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Investigation of the Relationship Between Mindfulness and Competition Status Anxiety with Track Performance

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Abstract

This research aim is to it is the examination of the relationship between mindfulness, competitive state anxiety and track performance in athletes. In addition, another aim of the study is to examine the effects of mindfulness levels of athletes on competitive state anxiety and track performance. The study group was determined according to the convenience sampling method in the study, in which the survey model, one of the quantitative research methods, was used. The sample of the research consisted of 292 athletes. The data were collected with the Mindfulness Inventory For Sport, Competition State Anxiety Inventory-2 and track performance information. Before the analysis, the assumption of normality was checked and descriptive statistics were determined. Then, relational (Pearson) and comparative (MANOVA and ANOVA) inferential statistical tests were performed. In athletes, there is a negative aspect weak level between mindfulness with cognitive anxiety and physical anxiety. In addition, positive aspect weak level between mindfulness; track performance and a positive moderate significant relationship was found between mindfulness and self-confidence. Athletes with high levels of mindfulness experienced significantly lower levels of physical anxiety and felt higher levels of self-confidence. Again, it was found that athletes with a high level of conscious awareness had a significantly higher level of track performance. With the high level of mindfulness of the athletes, their self-confidence can increase and their physical anxiety can decrease. Similarly, high mindfulness can increase the performance of athletes.

Keywords: Track performance, mindfulness, competition status anxiety, athlete.

Introduction

Athletes need to keep their psychological characteristics under control in order to reveal their physical performance in competitive situations where some win while others lose. Considering these characteristics, there are many psychological concepts. In this research, the concepts of mindfulness and competitive state anxiety were handled in detail.

The concept of *"mindfulness"* can be understood as the state of being conscious and aware of one's actions. In common parlance, the question *"Are you aware of what you're doing?"* may serve as a clarification of the aforementioned definition. Due to the inherent nature of sports, athletes make decisions and perform actions in a matter of seconds, even milliseconds. Consequently, the level of awareness of the athletes with respect to their actions can determine the degree of their mindfulness. Kabat-Zinn defines *"mindfulness"* as the act of performing events within a focus of attention (as cited in Aktepe & Tolan, 2020). Findings regarding the relationship between mindfulness and athletic performance are present in the literature, and furthermore, it is known through implemented practices that mindfulness practices significantly reduce the frequency and intensity of anxiety (Kabat-Zinn, 2021). Additionally, when viewed in terms of athletic performance, it is seen that mindfulness exercises positively affect athletic performance (Bühlmayer et al., 2017). Similarly, experimental studies have shown that mindfulness has a positive effect on sportive performance (Gültekin Arayıcı & Arayıcı, 2022). Roemer and Orsillo (2022) state that mindfulness improves cognitive functions as well as decision-making and problem-solving skills.

Competitive state anxiety can be interpreted as the sensory and emotional reactions of an individual according to the degree of importance s/he attaches to the work that s/he is doing in a momentary period of time. Anxiety can affect the athlete at the point of competing or giving up. In a way, anxiety can affect the athlete positively or negatively. In this case, the athlete needs to keep his/her anxiety under control in the competition. In the literature, performance anxiety is defined as a negative psychological state perceived as a threat to performance during a task being performed under pressure

(Cheng et al., 2009). The statement "Competition increases performance anxiety", by Mullen et al. (2016), can be held up as an example. It can be said that unexpected situations create pressure in athletes and thus negatively affect their performance and emotional characteristics (Roemer & Orsillo, 2022).

Mindfulness reduces athletes' perception of the stress state that occurs when they are exposed to high pressure in a competition (Eubank & Gilbourne, 2003). Mindfulness helps athletes remove negative thoughts and control anxiety. Therefore, it helps athletes focus on their own skills and contributes to their sporting performance (Beşer, 2023). Based on this information, the aim of this study is to investigate the relationship between mindfulness, competition state anxiety, and track performance. Furthermore, another purpose of this research is to examine the impact of athletes' level of mindfulness on their competition state anxiety and track performance.

The hypotheses for this study in line with the stated objectives are as follows:

H_1: There is a significant relationship between athletes' level of mindfulness and the sub-dimensions of competition status anxiety, as well as obstacle track performance.

H_2: Athletes' levels of competition status anxiety differ based on their level of mindfulness.

