports have a higher score in the SCLC Skill subdimension.

When the literature is analyzed, the strategies to cope with leisure constraints show that there is a positive relationship in favor of the participants who do sports actively. (Huang and Carleton, 2003; Tercan Kaas, 2015).

When the SCLC Physical Fitness sub-dimension is analyzed according to the referees' interest in other sports branches, the difference between mean rank scores of the referees performing individual sports and those of the referees performing team sports is found to be statistically significant. It is determined that the referees interested in individual sports have higher scores in the SCLC Physical Fitness sub-dimension. Tercan Kaas (2015) achieved results with high correlation in the physical fitness sub-dimension

of strategies to cope with leisure constraints.

According to the referees' weekly free time evaluation, it was understood that those who had free time between 6-9 hours per week have more problems in LC-Lack of Knowledge sub-dimension than those who spare less or more free time. In the literature, significant differences are reported for the lack of knowledge sub-dimension of university students in terms of leisure constraints (Özşaker, 2012).

When LC lack of knowledge sub-dimension of the referees' evaluating leisure time is examined, the difference between the mean rank scores of the referees participating in more than one activity and those of the referees participating in only one activity is found statistically significant. Referees who participate in more than one activity are found to have higher scores in the LC Lack of Knowledge sub-dimension.

Many studies have concluded that lack of knowledge is effective in assessing leisure time. (Demirel and Harmandar,2009; Lakot et al, 2015; Gülser,2017). As a result, there is a positive correlation between the leisure constraints of the referees and strategies to cope with them. If there are constraints individuals face participating in leisure activities, they develop coping strategies to overcome these obstacles. In other words, if there are obstacles to performing leisure activities, there are also strategies to cope with them (White, 2008; Hubbard and Mannell 2001; Chen, Lou and Ma, 2018; Loucks-Atkinson and Mannell, 2007). In this sense, the results of the researches conducted in the literature have similarities with the results of our research, and as leisure constraints increase, so do the number of methods to overcome them.

REFERENCES

- Alexandris, K. and Carroll, B. (1997). An analysis of leisure constraints based on different recreational sport participation levels:Results from a study in Greece. *Leisure Sciences*, 19, 1-15; doi: 10.1080/01490409709512236
- Beggs, B. A., Elkins, D. J. and Powers, S. (2005). Overcoming Barriers to Participation in Campus Recreational Sports. *Recreational Sports Journal*, 29(2), 143–155. doi:10.1123/rsj.29.2.143
- Bodur, F. (1988). Anadolu Üniversitesi İktisadi ve İdari Bilimler Fakültesi öğrencilerinin boş zamanlarını değerlendirme eğilimleri (Master's thesis, Anadolu Üniversitesi).
- Büyükköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2017). Bilimsel araştırma yöntemleri. Pegem Akademi, 1-360.
- Can, S. (2010). Muğla Üniversitesi Eğitim Fakültesi İlköğretim Bölümü

- öğrenci ailelerinin boş zaman faaliyetlerine katılım biçimlerinin belirlenmesi. *Kastamonu Eğitim Dergisi*, 18(3), 861-870.
- Cel, A., & Psikolojisi, H. (1994). Refereeing psychology. trans: A. Kin), *Futbol Bilim ve Teknoloji Dergisi*, 1, 21-23.
- Chen, S. F., Lou, S. J., & Ma, S. M. (2018). Role of positive emotions in the constraint process: the case of Taiwanese college students. *Leisure Studies*, 37(5), 574-588; doi: 10.1080/02614367.2018.1499798
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraint. *Leisure Sciences: An Interdisciplinary Journal*, 13(4), 309-320; doi: 10.1080/01490409109513147
- Çobanoğlu, B. (2018). Klasman hakemleri ve il hakemlerinin sürat ve sıçrama performansları arasındaki fark, İstanbul örneği (Master's thesis, İstanbul Gelişim Üniversitesi Sağlık Bilimleri Enstitüsü).
- Demir, Ş. Ş., Yeşiltepe, B., & Demir, M. (2013). Kamu kurumu ile otel yöneticilerinin serbest zaman algılaması ve değerlendirmesine yönelik bir karşılaştırma. *Akademik Bakış Uluslararası Hakemli Sosyal Bilimler Dergisi*, 39, 1-17.
- Demirel, M., & Harmandar, D. (2009). Üniversite öğrencilerinin rekreasyonel etkinliklere katılımlarında engel oluşturabilecek faktörlerin belirlenmesi. *Uluslararası İnsan Bilimleri Dergisi*, 6(1), 838-846.
- Drakou, A., Tzetzis, G., & Mamantzi, K. (2008). Leisure constraints experienced by university students in Greece. *The Sport Journal*, 11(1).
- Elkins, D. J. (2004). Levels of perceived constraint: A comparative analysis of negotiation strategies in campus recreational sports. Indiana University. Retrieved from <https://search.proquest.com/docview/305202664?accountid=25082>
- Fink, B., & Wild, K. P. (1995). Similarities in leisure interests: Effects of selection and socialization in friendships. *The Journal of social psychology*, 135(4), 471-482; doi: 10.1080/00224545.1995.9712216
- Fraenkel, J. R. & Wallen, N. E (2006). *How to Design and Evaluate Research in Education* (6th Ed.). New York: McGraw-Hill
- Gelen, N. K., & Hergüner, G. (2007). Beden eğitimi ve spor öğretmenlerinin serbest zamanlarını değerlendirme biçimlerinin incelenmesi (Sakarya İli örneği). *Uluslararası İnsan Bilimleri Dergisi*, (4), 1-9.
- Gratton, C., & Taylor, P. (2000). *Economics of sport and recreation* (No. Ed. 2). E & FN Spon Ltd.
- Gülser, F., Y. (2017). *Metropol Kentlerde Rekreasyon Sunumu ve Kullanım Sorunları, İzmit Kenti Örneği*, Master's thesis, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Gürbüz, B., & Karaküçük, S. (2007). Boş zaman engelleri ölçeği-28: ölçek geliştirme, geçerlik ve güvenirlik çalışması. *Gazi Beden Eğitimi ve*

- Spor Bilimleri Dergisi, 12(1), 3-10.
- Gürbüz, B., Öncü, E., & Emir, E. (2012). Boş zaman engelleri ölçeği: Yapı geçerliğinin test edilmesi. 12. Uluslararası Spor Bilimleri Kongresi, 12-14.
- Has, F., Öztürk, H. (2016). Sağlık Sektöründe Çalışanların Rekreasyon Etkinliklerine Katılımcılarının Önündeki Engellerin Belirlenmesi, 3. Uluslararası Spor Bilimleri Turizm ve Rekreasyon Öğrenci Kongresi, Gaziantep.
- Hawkins, B. A., Peng, J., Hsieh, C. M., & Eklund, S. J. (1999). Leisure constraints: A replication and extension of construct development. *Leisure Sciences*, 21(3), 179-192; doi: 10.1080/014904099273066
- Henderson, K. A., & Bialeschki, M. D. (1993). Exploring an expanded model of women's leisure constraints. *Journal of Applied Recreation Research*, 18(4), 229-252.
- Huang, C. Y. (2003). The relationships among leisure participation, leisure satisfaction, and life satisfaction of college students in Taiwan. *Journal of Exercise Science and Fitness*, 1(2), 129-132.
- Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure sciences*, 23(3), 145-163.
- Jackson, E. L. (1988). Leisure constraints: A survey of past research. *Leisure sciences*, 10(3), 203-215.
- Jackson, E. L. (1993). Recognizing patterns of leisure constraints: Results from alternative analyses. *Journal of leisure research*, 25(2), 129-149.
- Jackson, E. L., & Rucks, V. C. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of leisure research*, 27(1), 85-105.
- Karakaş, S. (1981). Psikolojiye Giriş Ders Kitabı. Hacettepe Üniversitesi Psikoloji Bölümü Yayınları, Ankara.
- Karaküçük, S., & Ermihan, N. (1996). Boş zamanları değerlendirme açısından voleybol, basketbol ve hentbol hakemlerinin hakemlik anlayışları üzerine bir araştırma. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 1(2), 58-69.
- Karasar, N. (1999). Bilimsel Araştırma Yöntemi. Ankara: Nobel Yayın Dağıtım.
- Karuç, S. (2018). Türkiye Hentbol Milli Takım kampına katılan sporcuların boş zaman değerlendirme davranışlarının öznel iyi oluşları üzerindeki etkisi (Master's thesis, Batman Üniversitesi Sosyal Bilimleri Enstitüsü, Batman).
- Lakot, K. (2015). Beden eğitimi öğretmeni adaylarında serbest zaman algısı ve engelleri. (Master's Thesis, Karadeniz Teknik Üniversitesi Eğitim Bilimleri Enstitüsü, Trabzon).
- Lee, Y. G., & Bhargava, V. (2004). Leisure time: Do married and single

- individuals spend it differently?. *Family and Consumer Sciences Research Journal*, 32(3), 254-274.
- Little, D. E. (2000). Negotiating adventure recreation: How women can access satisfying adventure experiences throughout their lives. *Loisir et societe/Society and Leisure*, 23(1), 171-195.
- Loucks-Atkinson, A., & Mannell, R. C. (2007). Role of self-efficacy in the constraints negotiation process: The case of individuals with fibromyalgia syndrome. *Leisure sciences*, 29(1), 19-36.
- Okumuş, F. Y. (2002). Kocaeli ilinde bulunan farklı sanayi kuruluşlarında çalışan bireylerin boş zamanlarını değerlendirme tercihlerinin incelenmesi (Master's thesis, Kocaeli Üniversitesi, Sağlık Bilimleri Enstitüsü).
- Orta, L. (2000). Dünya'da ve Türkiye'de Futbol Hakemliğinin Başlangıcı ve Gelişimi Semineri. Onsekiz Mart Üniversitesi Beden Eğitimi ve Spor Bölümü, Çanakkale.
- Özbey, S., & Çelebi, M. (2011). *Rekreasyon temelleri*. Spor Bilimlerine Giriş. Ankara: Spor Yayınevi, 248-276.
- Özşaker, M. (2012). Gençlerin serbest zaman aktivitelerine katılamama nedenleri üzerine bir inceleme. *Selçuk Üniversitesi Beden Eğitimi ve Spor Bilim Dergisi*, 14(1), 126-131.
- Sabancı, G. (2016). Öğretim elemanlarının rekreasyonel faaliyetlere katılımlarını engelleyen faktörlerin belirlenmesi (Doctoral dissertation, Selçuk Üniversitesi Sağlık Bilimleri Enstitüsü).
- Sabiston, C. M., & Crocker, P. R. (2008). Exploring self-perceptions and social influences as correlates of adolescent leisure-time physical activity. *Journal of Sport and Exercise Psychology*, 30(1), 3-22.
- Samdahl, D. M., & Jekubovich, N. J. (1997). A critique of leisure constraints: Comparative analyses and understandings. *Journal of Leisure Research*, 29(4), 430-452.
- Scott, D. (1991). The problematic nature of participation in contract bridge: A qualitative study of group-related constraints. *Leisure Sciences*, 13(4), 321-336.
- Tercan Kaas, E. (2016). Üniversite öğrencilerinde rekreasyon aktivitelerine katılım, yaşam tatmini, algılanan stres ve benlik saygısının incelenmesi. 3. Rekreasyon Araştırmaları Kongresi, Bildiri Kitabı, s, 534-543.
- Tezcan, M. (1993). Boş Zamanlar Sosyolojisi. Eskişehir: A.Ü. Eğitim Fak. Yayınları No: 174.
- Thrane, C. (2000). Men, women, and leisure time: Scandinavian evidence of gender inequality. *Leisure Sciences*, 22(2), 109-122.
- Uzunkara, M. K. (2007). Ankara Bölgesi Basketbol Hakemlerinin Sosyo-Ekonomik Yapılarının İncelenmesi ve Hakemliği Seçme Nedenleri Üzerine Bir Araştırma. (Master's thesis, Gazi Üniversitesi Eğitimi

Bilimleri Enstitüsü, Ankara).

- White, D. D. (2008). A structural model of leisure constraints negotiation in outdoor recreation. *Leisure sciences*, 30(4), 342-359.
- Yaşartürk, F., Uzun, M., İmamoğlu, O., & Yamener, F. (2016). Sedanter kadınların rekreatif etkinliklere katılımlarının önündeki engellerin incelenmesi. *International Journal of Science Culture and Sport (IntJSCS)*, 4, 789-803.
- Yerlisu-Lapa, T. (2014). Leisure negotiation strategies scale: A study of validity and reliability for university students. *South African Journal for Research in Sport, Physical Education and Recreation*, 36(3), 201-215.



Chapter 8

THE OSTRACISM EXPERIENCE OF HIGH SCHOOL STUDENTS

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INTRODUCTION

At the present time, It can be said that many factors such as degeneration of social relations, social fragmentation, unemployment, economic disadvantages, rural to urban migration have deepened disparities and differences among people. It would not be wrong to say that these differences cause increased problems of grouping and social exclusion.

Ostracism (social exclusion) means not being incorporated in a particular social network (Williams, Forgas & Von Hippel, 2013). Williams (1997) expresses the concept of ostracism with words such as avoided, excluded, ignored, rejected, exiled, shunned, banished. Ostracism is often described as being ignored and excluded, and often happens without explanation or negative attention (Williams, 2007). Ali & Miller (2016) made a metaphoric definition. Accordingly, ostracism is a form of social sanction in which, the guilty player is punished by all partners, while innocent players continue to cooperate with each other (Ali & Miller, 2016). Thus, an individual or members of a group may withdraw from joining a wider community in response to an experience of hostility and discrimination (Barry, 2002). It may be a general pattern that cultures use social inclusion to reward and social exclusion to punish as a way of enforcing their values (Baumeister & Leary, 1995). It should not be thought that social exclusion is only due to race, religion and socio-economic differences. Ostracism can also occur between groups that are not significantly different from each other economically (Barry, 2002).

One of the factors that make the individual feel psychologically well is sportive activities. One of the common points of these activities is that they are fun. A fun environment can give people more opportunities to socialize, share and be happy (Güngör & Çelik, 2020). Sport can be used as a tool in prevention of social exclusion. Sports and cultural events can develop self-esteem and help to respect for others, improve communication skills and teamwork, foster discipline, and it can teach basic life skills for people who are weak to social exclusion (Social Exclusion Unit, 2001). Sports can help individuals from different ethnic backgrounds adapt environment that they will live. It would not be wrong to say that the children of immigrant families in many European countries are accepted by the society through sports and they earned society's respect in this way. It has been demonstrated by many scientific studies that sports improve social and communication skills. Baciú & Baciú (2015), stated that sports contribute to the physical, psychological and emotional development of young people as well as their capacity to develop functional relationships with others. Kurtipek & Güngör (2019) stated that with the socialization, the creativity characteristics of individuals also improved. Sekot (2010) expressed that sports means an integral and indispensable part of socialization for young

people. Eccles et al. (2003), indicated that participation in sports connects an adolescent with similar peers, provides shared experiences and goals, and strengthens friendships between peers. Eime et al. (2013) examined the studies published between 1990 and 2012 and found that participation in sports had many benefits in terms of psychological and social health, and that self-esteem and social interaction developed after decreasing depressive symptoms. From this point of view, extracurricular activities can facilitate the developmental needs of adolescents and contribute to one's identity as an significant and valuable member of the school society (Eccles & Barber, 1999).

Aim and Significance of the Study

A person may face exclusion problems in many environments due to various differences throughout his life. School environment may be suitable for this situation especially in high school ages. The rapid emotional changes in adolescence can also affect people's behavior. Participating in sports, exercise or physical activities can improve communication and social interaction between people. In this way, they can get to know each other better and accept the differences. In addition, the related literature has been researched and it has been found that the studies on the ostracism experience in the field of physical education and sports are not sufficient in terms of quantity. In this context, the aim of this research is to determine difference between the ostracism experience levels of students studying in sports high schools and students studying in other high schools.

Research Question

In this study, it was sought answer to the following research question:

- What are the ostracism experience levels of high school students?

Also, in the study it was focused on the following sub-questions:

1. Is there a difference between the ostracism experience levels of high school students according to the type of high school they study?
2. Is there a difference between the ostracism experience levels of high school students according to the gender?
3. Is there a relationship between the ostracism experience levels of high school students and their age?

METHOD

Research Model

In the research, survey model which is one of the quantitative research

approaches was used. The survey model is a research approach that aims to describe a situation that existed in the past or exists today (Büyüköztürk, 2012).

Study Group

The participators of the study consisted of 430 students from high schools in Niğde and Ankara. 218 of the participators were male and 212 were female. The number of participators in sports high schools is 206 and the number of participants in other high schools is 224.

