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EXAMINING THE EFFECT OF ACADEMIC ACHIEVEMENT AND COACH COMMUNICATION ON PRE-COMPETITION ANXIETY: A RESEARCH ON ACTIVE STUDENT ATHLETES

Esra Kürkcü Akgönül[1*], İlker Günel[2], Mihriay Musa[3]
[1]Dokuz Eylül Üniversitesi, Necat Hepkon Spor Bilimleri Fakültesi, İzmir
[2]Osmaniye Korkut Ata Üniversitesi, Beden Eğitimi ve Spor Yüksekokulu, Osmaniye
[3]İstanbul Topkapı Üniversitesi, Spor Bilimleri Fakültesi, İstanbul

Abstract: This research was conducted to investigate the impact of academic success and coach communication level on pre-competition anxiety and self-confidence levels of students who do active sports. The sample consists of a total of 216 student athletes (age: 20.63±4.57), 89 female and 127 male. Pre-competition anxiety was measured with the "Revised Competition State Anxiety Inventory-2 (CSAI-2R)". Academic success was evaluated based on the participants' grade point average. “t test, ANOVA” and “Pearson Correlation test” were used. Cognitive anxiety (CA) level of students was 8.63 points (high); physical anxiety (PA) level was 8.51 points (medium); self-confidence (SC) level was 15.29 points (high). There is a significant and positive relationship between academic success and coach communication level (p=0.28; r=0.150); However, there was a significant and negative relationship between coach communication level and pre-competition CA (p=0.000; r=-0.279) and a significant and positive relationship with SC level (p=0.000; r=0.292). CA, PA and SC scores of students were significantly different according to gender (p=0.001; p=0.002; p=0.001); However, there was no significant difference according to sports age, coach type, education level and coach gender (p>0.05). As a result, it has been determined that students who do active sports have serious CA before the competition and very high SC. While the grade point average of the participants increases, the level of coach communication also increases. While coach communication level increases, their cognitive anxiety decreases and self-confidence increases. Therefore, while the grade point average increases, cognitive anxiety level decreases and self-confidence level increases. Increased academic success positively affects pre-competition anxiety.

Keywords: Academic success, Athlete, Coach communication, Competition anxiety, Student

AKADEMİK BAŞARI VE ANTRENÖR İLETİŞİMİNİN MÜSABAKA ÖNCESİ KAYGI ÜZERİNE ETKİSİNİN İNCELENMESİ: AKTİF SPOR YAPAN ÖĞRENCİLER ÜZERİNE BİR ARAŞTIRMA

Öz: Bu araştırma aktif spor yapan öğrencilerin akademik başarı ve antrenör iletişim düzeyinin müsabaka öncesi kaygı ve özgüven düzeylerine etkisini incelemek amacıyla yapılmıştır. Araştırma örneklemini 89'u kadın, 127'si erkek olmak üzere toplam 216 öğrenci sporcu (yaş: 20,63±4,57) oluşturmaktadır. Yarışma öncesi kaygı, "Revize Edilmiş Müsabaka Durumluk Kaygı Envanteri-2 (YDKE-2R)" ile ölçülmüştür. Akademik başarı, katılımcıların genel not ortalamasına göre değerlendirilmiştir. Verilerin analizinde “t test”, ANOVA ve “Pearson Korelasyon testi” kullanıldı. Öğrencilerin bilişsel kaygı (BK) düzeyi 8,63 puan (yüksek); bedensel kaygı (BK) düzeyi 8,51 puan (orta); kendine güven (KG) düzeyi 15,29 puan (yüksek) olarak belirlendi. Akademik başarı ile antrenör iletişim düzeyi arasında anlamlı ve pozitif bir ilişki vardır (p=0,28; r=0,150); ancak antrenör iletişim düzeyi ile müsabaka öncesi BK arasında anlamlı ve negatif bir ilişki (p=0,000; r=-0,279), KG düzeyi ile ise anlamlı ve pozitif bir ilişki (p=0,000; r=0,292) olduğu bulunmuştur. Öğrencilerin BK, BK ve KG puanları cinsiyete göre anlamlı düzeyde farklıydı (p=0,001; p=0,002; p=0,001); ancak spor yaşı, antrenör tipi, eğitim düzeyi ve antrenör cinsiyetine göre anlamlı farklılık olmadığı tespit edildi (p>0,05). Sonuç olarak aktif spor yapan öğrencilerin yarışma öncesi ciddi bilişsel kaygıya sahip oldukları ve kendine güvenlerinin çok yüksek olduğu belirlendi. Katılımcıların not ortalaması arttıkça antrenör iletişim düzeyi de artmaktadır. Antrenör ile iletişim düzeyi arttıkça bilişsel kaygıları azalmakta ve özgüvenleri artmaktadır. Dolayısıyla not ortalaması arttıkça bilişsel kaygı düzeyi azalmakta, özgüven düzeyi artmaktadır. Akademik başarının artması rekabet öncesi kaygıyı olumlu yönde etkilemektedir.

