

Comparison of Motivation Levels of Outdoor and Indoor Athletes Studying Physical Education and Sports Training

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Abstract

Purpose: The fact that the sports branch that the athletes are interested in is included in the

group of indoor and outdoor sports or team and individual sports can create differences in the motivation levels of the athletes. In this study, it was aimed to compare the motivation levels of team and individual athletes who do sports in Indoor and Outdoor.

Method: The Sports-Specific Achievement Motivation Scale (SSAMS) developed by Willis (1982) was used to determine the motivation levels of the athletes in the study. The study consists of athletes who take part in Archery, Athletics, Judo, Tennis, Muaythai, Shooting (Weapon), Volleyball, Football, Basketball, Handball and Field hockey teams in Turkey. A total of 259 athletes, 170 men and 89 women, in these teams were included in the study.

Findings: When we compared the motivation levels of individual and team athletes, a significant difference was found in the sub-dimensions of “motivation to show strength”, “motivation to approach success” and “avoiding failure” ($p < 0.05$). While a significant difference in the sub-dimensions of “motivation to show strength” and “motivation to approach success” was in favor of team athletes, “motivation to avoid failure” was found in favor of individual athletes ($p < 0.05$). Motivation levels of indoor and outdoor athletes. A significant difference was found in the motivation sub-dimensions of “motivation of strength” and “motivation of avoiding failure” of indoor and outdoor athletes ($p < 0.05$). It is seen that the significant difference is in favor of indoor athletes.

Result: As a result; It has been determined that the sports branch differences that the athletes are interested in, the aims of their orientation to sports, the level of communication between the athletes studying physical education and sports training and the people who are in direct and constant communication, and the spatial differences in which the interested sports branch is performed can play an active role in the motivation levels of the athletes. The scarcity of studies on athletes in different branches doing sports in indoor and outdoor areas in the literature has shown that more studies are needed in this area.

Keywords: Motivation in sport, Individual athletes, Team athletes, Approach success, Avoid failure, Studying physical education, Sports training

1. Introduction

Motivation is defined as all of the internal and external factors that affect the individual in terms of starting and maintaining a new behaviour and encouraging them to take action (Phillips et al., 2004). There are three main sources of motivation that differ from person to person. These; It is classified as intrinsic motivation, extrinsic motivation and insufficient motivation. Intrinsic motivation is the source of motivation arising from the needs of the person and the reason for the behaviour is the individual himself, while in extrinsic motivation, the reason for the behaviour stems from the environment of the individual, that is, there are more encouragements, rewards and punishments. In insufficient motivation, there are no internal or external sources of motivation that can encourage the individual to act, and people who are insufficiently motivated could not fully comprehend the relationship between their actions and their results, usually led by a sense of inadequacy (Bora, 2013). The concept of motivation, which is known to be directly related to many different concepts; it is known that it also covers subjects such as orientation, support and mobility (Cakıroglu, 1987). In

addition, motivation has various effects on the human organism, such as stimulating and activating the organism, directing the behaviour of the organism towards a certain goal. It has been suggested that if these effects are observed, the organism can be said to be motivated (Ozerkan, 2004). In the light of this information, it can be thought that motivation, which plays an active role in the process of transforming any action into action, may also be an important factor in an atmosphere like sports where there is constant mobility and this mobility is for a certain purpose.

It is known that motivation comes first in sports and sports psychology (Kavas, 2018). Motivation in sports is a psychological phenomenon that significantly affects sports performance, taking into account the needs and feelings of all individuals gathered under the roof of sports, especially athletes and trainers, in order to reach the desired performance level (Abakay, 2010). It has been stated that there are many physical and psychological factors that affect the level of performance in sports, but the most important psychological factor is motivation (Yalcin et al., 2017). It is known that exercise continuity and motivation level are factors that affect each other (Keskin & Baskurt, 2020). Aslan and Kuru (2002) suggested that motivation plays an active role in increasing the level of performance. In addition, they stated that there is a parallelism between motivation and success in sports, and that low motivation can result in failure. It has also been suggested that a person who is physically talented is psychologically inadequate, that is, not having the motivation to perform successfully (Yalcin et al., 2017). Guzel et al. (2020) supported the idea that fitness contributes to individuals both physically and spiritually, and that it can cause individuals to feel better motivationally through exercise in their mental well-being. Feelings such as pleasure, pleasure and relaxation from sports can actually reveal new expectations and desires in people who do sports. This type of motivation is called success motivation in sports (Guzel et al. 2020; Kavas, 2018). It can be said that success motivation in sports is a power that can encourage athletes to success, especially in order to realize the goals, expectations and even dreams of amateur and professional athletes, and can have significant effects on the performance level of the athlete.