H_3: Athletes' obstacle track performance differs based on their level of mindfulness.

Method

Research Model

Survey model, one of the quantitative research methods, was used in the study. The conceptual model in Figure 1 was created in order to determine whether the categorical mindfulness levels of athletes make a difference on competitive state anxiety and track performance and to reveal the relationships between these concepts.

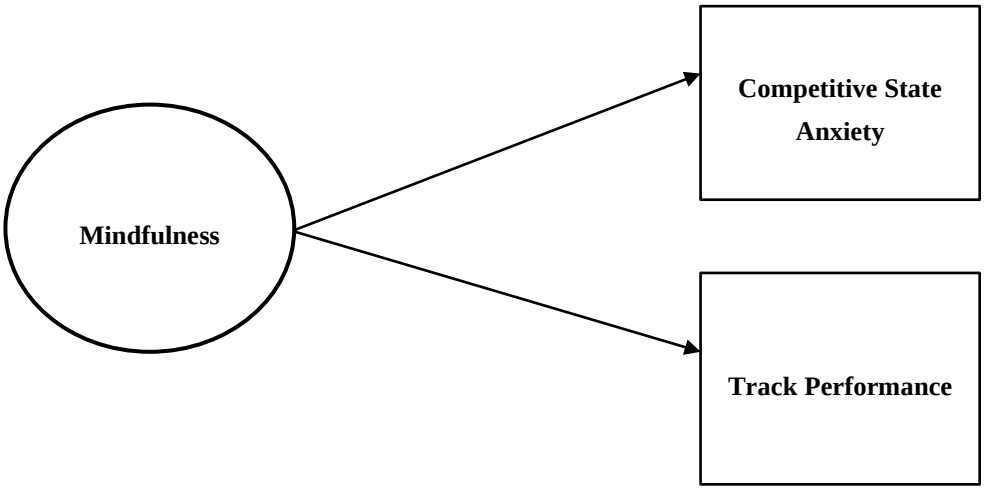

Figure 1. Research model

The conditional effect in the study is that athletes' competitive state anxiety (H_2) and track performance (H_3) will differ according to different mindfulness levels. In addition, significant relationships (H_1) are expected between mindfulness, competitive state anxiety and track performance.

Research Group

Data were collected from 298 athletes among 1,075 candidates who took the Special Talent Test [STT] in 2022-2023 academic year. The responses of 6 athletes (2.0%) were excluded from the analysis. Thus, the data from 292 athletes in total were analysed.

Convenience sampling method was used in this study. The population-sample table was used to determine the required sample size. It is stated that at least 285 participants are needed for sample representation at 95% confidence level and 5% confidence interval on condition that the number of the population is 1,100 (Cohen et al., 2018). Accordingly, it can be said that the sample size is representative of the population.

Data Collection Tools

Data were collected through face-to-face method. In addition to demographic information forms (gender, age, etc.), mindfulness and competitive state anxiety scales were used in the study. In order to evaluate the track performances of the athletes, the results of Kırsehir Ahi Evran University [KAEU] Faculty of Sports Sciences STT were used.

Mindfulness

Athlete Mindfulness Scale [MBAS], developed by Thienot et al. (2014) and adapted into Turkish by Tingaz, (2020) was used in the current study. The 6-point (1- Almost Never, 2- Very Rarely, 3- Rarely, 4- Sometimes, 5- Usually, 6- Almost Always) Likert-type scale consists of 15 items and 3 sub-dimensions. These sub-dimensions are awareness (1, 2, 3, 4, and 5), non-judgment (6, 7, 8, 9, and 10) and refocusing (11, 12, 13, 14, and 15). A score of minimum 40 and maximum 65 can be obtained from the scale. Cronbach's alpha coefficients were calculated as .82 in the total score. In the sub-dimensions on the other hand, awareness was .81, non-judgment was .70 and refocusing was .77 (Tingaz, 2020). In this study, awareness and non-judgment sub dimensions were found to be .80 while refocusing was .83. Thus, it can be said that this inventory used in the study is a reliable measurement tool.