Anahtar Kelimeler: Akademik başarı, Antrenör iletişimi, Öğrenci, Sporcu, Yarışma kaygısı

*Sorumlu Yazar: Esra Kürkcü Akgönül, Asisst. Prof. Dr., E-mail: bestfemalecyclist@gmail.com

INTRODUCTION

Physical activity is recognized as a practice to improve both physical and mental health. Although routine exercises provide physiological adaptations in both the body and the brain, there is not much evidence about their effects on cognitive functions. In methods such as exercise, which optimally use cognitive challenges along with physical challenges, long-term practices such as using information, making decisions, choosing actions and experiencing the results can provide the necessary conditions for providing cognitive benefits. Individuals doing activities such as physical activity or exercise can provide additional cognitive benefits in addition to physical benefits. According to recent studies, moderate or high-intensity physical activities such as running provide cognitive benefits (Schmidt et al., 2015; Owen et al., 2022), and this benefit is thought to result from increased cognitive loads to perform skills during sports. Another perspective is that the cognitive process is related to sport type. Accordingly, open skill sports such as tennis or basketball require high cognitive demands as they provide practice with cognitive functions such as spatial ability, information processing speed, multitasking flexibility, working memory and inhibitory control; closed skill sports such as swimming or cycling do not require high cognitive requirements because they involve a stable environment. However, it has been reported that open skill sports branches are more effective in improving cognitive functions than closed sports branches (Gu et al., 2019; Zhu et al., 2020). From this perspective, not only does participation in sports provide cognitive benefits, but the branch of sports performed can also be an effective factor in increasing academic success; It can be said that students interested in open skill sports branches may be more successful academically than those interested in closed skill sports branches.

Although individuals who do sports are basically divided into amateur and professional, athletes definitely have a sense of competition, ambition and fighting spirit. Even though they are trained, it is known that athletes experience some anxiety before the competition and there are scientific studies in the literature on this subject. However, it seems that there are still very few studies on the effect of academic success and especially the type of coach on pre-competition anxiety (De Olivera et al., 2022). Anxiety is the most common psychological factor associated with high worry (Hanton et al., 2004; Martinent & Ferrand, 2007); in other words, it causes individuals' self-esteem and self-confidence to be damaged due to reasons such as not being able to achieve goals or overcome any obstacle, academic failure and it is a state of irritability that causes an increase in feelings of deep guilt (Li et al., 2021).

Pre-competition anxiety is generally the tiring training before the match and the success-oriented psychological stress and low self-confidence coming from the coaches or the immediate environment who put pressure on them to implement this. The athlete may experience pre-competition anxiety by being affected by many different factors such as the perception of perfection and challenging competitive environments (De Pero et al., 2021; Slimani et al., 2018). Within the scope of the multidimensional competition anxiety theory, competition anxiety in sports has been determined as Cognitive, Somatic and Self-Confidence. In this sense, the concept of cognitive anxiety represents more of a mental component of anxiety. For this concept, a positive or negative self-evaluation results from negative expectations regarding victory. The experience of somatic anxiety develops without direct stimulation and reveals the physiological and emotional elements of the anxiety experienced. In addition, the perception of readiness for competitive conditions and the level of confidence are related to self-confidence (La Fratta et al., 2021).

One of the most important factors in creating an athlete's sense of self-confidence is his/her communication with his/her coach. Because the key to the physical and emotional development and sporting success of individuals who do sports is related to the communication they provide with their coaches (Jowett and Shanmugam, 2016); both the coach and the athlete support each other for the goals they want to achieve (Jowett, 2017). This can be considered a kind of meaningful, powerful, stimulating partnership for both parties. The coach-athlete relationship is a social relationship that includes feelings such as trust, respect, commitment and love, and over time, it can lead to sensitivity and relaxed behavior. Literature findings show that the quality of the relationship between the coach and the athlete is related to important elements such as physical and cognitive performance (Davis et al., 2018; Davis et al., 2019). Gilbert (2017) reported that the most important strategy for maintaining an effective coach-athlete relationship is communication.