Data Collection Tool

The ostracism experience scale for adolescents which was tested Validity and reliability of the Turkish version by Sertelin-Mercan (2016), which was developed by Gilman et al. (2013), was used as a data collection tool. The scale consists of 11 items and has two sub-dimensions. It is in the form of a self-assessment and is a 5-point Likert-type scale that evaluates two sub-dimensions of ostracism. The first dimension measures the situation of being ignored (5 items) and the second dimension measures the exclusion (6 items). The ostracism experience scale is calculated in reverse. Thus, the higher score indicate the higher level of ostracism experience. The internal consistency Cronbach alpha coefficients of the scale were calculated as .82 for sub-dimension of being ignored and .83 for the exclusion sub-dimension (Sertelin-Mercan, 2016). In current study, Cronbach alpha was found as .83 for sub-dimension of being ignored and .79 for sub-dimension of exclusion.

Data Analysis

In the study, descriptive statistics were used to determine ostracism levels of high school students, independent sample t-test was used for pairwise comparisons and Pearson correlation test was used for relational analysis.

FINDINGS

Findings related to the main research question

In the research question of the study, the ostracism experience levels of high school students were examined. Analysis results are given in table 1.

Table 1: Findings related to the research question

	N	\bar{X}	S
Being ignored	430	1,48	,62
Exclusion	430	2,89	,83

When table 1 is examined, it is understood that average score of participants in sub-dimension of being ignored is $1,48\pm,62$. Also, it is seen that average score of participants in sub-dimension of exclusion is $2,89\pm,83$. Accordingly, it can be commented that the levels of being ignored of the participants are below the average and the exclusion levels are better than average.

Findings related to first sub-question

In the first sub-question of the research, it was investigated whether the ostracism experience levels of high school students differ according to the type of school variable. Analysis results are given in table 2.

<i>Table 2: Scores of participants according to high school type variable</i>						
	High School Type	N	\bar{X}	S	t	p
Being ignored	Other High School	224	7,61	3,34	1,185	,237
	Sports High School	206	7,25	2,88		
Exclusion	Other High School	224	18,18	5,08	3,630	,000
	Sports High School	206	16,45	4,78		

When Table 2 is examined, it is seen that the participants are compared in terms of the scores they have received according to the type of high school. According to the table, in being ignore sub-dimension, there is no significant difference between the participants. On the other hand, there is a statistically meaningful difference among the participants in terms of exclusion sub-dimension in favor of the students in sports high schools.

Findings related to second sub-question

In the second sub-question of the research, it was investigated whether the ostracism experience levels of high school students differ according to the gender variable. Analysis results are given in table 3.

<i>Table 3: Scores of participants according to gender variable</i>						
	Gender	N	\bar{X}	S	t	p
Being ignored	Male	218	7,47	3,01	,220	,826
	Female	212	7,41	3,26		
Exclusion	Male	218	16,96	4,94	-1,640	,102
	Female	212	17,75	5,05		

When Table 3 is taken into consideration, it is understood that male participators had higher scores than female participators in the sub-dimension of being ignored, and female participants had higher scores in the exclusion sub-dimension and in terms of total score. However, there was no statistically meaningful difference among the participators in both sub-dimensions.

Findings related to third sub-question

In the third sub-question of the research, it was investigated whether there is a relationship between the ostracism experience levels of high school students and their age. Analysis results are given in table 4.

<i>Table 4: The relationship between age of participants and their ostracism experience levels</i>					
		Age	Being ignored	Exclusion	Total
Age	Pearson Correlation	1	-,147**	-,127**	-,170**
	Sig. (2-tailed)		,002	,008	,000
	N	430	430	430	430

When Table 4 is examined, it is seen that there is a negatively significant relationship between the age and ostracism experience levels of the participants. It can be concluded that the ostracism experience level of the participants decreases as their age increases.

CONCLUSION and DISCUSSION

In conclusion, it was concluded that the levels of being ignored of the high school students are below the average and their exclusion levels are better than average. Serpen, Kalaycı & Parlak (2019) determined that social exclusion level of participants is low in their research. Similarly, Dönmez & Mete (2019) expressed that organizational ostracism level of teachers is low. The difference between studies may be due to sample groups. Unlike other studies, the sample group of the current study consists of adolescents. Emotional changes come true intensely and quickly during adolescence. It can be said that adolescents are more sensitive in this period. The differences between the results of the research can be interpreted in this way.

As a result of the research, it was understood that according to gender variable, male participators had higher scores in the sub-dimension of being ignored, while female participators had higher scores than male participators in the exclusion sub-dimension and in terms total score. However,

there was no statistically meaningful difference among the participators in both sub-dimensions and in terms of total score. Similarly, Paquette & Underwood (1999) emphasized that there is no difference between young adolescent boys and girls in the frequency of experiencing social attacks. However Öcal, Kemer kaya & Arastaman (2013) indicated that male secondary school students living in orphanages feel more excluded than female students living under the same conditions. Gender differences are evident at every stage of development. Therefore, it is thought that it is not possible to make a generalization when it comes to gender.

It was decided that there was a significantly negative relationship between age and ostracism experience levels of the participants. From this point of view, it can be said that the ostracism experience level of the participants decreases as their age increases. Similarly, Gürler & Demirli (2017) emphasized that the social exclusion levels of 15-year-old adolescents are higher than 16-year-old adolescents. However, Ogurlu (2015) stated that social exclusion in the 8th grades is higher than the 6th and 7th grades. Öcal & Kemer kaya (2014) stated that there is no relationship between socialization skills and age. Emotional changes occur very quickly during adolescence. This situation may affect the behaviors of individuals. For this reason, the appearance of labile behaviors in adolescence should be considered natural.

According to the school type, it was concluded that there was no meaningful difference among participators in sports high schools and participators in other high schools in the sub-dimension of being ignored, and that there was a statistically significant difference between the participants in terms of exclusion sub-dimension and total score in favor of the participants in the sports high schools. Having advanced social skills can be seen as an important factor in preventing social exclusion. İlhan (2008) indicated that regular physical education and sports activities significantly increase the socialization levels of children with trainable mental disabilities. Güngör, Yılmaz & İlhan (2019) found that regular exercise increases the ability to socialize as well as physical gains. Dalkıran et al. (2015) stated that in secondary education, social skills of athlete students are higher than sedentary students. Similarly, Yıldırım & Özcan (2011) emphasized that in secondary education, the social skills of students who play sports are higher than those who do not. Özdiñç (2005) stated that sports contributes positively to the socialization process and individuals who receive a sports education with moral content will experience the socialization process more effectively. Based on the results of the aforementioned studies, it can be interpreted that sports is an important tool of socialization and can be used to cope with social exclusion.

REFERENCES

- Ali, S. N. & Miller, D. A. (2016). Ostracism and forgiveness. *American Economic Review*, 106(8), 2329-48.
- Baciu, C. & Baciu, A. (2015). Quality of life and students' socialization through sport. *Procedia-Social and Behavioral Sciences*, 209, 78-83.
- Barry, B. (2002). Social Exclusion, Social Isolation, and the distribution of income. In Hills, J., Le Grand, J. and Piachaud, D. (Eds.), *Understanding social exclusion* (pp. 13-29). Oxford: Oxford University Press.
- Baumeister, R. F. & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497.
- Büyüköztürk, Ş (2012). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem.
- Dalkıran, O., Aslan, C., Gezer, E. & Vardar, T. (2015). Sporcu ve sedanter öğrencilerin sosyal beceri düzeylerinin karşılaştırılması. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 1(13), 224-230.
- Dönmez, H. & Mete, Y. A. (2019). Tekirdağ'da görev yapan öğretmenlerin örgütsel dışlanma düzeyi. *Trakya Eğitim Dergisi*, 9(2), 350-365.
- Eccles, J. S. & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters?. *Journal of Adolescent Research*, 14(1), 10-43.
- Eccles, J. S., Barber, B. L., Stone, M. & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59(4), 865-889.
- Eime, R.M., Young, J.A., Harvey, J.T., Charity, M.J. & Payne, W.R.. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 1-21.
- Gilman, R., Carter-Sowell, A., DeWall, C. N., Adams, R. E. & Carboni, I. (2013). Validation of the ostracism experience scale for adolescents. *Psychological Assessment*, 25(2), 319-330.
- Güngör, N. B. & Çelik, O. B. (2020). The effect of attitude towards sport of Sports Science Faculty students on mental well-being, *International Journal of Eurasian Education and Culture*, 5(8), 468-493.
- Güngör, N. B., Yılmaz, A. & İlhan, E. L. (2019). Yaşam kalitesi bağlamında özel bir sporcunun kazanımları: Ebeveyn görüşleri doğrultusunda bir durum çalışması. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 20(3), 421-443.
- Gürler, A. & Demirli, C. (2017). Ergenlerde sosyal dışlanma ve benlik saygısı arasındaki ilişki. *Sosyal Bilimler Dergisi*, 11, 941-951.

- Kurtipek, S. & Güngör, N. B. (2019). Individual innovation: A research on sports manager candidates. *Journal of Education and Learning*, 8(1), 264-271.
- İlhan, L. (2008). Eğitilebilir zihinsel engelli çocuklarda beden eğitimi ve sporun sosyalleşme düzeylerine etkisi. *Kastamonu Eğitim Dergisi*, 16(1), 315-324.
- Öcal, A. & Kemer kaya, G. (2014). Yetiştirme yurtlarında kalan 6-8. sınıf öğrencilerinin sosyalleşme becerilerinin incelenmesi. *Kastamonu Eğitim Dergisi*, 23(4), 1567-1584.
- Öcal, A., Kemer kaya, G. & Arastaman, G. (2013). Sense of social exclusion of secondary school students living in orphanages. *Turkish Journal of Education*, 2(1), 49-56.
- Ogurlu, U. (2015). Ostracism among gifted adolescents: A preliminary study in Turkey. *Educational Process: International Journal (EDUPLJ)*, 4(1-2), 18-30.
- Özcan, G. & Yıldırım, S. (2011). Lisanslı olarak takım sporu ve bireysel spor yapan ile spor yapmayan ortaöğretim öğrencilerinin sosyal beceri düzeylerinin karşılaştırılması. *Bolu Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 11(2), 111-135.
- Özdiñç, Ö. (2005). Çukurova Üniversitesi öğrencilerinin sporun ve spora katılımın sosyalleşmeyle ilişkisi üzerine görüşleri. *Sportmetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 3(2), 77-84.
- Paquette, J. A. & Underwood, M. K. (1999). Gender differences in young adolescents' experiences of peer victimization: Social and physical aggression. *Merrill-Palmer Quarterly*, 45(2), 242-266.
- Sekot, A. (2010). Physical activity as a sociological phenomenon. *Physical Culture and Sport. Studies and Research*, 50(1), 32-43.
- Serpen, A. S., Kalaycı, E. & Parlak, E. Sakarya Kadın Eğitim ve Kültür Merkezi'nden Hizmet alan kadınlarda sosyal dışlanma ve yaşam tatmininin incelenmesi. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, 14(20), 1312-1335.
- Sertelin-Mercan, Ç. (2016). Ergenler için sosyal dışlanma ölçeği: Türkçe geçerlik ve güvenilirliği. *HAYEF Journal of Education*, 13(2), 175-186.
- Social Exclusion Unit (2001). *Preventing Social Exclusion: Report by the Social Exclusion Unit*. Cabinet Office.
- Williams, K. D. (1997). Social ostracism. In *Aversive interpersonal behaviors* (pp. 133-170). Springer, Boston, MA.
- Williams, K. D. (2007). Ostracism. *Annu. Rev. Psychol.*, 58, 425-452.
- Williams, K. D., Forgas, J. P. & Von Hippel, W. (2013). *The social outcast: Ostracism, social exclusion, rejection, and bullying*. Psychology Press.



Chapter 9

INVESTIGATION OF THE BENEFIT LEVELS OF INDIVIDUALS PARTICIPATING IN RECREATION ACTIVITIES FROM RECREATION ACTIVITIES THEY PARTICIPATE IN

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Introduction

Developments in technology and economy give people more time and opportunities to participate in recreation and entertainment activities (Ak-gül et al., 2018). With these developments, people have more free time and individuals tend to various recreational activities to evaluate this free time. These activities which they tend, bring many benefits to people.

Recreation and leisure activities can ease the tiredness and stress that people experience at work or school; increase their energy and motivations, as they provide opportunities for self-expression, relaxation and various other benefits. It can also be said that in the process of participating in such activities, the person benefits themselves or the society while performing the activities. In addition, it can be thought that recreation can provide every person with an opportunity to achieve a valuable and meaningful life and to further improve the quality of life. In the light of all this information, the aim of the study is the examination of the benefit levels of the individuals living in the province of Bayburt regarding recreation activities.

Concept of Time and Leisure Time

There are many definitions about time. To mention a few of them briefly; the Turkish Language Association defines time as a situation that was, will, or is in a process (www.tdk.gov.tr accessed on; 21.02.2020). According to Smith (2000), it is a process that continues from the past to the present and from the present to the future, without human control, as an ongoing process, while according to Tutar (2011) does not itself do a job or facilitate the work or does not contribute to any activity. However, they define it as a resource that is mandatory to carry out every work and activity.

Karaküçük (1999) defined leisure time as “when the person is not working, outside the necessities and formal duties required to sustain their life and that they can spend completely according to their own wishes”. Baud-Bovy and Lawson (2002), on the other hand, see leisure time as the time outside the time that the individual devotes to meeting their sleep, work and other basic needs. In a study to be carried out in relation to recreation, undoubtedly the concept of leisure is one of the main topics to be addressed. Because recreation is related to what people with spare time do in their spare time (Karaküçük, 1999).

Concept of Recreation and Benefits of Recreation

The word recreation comes from the word “Recreatio”, which means regaining health in Latin. According to some definitions, recreation is explained only as renewal, while for others it is considered in terms of activity (Torkildsen, 2005). Recreation is defined as the activities or experiences that individuals can freely choose and participate voluntarily in order to

satisfy their desires and desires (Torkildsen, 2005).

Recreation emerges as a self-development tool which includes physical, mental, emotional, spiritual and social benefits (Pichly, 2002; Eskiler et al., 2019) and people get rid of work exhaustion, monotony and work pressure by participating in recreation activities (Damanedier, 1974). Many researchers and academicians state that people who participate in recreation activities will get various benefits (Akgül et al., 2018). According to Bruns (1998), individuals are likely to assign different meanings to the same recreation experiences and gain different benefits from their favorite recreational activities (Lyu and Lee, 2013). The benefits of recreational activity can help achieve personal goals because individuals intend to stabilize their physical and mental health and satisfy physical, mental and social demands (Lu and Stepchenkova, 2012).

METHODOLOGY

Aim of the Study

The purpose of this study is to discuss the attitudes of the people living in the city of Bayburt towards the benefits of recreational activities they perform in their spare time, using personal information and the Leisure benefit scale.

Model of the Study

A descriptive and screening research model was applied in this study, which examines the attitudes of people living in the city of Bayburt towards the benefits of recreational activities they perform in their spare time.

Data Collection Method and Questionnaires

Questionnaire method was used in the data collection phase of the study. The questionnaire form consisted of two parts. In the first part, demographic questions about age, gender, marital status, educational background, monthly income, weekly working time and weekly leisure time were asked. In the second part of the questionnaire form, the Leisure benefit scale was used to determine the attitudes of the participants towards the benefits of recreational activities they carried out in their spare time.

“Leisure Benefit Scale” developed by Ho (2008) and adapted into Turkish via validity and reliability studies by Akgül, Ertüzün and Karaküçük (2018) was used in the study. The Cronbach Alpha value of the scale was .83, and the internal consistency coefficients for the three sub-dimensions varied between .80 and .86. Leisure Benefit Scale was a 5-point Likert-type measurement tool consisting of seven items in the physical sub-dimension, eight items in the psychological sub-dimension and nine items in the social sub-dimension, and a total of 24 items in 3 sub-dimensions.

Population and Sample

The population of the study was comprised of Bayburt province, and the sample was comprised of 448 participants periodically doing recreational activities and was chosen via convenient sampling.

Limitations of the Study

The present study was limited with the individuals who participated in recreational activities in Bayburt province.

Data Collection and Analysis

The data were analyzed using the SPSS 21 package program. In descriptive data analysis; Independent Sample T test and One-way analysis of variance (ANOVA) were performed alongside frequency, percentage, mean and standard deviation analyses.