No matter how talented and fit the athlete is, he may not be able to use this form and ability efficiently in every training or competition. It has been stated that every athlete has a different psychological structure, so the reasons that motivate the athletes may differ (Celik et al., 2020). Arguing that mental endurance is a very important factor in athletes in order to maintain and maintain the level of motivation and this factor has different effects on each athlete, Singh et al. (2016), in their research with a sample group consisting of indoor and outdoor athletes, they determined the motivation averages of outdoor athletes to be higher than indoor athletes, which also creates a statistical difference. It is also claimed that the motivation sources and levels of the athletes who are interested in team and individual sports are not the same (Celik et al., 2020; Singh et al., 2016). In the study of Crespo and Reid (2007) in tennis, which is included in both outdoor and individual sports, it is suggested that tennis athletes have a higher level of intrinsic motivation. Based on this information, the inclusion of the sports branch in the group of indoor and outdoor sports or team and individual sports may create differences in the motivation levels of the athletes. In this study,

it was aimed to compare the motivation levels of team and individual athletes who do sports in open and closed areas.

2. Method

2.1 Participants of the Study

A total of 259 athletes studying physical education and sports training, 170 men and 89 women, who took part in Archery, Athletics, Judo, Tennis, Muaythai, Shooting (Weapon), Volleyball, Football, Basketball, Handball and Field hockey teams in Turkey participated in this study. The sample group was determined by random selection method. Individuals who did not want to participate in the study were excluded from the study. The data were taken from the students studying at the Faculty of Sports Sciences in the 2020-2021 period.

2.2 Specific Achievement Motivation Scale (SSAMS)

In order to determine the motivation levels of the athletes in the research, the “Sport-Specific Achievement Motivation Scale (SSAMS)” developed by Willis (1982) was used. The SSAMS is a five-point Likert-type scale consisting of 40 items. Scale items can be scored between 1 and 5 “never, a little, sometimes, a lot, and always”. In the scale, power motivation 12 items “1, 3, 5, 7, 9, 10, 11, 13, 21, 29, 30, 35”, motivation to approach successes 17 items “4, 6, 8, 12, 16, 18, 19, 20, 23, 24, 26, 31, 32, 33, 36, 38, 39” and motivation to avoid failure 11 items “2, 14, 15”, “17, 22, 25, 27, 28, 34, 37, 40” (Willis, 1982). The validity and reliability study in Turkey was carried out by Tiryaki and Gödelek (1997). As a result of the reliability analyzes performed by Tiryaki and Gödelek (1997), the alpha reliability coefficients of the scale were calculated separately. In this study, Cronbach’s Alpha value of the sub-dimensions was 0.620 and Cronbach’s alpha values of the overall scale was 0.820. All these questionnaires were administered to the athletes face-to-face by the researchers, accompanied by their trainers.

2.3 Statistical Analysis

The data were analyzed using the SPSS 22 package program. Data on variables such as age, gender and education of the participants were analyzed descriptively. The Kolmogorov-Smirnov test was used because the sample group was larger than 50 for the normality tests of the values taken from the data. Since the data showed normal distribution, the Independent t test and One-Way Analysis of Variance (ANOVA) were used. Those who did not provide the homogeneous data with the Hochberg GT2 test were made the Games Howel Post-Hoc Multiple Comparison test. Pearson Correlation test was used to determine the relationship between age and sub-dimensions of the individuals participating in the study, since the data showed a normal distribution. Statistical values were evaluated at 95% confidence intervals and at $p < 0.05$ and $p < 0.01$ significance levels.