Competitive State Anxiety

Competition State Anxiety Inventory-2 [CSAI-2], developed by Cox et al. (2003) and adapted into Turkish Akgönül Kürkçü et al. (2021) was used applied in the study. The 4-point (1- Not at all, 2- Somewhat, 3- Moderately, 4- Very much) Likert-type scale consists of 14 items and 3 sub-dimensions. These sub-dimensions are cognitive anxiety (1, 3, 8, and 11), physical anxiety (4, 6, 9, 12, and 14) and self-confidence (2, 5, 7, 10, and 13). The scores of the items are summed, divided by the number of items and multiplied by 10 to obtain the sub dimension scores. The score range in the sub dimension is 10-40. If the candidate does not answer one of the items in the sub dimension part, then the scoring is conducted according to the above scoring method over the answered items. It is known that the higher the score a candidate gets, the higher the level of anxiety s/he has and the lower the score is, the lower the level of anxiety is. The application of the inventory is one hour before the competition starts. Cronbach's alpha coefficients were calculated for cognitive anxiety as .71, for physical anxiety as .78, and for self-confidence as .80 in sub-dimensions (Akgönül Kürkçü et al., 2021). Cronbach's alpha coefficients in this study on the other hand, were found to be .81 for cognitive anxiety, .66 for physical anxiety and .81 for self-confidence. Thus, it can be said that this inventory used in the research is a reliable measurement tool.

Special Talent Test (STT)

As seen in STT track, the candidate first performs a straightforward somersault. In the second row, there is a twist (360°). Next comes the obstacles over and under which the candidates have to pass. In the fourth place, the medicine balls in the boxes are moved from the right side to the left side. After that, the handball in the box is thrown three times to the wall at a distance of 5 meters. In the sixth row, a double-foot jump from the jumping table is made five times to the right and left. Later on, it is necessary to step into the car tires on the ground and pass them. Slalom is performed next, and sprints of 3 and 6 meters are performed in the final step (Figure 2). The finish time was determined by a photocell (Smartspeed PT, Australia). For each mistake made on the course, 1 second is added to the finish time of the candidates according to the rule stated in the test guide. In order to get 100 points male candidates must finish in 44 seconds or less while female candidates have to do it in 50.5 seconds or less. In case male candidates finish the course in 53.7 seconds or more and females in 60.2 seconds or more, they receive 0 points (Kırşehir Ahi Evran University, 2022). STT results were received through electronic mail and prepared for data analysis by the researcher after the necessary permission was obtained. In this study, analyses were conducted on the results adjusted for error points.

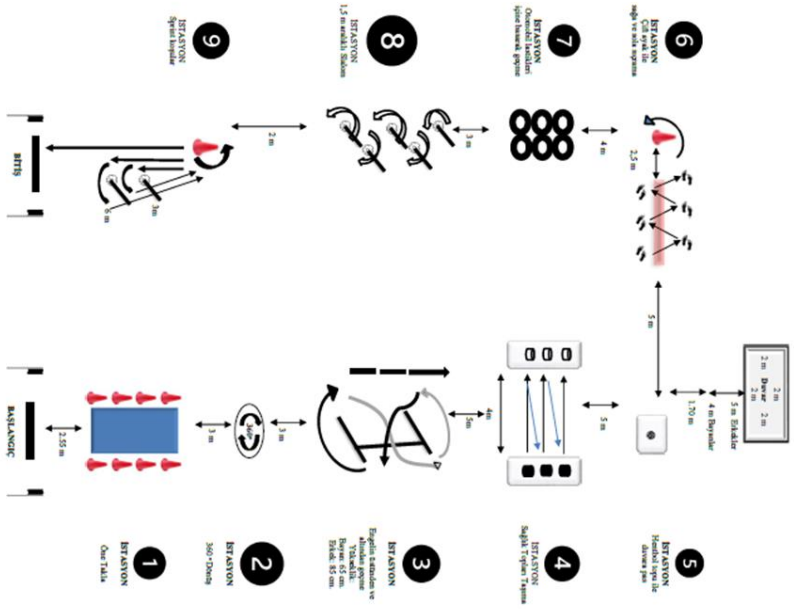

Figure 2. KAEU Faculty of Sport Sciences, 2022-2023 Academic Year Special Talent Test (Kırşehir Ahi Evran University, 2022).