One of the chain links that complete the relationship between the athlete and the coach is the athlete's personality traits and the coach's approach style. Coach type or style can have a significant impact on individuals' sports experiences (Smith & Smoll, 1990). To give an example; coaching behaviors have a positive effect on individuals' self-esteem as well as their desire to continue participating in sports (Conroy & Coatsworth, 2006). Coach type is actually the sum of his/her efforts to understand both his/her own situation and how his/her athletes think. In this process, if necessary, the coach can change him/herself and have a significant impact on the athletes' perspective on sports (Karlsen & Berg 2020). In this context, coaches' behaviors are important in supporting athletes' autonomy, gaining competence, and internal motivation (Moreno-Murcia et al., 2019).

It is noteworthy that there are few studies in the literature examining the relationship between academic success and pre-competition anxiety levels. In general, it has been observed that studies on the effect of anxiety on academic success have increased in intensity. In this respect, it is thought that our study will fill the gap in the literature. Based on this, the aim of the current study is to investigate the impact of coach communication and academic success on the pre-competition anxiety level in students who continue their active sports life.

MATERIAL and METHOD

Procedures

In the study, cross-sectional research and relational survey methods, which are quantitative research designs, were used. "Random sampling method" was used in the sample selection of the research because the population was taken from a relevant place (Kılıc, 2013). Volunteer athletes and students suitable for the research were identified, and the scales and forms prepared online were sent to all participants. Researchers gave information to the participants online about the study and written consent was obtained from all participants. In accordance with the Declaration of Helsinki. Student athletes filled the scales one hour before any competition. Students were informed about the procedure of the research and the purpose of the study. Ethics committee approval for the research was received from Usak University Social and Human Sciences Scientific Research and Publication Ethics Board (2024/61).

Participants

The research group was selected using the convenience sampling method; it is a non-random sampling method that the researcher chooses from the population, and data is collected in the fastest, easiest and most economical way (Gullu, 2023; Hasıloglu et al., 2015). The population of the research consists of female and male student athletes who are licensed in clubs in Türkiye,

have a good training level, participate in competitions, are over 15 years old, and are attending high school, undergraduate or postgraduate education. The research group is planned to consist of an estimated total of 220 athletes who participate in competitions across Türkiye and continue their training. Sample size calculation was done using Gpower analysis. Accordingly, in order to look at the mean differences, it was calculated that there should be a minimum of 111 athletes in total for the t test with a medium effect size and 95% confidence interval, at least 211 people in total for the ANOVA test, and at least 75 participants for the correlation test. Individuals who were 15 years of age or older, had an active license, had been doing sports for at least one year, and were attending postgraduate, undergraduate, associate or high school education and volunteered to participate in the study were included in the study. On the other hand, individuals who were under 15 years of age, did not do active sports, were not licensed, did not continue their postgraduate, undergraduate, associate degree or high school education, or did not volunteer to work were excluded from the study.

Table 1. Descriptive statistics of socio-demographic information of participants

Variables	Groups	N	%
Gender	Female	89	41.2
	Male	127	58.8
Educational status	High school	50	23.1
	College	36	16.7
	University	119	55.1
	Master's degree	11	5.1
Sports age	0-1 year	26	12.0
	2-3 year	11	5.1
	≥4 year	179	82.9
Gender of coach	Female	18	8.3
	Male	198	91.7
Coach type	Authoritarian and disciplined	39	18.1
	Moody	36	16.7
	Docile and relaxed	47	21.8
	Diligent and good-natured	94	43.5

Data Collection Tools

In the study, to collect the information about the demographic characteristics of the participants, "Personal Information Form" and to measure the pre-competition anxiety level, "Revised Competition State Anxiety Inventory-2 (CSAI-2R)" was used. The CSAI-2R scale was developed by Cox et al. (2003), and its Turkish validity and reliability were tested by Akgonul et al. (2021). In the Personal Information Form, participants' personal information; there were questions to learn about age, grade point average, education level, coach communication score, etc. The level of communication with the coach was evaluated according to the students' rating a value out of 10.