3. Results

Table 1. Motivation levels of individual athletes

Sub Dimensions		n	Mean±sd	F	p	Difference
Motivation to Show Strength	Archery ¹	21	41.66±5.12	1.16	0.329	
	Athletics ²	21	42.19±7.56			
	Judo ³	22	40.81±5.16			
	Tennis ⁴	23	40.08±4.24			
	Muaythai ⁵	19	43.68±7.49			
	Shooting ⁶	10	39.40±4.00			
The drive to approach success	Archery¹	21	58.52±6.65	2.75	0.022	1 < 2
	Athletics ²	21	67.47±7.16			
	Judo ³	22	62.72±7.98			
	Tennis ⁴	23	64.52±7.10			
	Muaythai ⁵	19	62.47±13.17			
	Shooting ⁶	10	60.40±5.29			
The drive to avoid failure	Archery ¹	21	32.42±5.71	1.80	0.117	
	Athletics ²	21	37.04±7.30			
	Judo ³	22	36.18±5.65			
	Tennis ⁴	23	33.65±5.81			
	Muaythai ⁵	19	36.94±9.74			
	Shooting ⁶	10	32.40±7.41			

According to the table, no significant difference was found in the sub-dimensions of “motivation to show strength” and “motivation to avoid failure” in individual sports participants ($p > 0.05$). A significant difference was found in the sub-dimension of “motivation to approach success” ($p < 0.05$). Considering the multiple comparison, a significant difference was found in athletics and archery branches ($p < 0.05$). It was determined that the significant difference was in favor of the athletics branch.

Table 2. Motivation levels of team athletes

Sub Dimensions		n	Mean±sd	F	p	Difference
Motivation to Show Strength	Volleyball ¹	23	45.13±3.67	7.63	0.001	1 > 2.4 3 > 2.4
	Football ²	51	41.54±5.19			
	Basketball ³	23	46.08±3.27			
	Handball ⁴	20	40.85±2.87			
	Field Hockey ⁵	26	42.88±3.61			
The drive to approach success	Volleyball ¹	23	63.65±3.97	9.51	0.001	1 > 2 3 > 2.4.5
	Football ²	51	60.54±4.16			
	Basketball ³	23	66.65±4.02			
	Handball ⁴	20	61.80±5.63			
	Field Hockey ⁵	26	61.73±2.58			
The drive to avoid failure	Volleyball ¹	23	32.08±6.76	4.75	0.001	4 > 2.5
	Football ²	51	29.84±4.84			
	Basketball ³	23	31.17±4.90			
	Handball ⁴	20	35.50±5.84			
	Field Hockey ⁵	26	29.42±5.40			

According to the table, a significant difference was found in the sub-dimensions of “motivation to show strength”, “motivation to avoid failure” and “motivation to approach success” in the participants who do team sports ($p < 0.05$). In the multiple comparisons in the sub-dimension of showing strength, a significant difference was found between volleyball, football and handball branches ($p < 0.05$). The significant difference is in favor of the volleyball branch. In the multiple comparisons in the sub-dimension of “motivation to show power”, a significant difference was found between basketball, football and handball branches ($p < 0.05$). It was found that the significant difference was in favor of the basketball branch. A significant difference was found between volleyball and football in the multiple comparisons in the sub-dimension of “approach to success” ($p < 0.05$). Significant difference was determined in favor of volleyball branch. A significant difference was found between basketball and football, handball and field hockey in multiple comparisons in the sub-dimension of “approach to success” ($p < 0.05$). Significant difference was found in favor of basketball branch. A significant difference was found between handball and football and field hockey and hockey in multiple comparisons in the sub-dimension of “failure avoidance motivation” ($p < 0.05$). It was determined that the significant difference was in favor of the handball branch.

Table 3. Individual and team athletes motivation levels

Sub Dimensions	Branch	n	Mean±sd	F	t	df	p
Motivation to Show Strength	Team	143	43.00±4.51	3.53	2.44	257	0.015*
	Individual	116	41.42±5.88				
The drive to approach success	Team	143	67.00±4.93	28.25	4.47	173.29	0.001*
	Individual	116	62.93±8.70				
The drive to avoid failure	Team	143	31.12±5.72	5.21	-4.70	219.16	0.001*
	Individual	116	34.95±7.08				

Note. * $p < 0.05$.

When we compared the motivation levels of individual and team athletes, a significant difference was found in the sub-dimensions of “motivation to show strength”, “motivation to approach success” and “avoiding failure” ($p < 0.05$). While a significant difference in the sub-dimensions of “motivation to show strength” and “motivation to approach success” was in favor of team athletes, “motivation to avoid failure” was found in favor of individual athletes ($p < 0.05$).