Findings

226 (50,4%) of the participants were females; 222 (49,6%) of them were males; 17 (3,8%) of them graduated/were still in primary school, 48 (10,7%), high school, 111 (24,8%) college, 221 (49,3) university, 51 (11,4%); while 238 (53,1%) of them were students, 97 (21,6%), private sector worker, and 113 of them were (25,2%) public servants. Additionally, the age mean of the participants was 24,2; while their monthly income mean was 2600 TL; their weekly work schedule mean was 32 hours; their weekly leisure time mean was 35 hours.

Table 1. Results regarding the participants' leisure benefit scale sub-dimension score means

	Gender	N	X	SD	t	p
Physical	Female	226	4,08	,72	-1,62	,10
	Male	222	4,19	,73		
Psychological	Female	226	4,02	,66	-1,23	,21
	Male	222	4,10	,72		
Social	Female	226	3,86	,71	-2,77	,00
	Male	222	4,05	,72		

Table 1 shows the results of independent groups t-test used in comparing the participants' sub-dimension scores of leisure benefit scale by gender. While a significant difference was found in the social sub-dimension according to gender in the analysis results ($p < .05$), no significant differences were found in the physical and psychological sub-dimensions according to gender ($p > .05$).

Table 2. Results regarding comparison of the participants' leisure benefit scale sub-dimension scores according to their marital status

	Marital Status	N	X	SD	t	p
Physical	Single	338	4,09	,74	-2,17	,03
	Married	110	4,26	,65		
Psychological	Single	338	3,99	,71	-3,39	,00
	Married	110	4,25	,58		
Social	Single	338	3,86	,73	-4,86	,00
	Married	110	4,23	,59		

Table 2 shows the results of independent group t-test used in the comparison of the leisure benefit sub-dimension scores of the participants according to their marital status. The analysis reveals that a significant difference was found in physical, psychological and social sub-dimensions according to marital status ($p < .05$).

Table 3. Comparison of the participants' leisure benefit scale sub-dimension scores according to their occupational status.

	Occupational status	N	X	SD	F	P	Difference
Physical	Private Sector	88	4,12	,82	6,81	,00	3>2
	Student	238	4,03	,72			
	Public servant	113	4,39	,58			
	Unemployed	9	3,89	,88			
Psychological	Private sector	88	4,08	,70	6,45	,00	3>2
	Student	238	3,96	,69			
	Public servant	113	4,28	,62			
	Unemployed	9	3,74	,88			
Social	Private Sector	88	4,02	,73	13,76	,00	3>2, 1>2
	Student	238	3,77	,71			
	Public servant	113	4,27	,60			
	Unemployed	9	4,02	,83			

1) Private sector, 2) Student, 3) public servant, 4) Unemployed

Table 3 shows the results of one-way analysis of variance (ANOVA), which is used to compare physical, psychological and social sub-dimension scores according to occupational status. The results show that the physical, psychological and social sub-dimension scores differ according to their occupational status ($p < .05$). According to the post hoc (Scheffe) test results to determine the source of the difference between the groups; statistically significant differences were found between “public servant” and “Student”

in physical subscale scores. Statistically significant differences were found between “Public Servant” and “Student” in psychological sub-dimension scores. Statistically significant differences were found between “Public Servant” and “Student” and “Private Sector” and “Student” in social subscale scores ($p < .05$).

Table 4. Results comparing the participants' leisure benefit scale scores according to monthly income

		N	X	SD	P	F	Difference
Physical	Up to 1000 TL	197	4,09	,70	6,82	,00	5>1,2,4
	Between 1000-2000TL	60	3,88	,81			
	Between 2000-3000 TL	35	4,10	,85			
	Between 3000-4000 TL	43	4,02	,88			
	4000 TL and above	113	4,41	,50			
Psychological	Up to 1000 TL	197	4,00	,66	5,55	,00	5>1,2
	Between 1000-2000TL	60	3,87	,81			
	Between 2000-3000 TL	35	4,00	,74			
	Between 3000-4000 TL	43	3,99	,79			
	4000 TL and above	113	4,31	,56			
Social	Up to 1000 TL	197	3,78	,71	13,59	,00	5>1,2
	Between 1000-2000TL	60	3,74	,65			
	Between 2000-3000 TL	35	3,96	,82			
	Between 3000-4000 TL	43	4,03	,78			
	4000 TL and above	113	4,33	,54			

1) up to 1000 TL, 2) between 1000-2000 TL, 3) between 2000-3000 TL, 4) between 3000-4000 TL, 5) 4000 TL and above

Table 4 shows the results of one-way analysis of variance (ANOVA), which is used to compare physical, psychological and social subscale

scores according to monthly income. The results show that the physical, psychological and social subscale scores differ according to monthly income ($p < .05$). The post hoc (Scheffe) test results which was applied in order to determine the source of the difference between the groups show that in the physical sub-dimension scores there were statistically significant differences between “4000 TL and above” and “Up to 1000 TL”, “4000 TL and Above” to “1000-2000 TL”, “4000 TL and Above” to “3000-4000 TL.” There were statistically significant differences in psychological sub-dimension scores between “4000 TL and Over” and “Up to 1000 TL;” “4000 TL and Over” and “1000-2000 TL”. There were also statistically significant differences in social sub-dimension scores between “4000 TL and above” and “Up to 1000 TL;” “4000 TL and Over” and “1000-2000 TL” ($p < .05$).

Discussion, Conclusion and Suggestions

The findings of this study which examined the level of benefits of individuals participating in recreation activities from the recreation activities they participate in; the independent sample t-test results which was applied to compare the leisure benefit scale sub-dimension scores according to gender, male participants were found to have higher means in the social sub-dimension compared to female participants ($p < .05$). On the other hand, no differences were found in the physical and psychological sub-dimensions ($p < .05$). $> .05$). Studies with similar and different results are also available in the literature. In a study conducted by Ayyıldız et al. (2017) on people who did pilates exercise in their leisure time, it is concluded that women had higher score means in social dimension than men. In the study conducted by Yalçınkaya (2019) on university students, the results revealed that there was a difference between the gender variable and the physical, psychological and social dimensions; and the conclusion was that female participants in the gender variable had higher mean scores than male participants. In the study conducted by Doğan (2018) on university students studying law, no difference was found according to gender. Durhan and Karakparmak (2017) could not find any differentiation in his study on parents who participated in baby gym activities with their children. In their study on physical education and sports teachers and candidates, Kocaer (2018) also did not find a significant difference between the benefit levels of recreation activities and the gender variable. Karaküçük et al. (2019), in their study on orienteering athletes, could not find any difference between gender variable and leisure benefit levels. In the study conducted by Chen et al. (2013), male teachers were found to have higher levels of leisure benefit in terms of physiological, psychological and social dimensions compared to female teachers. Philipp (1997) concluded that male participants benefited more in their leisure time. Bright (2000) stated

that leisure time benefits have a holistic structure that supported people's lives. In this context, it can be said that the social benefit levels of recreation activities are high due to the fact that male participants are more successful than female participants in getting to know someone, establishing relationships, getting closer and making new friends thanks to recreational activities.

In the independent sample t-test results used to compare the leisure benefit scale subscale scores according to marital status, it was found that married participants had higher averages than single participants in terms of marital status in physical, psychological and social sub-dimensions ($p < .05$). There are also studies that obtained different results from our study. Kocaer (2018) did not find any difference between marital status and benefit of recreational activities in their study on physical education and sports teachers and candidates. Chen and Fu (2008) said that social activities had health benefits. Ortnor and Mancini (1990) said that recreational activities strengthened family ties. Kelly (1978) stated that recreational activities involving the family were very important and beneficial in terms of correct leisure time. Based on this, it can be said that because of the fact that married individuals who have family life use their leisure activities both to strengthen their family ties and to spend their leisure time correctly, they obtain more physical, psychological and social benefits than single participants.

As a result of the one-way analysis of variance (ANOVA) used to compare the physical, psychological and social sub-dimension scores of the participants according to their occupational status, "Public Servant" scored higher in the physical sub-dimension scores than the "Student." "Public Servant" scored higher in psychological sub-dimension scores than students. In the social sub-dimension scores, "Public Servant" scored higher than the "Student" and also, "Private Sector" scored higher compared to the "Student." People experience stress in business life and react differently to this stress. While some people accept work stress, others may have various psychological or physiological results. According to Iwasaki and Mannell (2000), leisure time provides an instant physical and mental escape from the distress of the individual and the sources of their distress, while generally the feeling of pleasure associated with leisure can affect the mood positively (Merelas-Iglesias, & Sánchez-Bello, 2019). In the research conducted by Heintzman (2009), they also found that leisure time activities positively affected factors such as psychological well-being, psychological experience, and coping with stress psychologically. Yang (2006) suggested that recreation activities could contribute to the protection and maintenance of the mental and physical health of individuals (Eskiler et al., 2019). Iwasaki (2006) said that recreation offered people the opportunity

to have a meaningful and valuable life and to further improve the quality of life. According to the report of Philipp (1997), some studies can be said to find a positive relationship between mental health and participation in leisure time activities (eg Cutler-Riddick, 1985; Ragheb & Griffith, 1982; Sneegas, 1986). Today, people care about leisure time and see it as an important strategy to restore their energy, renew themselves and relieve work pressure (Iwasaki & Mannell, 2000). Lu et al. (2016) claimed that individuals would adopt different entertainment strategies according to different pressures to respond to pressure and maintain health. From this point of view, it can be said that the participants working in the public and private sectors are more likely to participate in various leisure activities than the students to get rid of the stress caused by their work life and get relieved from stress sources.

As a result of the one-way analysis of variance (ANOVA) used to compare the physical, psychological and social sub-dimension scores of the participants according to their monthly income status, the physical, psychological and social sub-dimension scores differ according to the participants' monthly income ($p < .05$). According to the post hoc (Scheffe) test results to determine the source of the difference between the groups; those with an income of 4000 TL and above scored higher than those with income between 1000 TL, 1000-2000 TL and 3000-4000 TL in the physical sub-dimension. Those with an income of 4000 TL and above scored higher than those who had an income between 1000 TL and 1000-2000 TL in the psychological sub-dimension. In the social sub-dimension, those with an income of 4000 TL and above and those with an income up to 1000 TL scored higher than those who had an income between 1000-2000 TL. There are studies in the literature that are similar to or different from the results obtained from our study. Yalçinkaya (2019) found a significant difference between perceptions of leisure benefit and income level. Doğan's study (2018) showed a significant difference between physical sub-dimension and income levels; but could not find a significant difference in psychological and social sub-dimensions. Dergance et al. (2003) stated that income level did not affect the level of benefit obtained by individuals who perform physical activity in a recreational sense in their research. In their study, Durhan and Karaküçük (2017) did not find any difference between recreational benefit and income levels. Burton et al. (2003) stated in their study that the income level of the individual was an important factor in participating in recreational activities. Torkildsen (2005) said that recreational activities diversified and increased as one's income rose. Accordingly, participants with an income of 4000 TL and above can be said to perceive more physical, psychological and social benefits than other income levels (up to 1000 TL, between 1000-2000 TL and between 3000-4000 TL) by turning to different recreational activities.

As a result, the level of benefit of individuals participating in recreational activities were found to be higher in male participants than female participants; in married participants than single participants; in working participants than students; and in participants with an income of 4000 TL and above than in those with up to 1000 TL, between 1000-2000 TL and between 3000-4000 TL. Local administrations can increase the recreation areas in the city and organize informative meetings about these areas. It is recommended that private sector investors establish activity areas that will appeal to the public. Thus, it is thought that recreational activities can be spread to the base.

References

- Akgül, B. M., Ertüzün, E., Karaküçük, S. (2018). Leisure Benefit Scale: A Study of Validity and Reliability. *International Congresses on Education*, 190.
- Ayyıldız, T., Akgül, B. M., Karaküçük, S. (2017). Proceedings of the Multidisciplinary Academic Conference, p737-743, 7p.
- Baud-Bovy, M. Lawson F. (2002). *Tourism and Recreation - Handbook of Planning and Design*. BathPress, Bath
- Bright, A. D. (2000). The Role of Social Marketing in Leisure and Recreation Management. *Journal of Leisure Research*, 32(1), 12-18.
- Bruns, D. (1998). Benefits-Based Recreation-Tourism Paradigm Shifts. In M. Johnson, G. Twynam, & W. Haider (Eds.), *Shaping Tomorrow's North: The Role of Tourism and Recreation* (pp. 228–256). Thunder Bay, ON, Canada: Lakehead Center for Northern Studies.
- Burton, N. W., Turrell, G., Oldenburg, B. (2003). Participation in Recreational Physical Activity: Why Do Socioeconomic Groups Differ?. *Health Education & Behavior*, 30(2), 225-244.
- Chen, C. C., Cheng, C. H., Lin S. Y. (2013). The Relationship Among Leisure Involvement, Leisure Benefits, and Happiness of Elementary School teachers in Tainan County. *International Research in Education*, 1(1), 29-51.
- Chen, S. Y., Fu. Y. C. (2008). Leisure Participation and Enjoyment among the Elderly: Individual Characteristics and Sociability. *Educational Gerontology* 34 (10): 871–889.
- Cutler-Riddick, C. (1985). Life Satisfaction Determinants of Older Males and Females. *Leisure Sciences*, 7, 47-63.
- Damanedier, J. (1974). *Sociology of Leisure*. New York Elsevier North-Holland.
- Dergance, J. M., Calmbach, W.L., Dhanda, R., Miles, T. P., Hazuda, P. H., Mouton, C. P. (2003). Barriers to and Benefits of Leisure Time Physical Activity in The Elderly: Differences Across Cultures. *J Am*

- Geriatr Soc., 51: 863–868.
- Doğan, M. N. (2018). Hukuk Fakültesi Öğrencilerinin Rekreatif Aktivitelerden Elde Ettikleri Faydaların ve Mutluluk Düzeylerinin İncelenmesi. Yüksek Lisans Tezi. Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- Durhan, T. A., Karaküçük, S. (2017). Çocuklarıyla Baby Gym Aktivitelerine Katılan Ebeveynlerin Rekreatif Fayda Düzeylerinin İncelenmesi. Gaziantep Üniversitesi Spor Bilimleri Dergisi, 2(4), 43-53.
- Eskiler, E , Yıldız, Y., Ayhan, C. (2019). The Effect of Leisure Benefits on Leisure Satisfaction: Extreme Sports. Turkish Journal of Sport and Exercise , 21 (1) , 16-20 . DOI: 10.15314/tsed.522984
- Heintzman, P. (2009) The Spiritual Benefits of Leisure. Leisure/Loisir, 33(1), 419-445.
- Ho, T. K. (2008). A Study of Leisure Attitudes and Benefits for Senior High School Students at PingTung City and Country in Taiwan (Unpublished doctoral dissertation). United States Sports Academy, Daphne, AL.
- Iwasaki, Y. (2006). Leisure, the Quality of Life and Diversity: An International and Multicultural Perspective. Paper presented at the World Congress of Leisure, China Zheuang Hangzhou.
- Iwasaki, Y., Mannell, R. C. (2000). The Effects of Leisure Beliefs and Coping Strategies on Stress-Health Relationships: A Field Study. Leisure/Loisir, 24(1–2), 3–57.
- Karaküçük S (1999). Rekreatif. 4. Baskı, Ankara.
- Karaküçük, S., Durhan, T. A., Akgül, B. M., Aksın, K., Özdemir, A. S. (2019). Oryantiring Sporcularında Ekosentrik, Antroposentrik, Antipatik Yaklaşımların Rekreatif Fayda ile İlişkisi. Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi, 39(3), 1263-1288.
- Kelly, J. R. (1978). Family Leisure İn Three Communities. Journal of Leisure Research. 10: 1-47.
- Kocaer, G. (2018). Beden Eğitimi ve Spor Öğretmenleri ve Adaylarının Öğretmenlik Mesleğine Yönelik Tutum, Serbest Zaman İlgilenim ve Rekreatif Faaliyetlerine Yönelik Fayda Düzeyleri Arasındaki İlişkinin İncelenmesi (Bartın İli Örneği). Yüksek Lisans Tezi, Bartın Üniversitesi, Eğitim Bilimleri Enstitüsü, Bartın.
- Lu, W., Stepchenkova, S. (2012). Ecotourism Experiences Reported Online: Classification of Satisfaction Attributes. - Tourism Management 33(3): 702-712.
- Lu, C. C., Cheng, T. M., Huang, S. J. (2016). The İmpact of The Causality Between Work— Family Conflict, Well-Being, and Leisure Coping Strategies on Tour Professionals. J. Trav. Tourism Market. 33 (7), 1028–1050.
- Lyu, S. O., Lee, H. (2013). Market Segmentation of Golf Event Spectators

- Using Leisure Benefits. *Journal of Travel & Tourism Marketing*, 30(3), 186-200.
- Merelas-Iglesias, T., Sánchez-Bello, A. (2019). Benefits of Leisure in Overcoming Gender Violence Experiences: A Case Study. *Leisure Studies*, 38(1), 15-27.
- Ortner, D. K., Mancini, J. A. (1990). Leisure Impacts on Family Interaction and Cohesion. *Journal of Leisure Research*. 22: 125-137.
- Philipp, S. F. (1997). Race, Gender, and Leisure Benefits. *Leisure Sciences*, 19, 191- 207.
- Pichly, A. (2002). Individuals Can Benefit Physically, Mentally, Emotionally, Spiritually And Socially From A Comprehensive Leisure Education Program Implemented in The Schools During Childhood. A Research Project Report Submitted İn Partial Fulfillment of The Requirements for the Successful Completion Of RLS 209.
- Ragheb, M., Griffith, C. (1982). The contribution of leisure participation and leisure satisfaction to the life satisfaction of older persons. *Journal of Leisure Research*, 14, 295-306.
- Smith, H. W. (2000). *Hayatı ve Zamanı Yönetmenin 10 Doğal Yasası*. (Çev. Adalet Çelbiş). İstanbul: Sistem Yayıncılık.
- Sneegas, J. (1986). Components of life satisfaction in middle and later life adults: Perceived social competence, leisure participation and leisure satisfaction. *Journal of Leisure Research*, 18, 248-258.
- Torkildsen, G. (2005). *Leisure and Recreation Management*. 5th Edition, Routledge. Yondra: Taylor and Francis Group.
- Tutar, H. (Editör). (2011). *Zaman Yönetimi*. Ankara: Seçkin Yayıncılık.
- Yalçınkaya, N. (2019). Üniversite Öğrencilerinin Rekreasyon Fayda Algıları İle Mutluluk Düzeyleri Arasındaki İlişkinin Belirlenmesi. Yüksek Lisans Tezi, Sakarya Uygulamalı Bilimler Üniversitesi, Lisansüstü Eğitim Enstitüsü, Sakarya.
- Yang, Y. J. (2006). A Study on the Relationship among Participation of Leisure Activities, Leisure Constraints and Well-Being of the Students in National Changhua Senior School of Commerce. Ta-Yeh University, Taiwan.