Revised Competition State Anxiety Inventory-2 (CSAI-2R)

Inventory revised by Cox et al. (2003); it consists of 14 items and three subscales: cognitive anxiety (CA), physical anxiety (PA) and self-confidence (SC). The inventory is answered on a 4-point Likert type and the answers are; Not at all (1), a little (2), quite a bit (3), a lot (4). As a result of the validity and reliability analysis of the scale, it was determined that the internal consistency coefficient (Cronbach's alpha) for the cognitive anxiety sub-dimension was 0.71; the internal consistency coefficient (Cronbach's alpha) for the somatic anxiety sub-dimension was 0.78; and the internal consistency coefficient (Cronbach's alpha) for the self-confidence sub-dimension was 0.80. Evaluation is made by adding up the scores from the inventory. High cognitive and physical anxiety scores in the sub-dimensions indicate a negative state, while a

high self-confidence score indicates a positive state (Akgonul et al., 2021). The total score of the scale does not reveal the level of anxiety, therefore the evaluation was made at the level of sub-dimensions. The score range in the scale sub-dimensions have seen in Table 2.

Table 2. The scores of scale and subdimensions

Variables	Min	Max	Low	Medium	High	Very high
Cognitive anxiety	4 p	16 p	<4,0 p	4,1 p-8,0 p	8,1 p-12,0 p	12,1 p-16,0 p
Physical anxiety& Self Confidence	5 p	20 p	<5,0 p	5,1 p-10,0 p	10,1 p-15,0 p	15,1 p-20,0 p

p: point

Data Analysis

The data obtained in the research were analyzed in the SPSS program. "Skewness-Kurtosis" (S-K) and Leven's test values have been used to evaluate the normality distributions of the data. Since S-K values were between -2/+2, the data had a normal distribution (George and Mallery, 2010). Accordingly, frequency distribution, "independent groups t test" and "ANOVA" test were used to examine the mean difference between the groups. The group from which the difference originated was examined using the "Bonferonni" or "Tukey" test, which is a post hoc test. In this regard, the inventory is a reliable measurement tool since the alpha coefficient for the sub-dimensions of CSAI-2R is on the group for which validity and reliability were tested (α=0.71-0.80). The relationship between subscale scores and independent variables was evaluated with the "Pearson correlation" test; the correlation coefficient between 0-0.30 (weak), 0.30-0.70 (medium), and 0.70-1.00 (high) relationship (Ozudogru and Aydin, 2016). The statistical significance level was accepted as 0.05. It is known that (α= 0.70 ≤) is sufficient for internal consistency reliability (Buyukozturk, 2011).

RESULTS

The participants' overall grade point and mean subscale scores are presented in Table 3 below.

Table 3. Descriptive statistics of student athletes

Variables	N	Min	Max	X	Sd
Average of grade	216	50.00	100.00	76.33	12.27
Cognitive anxiety	216	4.00	15.00	8.63	2.38
Physical anxiety	216	5.00	20.00	8.51	2.90
Self confidence	216	9.00	20.00	15.29	2.55

According to the results obtained from the table above, it was concluded that the participants' grade point average was 76.33 points, their pre-competition CA was high level (8.63), their PA was medium level (8.51) and their SC was very high level (15.29).

Table 4. Statistics of the difference in subscale scores according to gender

Subscales	Gender	N	$\bar{x}$	Sd	t	*p*
Cognitive anxiety	Female	89	9.29	2.40		
	Male	127	8.16	2.27	3.507	**0.001***
Physical anxiety	Female	89	9.22	3.44		
	Male	127	8.01	2.35	3.090	**0.002***
Self confidence	Female	89	14.62	2.50		
	Male	127	15.77	2.50	-3.315	**0.001***

*p<0.05

According to the results obtained from the table above, the cognitive, physical anxiety and self-confidence levels of the participants were significantly different according to gender (p<0.05; p=0.001; p=0.002; p=0.001). While the cognitive and physical anxiety levels of female student athletes were significantly higher than men, it was concluded that, on the contrary, the level of self-confidence was significantly lower.