Table 4. Motivation levels of indoor and outdoor athletes

Sub Dimensions		n	Mean±sd	F	t	df	p
Motivation to Show Strength	Outdoor athletes	117	43.05±5.13	0.51	2.13	257	0.034
	Indoor athletes	142	41.66±5.22				
The drive to approach success	Outdoor athletes	117	63.28±7.44	4.18	1.36	257	0.173
	Indoor athletes	142	62.13±6.06				
The drive to avoid failure	Outdoor athletes	117	34.07±6.98	4.18	2.74	257	0.006
	Indoor athletes	142	31.83±6.17				

Motivation levels of indoor and outdoor athletes. A significant difference was found in the motivation sub-dimensions of “motivation of strength” and “motivation of avoiding failure” of indoor and outdoor athletes ($p < 0.05$). It is seen that the significant difference is in favor of indoor athletes. No difference was found in the sub-dimension of “motivation to approach success” ($p > 0.05$). However, the average of indoor athletes was found to be high.

4. Discussion

Motivation in sports is seen as a very important factor in terms of maintaining and successfully concluding athletic performance. The fact that the athletes have different psychological structures may cause them not to be affected by different motivation sources at the same level (Celik et al., 2020). Factors such as sports branches that the athletes are interested in and individual differences can cause changes in their motivation levels (Jakovljevic et al., 2007). In this study, it was aimed to compare the motivation levels of team and individual athletes who do sports in indoor and outdoor areas.

When the Table 1 comparing the motivation levels of individual athletes is examined, there is no difference between other branches, but a significant difference in favor of athletics was found between athletics and archery branches ($p < 0.05$). This result suggests that there may be other factors that will affect the results of our study. Karademir et al., (2018) determined that the athletics branch had high values in cognitive imagery ($X = 52.72$), motivational specific imagery ($X = 28.54$) and motivational general mastery ($X = 19.21$). Again, Karademir et al. (2018) are known to have high average values in cognitive imagery, motivational specific imagery, motivational general arousal and motivational general mastery sub-dimensions in individual sports such as tennis, badminton and wrestling (Karademir et al., 2018). Kumartaşlı et al. (2020), in their study examining the relationship between anxiety and achievement motivation with elite athletes, suggested that athletes have low anxiety levels, which contributes positively to the motivation levels of athletes, otherwise, high anxiety levels may negatively affect the motivation level of athletes. It has been stated that the stress level and motivation level of athletes may vary depending on each other (Kavas, 2018). In the study conducted by Aslan and Kuru (2002) in which the relationship between sportive experience and success motivation was examined, it was suggested that factors such as the age of athletes starting sports, the time they spent training, the frequency of training and the number of competitions are important factors affecting motivation. Koruç (2009) states that in sports branches such as athletics that require serious effort, there are training times of up to 3-4 hours a day in order for the athletes to perform successfully, and that intense loading intensities are applied in the training programs. In addition, it is thought that the long periods of time spent training and the high training age of the athletes make their dialogues and communication levels with their coaches stronger, in this case, it provides a positive relationship between the athlete and the coach, and this positive communication level triggers the motivation of the athletes to show strength and approach success (Abakay, 2010). It is known that participating in long-term exercises has positive effects on motivation (Altıntaş et al., 2007). Yalçın et al. (2017) attach importance to the idea that the long-term work of the athlete and the coach can increase the success in sports. Based on the literature, in this study, the high values of the athletics branch in the sub-scales of showing strength, approaching success and avoiding failure, long periods of training in order to improve endurance in performance sports such as athletics, high intensity training in training programs, high frequency of training, and long hours spent with the trainer contributed to these reasons. Hours, the feeling of relaxation caused by doing sports regularly and the possibility of less occurrence of anxiety, stress and anxiety, which may negatively affect the motivation level,

can be directly related to the higher motivation level of the athletics branch.

When the Table 2 comparing the motivation levels of the team athletes is examined, statistically significant differences were found between different branches in all sub-scales ($p < 0.05$). It is known that many factors such as anxiety, professionalism and coach attitude can have important effects on the motivation levels of athletes (Clancy et al., 2016). Examining the literature that the sample group consisted of team athletes; It has been found that the success motivation of professional football players is higher than that of amateur athletes (Abakay, 2010; Aslan & Kuru, 2002). Aktaş et al. (2006) determined that basketball players have a statistically significant difference in achievement motivation subscales. Bora (2013) determined that basketball players have a higher perception of communication with their coaches. In the light of these results, when the motivation averages of the team athletes are examined, the fact that the athletes participating in the research do sports actively and regularly, the possibility of their communication power with their coaches is higher, the status of the team athletes as a constant support and motivation to each other as a result of the close friendships established with their teammates, the team as a whole. It can be directly related to the possibility of having a higher level of motivation in order to be able to do better things.