Data Analysis

The data were analyzed using the SPSS 26.0 program. Normality distribution of the data was tested, and it was observed that the data showed a normal distribution. In addition, the assumptions required for MANOVA test were examined before the analysis.

The homogeneity of the variance-covariance matrix, linearity and multicollinearity problems, univariate and multivariate normality of the research data were analyzed (Büyüköztürk, 2013; Pallant, 2005/2017). Kurtosis and skewness values of the dependent variables, histogram graphs, box m test values and Levene's test were analyzed for univariate normality. As a result of the preliminary analyses, the data were found to have appropriate values to be examined in the analysis process (Table 2)

MANOVA test is very sensitive to outliers (Pallant, 2005/2017). In order to detect the outliers, 5% trimmed values in the descriptives table were checked and data from 6 participants (2.0%) were excluded from the analysis.

After the preliminary examinations, descriptive statistics, Pearson correlation test and MANOVA test were utilized in line with the mean scores of the responses of the 292 participants. In addition, Bonferroni adjusted test results were applied to determine the source of significant differentiation. The data were tested at a significance level of p=0.05

Ethical Permits of Research

In this study, all the rules specified to be followed within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were complied with. None of the actions specified under the heading "Actions Contrary to Scientific Research and Publication Ethics", which is the second part of the directive, have been taken.

Ethics Committee Permission Information:

Name of the committee that made the ethical evaluation = Kirşehir Ahi Evran University Social and Humanities Scientific Research and Publication Ethics Committee

Date of ethical review decision= 22.09.2022

Ethics assessment document issue number= 2022/07/07

Findings

A total of 292 athletes participated in the study. Table 1 shows the distribution with regards to their gender and licensed sports status.

Table 1. *Frequency and percentage distributions of demographic features*

Demographic Features		n	Percentage (%)
Gender	Female	95	32.5
	Male	197	67.5
Age	Aged 17-18	139	47.6
	Aged 19-20	112	38.4
	Aged 21 and over	41	14.0

Accordingly, 53.80% (n=197) of the participants were male while 32.50% (n=95) of them were female. 47.60% (n=139) of the participants were aged between 17-18, 32.40% (n=112) of them were between 9-20, and 14.0% (n=41) were 21 years and older. (Table 1).

Descriptive Statistics

Descriptive statistics were applied to determine the level of mindfulness, competitive state anxiety sub-dimension and track performance mean scores of the athletes. The results obtained are shown in Table 2.

Table 2. *Average scores of athletes*

Sun Dimensions	n	x̄	ss	Min	Max	Skewness	Kurtosis
Cognitive Anxiety	292	8.92	3.15	4.00	16.00	0.564	-0.371
Physical Anxiety	292	18.49	7.65	10.00	40.00	1.009	0.264
Self Confidence	292	33.14	5.82	10.00	40.00	-0.888	0.637
Mindfulness	292	63.32	6.71	40.00	87.00	-0.014	1.355
Track Performance	292	27.59	28.69	0.00	100.00	0.748	-0.565

Athletes' mindfulness total score average is found x̄=63.32±6.71 while their track performance average score is x̄=27.59±28.69. When the competitive state anxiety sub-dimension score averages are examined, it is seen that cognitive anxiety mean score is x̄=8.92±3.15, physical anxiety mean score is x̄=18.49±7.65, and self confidence mean score is x̄=33.14±5.82.

Inferential Statistics

Results Related to Hypothesis 1

Pearson moment-product correlation coefficient at p=0.05 significance level was used to determine whether there was a significant relationship between the mindfulness, competitive state anxiety sub-dimensions and track performances of the athletes. The results obtained are shown in Table 3.

Table 3. *Correlations of mindfulness, competitive state anxiety and track performance*

Scales		Cognitive Anxiety	Physical Anxiety	Self Confidence	Track Performance
Mindfulness	r	-0.152**	-0.192**	0.317**	0.151**
	p	0.009	0.001	0.000	0.010
	n	292	292	292	292

** Correlation is significant at the 0.01 level (2-tailed).

Normality and linearity assumptions were checked by preliminary analysis. When Table 3 is examined, the results show that there is a weak negative correlation between mindfulness, cognitive anxiety and physical anxiety (rCognitive Anxiety=-0.15, p<0.01; rPhysical Anxiety=-0.19, p<0.01). Despite this, it is also seen that there is a moderate positive correlation between mindfulness and self-confidence (r=0.31, p<0.01), and a weak positive correlation between mindfulness and track performance (r=0.15, p<0.01).