Table 5. Statistics of the difference in subscale scores according to coach gender

Subscales	Gender	N	$\bar{x}$	Sd	t	*p*
Cognitive anxiety	Female	18	8.61	2.68		
	Male	198	8.63	2.36	-0.034	0.973
Physical anxiety	Female	18	9.05	2.99		
	Male	198	8.46	2.90	0.833	0.406
Self confidence	Female	18	15.83	2.25		
	Male	198	15.24	2.58	0.938	0.349

*p<0.05

According to the results obtained from the table above, no significant difference on the CA, PA and SC subscale scores according to coach gender (p>0.05; p=0.973; p=0.406; p=0.349).

Table 6. Comparison of subscale scores according to participants' sports age

Subscales	Sports age	N	$\bar{x}$	Sd	F	*p*
Cognitive anxiety	0-1 year	26	8.96	2.46	1.065	0.347
	2-3 year	11	9.45	1.92		
	≥4 year	179	8.53	2.40		
Physical anxiety	0-1 year	26	9.27	3.61	1.657	0.193
	2-3 year	11	9.36	2.87		
	≥4 year	179	8.35	2.78		
Self confidence	0-1 year	26	15.15	2.77	2.307	0.102
	2-3 year	11	13.73	2.72		
	≥4 year	179	15.41	2.50		

*p<0.05

According to the results obtained from the table above, no significant difference on CA, PA and SC subscale scores of the students athletes according to their sports age (p>0.05; p=0.347; p=0.193; p=0.102).

Table 7. Comparison of subscale scores according to coach type

Subscales	Coach type	N	$\bar{x}$	Sd	F	*p*
Cognitive anxiety	**Authoritarian-disciplined**	39	8.51	2.15	2.193	0.090
	Moody	36	9.36	2.59		
	Docile-relaxed	47	8.91	2.27		
	Diligent-good natured	94	8.26	2.40		
Physical anxiety	**Authoritarian-disciplined**	39	8.03	2.63	0.894	0.445
	Moody	36	8.78	2.72		
	Docile-relaxed	47	8.19	3.06		
	Diligent-good natured	94	8.77	3.00		
Self confidence	**Authoritarian-disciplined**	39	15.49	2.55	2.101	0.101
	Moody	36	14.39	2.59		
	Docile-relaxed	47	15.19	2.81		
	Diligent-good natured	94	15.61	2.36		

*p<0.05

According to the results obtained from the table above, no significant difference on CA, PA and SC subscale scores of the students athletes according to their coach type (p>0.05; p=0.090; p=0.445; p=0.101).

Table 8. Comparison of subscale scores according to education level

Subscales	Education level	N	$\bar{x}$	Sd	F	*p*
Cognitive anxiety	**High school**	50	8.50	2.36	0.303	0.823
	College	36	8.94	2.04		
	University	119	8.61	2.51		
	Master′s degree	11	8.36	2.29		
Physical anxiety	**High school**	50	8.42	2.92	1.411	0.241
	College	36	7.92	2.36		
	University	119	8.60	3.08		
	Master′s degree	11	9.91	2.12		
Self confidence	**High school**	50	15.06	2.63	0.299	0.826
	College	36	15.41	2.31		
	University	119	15.39	2.61		
	Master′s degree	11	14.91	2.66		

*p<0.05

According to the results obtained from the table above, no significant difference on CA, PA and SC subscale scores of the students athletes according to education level (p>0.05; p=0.823; p=0.241; p=0.826).

Table 9. The relationship between subscale and average point grade and ccs

Subscales	N=216	CCS	CA	PA	SC
Average grade	r	**0.150***	-0.036	0.075	0.043
	p	**0.028**	0.603	0.276	0.528
Score of coach communication	r	**1**	**-0.279****	-0.063	**0.292****
	p		**0.000**	0.359	**0.000**

**: 0.01; *: 0.05; CCS: Coach Communication Score

According to the results obtained from the table above, there is a significant relationship between the coach's communication level and pre-competition cognitive anxiety and self-confidence scores (p<0.05). It was found that this relationship was negative and weak with cognitive anxiety (r=-0.279), and positive and weak with self-confidence (r=0.292). While there is no significant relationship between average grade point of the student athletes and sub-dimension scores (p>0.05); it was found that there was a significant, positive and weak relationship with the coach communication score (p=0.028; r=0.150). From this point of view, as the grade point average increases, the level of communication of coach also increases. Indirectly, while the grade point average increases, pre-competition anxiety decreases and self-confidence increases.