When Table 3 comparing the motivation levels of individual and team athletes was evaluated, it was determined that team athletes had higher average values than individual athletes in the motivation sub-scales of showing strength and approaching success ($p < 0.05$). It has been suggested that branch differences create changes in both body functions and motivation levels of individuals (Jakovljevic et al., 2007). It has been stated that motivation is intertwined with many concepts and these concepts have important effects on the level of motivation. These concepts are; fun, pleasure, passion and love of play. It is known that the stated concepts are effective in the motivation levels required for the athletes to perform successfully (Crespo & Reid, 2007). Crespo and Reid (2007), based on the research they have done, lead to the fact that the athletes are more motivated to perform successfully in the sports branches they are interested in. In his study, Paul (2018) determined the motivation level averages of team athletes to be higher than combat athletes. It is thought that team training provides higher motivation compared to individual endurance training, and this motivation source is based on social relations with people (Pedersen et al., 2017). Nielsen et al. (2014), in which the motivation levels in team and individual sports were examined, they found team sports more motivating than individual activities due to the sense of belonging and competence. Based on all the information, in this study, team athletes have higher average values than individual sports in their motivation to show strength and approach to success, there are common goals that cause team athletes to come together, even if an athlete makes a mistake, there are teammates who can make up for his mistake, team athletes have higher average values than individual sports. The fact that the athletes are in constant solidarity with each other, the close friendships established with their teammates, and as a result of these friendships, the long periods of time spent exercising with their loved friends, the fact that they enjoy the exercise they do, they do the exercise lovingly, and as a result of long hours spent doing sports with their loved ones, negative effects such as stress and anxiety. reasons such as the possibility of getting rid of emotions and thoughts more quickly can be associated with the higher

motivation level of team athletes. Based on the findings, in this study, a significant difference was found in favor of individual athletes in the motivation to avoid failure ($p < 0.05$). In this study, the average of the motivation to avoid failure in individual sports is high compared to team sports, individual athletes are in one-on-one competition with the opponent during the competition, they are only responsible for all the right or wrong decisions they can make during the competition, they cannot maintain their internal control due to factors such as the excitement of the competition, they cannot continue their success. Factors such as having negative emotions and thoughts may create an extra pressure and stress effect on individual athletes. It is known that negativities such as stress and anxiety directly affect the level of motivation (Kumartaşlı et al., 2020; Kavas, 2018; Clancy et al., 2016; Serin, 2016; Turhan, 2009). In addition, in individual sports, factors such as the athlete being at greater distances from the trainer during the race, being able to notice the situational changes at the time of the race, and making quick decisions and putting them into practice by considering both his own performance and the performance of his opponent can create pressure on the athlete to provide internal control.

When Table 4 is examined, a significant difference was found in the sub-dimensions of the motivation to show strength and the motivation to avoid failure of indoor and outdoor athletes ($p < 0.05$). It is thought that the characteristics of the sports branches that the athletes are interested in may be directly related to the personality and psychological development of the athletes (Salar et al., 2012). Salar et al. (2012), based on the researches, it can be seen as an important factor on the motivation level of the individual whether the sports branch is team, individual, combat sports or indoor and outdoor sports. In the study conducted by Singh et al., (2016) in which the mental endurance of indoor and outdoor athletes were compared, it was determined that both the mental endurance and motivation levels of indoor athletes were higher than those of outdoor athletes, making a statistically significant difference ($p < 0.05$). The results of the studies of Singh et al. do not show parallelism with this study. The main reason for this difference is thought to be that the indoor and outdoor sports in Singh's research are different from the indoor and outdoor sports in this study. In the research conducted by Mumcu and Özgül (2018), in which the personality traits and motivation levels of indoor and outdoor athletes were examined, the unmotivated level of outdoor athletes was found to be higher than the indoor athletes, which could make a statistical difference. Again, Burtscher (2011) conducted a study on the motivation of mountain runners, one of the outdoor sports, and low values were found in the findings for the motivation of mountain runners. In addition, it is suggested that during physical exercise, an extra stress factor may occur on the respiratory tract in order to reduce the carbon dioxide rate from the inhaled air and to send more oxygen to the muscles for energy production. Therefore, outdoor athletes may encounter factors that can negatively affect sports performance such as cold and dry air, air pollution, ozone, sulfur dioxide, nitrogen dioxide, and cigarette smoke due to competing in natural conditions (Drobnic & Haahtela, 2005). Based on these statements, it is thought that environmental factors may have important effects on the performance of athletes in outdoor sports. Considering the indoor and outdoor sports, the fact that the sports branches included in these classifications are in different places, atmospheres, playing fields and sports branches with different characteristics may cause different results on the personality and