Results Related to Hypothesis 2

The MANOVA test performed to determine whether categorical mindfulness levels have an effect on competitive state anxiety sub-dimensions is shown in Table 4.

Table 4. *MANOVA results of athletes' competitive state anxiety levels according to their mindfulness levels*

Wilks' Lambda	F	Hypothesis df	Error df	p
0.878	6.450	6	574	0.000

The results of MANOVA reveal that there is a significant difference in the sub-dimensions of the CSAS (Competitive State Anxiety Scale) depending on the mindfulness levels of the athletes (WilksL(λ)=.878; F (6.574) =6.450; p<0.05). This finding indicates that the scores to be obtained from the linear component consisting of sub-dimension scores vary depending on the level of mindfulness.

Since there was a significant difference in the MANOVA test, ANOVA test was performed in order to examine how the group averages differed according to mindfulness levels. The results are shown in

Table 5. When the ANOVA results were evaluated at 0.016 significance level using Bonferroni adjusted alpha level, signifiant differences were found in the dimensions of physical anxiety (F (2.290)=5.10, p=0.007) and self-confidence (F(2.449)=14.45, p=0.00).

Table 5. *ANOVA results of athletes' competitive state anxiety levels according to their mindfulness levels*

Sub Dimensions	Categorical Mindfulness	n	x̄	ss	F	p	Dif
Cognitive Anxiety	Low[1]	33	9.24	2.85	3.85	0.022	No
	Moderate[2]	212	9.13	3.24			
	High[3]	47	7.77	2.72			
Physical Anxiety	Low[1]	33	21.27	7.46	5.10	0.007	1>3
	Moderate[2]	212	18.63	7.72			
	High[3]	47	15.87	6.75			
Self Confidence	Low[1]	33	28.79	8.10	14.45	0.000	3>2-1
	Moderate[2]	212	33.29	5.34			
	High[3]	47	35.53	4.33			

p<0.05*

Results Related to Hypothesis 3

One-Way ANOVA test was applied at a=0.05 significance level in order to determine whether the level of categorical mindfulness makes a difference on the track performance of the athletes. The results of the analysis are shown in Table 6.

Table 6. *ANOVA results of athletes' track performances according to mindfulness levels*

Dependent Variable	Categorical Mindfulness	n	x̄	ss	F	p	Dif
Track Performance	Low[1]	33	16.67	23.54	3.54	0.030	3>1
	Moderate[2]	212	27.92	28.60			
	High[3]	47	33.72	30.74			

p<0.05*

The results of the analysis show that the track performances of the athletes differ according to their mindfulness levels (F(2.289)=3.54, p=0.030). As a result of the Tukey test conducted to determine the source of the difference, the track performance of the athletes with high mindfulness level (x̄=33.72±30.74) was found to be significantly higher than the athletes with low mindfulness level (x̄=16.67±23.54).

Discussion and Conclusion

Athletes care about the results of a competition or contest. Therefore, it is usual for them to feel anxious before and during sportive activities. On the other hand, having high levels of attention and focus may help them feel more comfortable and increase their performance within the developing and changing conditions during sportive activities. From this point of view, the relationship between athlete mindfulness, anxiety and performance was analysed in the current study.

When the descriptive statistics of the athletes were analysed, it was seen that their self-confidence, attention and focusing levels were slightly above the average. Nevertheless, it can be said that they experience moderate levels of physical and cognitive anxiety. Cerit et al. (2013) found that there was a significant difference (p<0.05) between anxiety levels and performances of female basketball players and suggested that anxiety levels of athletes should be kept under control. In his study, carried out with 75 university basketball players, Özerkan (2003) reported that there was a negative relationship between competition anxiety and performance. Based on both the results of the

research and the studies in the literature, it is obvious that anxiety before the competition is a psychological state that occurs at certain levels in athletes.