Chapter 10

EXAMINATION OF CANOE ATHLETES' LIFE SATISFACTION, GOAL ORIENTATIONS AND COACH BEHAVIOR PERCEPTIONS

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Canoe sport is a highly competitive sport that has various factors in winning the race such as physical force, technique, fitness, psychology and racing strategy (Diafas et al., 2011). It is a water and nature sport performed with one or more short paddles with sporty and light boats. History of the canoe, which is the oldest of boats, dates back to prehistoric times. In early ages, the boats, obtained by carving tree stumps, were later made by the Indians from beech bark. These boats, used by the Indians in fast and turbulent waters, developed over time and became the equipment of canoeing. Canoeing is one of the newly developing nature sports in our country (Pusula, 2020).

The primary psychological benefits of extreme sports to individuals are; working with the group, learning the group dynamics, setting goals, leadership, gaining self-confidence, self-efficacy, self-decision making, risk management, taking responsibility for yourself and others, affecting personality and physiological development positively, increasing life satisfaction, feeling happy, interacting with others and socializing can be listed. (Burnett, 1994; Hilton, 1992; Levi, 1994; McKenzie, 2000; McRoberts, 1994; Wagner & Rowland, 1992; as cited in Yerlisu Lapa et al., 2010).

One of these benefits is the concept of life satisfaction which is the first subject of our study. Life satisfaction is a concept used for the first time in 1961 by B. Neugarten. Neugarten defines life satisfaction as a whole quality of life, positively a degree of development. While Telman (2004) were defining life satisfaction as the satisfaction of individual from his/her life, in an other definition, it is defined as the general evaluation of quality of life according to the principles of individual (Dost, 2007). Many theories have been developed to understand the concept of success and failure in sports. The dominant social-cognitive-based model adopted in sports psychology is called the Achievement Goal Theory (Printrich, 2003: 667-686; as cited in Barut, 2018). It is influenced by the developmental-based perceived competence theory, and two basic styles are specified in achieving goals in sports and motivation for success (Duda, 1989; Duda and White, 1992). According to the results of the researches on the concept of goal orientation of Nicholls has two independent achievement categories. Ego orientation and task orientation (Nicholls et al., 1989; Nicholls et al., 1990; Duda and Nicholls, 1992; as cited in Barut, 2018). Ego orientation; goals that “refer to others in sports” such as the individual doing better than others, self-disclosure and ranking better than others (competitors). Task orientation is expressed as goals that the individual refers to, such as doing better than the performance previously shown, attending new studies, and mastering a task (Duda and Nicholls 1992; 290-299; cited in: Barut, 2018). These two orientations are thought to be related to the skill level of the athlete.

In canoeing, as in any sport, the leadership characteristic of the coach and how that trait is perceived by the athletes is important. For this reason, it has been known for a long time that the concept of leadership has attracted great interest by researchers in sports environment (Yukl, 1998). As a result of this interest, studies on the subject of leadership have led to the occurrence of new concepts for defining the concept of leadership. In the sports environment, each leadership situation involves the interaction of three basic variables: coach(leader), athlete and training environment. Many models have been developed in the literature to explain this complex tripartite structure. Existing theoretical leadership models have taken these three variables into account when explaining the coach effect on athlete development in sport (Chelladurai, 1984, 1993; Smoll & Smith, 1984; as cited in Barut, 2018). It is thought that one of the important concept that allows the athlete to interact with the coach behavior for the success is leadership behavior, and that the reason for this effect is the concept of motivation and goal orientation.

The aim of our study is to determine the life satisfaction of athletes who have different goal orientations that they prefer when experiencing success or failure, which coach behavior they prefer in success or failure situation, and which aspect of these behaviors they perceive and find meaningful.

Although in sports psychology literature, leadership, effective coach behavior(leadership) and goal orientations are very comprehensive studies, there are few studies specific to canoe sports in our country and the first research related to the concepts described above will be considered to be a encouraging, guiding and beneficial for new studies related to canoe sports.

Therefore, purpose of the study is to examine life satisfaction, goal orientation and perceived coach behaviors of canoe athletes in Turkey in terms of some variables.

METHOD

Research Model

A descriptive and an easy sampling method was used in the research.

Research Group

Sample of the research consists of licensed stagnant canoe athletes who are actively involved in canoeing in 2020. 106 male and 62 female with an average age of 14.50 (SD: 2.251) participated in the study voluntarily. In addition, average year of canoeing for athletes is 2.65 (SD: 1.619), and average year of working with their coaches is 2.40 (SD: 1.525).

Data Collection

The Satisfaction with Life Scale, Task and Ego Orientation in Sport Questionnaire and Leadership for Sport Scale (C) form were used in the study.

The Satisfaction With Life Scale: A 5-item scale designed to measure global cognitive judgments of one's life satisfaction. Participants indicate how much they agree or disagree with each of the 5 items using a 7-point scale that ranges from 7 strongly agree to 1 strongly disagree. Cronbach Alpha coefficient of the scale was calculated as 0,88.

Task and Ego Orientation in Sport Questionnaire (TEOSQ): It is a scale developed by Duda (1989) based on Nicholls' 'Perceived Competency Theory Based on Development'. The validity and reliability study of the scale for Turkish athletes was adapted by Toros (2001). In the study of Toros (2001), internal consistency coefficient value of the "task orientation" subscale is 0,87. Internal consistency coefficient was found as 0.85 in the "ego orientation" subscale. In general, the reliability coefficient of the scale was 0.86. It was found that two factors with task and ego orientation explained 58% of the overall variance, and the test-retest reliability of the scale was 0.65 for task orientation and 0.72 for ego orientation. This scale consists of 13 items and has two sub-dimensions, one is task related goals and the other is ego related goals. The scale is based on a 5-point Likert-type scale that ranges from 5 strongly agree to 1 strongly disagree.

Leadership for Sport Scale (LSS): Chelladurai and Saleh (1980) developed the scale to measure role of leadership in sports. This scale has three forms. Form (c) - the athlete's perception of coach behavior - was used in the study. The validity and reliability of the Turkish scale consists of five leadership dimensions adapted by Toros and Tiriyaki (2006). These dimensions are; training and instruction, democratic behavior, autocratic behavior, social support and positive feedback. Internal consistency coefficient values of the scale are 0.72 in autocratic behavior dimension, 0.87 in democratic behavior dimension, 0.83 in training and instruction dimension, 0.76 in social support dimension and 0.77 in positive feedback dimension.

Data Analysis

Kolmogorov Smirnov and Shapiro Wilk test was used for normality distributions. *T*-test was used in comparison of binary groups and Pearson correlation test was used in correlation analysis.

RESULTS

Table 1. *Frequency of Participants*

		n	%	SD
Gender	Female	62	36.9	.484
	Male	106	63.1	
National Athlete	Yes	18	10.7	.310
	No	160	89.3	
Interested in Canoeing in His/Her Family	Yes	32	19.0	.394
	No	136	81.0	
Salary From The Club	Yes	22	14.3	.351
	No	144	85.7	

Descriptive statistics of canoe athletes' gender, national athlete status, interested in canoeing in the family and charging salary from the club are shown in Table 1.

Table 2. *Relationship Between Life Satisfaction and Goal Orientations of Canoe Athletes*

		Life Satisfaction
Task Orientation	r	.481**
	p	.000
	n	168
Ego Orientation	r	.274*
	p	.000
	n	168

* = Mild relationship, ** High level relationship

When the table is examined, it was seen that there was a positive relationship ($r = .481$; $p = .000$) between life satisfaction and task orientations of canoe athletes, and a positive relationship ($r = .274$; $p = .000$) between life satisfaction and ego orientations.

Table 3. *Relationship Between Life Satisfaction, Goal Orientations and Perceived Coach (Leadership) Behavior of Canoe Athletes*

		Task Orientation	Ego Orientation	Life Satisfaction
Training and Instruction	r	-.279**	-,055	-,447**
	p	.000	,479	,000
	n	169	168	168
Democratic Behavior	r	-,191*	-,007	-,428**
	p	,013	,928	,000
	n	168	168	168

Autocratic Behavior	r	-,036	-,208**	-,063
	p	,642	,007	,421
	n	168	168	168
Social Support	r	-,161*	-,113	-,405**
	p	,037	,144	,000
	n	168	168	168
Positive Feedback	r	-,352**	-,153*	-,356**
	p	,000	,047	,000
	n	168	168	168

* 0,05 level

** 0,01 level

When the table is examined, there was a negative relationship between canoe athletes' task orientations, and sub-dimensions of leadership behaviors (democratic behavior, social support, and positive feedback) and it was also found that there was a negative relationship between ego orientation and training and instruction, autocratic behavior and positive feedback, and there was a negative relationship between life satisfaction and training and instruction, democratic behavior, social support and positive feedback sub-dimensions.

Table 4. Comparison Of Goal Orientation, Life Satisfaction and Perceived Coach Behaviors of Canoe Athletes In Terms of Gender

		n	X	SD	t	P
Task Orientation	Male	106	27.0189	5.53600	2.681	.005*
	Female	62	29.2258	4.40350		
Ego Orientation	Male	106	19.3962	5.18364	1.673	.097
	Female	62	20.8065	5.32498		
Life Satisfaction	Male	106	21.9057	6.42692	1.429	.157
	Female	62	23.3548	6.29623		
Training and Instruction	Male	106	22.6226	8.50821	2.678	.004*
	Female	62	19.3548	5.82560		
Democratic Behavior	Male	106	18.4717	6.81065	.594	.566
	Female	62	17.8710	6.02586		
Autocratic Behavior	Male	106	14.8679	3.97151	4.088	.000*
	Female	62	17.2581	3.04036		
Social Support	Male	106	16.1698	4.89795	-.947	.331
	Female	62	16.9677	5.47713		
Positive Feedback	Male	106	9.3396	3.10418	.298	.766
	Female	62	9.1935	3.00185		

When the table is examined, there was a significant difference between task orientation of canoe athletes, which is the sub-dimension of goal orientation in terms of gender, and there was also a significant difference between training and instruction, autocratic behavior which is the sub-dimension of perceived coach behavior in terms of gender.

Discussion and Conclusion

Purpose of the study is to examine life satisfaction, goal orientation and perceived coach behaviors of canoe athletes in Turkey in terms of some variables. In this regard, it will be the first study to investigate related concepts in canoeing in Turkey. In this study it was seen that there was a positive relationship between life satisfaction and task orientations of canoe athletes, and a positive relationship between life satisfaction and ego orientations.

In the findings of a study on outdoor athletes (Toros et al., 2010), there was no significant relationship between task-oriented goals and life satisfaction (0.254 ; $p > 0.05$). There was also no significant relationship between ego-oriented goals and life satisfaction (0.352 ; $p > 0.05$). Although this study does not support the conducted study, in Gencer's research (2012) ego-oriented athletes who have high self-esteem life satisfaction is characterized with concepts such as self esteem, self efficacy and as a result it is an expected result that of a there is a positive relationship between life satisfaction and the athlete's goal orientation, but also it supports the conducted study. The findings of this study in canoe sport are in parallel with the finding that those who do canoeing have more task and ego-oriented goals in another study conducted in nature sports (Papaioannou, 1994). From these findings, it can be stated that canoe athletes have both goal orientations, their task orientation is more dominant and their life satisfaction levels are in positive relationship with these orientations.

According to the findings of the study, there was a negative relationship between canoe athletes' task orientations, and sub-dimensions of leadership behaviors (democratic behavior, social support, and positive feedback) and it was also found that there was a negative relationship between ego orientation and training and instruction, autocratic behavior and positive feedback. The canoe athletes with high task orientation perceived their coaches as leaders who have less proficiency in education, less democratic, less proficiency in social support and less proficiency in positive feedback. Athletes with high ego orientations have perceived that their coaches with less autocratic behavior and less proficiency in positive feedback. Task orientation is the ability of the individual to work hard and try to do what he/she does best by putting out the best effort and enjoying it (Duda, 1998). According to the study conducted by Barut (2018), it was

determined that athletes with high task orientations perceive and prefer coach who demonstrates democratic behavior and training-instruction style leadership but task orientation decreases as the autocratic coach behavior increases. In the study among young badminton athletes, Kim (2017) found that task-oriented young athletes preferred training and instruction dimension, then positive feedback dimension, then democratic behavior, and finally autocratic behavior dimension. The results of these studies are in contrast to our study and do not support the findings. According to the results obtained from the study, it can be said that task-oriented canoe athletes avoided positive feedback of their coaches about their skills, social support behavior, and democratic behavior of their coaches, and did not prefer training and instruction. On the contrary, canoe athletes with ego oriented found their coaches more meaningful who give less positive feedback and who have less autocratic behavior. Ego orientation is the feeling of success that the individual gains when excels over others. Contrary to our study, some studies (Cruz and Kim, 2017) revealed that young athletes with high ego orientation prefer positive feedback, and they also request to social support behavior from their coaches.

It is expected that ego-oriented athletes will be open to positive feedback(rewarding behavior) from the coach as they are focused on competition and competition-oriented success and reward. Considering that ego-oriented individuals focus on achieving superiority, it seems more likely that they will prefer the coach, who is aware of the good performance and reinforces behavior of the athlete by rewarding, but it has been revealed that canoe athletes with high task and ego orientation do not prefer the coach who supplies positive feedback. It was found that there was a negative relationship between life satisfaction and training and instruction, democratic behavior, social support and positive feedback sub-dimensions. It has been found that athletes with high level life satisfaction perceive less democratic behavior, less social support from coaches and prefer less positive feedback. In the results of the research conducted to determine the relationship between young athletes' staying time at game and their goal orientation, perceived motivational climate and life satisfaction, there is no significant relationship between athletes with high task and ego orientation and life satisfaction (Toros, 2005: 50- 63). However, in this study, it was found that there was a negative relationship between life satisfaction and training and instruction, democratic behavior, social support, positive feedback sub-dimensions. In another study (Toros, Akyuz, Bayansalduz, and Soyer, 2010), it was found that there is no significant relationship between the task and ego-oriented goals' an life satisfaction in climbing which is a nature sport like canoe. These findings are in line with the findings of Duda (1989) and Walling, Duda and Chi (1993).