psychological development of the athletes. The fact that people such as teammates and coaches are in close contact with the athlete in a limited area compared to outdoor sports, so that the athlete has more communication with people who can have a direct effect on the athlete and his motivation, indoor athletes are relatively better than outdoor athletes during summer holidays and during non-training hours. The reasons such as the possibility of being exposed to the sun more, the possibility of the outdoor athletes being more likely to encounter factors (air pollution, noise, etc.) that may impair their attention and motivation due to the necessity of competing in natural conditions compared to the indoor athletes are the sources of the differences in the motivation levels of the indoor and outdoor athletes in this study. can be displayed.

As a result, whether the sports branches that the athletes are interested in are team or individual sports, whether the sports branches are performed indoors or outdoors, for what purposes the athletes tend to sports (becoming a national athlete, having fun, relieving stress, etc.), people who have a say over the athlete (trainer). It is thought that factors such as the good or bad communication level of the athlete may create differences in the motivation levels of the athletes. Regardless of the branch, when athlete motivation is combined with physical performance, it will help athletes to reach elite levels. In addition, both coaches and sports trainers should constantly improve themselves in terms of motivation and support athletes in these matters is one of the suggestions of our study.

References

- Abakay, U. (2010). *The relationship between the footballer-coach communication and the achievement motivation of the footballers in different statuses* (Unpublished dissertation, Gazi University).
- Aktaş, Z., Çobanoğlu, G., Yazıcılar, İ., & Er, N. (2006). The comparison of sports related success motivation level among professional basketball players in terms of gender. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 4(2), 55-59. https://doi.org/10.1501/Sporm_0000000058
- Altıntaş, A., Aşçı, F. H., & Özenir, B. T. (2007). An examination of self-presentation in exercise contexts with regard to gender and exercise behavior variables. *Hacettepe Üniversitesi Spor Bilimleri Dergisi*, 18(2), 91-99.
- Aslan, A., & Kuru, E. (2002). Achievement motivation differences of professional and amateur soccer players and relationship with sport experience. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 2, 23-30.
- Bora, M. V. (2013). *Communication between teachers and students in physical education sports, sports achievement motivation relations* (Unpublished dissertation, Harran University).
- Burtscher, M. (2011). Validation of a German version of the sport motivation scale (SMS28) and motivation analysis in competitive mountain runners. *Perceptual and Motor Skills*, 112(3), 807-820. <https://doi.org/10.2466/05.06.25.PMS.112.3.807-820>