It can be said that there is a moderate level of relationship between athletes' awareness of their emotions and thoughts and their ability to overcome difficulties. Furthermore, it can be suggested that athletes who do not have problems focusing on their sports performance and who are not easily distracted experience less anxiety and lower levels of physical anxiety regarding their sports performance. In other words, even at a low level, the increase in mindfulness of athletes may lead to a decrease in physical and cognitive anxiety levels. Based on these findings, it can be said that hypothesis H_1 is supported. Kısmetoğlu (2019) states in his study that as the level of mindfulness increases, the level of anxiety decreases. Yalçın et al. (2023) pointed out in their study that mindfulness should be high in order to decrease competition anxiety in female volleyball players. Demir (2017) states that cognitive-based mindfulness practices reduce the anxiety levels of university students. Research results showing that cognitive mindfulness and cognitive mindfulness practices reduce anxiety levels are consistent with the findings of the current study.

Athletes who have high levels of attention and focus, and are aware of their emotions and thoughts, are better able to control their physical reactions and have higher levels of self-efficacy in overcoming difficulties during competitions or races. In other words, high levels of mindfulness in athletes can help them have self-confidence and keep their bodily reactions under control. The results also support hypothesis H_2. Kabat-Zinn (2021) states that mindfulness practices are effective in reducing the frequency and severity of anxiety. In addition, Gültekin Arayıcı and Arayıcı (2022) points to the fact that mindfulness has a positive effect on sportive performance. Thus, in order to reduce and control anxiety in athletes, mindfulness practices should be apllied to athletes as well.

Track performances of the athletes who did not have problems in focusing on their instant performance and who did not have problems in refocusing on their instant performance when they were in negative emotions were froun to be at higher levels. In other words, it can be said that the mindfulness levels of the athletes were effective on their track performances. This result proves the effect of mindfulness on sportive performance. These findings support hypothesis H_3. Bühlmayer et al. (2017) state that mindfulness positively affects sportive performance. Accordingly, Eubank and Gilbourne (2003) stresses that mindfulness is effective in reducing the stress caused by high pressure in the competition. Therefore, it can be said that mindfulness contributes to athletes to control their stress situations at the moment of competition. In other words, it can be specified that mindfulness has a positive effect on sportive performance.

Recommendations

As a result, it can be said that with the increase in mindfulness, cognitive anxiety and physical anxiety levels may decrease and athletes' self-confidence may increase as well. In addition, there were significant relationships between athletes' mindfulness and their track performance. It was observed that athletes with high levels of mindfulness experienced lower levels of physical anxiety and had higher levels of self-confidence. Similarly, athletes with higher levels of mindfulness had higher track performance.

All of these results suggest that high levels of mindfulness are necessary for athletes to improve their sport performance and reduce competitive anxiety. Therefore, coaches are encouraged to implement mindfulness practices/exercises for their athletes.

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BIOGRAPHICAL NOTES

Contribution Rate of Researchers

Author 1: 50%

Author 2: 50%

Conflict Statement

There is no conflict of interest in the research.

Genişletilmiş Türkçe Özet

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Bilinçli Farkındalık ve Durumluk Kaygı ile Parkur Performansı Arasındaki İlişkinin İncelenmesi

Giriş

Bilinçli farkındalık kavramı, bireyin yaptığı işin farkında olması şeklinde yorumlanabilir. Halk dilinde; *"Yaptığının farkında mısın?"* sorusu bir önceki cümledeki tanımın açıklayıcısı olabilir. Sporun doğası gereği, sporcu, saniye ve hatta saliseler içinde karar almakta ve uygulamaktadır. Dolayısı ile sporcunun yapmakta olduğu işin farkındalık derecesi bilinçli farkındalığını belirleyebilir. Literatüre bakıldığında Kabat-Zinn, *"bilinçli farkındalığı yaşantı içindeki olayları dikkat odağı içinde gerçekleştirilmesi"* olarak ifade etmektedir (Akt. Aktepe ve Tolan, 2020). Literatürde bilinçli farkındalık ve sportif performans ilişkisine dair bulgular yer almaktadır; dahası, bilinçli farkındalık uygulamalarının kaygı sıklığını ve şiddetini gözle görünür oranda azalttığı yapılan uygulamalarca bilinmektedir (Kabat-Zinn, 2021). Bunun yanı sıra, bilinçli farkındalık egzersizlerine sportif performans açısından bakıldığında sportif performansı olumlu yönde etkilediği görülmektedir (Bühlmayer vd., 2017). Farkındalık, sporcuların bir müsabakada yüksek baskıya maruz kaldıklarında ortaya çıkan stres durumunu algılamalarını azaltır (Eubank & Gilbourne, 2003). Dahası, farkındalık, sporcuların olumsuz düşünceleri ortadan kaldırmasına ve kaygıyı kontrol etmesine yardımcı olur. Bu nedenle sporcuların kendi becerilerine odaklanmalarına yardımcı olur ve sportif performanslarına katkı sağlar (Beşer, 2023).