DISCUSSIONS

In the current study, which was conducted to examine the effect of academic success and coach communication level of students doing active sports on pre-competition anxiety and self-confidence levels, it was revealed that there is a significant difference in the subscales of anxiety in terms of gender. In parallel with this study, Nicholls et al. (2010) studied a total of 307 athletes; Ghorbanzadeh and Bayar's (2013) study on 468 female and competitive taekwondo athletes; Gizaw's (2014) study on 70 athletes studying at university Thanopoulos and Platanou’s

(2017) study on 692 athletes engaged in water sports, they all reported that the pre-competition anxiety level of females was higher than males. According to the findings of literature studies, the fact that women athletes or students who do sports have higher anxiety levels just before the competition compared to men may be related to women having lower self-confidence compared to men, and the fact that women's self-confidence levels were significantly lower than men in the current study supports this inference. Unlike our study, Wang's (2023) study on 187 young table tennis athletes reported that women had higher self-confidence than men. This different result is thought to be due to the need for a performance parameter that is not based on structural differences between genders, such as table tennis. However, in the study conducted by Akgonul et al. (2023) with 379 competitive team athletes, they concluded that there was no significant difference in terms of gender in anxiety and subscale scores. It can be said that pre-competition anxiety is less felt in team sports. It is thought that the reason for this difference in the results is due to the dimensions of sports branch, sporting level, league level and competition duration.

In the current study, it was observed that anxiety did not differ in terms of sports age. In line with this result, Ozden and Ocalan's (2022) study on taekwondo athletes concluded that there was no significant relationship between sports age and anxiety experienced. Unlike the current study, Sadrincevaite and Gririciute's (2023) study on 37 Lithuanian male and female volleyball athletes found that the athletes' playing time and cognitive anxiety level were directly related; they also reported that volleyball players who had the necessary knowledge and experience to manage the competition had lower cognitive anxiety. Similarly, in the study conducted by De Moraes et al. (2019) on 115 young female artistic gymnastics athletes, they reported that there was a significant difference between competition anxiety scores in those entering national and state competitions according to competition experience. Considering the literature results, the effect of sports age on pre-competition anxiety may be related to the sports branch.

Based on the findings of the study, it was determined that there was no significant difference between the groups in anxiety scores in terms of coach type. As a result, in the study conducted by Kassim et al. (2022), which is parallel to our study, it was determined that coach behavior did not make a difference of anxiety. The result of Braun-Trocchio's (2024) study that the coaches' behavioral style had no effect on the anxiety of athletes who were worried about injury before the competition is somewhat similar to the results of the current study. Unlike the results, Najafi et al.'s (2018) study, in which they examined the relationship between coach behavioral style and pre-competition anxiety levels, revealed that the coach's behavioral style directly affects the athletes' competition anxiety. Liu (2024) concluded in his study that coaches' positive affect and behavioral styles towards athletes will have a positive effect on athletes' pre-competition anxiety. Similarly, Kenow and Williams (1992), in their study of 11 female basketball college students, reported that coaches should be more supportive towards athletes with high anxiety and low self-confidence. Pineda-Espejel et al. (2020) revealed in 239 high-performance athletes that the autonomy-supported coaching style affected the athletes' self-confidence and pre-competition anxiety. In the study conducted by Horn et al. (2011) on 195 athletes who were college students, they reported that coach behavior was related to and affected the athlete's emotional state such as anxiety, self-confidence and motivation. It is thought that the differences in the results regarding the relationship between coach type and approach and athlete emotional state are due to factors that directly affect communication and emotional state, such as the athlete's branch, personality, education level, age, and coach education level. The fact that there were participants from every education level and every branch in the current study may have caused different opinions about the type of coach, thus causing no relationship.

In the current study, it was determined that there was no difference between the athletes' anxiety scores in terms of their education level. In parallel with our study, in the studies conducted by Tasmektepligil et al. (2004) on referees active in different branches and by Sadrincevaite & Gririciute (2023) on 37 male and female volleyball athletes, they reported that there was no significant difference in the pre-competition anxiety scores according to education level. Unlike our study, Nıcolae et al. (2022) reported that there was no significant difference in the anxiety scores of athletes in terms of education level.