- Çakıroğlu, T. (1987). *Coach-athlete relations and the importance of sports psychology in success* (Unpublished dissertation, Gazi University, Turkey).
- Çelik, N. D., Çulha, Y., & Adal, P. (2020). *Determining the motivation sources of athletes* (Conference presentation, Atlas International Congress on Social Sciences 7, Hungary).
- Clancy, R. B., Herring, M. P., MacIntyre, T. E., & Campbell, M. J. (2016) A review of competitive sport motivation research. *Psychology of Sport and Exercise*, 27, 232-242. <https://doi.org/10.1016/j.psychsport.2016.09.003>
- Crespo, M., & Reid, M. M. (2007). Motivation in tennis. *Br J Sports Med*, 41, 769-772. <https://doi.org/10.1136/bjism.2007.036285>
- Drobnic, F., & Haahtela, T. (2005). The role of the environment and climate in relation to outdoor and indoor sports. In K. H. Carlsen, L. Delgado, S. Del Giacco (Eds.), *Diagnosis, prevention and treatment of exercise-related asthma, respiratory and allergic disorders in sports* (pp. 35-48). European Respiratory Monograph. <https://doi.org/10.1183/1025448x.00033-005>
- Güzel, P., Esentaş, M., & Tez, Ö. Y. (2020). Recreational exercise and motivation: An empirical study on fitness centers. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 5(3), 206-218. <https://doi.org/10.31680/gaujss.712108>
- Jakovljevic, D. K., Gacesa, J., Grujic, N., Barak, O., & Drapsin, M. (2007) Motivation and motoric tests in sports. *Med Pregl*, 5(6), 231-236. <https://doi.org/10.2298/MPNS0706231K>
- Karademir, T., Türkçapar, Ü., Açak, M., & Eroğlu, H. (2018). Investigation of imaging patterns in athletes with individual and team sports. *Atatürk Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, 20(3), 92-102.
- Kavas, E. T. (2018). *Research about motivation level on success of volleyball players* (Unpublished Master dissertation, Sakarya University, Turkey).
- Keskin, T., & Başkurt, F. (2020). Exercise compliance and motivation in elderly. *SDÜ Sağlık Bilimleri Enstitüsü Dergisi*, 11(3), 369-375. <https://doi.org/10.22312/sdusbed.757470>
- Koruç, P. B. (2009). The relationships between pre-competitive state anxiety levels of young athletes with motivation dimensions and goal orientation. *Spor Hekimliği Dergisi*, 44(2), 61-69.
- Kumartaşlı, M., Erbaş, İ., Yılmaz, E., & Koçyiğit, B. (2020) Investigation of the effect of anxiety levels of elite athletes on success motivation. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 5(4), 456-467. <https://doi.org/10.31680/gaujss.806396>
- Mumcu, H. E., & Özgül, S. A. (2018). Outdoor and indoor sports that require skill executive branches of the personality types of athletes. *International Journal of Recreation and Sport Science*, 2(1), 19-29. <https://doi.org/10.46463/ijrss.457042>
- Nielsen, G., Wikman, J. M., Jensen, C. J., Schmidt, J. F., Gliemann, L., & Andersen, T. R. (2014). Health promotion: the impact of beliefs of health benefits, social relations and

enjoyment on exercise continuation. *Scand J Med Sci Sports*, 24(1), 66-75. <https://doi.org/10.1111/sms.12275>

Özerkan, K. N. (2004). *Introduction to sports psychology*. Nobel Yayınları.

Paul, M. (2018). A comparative study of mental toughness among individual, team and dual sports players of Guru Nanak Dev University. *International Journal of Yogic, Human Movement and Sports Sciences*, 3(2), 209-213.

Pedersen, M. T., Vorup, J., Nistrup, A., Wikman, J. M., Alstrøm, J. M., Melcher, P. S., & Bangsbo, J. (2017). Effect of team sports and resistance training on physical function, quality of life, and motivation in older adults. *Scand J Med Sci Sports*, 27(8), 1-13. <https://doi.org/10.1111/sms.12823>

Phillips, E. M., Schneider, J. C., & Mercer, G. R. (2004). Motivating elders to initiate and maintain exercise. *Arch Phys Med Rehabil*, 85(3), 52-57. <https://doi.org/10.1016/j.apmr.2004.03.012>

Salar, B., Hekim, M., & Tokgöz, M. (2012). To compare emotional state of individuals making team and individual sport 15-18 age group. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 4(6), 123-135.

Serin, C. (2016). *Examining the relationship of motivation and focus of control in turk national sailors team* (Unpublished Master dissertation, İstanbul Gelişim University, Turkey).

Singh, S., Thapa, S. K., Baro, M., & Singh, J. O. (2016). Mental toughness between selected outdoor and indoor games athletes. *International Journal of Physical Education, Sports and Health*, 3(6), 271-273.

Tiryaki, Ş., & Gödelek, E. (1997). *Adaptation of the sport-specific achievement motivation scale for Turkish athletes*. Bağırhan Yayınevi.

Turhan, M. (2009) *Investigating the relationship between competitive motivation and depression, anxiety levels, and personality characteristics in professional soccer players* (Unpublished Master dissertation, İstanbul Maltepe University, Turkey).

Willis, J. D. (1982). Three scales to measure competition-related motives in sport. *Journal of Sport Psychology*, 4(4), 338-353. <https://doi.org/10.1123/jsp.4.4.338>

Yalçın, İ., Çalık, F., Ramazanoğlu, F., & Tutar, Ö. F. (2017). *Research on the achievement motivation levels of the amateur football players* (Conference presentation, Paper presented at ERPA International Congresses on Education, Hungary). <https://doi.org/10.1051/shsconf/20173701054>

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