According to results of the study, there was a significant difference between task orientation of canoe athletes, which is the sub- dimension of goal orientation in terms of gender, and there was also a significant difference between training and instruction, autocratic behavior which is the sub-dimension of perceived coach behavior (leadership) in terms of gender. It has been found that female canoe athletes are more task oriented than male canoe athletes, male athletes prefer more training and instruction dimension than female, and female canoe athletes prefer their coaches more autocratic than male athletes. Another factor related to goal orientation of the athlete is 'gender'. In the study of Duda (1989) on individual and team sports of university and high school athletes, a significant difference was found between goal orientations of male and female students. According to the results of research, it is stated that female athletes are more task oriented and male athletes are ego oriented. This is a situation that supports our findings.

In their study, Gentile (2002) and White and Zellner (1996) found that male are more ego oriented than female, and female are more task oriented than male. In addition, in the study of Omar-Fauzee et al. (2008), no significant difference was found between goal orientation in terms of gender. In addition, in other cross-cultural studies, it was concluded that female athletes have low ego orientation and male have high ego orientation (White and Duda, 1994: 4-18). However, it was concluded that male have a low task orientation and female have a high task orientation (Harwood, 2004: 318-332). Regarding results of the research, it is thought that social norms affect the gender identity of the female and social effect on upbringing of the female suppresses ego orientation. In our conducted study, there was no significant difference between ego orientation scores in terms of gender, and no difference was found in male and female athletes in terms of life satisfaction levels. In the research that examines life satisfaction and self-efficacy of individuals engaged in hiking and paragliding, such as canoeing, (Barut, Demir, Ballıkaya, & Çifci, 2019) life satisfaction of individuals did not differ in terms of gender, and studies in the literature generally show that female have more life satisfaction than male individuals. It has been stated that this difference is a very weak level.

In another study conducted in terms of gender, Horn (2002) stated that male athletes prefers training and instruction and autocrat coaching style more than female athletes. At the same time, both female and male athletes require high frequency of behavior from their coaches. Although these findings support our study in terms of training and instruction dimension, it does not support the findings in this study in terms of female athletes preferring coach with autocratic behavior.

The research is the first comprehensive study conducted with professional canoe athletes available nationwide. In addition, when literature has

reviewed, there are no other studies which investigate goal orientation, coach (leadership) perceptions and life satisfaction of canoe athletes.

With this research:

- Having knowledge about leadership styles of canoe coaches in Turkey and to help athletes and coaches to show proper leadership by developing this knowledge
- Determining with which goal orientation canoe athletes attribute success and failure will provide output to both athletes and their coaches while setting goals of the athletes,
- Knowing the life satisfaction levels of athletes will present practical and new information about determining the way in which athletes make sense of their personal and sports life,
- When gaining information is processed, it will give coaches the opportunity to understand their own behaviors and to recognize their athletes' personality and improve their behavior.
- Finally, it is thought that this research may present new and functional perspectives on Turkish sports psychology literature.

References

- Barut, A. İ., Demir, A , Ballıkaya, E , Çifci, F . (2019). Doğa Yürüyüşü ve Yamaç Paraşütü Sporü Yapan Bireylerin Yaşam Doyumu ve Özyeterliklerinin İncelenmesi. *Spor Eğitim Dergisi*, 3 (2) , 137-145.
- Barut, A. İ. (2018). *Farklı Hedef Yönelimlerine Sahip Unilig Erkek Basketbolcularının Algılanan Liderlik Davranışı ve Antrenör Davranışlarını Değerlendirmelerinin Karşılaştırılması*. Mersin Üniversitesi, Eğitim Bilimleri Enstitüsü, Beden Eğitimi ve Spor Anabilim Dalı (Doctoral dissertation, Doktora Tezi, Mersin Üniversitesi Eğitim Bilimleri Enstitüsü, Mersin).
- Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sports: Development of a leadership scale. *Journal of Sport and Exercise Psychology*, 2(1), 34-45.
- Cruz, A. B., & Kim, H. D. (2017). Leadership preferences of adolescent players in sport: influence of coach gender. *Journal of sports science & medicine*, 16(2), 172.
- Diafas, V., Dimakopoulou, E., Diamanti, V., Zelioti, D. & Kaloupsis, S. (2011). Anthropometric characteristics and somatotype of Greek male and female flatwater kayak athletes. *Biomedical Human Kinetics*, 3, 111-114
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 49(1),

71-75.

- Duda, J. L. (1989). Relationship between task and ego orientation and the perceived purpose of sport among high school athletes. *Journal of sport and exercise psychology*, 11(3), 318-335.
- Gencer, E. (2012). Goal Orientation, Motivational Climate And Self-Esteem İn Boxers. *Tojras*, 22.
- Gentile, D. (2002). Volunteering to coach: An analysis of youth sport coaches. *elibrary.ru*
- Horn, T. S., Bloom, P., Berglund, K. M., & Packard, S. (2011). Relationship between collegiate athletes' psychological characteristics and their preferences for different types of coaching behavior. *The Sport Psychologist*, 25(2), 190-211.
- Papaioannou, A., (1994). Development of a questionnaire to measure achievement orientation in physical education. *Research Quarterly for Exercise and sport*, 65, 11- 20.4
- Pusula, (2020). Kızıldere'lerden kalma bir spor, kano, Retrieved from: <https://www.pusulaspor.net/olimpik/kizildere'lerden-kalma-bir-spor-kano>
- Toros, T., (2001). *Elit ve Elit Olmayan Erkek basketbolcularda Hedef Yönelimi Gündüsel İklim ve Hedeflerin, Özgürlük Güçlük Derecesi Özelliklerinin Yaşam Doyumuna Etkisi*. Yüksek Lisans Tezi, Mersin Üniversitesi Sağlık Bilimleri Enstitüsü, Mersin.
- Toros, T., & Tiryaki, Ş. (2006). Sporda liderlik ölçeği'nin-futbolcuların antrenör davranışlarını algılaması versiyonunun-geçerlik ve güvenirlik çalışması. 9. *Uluslararası Spor Bilimleri Kongresi, Muğla*.
- Toros, T., Akyüz, U., Bayansaldız, M., Soyer, F., (2010). Görev ve ego yönelimli hedeflerin yaşam doyumu ile ilişkisinin incelenmesi (dağcılık sporu yapanlarla ilgili bir çalışma). *Uluslararası İnsan Bilimleri Dergisi*
- Walling, M. D., Duda, J. L., & Chi, L., (1993). The perceived motivational climate in sport questionnaire: construct and predicative validity. *Journal of Sport and Exercise Psychology*, 15, 172-183
- White, S. A., & Zellner, S. R. (1996). The relationship between goal orientation, beliefs about the causes of sport success, and trait anxiety among high school, intercollegiate, and recreational sport participants. *The Sport Psychologist*, 10(1), 58-72.



Chapter 11

THE INVESTIGATION OF THE RELATIONSHIP BETWEEN ACADEMIC SELF-EFFICACY AND LEISURE TIME MANAGEMENT OF THE FACULTY OF SPORTS SCIENCES STUDENTS

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INTRODUCTION

Academically successful human potential is one of the key features in societies' development and reaching perfection. It is known that education is very important in terms of training individuals who are able to think about all fields of life, process information, make their own decisions and try to reach the perfection as academically successful human potential.

The concept of academic self-efficacy that emerges at this point is defined as individuals' perceptions that they will manage to perform given academic tasks and responsibilities at specified success levels (Donmuş et. al, 2017). Again, according to another definition, academic self-efficacy is related to motivation, academic choices and success (Pajares, 1996).

Today, sports have started to function as a powerful education tool in the solutions of social problems by widening its area of interest in order to meet different expectations of individuals. Sports is a tool that contributes positively to the whole life of individuals and enables the development of people. Regardless of age, sports done by individuals being based on scientific fundamentals, consciously and systematically, plays an important role in keeping them healthy, successful, happy and keeping their morale high throughout their life (Yalçınkaya et. al, 1993, Akıncı, 2019).

It is predicted that when academic success increases, improvement in mental performance and cultural improvements in individuals by means of free time activities is an important concept.

The concept of time is handled in 2 groups as working time and leisure time. Working time includes a series of actions for the purpose of working and the obligatory time of period spent for work. Leisure time, emerging as a result of a good planning and treatment of time (Mc Lean&Hurd, 2012) is considered as the time remaining from the time spent for work and work-related supportive activities such as travel, training and meeting.

The term of leisure time is the time that individuals move away from the obligations in life and engage with certain activities voluntarily to relax and get away from concerns (Hacıoğlu, Gökdeniz&Dinç 2003,).

In universities, which are the last stage of transition to professional life, leisure time attitudes and time management are important for students who are academically educated to improve their scientific, cultural and social skills, as well as their academic infrastructures for student years and later (Yağmur, 2006).

According to the literature review by the author, there are definitions and studies in many different sample groups about academic/self-efficacy (Turan et. al, 2016, Saracaloğlu et. al, 2017, İzgar&Dilmaç, 2008, Caba&-Pekel, 2017), leisure time (Karakuş, 2020, Ergül, Alp&Çamlıyer, 2015,

Demirel&Harmandar, 2009) and time management (Başak, Uzun&Arslan, 2008, Macan, 1994, Wang, Kao, Huan&Wu, 2011) but no studies investigating academic self-efficacy and leisure time management together have been found.

The objective of this study is to investigate the relationship between the academic self-efficacy and leisure time management of the students of sports sciences faculty.

METHOD

The Model of the Research

This research is in the descriptive and relational survey model. These survey models can be defined as "...the research models aiming at determining the existence and/or the level of the covariance between two or more variables"(Karasar, 2007).

Forming the Voluntary Groups

The population of the research includes 1552 students studying at Er-ciyes University, Faculty of Sport Sciences, and the sample group includes 496 students selected randomly (Çingi, 1994) from the population.

Table 1: *Demographic Characteristics of the Participants*

	Variables	N	%
Gender	Male	256	51.6
	Female	240	48.4
	Total	496	100
Age	18-20	204	41.1
	21-23	189	38.1
	24 and above	103	20.8
	Total	496	100
Department	Physical Education and Sports		
	Teaching	105	21.2
	Coaching	143	28.8
	Sport Management	101	20.4
	Recreation	147	29.6
	Total	496	100
Education	Day	263	53.0
	Evening	233	47.0
	Total	496	100
General Grade Point Average	0-1.99	30	6.0
	2.00-2.99	265	53.5
	3.00-4.00	201	40.5
	Total	496	100

When Table 1 is examined, it is observed that 51.6% of the students are males, 48.4% are females, 41.1% are between the ages of 18-20, 38.1% are between 21-23 and 20.8% are at the age of 24 and above. 21.2% of them are studying at the department of Physical Education and Sports Teaching, 28.8% at the department of Coaching, 20.4% are at the Sport Management and 29.6% are at the department of Recreation. 53.0% of the students are studying in day classes, and 47.0% in evening classes. 6.0% of the students have general grade point average in the range of 0-1.99, 53.5% of them between 2.00-2.99, and 40.5% have between 3.00-4.00.

Data Collection Techniques

Personal Information Form prepared by the researcher, Academic Self-Efficacy Scale and Leisure Time Management Scale were used to collect the data.

Personal Information Form:

The form includes five questions in order to obtain the information about the gender, age, department, education and general grade point averages of the participants

Academic Self-Efficacy Scale:

The scale developed by Jerusalem and Schwarzer (1981) to determine the academic self-efficacy levels of students includes 7 items having one dimension. It is 4-point likert type scale, and the items are scored as (1) 'Not at all like me', (2) 'Not much like me', (3) 'Somewhat like me' and (4) 'Very much like me.' The original scale was developed by conducted on the students of medical faculty, and Cronbach Alpha value of the scale was determined as 0.87.

The scale was adapted into Turkish by Yılmaz et. al (2007). The Turkish adaptation was conducted on 672 university students who were teacher candidates in different fields. According to the analysis results, the structure of the original scale with one dimension and 7 items was preserved in Turkish adaptation. In the analysis results, it was stated that Cronbach Alpha reliability value was determined as .79. It was revealed that Academic Self-Efficacy Scale could be used in Turkey conditions as a valid and reliable scale to determine the self-efficacy of university students related to their academic learning.

Leisure Time Management Scale

The scale, developed by Wang et. al (Wang, Kao, Huan&Wu, 2011) in 2011, adapted into Turkish by Akgül and Karaküçük (Akgül ve Karaküçük, 2015) in 2015.

The scale includes 15 items and 4 sub-scales. There are 6 items in the

‘goal setting and method’ subscale, and 3 items in each of the ‘leisure time attitude’, ‘programming’ and ‘evaluation’ subscales. It is a 5-point Likert scale including the statements of “Strongly agree – Agree – Undecided – Disagree – Strongly Disagree.” In the confirmatory factor analysis performed by the researchers, it was reported that the scale is coherent with the original form, Cronbach Alpha value was .83, test-retest test reliability was .86, and the internal consistency coefficients for the sub-scales changes between the range of .71 - .81. According to these results, it can be stated that the scale is a valid and reliable measurement tool (Wang, Kao, Huan ve Wu, 2011, Akgül&Karaküçük, 2015).

Statistical Analysis

The performance of Shapiro-Wilk test is only one of the methods used to examine the normality. Skewness and kurtosis distributions according to the statistics of the obtained data are given in Table 2.

Table 2. *Skewness-Kurtosis and Shapiro-Wilk Test Significance Level Results of the Sub-scale Scores of the Participants*

	N	Skewness	Kurtosis
Academic Self-Efficacy	496	-.738	.121
Goal Setting and Method	496	-.799	-.052
Leisure Time Attitude	496	-.423	-.349
Programming	496	-.924	.490
Evaluation	496	-.517	-.528
Leisure Time Total	496	-.571	-.440

According to Shapiro-Wilk Test results, deviation from normality of the scores that the participants obtained from the academic self-efficacy and leisure time management scales are at significant levels (Table 2). When normal distribution curves are examined, it is observed that there are no extreme deviations from normality. In the literature, George and Mallery (2016) state that skewness and kurtosis values of ± 1 are acceptable ideally.

In the light of this information, parametric statistical analysis tests were decided to be used. The obtained data were analyzed on computer. Number, percentage, mean and standard deviation were use as the descriptive statistical methods in the evaluation of the data. Pearson correlation analysis was performed between the continuous variables of the research.

FINDINGS

Table 3: *The Descriptive Statistics of the Scores Obtained from the Scales*

	N	Min	Max	X±Sd
Academic Self-Efficacy	496	11.00	35.00	26.258±4.216
Goal Setting and Method	496	11.00	30.00	24.323±5.055
Leisure Time Attitude	496	4.00	15.00	11.057±2.600

Programming	496	3.00	15.00	12.076 ±2.815
Evaluation	496	4.00	15.00	11.744±2.656
Leisure Time	496	26.00	75.00	59.200±11.914
Management Total				

When Table 3 was examined, it was determined that the academic self-efficacy scale averages of the students participated in the study was 26.258±4.216. When Leisure Time Scale sub-scales were examined, it was found that goal setting and method sub-scale means were 24.323±5.055, leisure time attitude sub-scale means were 11.057±2.600, programming sub-scale means were 12.076 ±2.815 and evaluation sub-scale means were 11.744±2.656. Leisure Time Management total score means were determined as 59.200±11.914.

Table 4: The Relationship between the Academic Self-Efficacy and Leisure Time Management of the Participants

		1.	2.	3.	4.	5.	6
1. Academic Self-Efficacy	r	1					
	p						
	n	496					
2. Goal Setting and Method	r	.115	1				
	p	.010					
	n	496	496				
3. Leisure Time Attitude	r	.055	.788	1			
	p	.221	.000				
	n	496	496	496			
4. Programming	r	.060	.687	.660	1		
	p	.181	.000	.000			
	n	496	496	496	496		
5. Evaluation	r	.039	.829	.822	.746	1	
	p	.391	.000	.000	.000		
	n	496	496	.496	496	496	
6. Leisure Time Total	r	.084	.943	.891	.938	.930	1
	p	.062	.000	.000	.000	.000	
	n	496	496	496	496	496	496

When Table 4 was examined, no relationship was found between academic self-efficacy and leisure time attitude ($r=.055$, $p=.221$), programming ($r=.060$, $p=.181$), evaluation ($r=.039$, $p=.391$) and leisure time management total scores ($r=.084$ $p=.062$) of the Faculty of Sports Sciences students. However, a low level of positive relationship was determined between academic self-efficacy and the sub-scale of goal setting and method ($r=.115$, $p=.010$).

DISCUSSION AND CONCLUSION

Today, university education is a very critical stage in people's lives. It is known that, on one hand, university students' having academic success at this stage that will affect them during their lives and transferring the achievements they obtain to their later lives, and, on the other hand, protecting physical, mental and emotional health by participation in leisure time activities are important in terms of their attitudes and behaviors.

A low positive relationship was determined between the academic self-efficacy and goal setting and method sub-scale of the leisure time management in the students of faculty of sport sciences (Table 4).

