

Investigation of conscious mindfulness levels of individuals doing sports in the context of fitness centers in terms of various variables

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Abstract

Athlete conscious mindfulness is defined as athletes being aware of their physical and mental states during their training and performance, and increasing their ability to focus and concentrate. Since this level of conscious awareness can directly affect sports performance, determining the awareness levels of individuals who do sports is important for both performance development and the efficiency of training processes. Based on this importance, the purpose of the research was determined as investigating the conscious awareness levels of individuals who do sports in fitness centers. The research was conducted with the voluntary participation of 295 people. A personal information form prepared by the researcher was used to collect personal data, and the Athlete Mindfulness Scale was used to collect athlete mindfulness data. In the analysis of the data, independent samples t-test, one-way analysis of variance (ANOVA), and Tukey test were used. In general, when the research results are examined, it is seen that gender, education level and time spent on sports are not factor variables on the conscious awareness levels of individuals who do sports in fitness centers; it is seen that the status of doing sports research and having a training program or not are factor variables. This finding indicates that implementing a training program and conducting sports research can increase attention, mindfulness and confidence. As a result, the higher conscious mindfulness levels of individuals who do sports research are an indication that learning about sports and doing research can deepen this process. The higher conscious mindfulness levels of individuals who have a training program reveal that doing regular and planned sports can increase conscious mindfulness.

Keywords: Athlete, Fitness center, Mindfulness, Sports

Fitness salonları bağlamında spor yapan bireylerin bilinçli farkındalık düzeylerinin çeşitli değişkenler açısından incelenmesi

Öz

Sporcu bilinçli farkındalık, sporcuların antrenman ve performansları sırasında fiziksel ve zihinsel durumlarının farkında olma, odaklanma ve konsantrasyon yeteneklerini artırma olarak tanımlanmaktadır. Bu bilinçli farkındalık düzevi, spor performansını doğrudan etkileyebileceği için spor yapan bireylerin farkındalık düzeylerinin belirlenmesi hem performans gelişimi hem de antrenman süreçlerinin verimliliği açısından önem arz etmektedir. Bu önemden yola çıkarak araştırmanın amacı fitness salonlarında spor yapan bireylerin bilinçli farkındalık düzeylerinin araştırılması olarak belirlenmiştir. Araştırma, 295 kişinin gönüllü olarak katılımı ile yürütülmüştür. Araştırmada kişisel verileri toplamak için araştırmacı tarafından hazırlanan kişisel bilgi formu ve sporcu bilinçli farkındalık verilerini toplamak için Sporcu Bilinçli Farkındalık Ölçeği kullanılmıştır. Verilerin analizi işlemlerinde t-testi, tek yönlü varyans analizi ANOVA ve Tukey testi kullanılmıştır. Genel olarak, araştırma sonuçları incelendiğinde, fitness salonlarında spor yapan bireylerin bilinçli farkındalık düzeyleri üzerinde cinsiyet, eğitim seviyesi ve spora ayrılan sürenin etken bir değişken olmadığı; spor araştırması yapma durumu ve antrenman programına sahip olup olmama durumlarının etken birer değişken olduğu görülmüştür. Bu bulgu, antrenman programı uygulamanın ve spor araştırmaları yapmanın dikkat, farkındalık ve güveni artırabileceğine işaret etmektedir Sonuç olarak spor araştırmaları yapan bireylerin bilinçli farkındalık düzeylerinin daha yüksek olması, spor hakkında bilgi edinmenin ve araştırmanın bu süreci derinleştirebileceğinin göstergesidir. Antrenman programı olan bireylerin bilinçli farkındalık düzeylerinin daha yüksek olması, düzenli ve planlı spor yapmanın bilinçli farkındalığı artırabileceğini ortaya koymaktadır.

Anahtar Kelimeler: Bilinçli farkındalık, fitness salonu, spor, sporcu

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INTRODUCTION

Today, as technology continues to rapidly advance, the number of tools and devices that facilitate human life is also increasing. While the development of technology brings many positive aspects, it is also observed to cause negative effects such as the limitation of people's physical activity and subsequently adopting lifestyles that are not in harmony with human nature (Akça & Sunay, 2012). Human beings are adapting to the modern world, and as a result, they are being pushed towards a sedentary lifestyle (Dönmez & Aydos, 2000). A sedentary lifestyle, which creates a negative situation for people, has led people who have adopted this lifestyle with the conveniences brought by the modern world to sports in order to overcome inactivity (Woessner et al., 2021). The primary aim of doing sports is to prevent the physical, psychological, and organic negative consequences that a sedentary lifestyle can bring, as well as to maintain and enhance physical health and fitness (Zorba, 2012).