Bu bilgiler ışında bu araştırmanın amacı, bilinçli farkındalık, yarışmasal durumluk kaygı ve parkur performansı arasındaki ilişkinin incelenmesidir. Ayrıca sporcuların bilinçli farkındalık düzeylerinin yarışmasal durumluk kaygı ve parkur performansı üzerindeki etkisini incelemek bu araştırmanın bir diğer amacıdır.

Bu amaç doğrultusunda araştırmanın hipotezleri aşağıdaki gibidir:

H_1: Sporcuların bilinçli farkındalık düzeyleri ile yarışmasal durumluk kaygı alt boyutları ve parkur performansı arasında anlamlı bir ilişki vardır.

H_2: Sporcuların yarışmasal durumluk kaygı düzeyleri bilinçli farkındalık düzeylerine göre farklılaşır.

H_3: Sporcuların parkur performansları bilinçli farkındalık düzeylerine göre farklılaşır.

Yöntem

Araştırmada, nicel araştırma yöntemlerinden tarama modeli kullanılmıştır. Araştırmada sporcuların kategorik bilinçli farkındalık düzeylerinin yarışmasal durumluk kaygı ve parkur performansları üzerinde farklılık yaratıp yaratmadığını belirlemek ve kavramlar arasındaki ilişkileri ortaya koyabilmek amacıyla kavramsal model oluşturulmuştur. Araştırma kapsamında, 2022-2023 eğitim-öğretim döneminde Kırşehir Ahi Evran Üniversitesi (KAEÜ) Özel Yetenek Sınavına (ÖYS) giren toplamda 292 sporcunun verileri analize dâhil edilmiştir. Örneklem sayısının tespiti için popülasyon-örneklem tablosu kullanılmıştır. Evren sayısının 1.100 olması koşuluyla %95 güven düzeyinde ve %5 güven aralığında örneklem temsili için en az 285 katılımcıya ihtiyaç duyulduğu belirtilmektedir (Cohen vd., 2018). Buna göre örneklem büyüklüğünün evreni temsil ettiği söylenebilir. Bu çalışmada kolayda örnekleme yöntemi kullanılmıştır.

Veriler yüz yüze veri toplama tekniği ile toplanmıştır. Araştırmada bireylerin demografik bilgileri (cinsiyet, yaş ve benzeri) tespit edilmiş sonrasında ise bilinçli farkındalık ve yarışmasal durumluk kaygı ölçeği ile kullanılarak veriler toplanmıştır. Ayrıca sporcuların parkur performanslarını değerlendirebilmek için KAEÜ Spor Bilimleri Fakültesi ÖYS sonuçları kullanılmıştır. Sporcuların verileri SPSS 26.0 programı ile analiz edilmiştir. Analizler öncesinde verilerin normallik dağılımları incelenmiş ve verilerin normal dağılım gösterdiği görülmüştür (George & Mallery, 2016). Belirtilen ön incelemelerden sonra 292 sporcunun ölçeklere vermiş oldukları cevapların puan ortalamaları doğrultusunda tanımlayıcı istatistikler, Pearson korelasyon testi ve MANOVA testi kullanılmıştır. Ayrıca anlamlı farklılaşmanın kaynağının tespiti için Bonferroni uyarlanmış test sonuçları uygulanmıştır. Veriler p=0.05 anlamlılık düzeyinde sınanmıştır.