According to the literature review by the author, there are studies reporting that there is a relationship between academic/self-efficacy and success orientation (Kayaş, 2013), academic motivation (Alemdağ, Öncü&Yılmaz, 2014) and performance approach orientation (Bell&Kozlowski, 2002, Cellar et. al, 2011). In the study conducted by Alay and Koçak (2003) on university students, a relation was detected between time management and academic success. However, Durmaz, Hüseyinli and Güçlü (2016) found in the study they conducted on a sample including high school students that students having high academic success also had high perception related to planning, prioritization, traps and concentration. Yılmaz, Yoncalık and Bektaş (2010) determined that there was no relation between the time management variable and academic success of the students studying at Sport Management department.

The academic success of an individual is the most important determinant of his/her professional status, income and level of welfare (Spinath, 2012).

In the study conducted by Mannel and Klaber (1997), leisure time management includes employing some techniques for individuals to use their unpledged time in a positive manner according to a plan based on certain goals and priorities, to organize and to schedule. According to this definition, the amount of leisure time can be determined according to the way of use. Different people can attribute different values to leisure time. Individually, to manage the time well is to provide opportunities to plan the career better and prepare for the future, to read and learn more, to follow the new improvements and technology, to spend more time with family and other people, to rest, to have fun, to think, to create new ideas and to start new projects (Başak, Uzun&Arslan, 2008). To do this, setting goals, setting priorities, planning, organization, the techniques of saving time and attitudes towards time are important.

In the presented study, the relationship between academic self-efficacy

and leisure time management reveals that while students try to increase their knowledge, skills and academic success in order to prepare a good future for themselves, they also should manage their leisure time activities well to be physically, mentally and emotionally healthy

Consequently, it is considered that the study programs of the students of the faculty of sports sciences including training, competition and resting intervals provided by the sport branches they engage bring them time management skill and they positively affects students' academic success and their leisure time management in the most efficient way.

RECOMMENDATIONS

- Studies involving sports science students with a wider range of students can be conducted.
- Academic self-efficacy and leisure time skills of the students studying at other faculties can be investigated.
- Trainings related to academic self-efficacy and leisure time management can be provided for students, and after these trainings academic self-efficacy and leisure time management skills of the students can be reevaluated.

REFERENCES

- Jerusalem M, Schwarzer R. Fragebogen zur Erfassung von "Selbstwirksamkeit. Skalen zur Befindlichkeit und Persoenlichkeit. (R Schwarzer, Der.). Forschungsbericht No. 5. Berlin: Freie Universitaet, Institut fuer Psychologie 1981; 1-4
- Yılmaz M, Gürçay D, Ekici G. Akademik Özyeterlik Ölçeğinin Türkçe'ye Uyarlanması. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 2007; 3: 253-259
- Wang, W.C., Kao C.H., Huan, T. C & Wu, C.C (2011). Free Time Management Contributes to Better Quality of Life: A Study of Undergraduate Students in Taiwan. Journal of Happiness Studies, 12(4):561-573.
- Akgül, B. M., & Karaküçük, S. (2015). Boş zaman yönetimi ölçeği: Geçerlik-güvenirlilik çalışması. International Journal of Human Sciences, 12(2), 1867-1880
- Donmuş V, Akpınar V, Eroğlu M. Öğretmen Adaylarının Akademik Öz yeterlikleri ve Mesleki Kaygıları Arasındaki İlişkinin İncelenmesi, Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 2017; 14(37): 1-13).
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. Review of Educational Research, 66 (4), 543-578.
- Yalçinkaya M, Saracaloğlu A, Varol R. Üniversite öğrencilerinin spora ilişkin görüşleri ve beklentileri, Spor Bilimleri Dergisi, 1993; 4(2): 12-26.)
- Akıncı Ay (2019) Beden Eğitimi, Sosyalleşme İlişkisi, Ortaöğretim Kurumlarında Beden Eğitimi ve Spor Etkinliklerinin Sosyalleşme Süreci ve Şahsiyetin Oluşumuna Katkısı, Lab Lampert Academic Publishing,Maurutis.
- McLean, D., Hurd, A.D. (2012). Kraus' Recreation and Leisure in Modern Society (9th Eds.). USA: Jones & Bartlett Learning Inc. Ss:20.
- Hacıoğlu N, Gökdeniz A, Dinç Y. Boş Zaman & Rekreasyon Yönetimi Örnek Animasyon Uygulamaları, Editör: Yrd. Doç. Dr. Ayhan Gökdeniz, Detay Yayıncılık, Ankara, 2003: 18
- Yağmur, R. (2006). Afyon Kocatepe Üniversitesi Beden Eğitimi ve Spor Yüksekokulu Öğrencilerle Farklı Bölümlerdeki Öğrencilerin Serbest Zaman Aktivitelerinin Karşılaştırılması. (Yüksek lisans tezi), Afyon Afyon Kocatepe Üniversitesi/Sağlık Bilimleri Enstitüsü, Afyon
- Karakuş M, (2020). 'Spor Bilimleri Fakültesi Öğrencilerinin Yaşam Tatmini ve Boş Zaman Tutumları Arasındaki İlişkinin İncelenmesi'. (Ed. Zeynep Filiz Dinç), Sporda Psiko-Sosyal Alanlar, ss. 153-160, Akademisyen Yayınevi, Ankara
- Ergül, O.K.; Alp, H. & Çamlıyer, H. (2015). Determination of the Interest

- and Participation Level for the Outh of University Sports Recreation Activities. *Journal of Tourism Theory and Research*, 1 (2):104-115
- Demirel M, Harmandar D. (2009) Üniversite Öğrencilerinin Rekreatif Etkinliklere Katılımlarında Engel Oluşturabilecek Faktörlerin Belirlenmesi *Uluslararası İnsan Bilimleri Dergisi Cilt:6 Sayı:1*: 838-846
- Başak, T., Uzun Ş. & Arslan, F. (2008). Hemşirelik yüksekokulu öğrencilerinin zaman yönetimi becerileri. *TAF Preventive Medicine Bulletin*, 7(5), 429-434.
- Macan, T. H. (1994). Time management: Test of a process model. *Journal of Applied Psychology*, 79, 381-391.
- Wang, W.C., Kao C.H., Huan, T. C & Wu, C.C (2011). Free Time Management Contributes to Better Quality of Life: A Study of Undergraduate Students in Taiwan. *Journal of Happiness Studies*, 12(4):561-573.
- Turan MB, Karaoğlu B, Kaynak K, Pepe O. (2016). Özel Yetenek Sınavlarına Giren Adayların Genel Öz yeterlik Düzeylerinin Bazı Değişkenlere Göre İncelenmesi *Spor Bilimleri Araştırmaları Dergisi*, 1(1):17-26.
- Saracaloğlu, A.S., Aldan Karademir., Ç. Dursun, F., Altın, M., Üstündağ, N. (2017). Sınıf Öğretmeni Adaylarının Öz-Düzenleyici Öğrenme Becerilerinin, Akademik Öz-Yeterlik, Akademik Kontrol Odağı ve Akademik Başarıları İle İlişkisi. *Turkish Studies International Periodical For The Languages, Literature And History Of Turkish Or Turkic Volume 12/33*, P. 379-402
- Izgar H, Dilmaç B. Yönetici Adayı Öğretmenlerin Öz yeterlik Algıları ve Epistemolojik İnançlarının İncelenmesi, *Selçuk Üniversitesi Sosyal Bilimler Dergisi*, 2008; 437-446.
- Caba U, Pekel A (2017). Üniversite Öğrencilerin Genel Öz yeterlik Düzeyleri İle Sporcu Kimlik Algısı Arasındaki İlişki (Vakıf Üniversitesi Örneği, *The Journal of Academic Social Science Yıl: 5, Sayı: 55, Ekim 2017*, s. 475-482
- Karasar N. Bilimsel Araştırma Yöntemi (2007) (17.Baskı), Ankara, Nobel Yayın Dağıtım, pp:49-53
- Çıngı, H. (1994). Örneklem Kuramı, *H.Ü. Fen Fakültesi Yayınları*, Ankara, 346.
- George D, Mallery P. IBM SPSS Statistics 23 Step by Step: A Simple Guide and Reference. New York: Routledge; 2016, pp:112-120.
- Kayış, A.R Üniversite Öğrencilerinin Başarı Yönelimlerinin İncelenmesi Eskişehir Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü Yüksek Lisans Tezi Eskişehir 2013
- Alemdağ, C., Öncü, E., ve Yılmaz, A. (2014). Beden Eğitimi Öğretmeni Adaylarının Akademik Motivasyon ve Akademik ÖzYeterlikleri.

- Hacettepe Spor Bilimleri Dergisi, 25 (1), 23–35.
- Bell, B.S, Kozlowski, W.J. (2002). Goal Orientation And Ability: Interactive Effects On Selfefficacy, Performance, And Knowledge. *Journal Of Applied Psychology*, 87, 497–505
- Cellar D.F, Stuhlmacher A.F, Young S.K, Fisher, D.M, Adair, C.K, Haynes S, Twichell E, Arnold K.A, Royer K, Denning B.L, Riestler D (2011). Trait goal orientation, self-regulation, and performance: A meta-analysis, *Journal of Business and Psychology*, 26, 467–483.
- Alay, S., Koçak S., (2003). Üniversite Öğrencilerinin Zaman Yönetimleri İle Akademik Başarıları Arasındaki İlişki. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 35, 326-335.
- Durmaz, M., Hüseyinli, T., ve Güçlü, C., (2016). Zaman Yönetimi Becerileri ile Akademik Başarı arasındaki İlişki, *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 5 (7), pp.2291-2303.
- Yılmaz, İ., Yoncalık, O., Bektaş, F., (2010). Zaman Yönetimi Davranışı ile Akademik Başarı Arasındaki İlişki, *e-Journal of New World Sciences Academy Sports Sciences*, 5(3), 187-194.
- Spinath, B. (2012). Academic achievement. In V. S. Ramachandran (Ed.), *Encyclopedia of human behaviour* (pp. 1-9). London: Academic Press
- Başak, T., Uzun Ş. & Arslan, F. (2008). Hemşirelik yüksekokulu öğrencilerinin zaman yönetimi becerileri. *TAF Preventive Medicine Bulletin*, 7(5), 429-434.
- Mannell, R. C., & Kleiber, D. A. (1997). *A social psychology of leisure*. PA: Venture Publishing, Inc.



Chapter 12

BODY WEIGHT TRAINING

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Introduction

Strength, it is one of the basic biomotoric features of the individual and is expressed as the opposing power created by a muscle / muscle group to overcome the external resistance as the most basic value of many sports branches (Acar, 2000, Günay ve Cicioğlu, 2001).

Sport also has features that positively affect performance, among them strength has an important factor (Serin, E., 2019). The aim that all trainers, instructors want to achieve is that their athletes have sufficient performance and strength level. While achieving this goal, a lot of research should be done besides working. Different training variations, physiological reactions, muscle fiber types to build muscle are the building blocks that need to be evaluated by trainers to bring the person better condition (Bosco, A. 1985).

It was not possible for mankind to continue his life with a sedentary lifestyle. In case of this situation, there will be negative effects on human health. Accordingly, human health is mostly dependent on training, physical activities and exercises (Serin, E., 2020).

Body Weight Exercises

A certain level of strength training applied with supportive materials such as exercises, body weight, fitness equipment, machines. Body weight exercise is the whole set of movements which is an exercise application that can be performed using the individual body weight of the athlete.

The elastic energy gained by gravity contribution in the phase of studies applied with eccentric contraction with body weight turns into an equal and opposite force at the moment of concentric contraction (Chu, D.A., Chu, D. 1992,1988). The heavier the individual, the more weight he will lift in his exercises with his own body weight. The reason for this is not only the individual's excessive body muscle ratio, but also the fact that the body mass acts as acceleration and leverage. Body weight exercises can be practiced by some coaches for beginners to sports, or as a transition process in pre-season training.

Exercises are applied not only to develop muscle strength, but also to improve body composition as well as motor condition in individuals. While this type of exercise model accelerates the organism, it is important because it improves the endurance of the athlete. Of course, it is also possible to increase the athlete's muscle mass with body-weight training. The main thing here is how it benefits from body weight, in addition, many athletes use it for additional weight, weightlifting, etc. What is essential is the situation about how the athlete knows himself, knows his limits, specializes, and how he effectively uses his body during training.

Body weight training It is the strength training method applied by the athlete defeating, using his own body weight in a way that is opposite to gravity (*Harrison J. S., 2010*). Athletes can improve their muscle mass and mobility as well as being balanced and healthy with their strength training. Although the athletes are in the training areas and fitness halls for hours, it is possible to reach the targets with the training in body weight in modest areas. It should be remembered that many successful athletes also allocate a lot of space for training with body weight.

Gaining Strength Through Body Weight Exercises

In our childhood, as our fathers said the man should always be strong. But to achieve this, people, athletes don't have to work with dumbbell bars to get a muscular build. It is also possible to reach the targets by using body weight. If the goal is to create power, it will be possible to make progress with the number of repetitions that will be applied between 6-12 at right angles. The essential thing here is the contraction time of the muscle, and if we train our muscles with the loading percentages that will force it, at the borders and at the right angles, we will leave our muscles under hypertrophy.

Example;

a) With our 25 burpee-jack, 40 squat walk, 20-25 bicycle crunch movement, a sufficient maximum tension will occur in our muscles.

b) Each set of repetitions performed by the athletes using their body weights provides an effective nervous system, while enabling a high level of muscle density compared to studies with free weights.

At this point, training is important in terms of set, duration and number of repetitions;

a) All sports branches have a special application method, namely the technique of each driller. With the exercises we do with our own body weight, we gain high gain while the risk of strain, strain and tear of the muscles decreases. b) Except that the knees and joints are bent at a certain angle for some movements, the fact that the lower limb is upright and straight, the effective use of force for movements with the upper limb contributes to the resistance against the weight on the hip and leg.

c) In the exercises to be done with our arms or feet, the frontal part of the body, scapula, teres major and latissimus dorsi muscles are also included in the weight training.

With the work of the lower or upper extremities, we have a strong healthy structure. The most important factor is that it is necessary to see and operate all the limbs as a whole, not part of the body.

Mastering On Certain Moves Our concentration, self-esteem must be sufficient to reach the peak in the goal-oriented process, but they are not always sufficient.

We must always support ourselves with new training methods. Often, changing methods also has a negative effect.

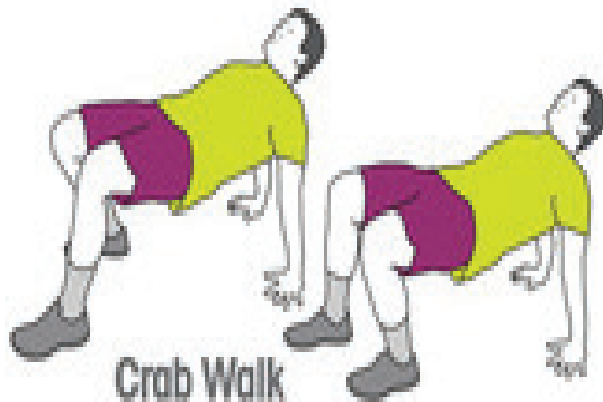


Table 1 Body Weight Application

This continuity obstacle also undermines the athlete’s potential to provide muscle mass. Since it cannot be concentrated on a drill, one will not have a unique technique and expertise, and skills and mastery will be limited. Still, of course, training methods should be done at the right time so that people do not draw a plateau with their exercises and maintain their muscle development.

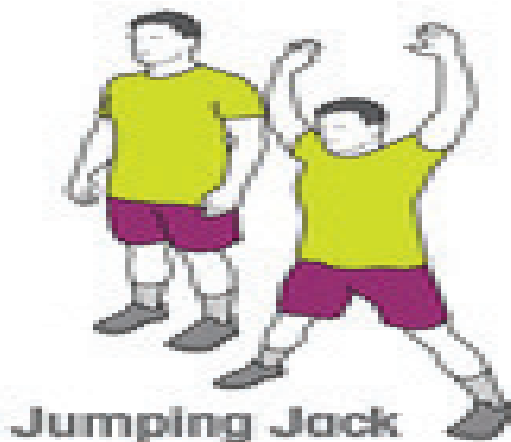


Table 2 Body Weight Application

As will be understood, studies with limited exercise drills provide a high rate of improvement, while maximum benefit from these studies is obtained. There are certain basic training programs that we will do with our own body weight in order to maintain a healthy, athletic body and maintain this.

If an example is given for some of them, these are listed as follows; Hip hinge, hip thrust, deep squat, single-leg squat, air squat, squat walk, pullup, pushup, handstand pushup. Basically, body weight training with push-up, pull-up and sit-up movements are among the most practiced drills among applications (Contreras B. 2013).