A sedentary lifestyle negatively affects human health (Çolakoğlu, 2003). People who are aware of this turn to sports to protect themselves physically, psychologically, and spiritually. Although socialization and urbanization limit people's physical activity, the rapid increase in sports centers and gyms in recent years has created opportunities for people to engage in sports. It is known that the most preferred methods in these centers and gyms are fitness and bodybuilding (Berk & Bingöl, 2023). The growing importance of sports paves the way for an increasing number of members attending places that facilitate sports activities, such as sports centers, fitness, bodybuilding, and pilates studios (Ferrand et al., 2010). These centers and studios provide various physical activities aimed at regulating physical form and maintaining health, offering fun exercises without a sense of competition (Sassatelli, 2015). According to research on fitness and bodybuilding sports, it is observed that people largely meet their expectations in sports centers and gyms (Kumartaşlı & Atabaş, 2015).

Individuals who go to gyms to exercise, train, and engage in physical activity are aware that rapidly advancing technology and urbanization are limiting their physical activity. In addition, individuals who exercise are also aware of the health, physical appearance, and psychological benefits of sports. In this context, athletes who are aware of the physical and psychological effects of sports also understand the importance of mental awareness in order to increase their performance, and in this direction, the effects of conscious awareness on sports performance are increasingly being investigated. Gardner & Moore (2004) argue that the increase in athletic performance is related to the level of mindfulness. Mindfulness, which originated from Eastern meditation traditions, has become a method of focused attention widely

adopted in Western cultures (Kabat-Zinn, 2003). Brown & Ryan (2003) describe mindfulness as continuous attention and awareness of the present moment. Shapiro et al. (2006) define it as a method that maintains mental health by controlling the repetition of habits resulting from the discordance of internally and externally acquired experiences.

The ability of individuals who exercise to enhance their performance is related to their level of attention and mindfulness (Gür & Alataş, 2022). Klinger et al. (1981) state that increasing an athlete's level of mindfulness will lead to an improvement in sports performance. Gardner and Moore (2004) argue that developing the level of mindfulness is necessary to enhance sports performance. When the mindfulness levels of athletes are determined and their thoughts, feelings and behaviors during training are revealed, mental training programs can be created for their individual needs and their performance can be increased. In addition, thanks to this evaluation, athletes can better understand their strengths and weaknesses and increase their performance in a sustainable way. Considering these situations, determining the mindfulness levels of individuals who do sports in fitness centers and examining them according to various variables will contribute to sports for everyone and will also be a step towards encouraging society's participation in sports. In addition, revealing the athlete mindfulness levels of sedentary individuals will pave the way for them to increase their performance and increase their chances of becoming elite athletes. In this context, determining the mindfulness levels of athletes is seen as an important factor. A review of the literature reveals research on mindfulness in sports (De Petrillo et al., 2009; Gardner & Moore, 2012; Baltzell & Akthar, 2014; Cathcart et al., 2014; Thienot et al., 2014; Moen et al., 2015; Bühlmayer et al., 2017; Gardner & Moore, 2017; Josefsson et al., 2017; Çarraça et al., 2018; Esentürk & Yalçın, 2019; Josefsson et al., 2019; Aygün, 2020; Gardner & Moore, 2020; Hussey et al., 2020; Tingaz, 2020; Alper et al., 2021; Kozak & Zorba, 2021; Topal et al., 2021; Vural & Ilyas, 2021; Gür & Alataş, 2022; Ekiz et al., 2023; Yalçın et al., 2023). The importance of mindfulness in sports is clearly seen in the studies in the literature. When the studies in the literature are examined, it is seen that the study groups of the studies on mindfulness conducted on athletes mainly consist of high school students, students of the faculty of sports sciences and individuals who do sports professionally. It is thought that this study will contribute to the literature by differentiating from other studies in the literature in that it aims to determine the mindfulness levels of individuals who do sports in fitness centers in terms of some variables. In this context, answers to the following questions were sought in the research process;

Do the mindfulness levels of individuals who do sports in fitness centers differ significantly according to the gender variable?

Do the mindfulness levels of individuals who do sports in fitness centers differ significantly according to the educational status variable?

Do the mindfulness levels of individuals who do sports in fitness centers differ significantly according to the time allocated to sports?

Do the mindfulness levels of individuals who do sports in fitness centers differ significantly according to the variable of having a training program or not?