Bulgular

Araştımada yer alan katılımcıların dağılımları incelendiğinde; %53,80'i (n=197) erkek, %32,50'si (n=95) kadındır. Katılımcıların %47,60'ı (n=139) 17-18 yaş aralığında, %32,40'ı (n=112) 9-20 yaş aralığında ve %14,0'ı (n=41) 21 yaş ve üzerinde olduğu görülmüştür. Tanımlayıcı istatistikler incelendiğinde; sporcuların bilinçli farkındalık toplam puan ortalaması $\bar{x}$=63.32±6.71, koşu performans ortalama puanları $\bar{x}$=27.59±28.69 olarak bulunmuştur. Yarışmasal durumluk kaygı alt boyut puan ortalamaları incelendiğinde bilişsel kaygı puan ortalamasının $\bar{x}$=8,92±3,15, fiziksel kaygı puan ortalamasının $\bar{x}$=18,49±7,65 ve kendine güven puan ortalamasının $\bar{x}$=33,14±5,82 olduğu görülmektedir.

Hipotez test sonuçları ise şu şekildedir: Sporcularda bilinçli farkındalık ile bilişsel kaygı (r=-0.15, p<0.01) ve bedensel kaygı (r=-0.19, p<0.01) arasında negatif yönlü zayıf düzeyde; bilinçli farkındalık ile parkur performansı arasında pozitif yönde zayıf düzeyde (r=0.15, p<0.01); bilinçli farkındalık ile kendine güven arasında pozitif yönde orta düzeyde (r=0.31, p<0.01) anlamlı ilişkiler tespit edilmiştir. Bilinçli farkındalık düzeyi yüksek sporcuların anlamlı bir şekilde daha düşük düzeyde bedensel kaygı yaşadıkları ($\bar{x}$=15.87±6.75) ve daha yüksek düzeyde kendine güven hissettikleri ($\bar{x}$=35.53±4.733)

görülmüştür. Yine, bilinçli farkındalık düzeyi yüksek sporcuların anlamlı bir şekilde daha yüksek düzeyde parkur becerilerine sahip oldukları görülmüştür ($\bar{x}$=33.72±30.74).

Tartışma ve Sonuç

Sporcuların duygu ve düşüncelerinin farkında olması ile zorlukların üstesinden gelebilme inancının orta düzeyde ilişkili olduğu söylenebilir. Yine, sportif performansına odaklanmada sorun yaşamayan, dikkati dağılmayan sporcuların sportif performans konusunda daha az endişelendikleri ve daha düşük düzeylerde bedensel endişe yaşadıkları söylenebilir. Bu doğrultuda H_1 hipotezinin desteklendiği görülmektedir. Dikkat ve odaklanma düzeyleri yüksek; duygu ve düşüncelerinin farkında olan sporcuların müsabaka veya yarışma sırasında hem beden tepkilerini daha iyi kontrol ettikleri hem de zorlukların üstesinden gelebilme inançlarının daha yüksek seviyelerde olduğu söylenebilir. Elde edilen bu bulgular ile H_2 hipotezinin desteklendiği görülmektedir. Anlık performansına odaklanmada sorun yaşamayan ve negatif duygular içinde olduğunda yeniden anlık performansına odaklanmada sorun yaşamayan sporcuların parkur performanslarının daha yüksek düzeylerde olduğu görülmüştür. Bu sonuç, farkındalığın sportif performans üzerindeki etkisini kanıtlar niteliktedir. Elde edilen bu bulgular ile H_3 hipotezinin desteklendiği görülmektedir. Sonuç olarak, bilinçli farkındalığın artışı ile bilişsel kaygı ve bedensel kaygı düzeylerinin azalabileceğinin yanı sıra sporcuların kendine güveninin artabileceği söylenebilir. Ek olarak, sporcu bilinçli farkındalığı ile parkur performansı arasında da anlamlı ilişkiler olduğu görülmüştür. Bilinçli farkındalık düzeyleri yüksek sporcuların daha düşük düzeylerde bedensel kaygı yaşadıkları ve kendilerine daha yüksek düzeyde güven duydukları görülmüştür. Benzer şekilde, bilinçli farkındalık düzeyleri yüksek sporcuların parkur performansları daha yüksektir.

Öneriler

Tüm bu sonuçlar sporcuların sportif performanslarını artırmaları ve daha düşük düzeylerde yarışmasal durumluk kaygı yaşamaları için bilinçli farkındalık düzeylerinin yüksek olması gerektiğini göstermektedir. Bundan dolayı, özellikle antrenörlere sporcuları için bilinçli farkındalık uygulamaları/alıştırmaları yaptırmaları önerilmektedir.