In the study, it was observed that there was a significant relationship between the coach communication score and anxiety and its subscales. When the literature is examined, it is seen that studies parallel to this result of our study are limited. Regarding the subject, in the study conducted by Ates et al. (2018) on 235 professional basketball and volleyball athletes, it was reported that sports age and duration of working with the coach had an impact on the perception of coach communication skills; gender and education level had an impact on the trait anxiety level of the athletes. In the systematic review study by Kamis et al. (2021), they reported that athletes experienced less anxiety when supported by the coach, and having quality communication with the coach positively affected the athlete's physical and psychological well-being, motivation and confidence. Another study by Stephen et al. (2022) is similar to the results of our study in that they detected a significant relationship between the anxiety experienced by athletes through coach communication, and it can be inferred that athletes' communication with the coach has positive reflections on positive emotions and negative reflections on negative emotions. In addition, it can be said that individuals with high academic success are successful in emotional intelligence management due to their high level of perception. Therefore, students with this characteristic are likely to be able to control the negative emotions they experience momentarily or continuously, and in this context, it can be said that they can also control anxiety situations that may negatively affect sports performance.

In the study, it was determined that there was a significant and negative relationship between academic success and pre-competition cognitive anxiety, and a significant and positive relationship with self-confidence. When the literature is examined; similar to the study results, Sahsuvar and Ustun (2023), who examined the relationship between academic success and anxiety in physical education and sports students, reported that as students' self-confidence increases, their general grade point average increases and anxiety decreases. However, Oner (1977) and Vurgun (1998) found that there was no significant relationship between academic success and pre-competition anxiety levels and its sub-dimensions. In studies investigating the relationship between sports and academic success, the relationship between participation in sports events and competitions and students' academic success has been examined as general. Although there is a large amount of research on this subject (Chuan et al., 2013; Gaston-Gayles and Hu, 2009), there is no consensus regarding the impact of sports participation on academic achievement (Muñoz-Bullón et al., 2017). Athletes who continue their education can increase or decrease their academic success by participating in sports, using their skills and aiming for goals, establishing social relationships and investing in mental health. Regarding the subject, the fact that students who started their undergraduate education at Universidad Carlos III de Madrid University in 2008 and completed it in 2014 and who participate in regular organized physical-sports activities have higher academic success than other students supports this thesis (Muñoz-Bullón et al. , 2017). Findings in the literature reveal that there is a correct and high relationship between participation in sports activities and students' academic achievements, and it is clear that our study results support the literature. In this context, individuals who continue both sports life and education at the same time should be given more opportunities to participate

in extracurricular sports programs. However, the number and depth of studies on the relationship between academic success and competition anxiety in these individuals need to be increased.

CONCLUSIONS

As a result, it can be said that the average academic success and pre-competition self-confidence of athletes who are active in sports are quite high, and their cognitive anxiety and physical anxiety are at medium levels. It has been observed that male athletes, in particular, have a higher level of confidence than female athletes. It has been concluded that the increase in healthy communication between coaches and athletes is effective in increasing the academic success of athletes, decreasing their pre-competition cognitive anxiety, and increasing the athletes' self-confidence. In future studies, comparison of coach communication and women's anxiety levels before, during and after the competition can be examined.

PRACTICAL IMPLICATIONS

It was determined that there was a relationship between sports participation and academic success in athletes who continue their education. It was also found that coach communication was effective on pre-competition anxiety and self-confidence. The coach should be in communication one-by-one with each athlete and receive constant feedback. Especially the coaches of athletes who are at competitive levels and run races should be more sensitive about this issue for the academic success of the athletes. Coaches of athletes preparing for the national team or the World or European Championship should communicate more carefully with their athletes. As a method of increasing communication between coaches and athletes, coaches can receive communication support or attend training to develop communication strategies. In addition, clubs that train high-level athletes can provide in-service training to their coaches on this subject.

LIMITATIONS

The limitations of this study are that the sports branches were not determined in the study and the scale was applied to a wide range of athletes, therefore the generalizability of the scale and the scale was not tested in this sample.

Ethics Committee Approval: Researchers gave info to the participants online about the study and written consent was obtained from all participants in accordance with the Declaration of Helsinki. Student athletes filled the scales one hour before any competition. Students were informed about the procedure of the research and the purpose of the study. Ethics committee approval for the research was received from Usak University Social and Human Sciences Scientific Research and Publication Ethics Board with decision number 2024-61 dated 07.03.2024.

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