Do the mindfulness levels of individuals who do sports in fitness centers differ significantly according to the variable of doing sports research or not?

METHOD

Model of the research

In this research, the survey model, one of the quantitative research models, was used. The survey model is a research approach that aims to describe a situation as it exists in the past or present (Karasar, 2006) and is the most commonly used method in quantitative research models (Tabachnick & Fidell, 2013). The survey model is a model in which generalizations can be made. Based on the data obtained from the sample, generalizations can be made to the represented universe (Cohen et al., 2007). Among the survey methods, the descriptive survey model was preferred. Descriptive survey is a survey model used in studies conducted with large groups, where the opinions and ideas of group members on a subject are gathered, and phenomena are described and expressed (Karakaya, 2012).

Research groups

The universe of the study consists of athletes in fitness centers in Kırşehir (Turkey) in 2023. 295 athletes randomly selected from this universe constitute the study sample. Volunteering was sought in filling out the measurement tools.

Data collection tools

A personal information form was used to determine the participants' gender, educational status, weekly sports activity duration, whether they had a training program, and whether they had conducted sports research. Additionally, the Athlete Mindfulness Scale, developed by Thienot et al. (2014) and adapted into Turkish by Tingaz (2020), was used to collect data on athlete mindfulness. Cronbach's alpha internal consistency coefficient of the athlete awareness scale adapted to Turkish by Tingaz (2020) was calculated as .82 for the overall scale, α =.81 for

the Awareness sub-dimension, α =0.70 for the Non-Judgment sub-dimension, and α =0.77 for the Refocus sub-dimension. However, Cronbach's alpha internal consistency coefficient of the data collected within the scope of our study was calculated as .76 for the overall scale, α =0.70 for the Awareness sub-dimension, α =0.77 for the Non-Judgmental sub-dimension, α =0.68 for the Refocus sub-dimension. The purpose of the measurement tool is to determine the conscious awareness levels of athletes. Athlete Mindfulness Scale: The scale consists of a total of 15 items and includes the sub-dimensions of awareness (5 items), non-judgment (5 items), and refocusing (5 items). It is structured as a 6-point Likert scale ranging from almost never, very rarely, rarely, sometimes, often, to almost always.

Data collection

In this study, in which the athlete mindfulness levels of individuals doing sports in fitness centers were examined according to various variables, data were collected online using a scale prepared via Google Forms.

Data analysis

Missing and incorrect data entries were checked in the SPSS 25.0 program. After examining the data, the total mindfulness scores of the participants were calculated and the extreme values were examined. Skewness and kurtosis coefficients were calculated to evaluate normality. Since the data showed a normal distribution (Table 2), parametric tests were applied. In the analyses, it was observed that the variances were distributed homogeneously (Levene's Test). In this regard, independent samples t-test was used for different pairs of groups, and an ANOVA test was used for groups of more than two. The Tukey test was used to examine the relationship between variables in the ANOVA test. When the data collected within the scope of the research was examined, it was seen that the number of high school graduate athletes was 29, the number of undergraduate graduate athletes was 68 and the number of postgraduate graduate athletes was 198. For variance analysis, the ratio of the groups to each other should not exceed 3-4 times (Tabachnick & Fidell, 2013). While the High School subgroup was 29, the Postgraduate subgroup was 198 and the ratio of these groups to each other was 6.82. Accordingly, a balanced distribution of the groups was not achieved. Therefore, the examinations according to the educational status variable were made between athletes with undergraduate and postgraduate degrees.

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Ethical approval

The study received ethical approval from the of Kırşehir Ahi Evran Universit Social and Humanities Scientific Research and Puplication Ethics Committee, dated 15.06.2023 and numbered 010.99-00000531624.

RESULTS

In this study, where the mindfulness levels of individuals doing sports in fitness centers are examined according to various variables, the demographic information of the participants is shown in Table 1.