Body Weight Exercises Should Be Practiced Every Day

It is also important that the drills, which are applied for the skillful acquisition of the technique, should be repeated frequently in the training program and the work should be spread over time.



Table 3 Regular Chin Ups

The athlete needs a higher skill, ability and requirement in the drills he makes with his own weight compared to other applications. Studies should be applied frequently to ensure the proper fit of the technique. Even while sitting, some limbs are the basis for our progress in terms of time, scope, mastery of the possible extremities, and increase mobility. At this workout session, the basic principleMovements should be studied with the principle of simple to difficult.

Sample; A Simple Training Program That Can Be Applied With Body Weight is listed below* Movements should be studied with the principle of simple to difficult.

A sample training program;15 minute warming up & stretchin up
preperation programme

12 rpt. pistol Squats – (each leg)

22 rpt. Jumping air Squats

22 rpt. Lunges Matrix (10 each leg)

22 rpt. Jumping Step-Ups (11 each leg)

12 rpt. Knees Raised Dips

12 rpt. L-Sit Pull-Ups

12 rpt. Tandem Grip Chin-Ups (or inverted bodyweight rows with un-
derhand grip)

12 rpt. Single leg Push-Ups (each leg)

12 rpt. Bulgarian Split Squat35 sec. Low Plank

15 Minute Cooling Down & Stretching Programme

Explanation Of The Main Basic Movement

Squat, as an example to definition

Squat exercise with body weight is the movement of sitting back at a certain right angle by holding the spine straight-upright. As a approach, the squat movement is very similar to the movements that people perform daily. As a approach, the squat movement is very similar to the movements that people perform daily.

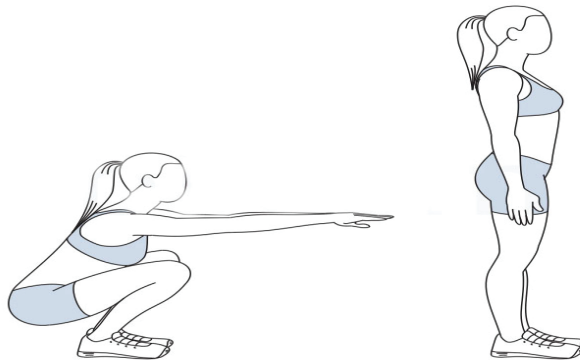


Table 4 Air Squat

It is one of the most basic movements in fitness exercises and it is an important athlete action with its flexible work that can be applied in many environments. In addition to being a stereotyped professional application for the muscles of the legs and feet, it will affect the performance of the

athlete. It develops with this movement in the hip and other auxiliary muscles. There are many different squat training drills in terms of application and programming. Accordingly, the benefit to be achieved is the peak level and will differ in the muscles studied.

For example;

* Push-up & Squat jump.

The benefits of regular 'Push-ups' It gives athletes well-shaped form and maintain the form

Helping athlete get fit body and very healthy looking.

Contributing in positive way to keep metabolism running.

Parts of all body are shaped well and fit.

Increasing energy and strength, force, so rapidly

The benefits of regular 'Push-ups'

Very strict 30 min. jump training has an effect equivalent to 1 hour of cardiovascular training.

Helping to lose weight by accelerating metabolism. Having a natural pain relief impact efficacy as accelerating blood circulation and oxygen flow, particularly on some parts of body

Expanding the blood vessels, decreasing blood pressure and providing moderate very suit blood circulation.

A Workout that athletes can easily take always, outdoor or indoor. It helps increasing the endorphin hormone and In this way, it regulates the nervous system and protects against stress.

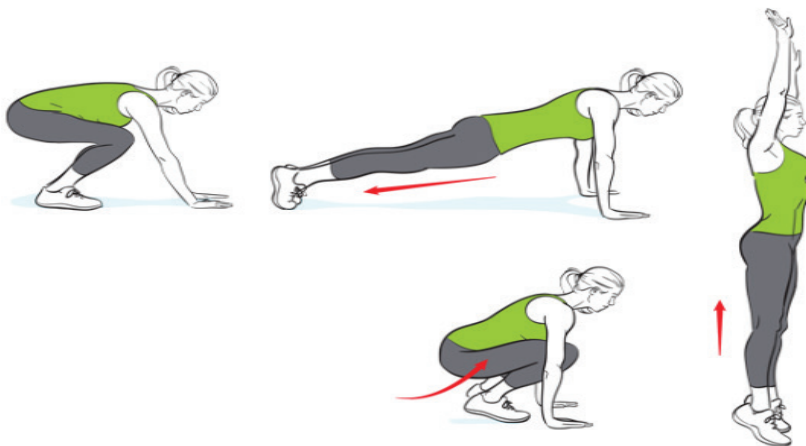


Table 5 Push-up & Squat jump.

Disadvantages Of Machines And Materials All individuals cannot use the devices and machines produced for sports purposes. The adaptation process of people to machines may take time or may not be used at all.

These disadvantages can be briefly listed as follows;

With the power applied by the person while using the device, it is possible that he / she cannot balance the machine during use. For this reason, efficient exercise cannot be taken, waste of time occurs, muscle development does not occur or it is limited. Coordination problems occur in movements, as it is often seen in first-time users of machinery.

Problems arising from not using the machines correctly; * Wrong usage of materials & machines,

- * Not working the right muscle efficiently,
- * Limited development,
- * Risk of injury,
- * Incorrect adjustment of the machine,
- * wrong posture, wrong grip, etc., are among the main reasons.

Thus, the adaptation process of the person is prolonged, delayed or not realized. Having such negative factors will result in no efficiency from the movement.

Some people do not adopt sports with machines. This situation is common. They talk about feeling that they do not feel comfortable or can not exercise when using machines. Or in other words, machine usage may not be suitable for everyone. This situation arises from personal reasons or environmental factors. The work that can be applied with the machines will cause the movements to remain at a certain joint span, and the desired efficiency will not be at an optimum level. Not all tools are portable. For this reason, they are difficult to move from where they are. This situation makes it difficult for those who do sports to reach the devices. Preferably prevents the use of tools. Prices of tools and devices are not economical, they cannot be easily used by everyone for such reasons.

Body Weight Workouts Disadvantages While body weight exercises are considered difficult for beginners, it is not a very challenging training method for senior athletes (*Harrison J.S., 2010*). A different disadvantage is that when applying the body weight exercises, the athlete only works with his own body weight, so the weight will not exceed a certain level. Since the physical and physiological parameters of the athlete will be limited at a certain level, at this point, a certain amount of weight and

a certain level of weight, tools, materials can be used for support purposes. Female athletes can avoid training by having difficulty in body weight training, mostly upper extremity exercises.

Due to body weight exercises, it is possible to encounter cellular negativities and disabilities even at a certain level. These kinds of injuries can be ranked according to the severity of the situation.

It is possible to describe muscle damage as ordered;

* Microinjury,

* Microtrauma (Simith L., Miles M. 2000),

Muscle damage can be collected in 2 main headings. While the first factor is the practice of the training method that the athlete does not adapt, the other factor is the fact that some metabolic chemical reactions occur due to the damage in the tissue due to the fact that it is not defined properly (Simith L., Miles M. 2000).

Depending on the training method applied, scope and intensity, muscle damage occurs at different levels. The reason for this may be that the person does not adapt to any type of training method in a short time. As a result, muscle damage caused by incompatible eccentric contraction causes damage and disruption of the myofibril structure (Brown S ve ark. 1999).

It can be observed that muscle damage occurs with an increase in serum levels of CK and LDH (Lott J.A., Stang J.M. (1980). Muscle damage occurs in athletes during eccentric exercises with body weight. Exercises with eccentric contractions cause more muscle damage in those who do sports compared to different types of contractions (Brown S ve ark. 1999). With the occurrence of muscle damage, an increase in CK and LDH serum levels is observed (Lott J.A., Stang J.M. (1980). **Advantages Of Body Weight Training**

Exercises selected from movements that work many muscles are not strengthened by a single muscle. In addition, it increases inter-muscle function, coordination and effectiveness of muscles. Muscle weakness and imbalances are less common among individuals doing sports than sedentary ones.

The main advantage of body weight training is that it is not costly (Harrison J.S 2010). Physical and physiological developments occur in people who exercise for a certain period of time. These developments continue at rest, during exercise and even after exercise. When it comes to body weight exercises, it can be thought of as exercises that exceeds one's own strength. It is also possible to improve the performance of the athlete at the advanced level by training with body weight

Since you only need your own body to do it, you can do your own weight exercises practically anytime, anywhere and for free. This makes them ideal for those who cannot or do not want to go to a gym (Masurier G. L ve ark., 2017). Strength, power, endurance, speed, flexibility, coordination, balance, etc. with body weight exercises. various biomotor capacities can be developed. This training method is used by professional athletes as well as recreational purposes. Athletes simply perform push, pull, squat, bend, shrink, stretch and balance movements of body weight training (Patel K., 2014). While some materials and devices are needed for some studies, this dependence is less in body weight studies. Simple materials can be used for work using tools, such as; A horizontal bar hanging on rope, towel or pull up is a pole. With such facilities, individuals can exercise anytime, anywhere, without the need for sports centers.

To a certain extent, using some basic materials, devices, weight will support body weight exercises and will prevent the development from being limited by applying only body weight exercises. With this important requirement, it is necessary to take advantage of certain weights. Improve aerobic and anaerobic endurance with burpees and one-leg squats, so-called pistol squats or various gymnastics exercises. Certain levels of weight training supported by materials, tools, free weights etc. can be used and diversified to achieve various goals, such as strength training or combination of strength and endurance.

Dumbbell Exercises

In the field scanning study we applied, the studies on the bench-press movements applied in many different types were examined.

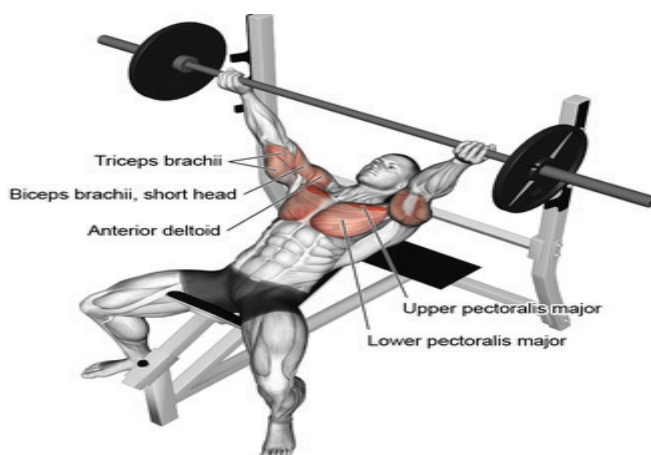


Table 6 Barbell-Press

The EMG tests (electromyography) obtained from the chest, triceps, biceps muscles were examined and it was concluded that dumbbell-press and barbell-press drills had similar effects to the chest and triceps muscles.

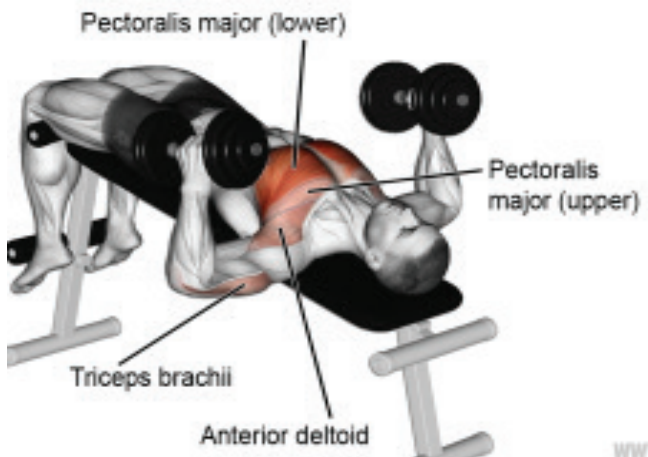


Table 7 Dumbbell-Press

Dumbbell drills enable us to work more efficiently

Dumbbells and drills are among the important drills for strengthening and muscle building. Dumbbells workouts are more versatile and effective in making drill applications difficult for muscle growth.

During workouts, the principle of work and rest can also be applied. Conventional pyramidal methods, inverse pyramidal methods are among the easiest techniques that can be applied by sports people. Driller applied with a long bar max. density exercises are not easy, however dumbbell exercises are more effective. Applications that cannot be done with bar studies in many ways are easily applied with dumbbell instruments. Training Programs can be organized more extensively intensively, variationally.

References

1. Acar MF. (2000). Kuramsal Boyutlarıyla Antrenman Bilimi El Kitabı. Meta Basım, İzmir.
2. Bosco, A.(1985). “Stretch-Shortening Cycle in Skeletal Muscle Function and Physiological Considerations On Explosive Power in Man”. Athletics Studies 1:7-13.
3. Brown S., Day S., Donnelly A. (1999). “Indirect Evidence of Human Skeletal Muscle Damage and Collagen Breakdown After Eccentric Muscle Action”, J Sport Science., 17(5):397-402.
4. Chu, D.A., Chu, D. (1988). Jumping Into Plyometrics, Human Kinetics Pub; Dimension
5. Chu, D.A. (1992). Jumping Into Plyometrics, Leisure Press Company, Illinois,1-24
6. Contreras, Bret (2013). Bodyweight Strength Training Anatomy. Human Kinetics
7. Masurier G. L., Charles B. C., Baker K., Byl J., 2017., Fitness for Life Canada With Web Resources: Preparing Teens for Healthy, Human Kinetics, 223
8. Harrison, Jeffrey S (April 2010). “Bodyweight Training: A Return To Basics”. Strength and Conditioning Journal. **32** (2): 52–55
9. Lott J.A., Stang J.M. (1980). “Serum Enzymes and Isoenzymes in the Diagnosis and Differential Diagnosis of Myocardial Ischemia and Necrosis”. Clin. Chem. 26:1241-1250
10. Morrissey, M.C., Harman, E.A., Johnson, M.J. (1995). Resistance training modes: specificity and effectiveness. Med Sci Sports Exerc, 27(5):648-60.
11. Patel, Kesh (2014). The complete guide to bodyweight training. Bloomsbury Publishing
12. Reid, M., Schneiker, K. (2008). Strength and conditioning in tennis: current research and practice. J Sci Med Sport,11(3):248-56.
13. Serin, E., 2019., Profesyonel, Amatör ve Sedanter Futbol Oynayanların Fiziksel, Fizyolojik ve Motorik Özelliklerinin Değerlendirilmesi – Anaerobik Dayanıklılıklarını Etkileyen Faktörlerin Belirlenmesi, CBÜ Bed Eğt Spor Bil Dergisi, 14(2), 344-355.
14. Serin, E., 2020. Aerobik Antrenmanların Vücut Kompozisyonu Üzerine Etkisi WOJHENS World Journal of Health & Natural Sciences, (1),40-52
15. Serin and Ziyagil 2020. International Journal of Disabilities Sports & Health Science, 29-32.
16. Simith Ll., Miles Mp.(2000). “Exercise Induce Muscle Injury and Inflammation,” Exercise and Sport Science (William E., Garrett Jr., Ed.) pp.163-173, USA.
17. Tesch, P.A. (1987). Acute and long-term metabolic changes consequent

- to heavyresistance exercise. *Medicine and Sport Science*, 26:67-89.
18. Young, W.B., Rath, D.A. (2010). Enhancing Foot Velocity in Football Kicking: The Role of Strength Training. *The Journal of Strength and Conditioning Research*, 25(2):561-6.



Chapter 13

THE REVENUE LOSS AND PRECAUTIONS IN SPORTS INDUSTRY FOLLOWING THE OUTBREAK OF THE COVID-19

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INTRODUCTION

“The most dangerous silence is the one where the impending danger is more silent than the silence there!” (Mehmet Murat İldan)

The statement above is not in fact the true reflection of what will be written and discussed within this paper yet it tells us a lot about the unforeseen future, particularly the near future. For, this paper is about the impact of the coronavirus outbreak (COVID-19) and it was not that silent for all of us that we, as the dwellers of the world we live in, would have the danger and as a result, the impending impacts of COVID-19 in all areas of our life. Governments were on full alert while people were in full fear of what is happening and what will be happen following the news all over the world that a new type coronavirus has left China for its long journey to all parts of the world. Shops, shopping malls, hairdressers, galleries, museums and you name it; every commercial mechanism was shut down after the outbreak to refrain the further impact of the virus. Yet, as the object of analysis of this paper and one of the most-affected industries, the sports industry was highly affected by the reflections of COVID-19 not only in terms of economical destruction but also schedule-related issues. According to the data of the report prepared by a website called Statista (2020), the revenues of the NBA, the heaven of the basketball, has dropped to 200 million U.S dollars from 450 million U.S dollars which reveal the differences between gate revenues and non-ticket revenues while the loss indicated in the report regarding the Olympics scheduled to be held in Tokyo, Japan amounts to 900 M dollars and 1250 M dollars for the local sponsorship partners and NBC (the broadcast of Summer and Winter Olympic Games) advertising, respectively due to the postponement. Besides, the loss of soccer is reported to be 300 to 400 M euros (postponement-cancellation for UEFA), 1280 M euros for Premier League, 970 M euros for La Liga, 790 M euros for Bundesliga, 700 M euros for La Seria, and 420 M euros for Ligue 1, respectively. These amounts solely are enough to explain the economic destruction that are on the way for the world sports industry due to COVID-19 and the obligation to stay at home. Amir Somoggi (2020), who maintains that “the sport’s greatest strength is to gather interest and drag crowds and that the impact that can reach 2.5 times the direct revenue is only possible thanks to its dynamism and emotion, which induces the economy and leverages cities and even countries”, purports that “professional sport, although not the main source of revenue, is undoubtedly the one that most impacts the production chain, with its match-day revenues, sponsorships, TV rights, players’ transfers and its high media and employment character.”

In light of the abovementioned issues related to the damage to the sports industry due to COVID-19, this paper attempts to investigate the

economic impact of the sports industry with particular attention to the loss in football, basketball, volleyball, Formula 1 and motor racing among others. In this context, first there will be a literature review related to the sports industry along with a historical narration of how the sports industry became a huge industry as it is now. Secondly, the principal changes, measurements, and directives by important institutions such as FIFA, FIBA, etc. after the outbreak will be discussed in detail. Then, methodology and analysis and results sections will be included. Finally, a discussion and conclusion will be given to finalize the paper.

LITERATURE REVIEW

Sports and its industry have been among the important topics that have attracted many people all around the world. As today sports industry makes good profits with its all branches, many people have started to invest in this type of business. From the very beginning of the civilization people have been fond of engaging in sports activities. In some periods of history, people were involved in sports in relation to struggling for something, having fun and sometimes for purposes of show of force as was the case in the period of Hitler's Germany during the world cup. Mary Bellis (2019) purports that the documented history of sports goes back at least 3000 years and mainly sports was used for purposes of preparation for war or training as a hunter which explains why so many early games involved the throwing of spears, stakes, and rocks, and sparring one-on-one with opponents. People mainly drew upon ordinary tools such as bats, balls, various types of woods, and irons to conduct sports activities. Among these are cricket, baseball, softball, etc. Besides, the use of sports industry based on the fact that it is easier to promote the thing in mind. For example, Hitler made use of the World Cup held in 1938 in Germany to show his strength and that of the German race. Eric Niiler (2018) puts forward that "Adolf Hitler was hoping for a bit of revenge after losing the propaganda battle at the 1936 Berlin Olympics. Those games were supposed to be a showcase for the Nazi regime and the athletic superiority of the Aryan race."

Following the industrialization in the mankind life, the sports industry also was affected and became a part of this industrialization process as was expected. Championships and tournaments were held all around the world in certain periods. And billions of dollars were poured into the advertisement of any sports areas to host these tournaments and championships. Today, countries or governments in charge of these countries are struggling to get a slice of the cake by promotion of their country in an attempt to host certain tournaments to make profit and where expected returns are not gained, these countries look at the bright side, in other words, at the promotion of the country to attract tourists.

Gillentine et al. (2009) state that “in addition to the rapid growth of the sport industry, the nature of sport business has changed as well and sport is now a major component of the entertainment industry, competing for the discretionary income of fans worldwide.” Today most powerful and known investors, such those from Qatar, Indonesia, Russia, and China are mainly focusing on buying popular clubs which may help them gain huge profits such as Leicester City, Chelsea, Inter, etc. this shows that sports industry is not only an industry involving athletes struggling for winning a trophy but also athletes who seem to be working hard and are seen as instruments on the way to become rich or gain enormous profits.

Among the areas of sport that have been attracted a myriad of people from the economy world are football, basketball and Olympic Games, one of the most popular of which is track and field. Tournaments such as World cup, European Cup, Champions League, Euroleague, and Olympic Games are platforms that even attract presidents, kings, and many important figures. Thus, being aware of the power of these tournaments, investors pour money every single year to have a voice and thus to have the chance to earn more money.

CURRENT SITUATION IN TURKEY

Turkey is one of the few countries that have refrained from the effects of the spread of virus at the first stages of the outbreak due to harsh precautions taken from the very beginning of the announcements that the virus commences to spread throughout the world. With many circulars issued by the presidency of the Republic of Turkey along with the participation of the Ministry of Health and the Science Committee commissioned to take virus-related decisions and make them be implemented immediately, flights were cancelled, a great number of shops including shopping malls, hairdressers, etc. were shut down and people over 65 were banned from going out. In the meantime, associations of football, basketball, volleyball and other sports branches also took steps to eliminate the health risks of the players and fans though it was not until March 19 2020 that all football, volleyball, handball, and basketball leagues were suspended indefinitely by the relevant federations of all these major competitions. One of the main issues that remained on the top of the agenda was that of football leagues. Though the suspension on March 19 2020 was criticized by some, the step was welcomed by almost every single football club in the Superlig (The top league in Turkey). Upon the suspension of the leagues, an advisory protocol was prepared by Turkish Football Federation Medical Committee, Acibadem Sports and T.C Ministry of Health/Provincial Health Directorate with regards to the possibility of resuming TFF 2019-2020 season during COVID-19 pandemic by noting that “the sections of the protocol will be shared continually with clubs and public as the process gets updat-

ed with Turkish Ministry of Health, Scientific Committee, World Health Organization, FIFA and UEFA announcements” (TFF, 2020).

“Return to Football” Preparation Period covers the period from the day the leagues were postponed to the day of the first friendly or official match to be played. Timeline showing the estimated duration of Preparation and Competition Periods and implementation time of COVID-19 screening tests are stated as below (TFF (2020):

- Phase 1: Isolation at home and remote online individual trainings
- Phase 2: Individual and group trainings with a limited number of employees at club facilities
- Phase 3: Team trainings at facilities or training camp sites
- Phase 4: Start and continuation of official and friendly games

It was also stated that through all those phases, COVID-19 management will handle Players, Coaching Staff, Support Team, and Club Personnel separately. Primary Goals of the Preparation Period are stated as per the following:

1. Provision of a disinfected (training, game and working) environment for everyone.
2. Taking players to optimum fitness & health level until the Competition Period without getting infected.
3. Proper maintenance of the psychosocial management for players, employees and families.
4. Protection of players and employees’ families.
5. Achievement of all these matters without disrupting the well-managed pandemic period in the country.

Such protocols were issued by all major federations of major competitions including basketball and volleyball.

METHODOLOGY

In this study, qualitative and quantitative analyses were conducted based on compiling and analysing data based on web search that included reports of some football, basketball, formula 1, and volleyball associations and articles about these areas of sports with particular attention to the issue of profit loss following the COVID-19 outbreak. As the outbreak occurred in the beginning of 2020 all around the world and reports and articles were prepared in this time, web search was conducted solely on those published in 2020. And the reason for the selection of these associations is that these associations are the authorized bodies and decision makers in any aspects

of these areas of sports. Two main issues were taken into consideration when the methodological background was established: profit loss and measures taken by the relevant associations following the outbreak. Based on the reports related to these two main issues, qualitative and quantitative analysis shall be conducted along with interpretations. And when revealing the content of these reports, particular attention will be paid on the profit loss in percentage compared to previous years and the efficiency of decisions made by associations all over the world. Finally, the efficiency of these decisions will be taken into consideration in Turkey as the country of the researcher and differences in implementations among countries will be set forth not only qualitatively but also quantitatively. Thus, first of all, reports of these associations will be given separately in tables and then will be analysed one by one along with various interpretations and recommendations and potential reasons behind them.

ANALYSIS AND RESULTS

In this section, tables including the reports of various associations related to measures after the outbreak of COVID-19 are given.

Table 1: *A series of recommendations and guidelines to address some of the key practical issues arising from the pandemic, especially with regard to player contracts and the transfer system in football*

Expiry and commencement of player contracts	<p>I. i.e. agreements terminating at the end of the current season and new agreements (i.e. those already signed and due to commence at the start of the next season)</p> <p>(i) employment agreements are due to expire at the original end date of the season;</p> <p>(ii) loan transfer agreements (and related employment agreements) are due to expire at the original end date of the season;</p> <p>(iii) (permanent and loan) transfer agreements (and related employment agreements) are due to commence at the original start date of the next season; and</p> <p>(iv) employment agreements are due to commence at the original start date of the next season.</p>
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Football employment agreements that can no longer be performed	<p>II. agreements that cannot be performed as the parties originally anticipated as a result of COVID-19; and)</p> <p>(i) Where an agreement is due to expire at the original end date of a season, such expiry be extended until the new end date of the season.</p> <p>(ii) Where an agreement is due to commence at the original start date of a new season, such commencement be delayed until the new start date of a new season.</p> <p>(iii) In the event of overlapping seasons and/or registration periods, and unless all parties agree otherwise, priority be given to the former club to complete their season with their original squad, in order to safeguard the integrity of a domestic league, MA competition and continental competition.</p> <p>(iv) Notwithstanding the recommended amendment to agreement dates, any payment that contractually falls due prior to the new commencement date of an agreement should be delayed until the new start date of a new season or its first registration period.</p>
Transfer windows	<p>The appropriate timing for registration periods –</p> <p>I. all requests for an extension of the current season finishing date be approved;</p> <p>II. all requests to extend or amend registration periods that have already commenced be approved, provided that their duration complies with the maximum limit (i.e. 16 weeks) established in the RSTP;</p> <p>III. all requests to amend or postpone registration periods that have not commenced be approved, provided that their duration complies with the maximum limit (i.e. 16 weeks) established in the RSTP;</p> <p>IV. MAs be permitted to amend season dates and/or registration periods, either within TMS or by otherwise notifying FIFA;</p> <p>V. and as an exception to article 6 paragraph 1 of the RSTP, a professional whose contract has expired or been terminated as a result of COVID-19 has the right to be registered by an association outside a registration period, regardless of the date of expiry or termination.</p>

Source: <https://img.fifa.com/image/upload/zyqtt4bxgupp6pshcrtg.pdf>

The report including football regulatory issues following the COVID-19 outbreak is included in the table shown above. It is clearly seen that main issues that have been taken into consideration are player contracts, football employment agreements and transfer windows. This shows that regulatory issues following the outbreak mainly focus on financial issues rather than the health or any other more important issues. It is stated by

FIFA in the report that “FIFA has received numerous enquiries and requests, the majority related to the FIFA Regulations on the Status and Transfer of Players”. This shows that the principles and guidelines have been prepared taking into account the requests football associations.

Table 2: *COVID-19 Guidelines in Basketball*

Main issues	I.	Priority of Amicable Settlements
	II.	New Contracts entered into after the beginning of the Lockdown Period
	III.	Allocation of risk
	IV.	Termination and term of contracts
	V.	Effects on the contractual obligations of clubs (amenities, bonuses, salaries)
	VI.	Effects on the contractual obligations of players
	VII.	Agent Agreements

Source: <http://www.fiba.basketball/en/Module/c9dad82f-01af-45e0-bb85-ee-4cf50235b4/e994125c-7ec3-456b-8739-cbf97e4342ae>

It is clear from the table that includes the guidelines issued by FIBA following the outbreak of COVID-19 that main issues primarily are contract-focused as was in the guidelines of football. This demonstrates that financial issues are issues that are taken care of most and that other issues are not prioritized. Though, as the actors of the basketball community, athletes seem to be under the guarantee of FIBA as the top authorization in basketball, there are not many issues that take care of other issues such as fans, the employment of other workers and so on.

Table 3: *USA Volleyball's Coronavirus Protocol*

Main Issues	<ul style="list-style-type: none"> • We request any individual who does not feel well to stay at home and watch via live stream. Please implement Self-Quarantine for the safety of others. • If you have travelled to high risk areas or feel you may have otherwise been exposed, please remain at home. • For match play there will be no high-fives or hand shaking with opposing teams • Referee go to the stand. • Only the six starting players go to the end line. • Referee beckons for the players to go to their starting positions. • R2 checks line-ups. <p>When the game ends, R1 releases players to their respective benches.</p> <ul style="list-style-type: none"> • We will have hand sanitizer available through-out the gym for public use
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Source: <https://rallyvb.com/coronavirus-protocol/>

The United States Volleyball has prepared a coronavirus protocol to pay attention to the health risks of the outbreak of the virus following news that the virus is spreading in the US territories. It is clearly seen from the protocol included in the table above that unlike measures that were taken by football and basketball associations, the protocol presented for the volleyball community in the US consists of issues that are health-focused and take care of the risks that may put the lives of players and participants into danger. In this sense, it should be noted that measures to eliminate the risks of the virus and its spread during matches are aimed at relieving the effects of the virus and that moves such as shaking, high-fives are prevented while sanitizing hands and decreasing the number of players in action are encouraged.

RESULTS and DISCUSSIONS

This paper has been designed to reveal the current situation of the sports community and its reactions to the spread of the outbreak of the coronavirus that has had an influence throughout the world. In so doing, the researcher mainly focused on the statistical data obtained from the protocols including precautions taken regarding the elimination of the risks that would likely occur in the meantime. Besides, particular attention was paid to the issue of revenue loss in major competitions, notably football, basketball and volleyball.

Based on the data obtained from the protocols that were presented in tables within the paper, one may notice that while most of the major federations took steps regarding financial issues there were also others such as the US Volleyball that took into consideration the health risks of the athletes and other participants.

Besides, it was also observed that the revenue loss was at a high level following the outbreak and that this loss was evident in football which was postponed indefinitely in most parts of the world. Millions of euros and dollars were lost and there was a dramatic and sharp decrease in the income of the football clubs playing in major leagues such as Bundesliga, La Liga, Premier League and so on. In this context, it was also observed that most of the football clubs took steps to minimize this loss of revenue by firing those employed within the body of the football club. It seems that if the spread of the virus is not prevented to a large extent, more losses will be seen and that federations of all leagues in the world will have to take harsher steps.

It is highly recommended that more studies be conducted upon the specific effects of the outbreak of the coronavirus on every single sports branch to reveal the consequences of one of the most dramatic situations that mankind has ever experienced and will unlikely experience in the future.

REFERENCES

- İldan, Murat, Mehmet (2020). Quatable Quote. Retrieved from <https://www.goodreads.com/quotes/8741626-the-most-dangerous-silence-is-the-one-where-the-impending>
- Sttaista (2020). Potential loss of revenue in the NBA due to the coronavirus (COVID-19) pandemic as of March 2020. Retrieved from <https://www.statista.com/statistics/1104004/coronavirus-revenue-loss-nba/>
- Somoggi, Amir (2020). Coronavirus' economic impact on the sports industry. Retrieved from <https://sportsvenuebusiness.com/index.php/2020/03/19/coronavirus-economic-impact-on-the-sports-industry/>
- Bellis, Mary (2019). A Brief History of Sports. retrieved from <https://www.thoughtco.com/history-of-sports-1992447>
- Niiler, Eric (2018). World Cup 1938: When Nazi Germany Forced Austrians to Play For Them—And Lost. Retrieved from <https://www.history.com/news/world-cup-nazi-germany-forced-austrian-players-lost>
- Gillentine, A., Crow, B. & Harris, J. (2015). Introduction to the Sport Industry. In Gillentine, A. & Crow, B. (Eds.) Foundations of Sport Management 3rd Ed. FIT/West Virginia.
- TFF (2020). “Return To Football” Advisory Protocol. Turkish football Federation. Retrieved from <https://www.tff.org/Resources/TFF/Auto/4f1245d924824c17a064b2a8334d836c.pdf>
- FIFA (2020). Covid-19 - Football Regulatory Issues. Retrieved from <https://img.fifa.com/image/upload/zyqtt4bxgupp6pshcrtg.pdf>
- FIBA (2020). COVID-19 Guidelines Issued on 20 April 2020 by the BAT President, Vice-President and Arbitrators. Basketball Arbitral Tribunal. Retrieved from <http://www.fiba.basketball/en/Module/c9dad82f-01af-45e0-bb85-ee4cf50235b4/e994125c-7ec3-456b-8739-cbf97e4342ae>
- Rally Volleyball (2020). Coronavirus Protocol. Retrieved from <https://rallyvb.com/coronavirus-protocol/>