FINDINGS

Table 1. Demographic information of the study sample

Independent variables	Groups	Ν	%
Gender	Female	143	48.5
Gender	Male	152	51.5
	High School	29	9.8
Educational Level	Undergraduate	68	23.1
	Postgraduate	198	67.1
	1 day per week	40	13.6
	2 day per week	50	16.9
Time Allocated to Sports	3 day per week	69	23.4
_	4 day per week	83	28.1
	5 days per week and above	53	18.0
Tusinin - Drosener	Yes	174	59.0
Training Program	No	121	41.0
	Yes	198	67.1
The Situation of Doing Sports Research	No	97	32.9
	Total	295	100

When examining the study sample: 48.5% (143) of the participants are female, and 51.5% (152) are male; 9.8% (29) are high school graduates, 23.1% (68) have a undergraduate degree, and 67.1% (198) have a postgraduate degree; 13.6% (40) exercise one day a week, 16.9% (50) exercise two days a week, 23.4% (69) exercise three days a week, 28.1% exercise four days a week, and 18% (53) exercise five or more days a week. While 59% (174) of the participants have a training program, 41% do not have one. Additionally, 67.1% (198) of the participants conduct sports research, while 32.9% do not.

A normality test was conducted for the analysis of the research data. The results of the normality test are shown in Table 2.

		Skewness	Kurtosis
General	Statistics	0.859	0.796
General	Std. Error	0.142	0.283
A	Statistics	-0.624	0.888
Awareness	Std. Error	0.142	0.283
Non indomental	Statistics	0.866	0.241
Non-judgmental	Std. Error	0.142	0.283
Defeave	Statistics	-0.220	-0.227
Refocus	Std. Error	0.142	0.283

Table 2. Normality data

The skewness and kurtosis coefficients for the overall scale score and its sub-dimensions were found to be within the ± 1 range. According to this result, the data are considered to be normally distributed (George & Mallery, 2010; Tabachnick & Fidell, 2013).

During the research process, the athlete conscious mindfulness levels of individuals who do sports in gyms were examined according to variables such as gender, educational background, participation in sports research, existence of a training program and time devoted to sports. Data pertaining to each variable was presented in separate tables.

	Gender	Ν	Mean	St. Deviation	df	t-test	р
Carraral	Female	143	4.19	0.668	293	0.266	0.715
General	Male	152	4.16	0.571	279.960	0.366	0.715
	Female	143	5.18	0.586	293	1.027	0.054
Awareness	Male	152	5.05	0.562	279.960	1.937	0.054
	Female	143	2.64	1.29	293	0.00	0.400
Non-judgmental	Male	152	2.75	1.21	279.960	-0.692	0.486
	Female	143	4.74	0.713	293	0.500	0.550
Refocus	Male	152	4.69	0.742	279.960	0.599	0.550

Table 3. T-Test results according to gender variable

When examining Table 3, it is observed that the mean scores of females (\overline{X} =4.19) on the athlete conscious awareness scale are slightly higher than those of males (\overline{X} =4.16) overall. Regarding subscales, females have higher averages in the awareness and refocusing subscales, while males have higher averages in the non-judgment subscale. Independent samples t-tests were conducted to determine if the differences in means between groups are significant. The results indicate that there are no significant differences in mean scores between groups overall and across all subscales (p > 0.05).

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Program	Ν	Mean	St. Deviation	df	t	р	Cohen's d
$ \frac{N_0}{A_{wareness}} = \frac{Ves}{N_0} = \frac{121}{5.07} + \frac{4.05}{0.577} + \frac{272.263}{272.263} + \frac{1000}{0.000} + \frac{1000}{0.000}$		Yes	174	4.27		293			
Awareness No 121 5.07 0.538 272.263 1.225 0.222 Non-judgmental Yes 174 2.79 1.266 293 1.595 0.112 No 121 2.59 1.222 272.263 1.595 0.112 Refocus Yes 174 4.86 0.690 293 4.073 0.000^* 0.44	General	No	121	4.05	0.577	272.263	3.049	0.003*	0.3
No 121 5.07 0.538 272.263 Non-judgmental Yes 174 2.79 1.266 293 No 121 2.59 1.222 272.263 1.595 0.112 Refocus Yes 174 4.86 0.690 293 4.073 0.000* 0.44	A	Yes	174	5.15	0.601	293	1 225	0.000	
Non-judgmental No 121 2.59 1.222 272.263 1.595 0.112 Refocus Yes 174 4.86 0.690 293 4.073 0.000* 0.4	Awareness	No	121	5.07	0.538	272.263	1.225	0.222	
No 121 2.59 1.222 272.263 Yes 174 4.86 0.690 293 4.073 0.000* 0.4	Neg indemental	Yes	174	2.79	1.266	293	1 505	0.112	
Refocus 4.073 0.000 * 0.4	Non-judgmentai	No	121	2.59	1.222	272.263	1.595		
	Refocus	Yes	174	4.86	0.690	293	4 073	0.000*	0.4
No 121 4.51 0.735 272.263		No	121	4.51	0.735	272.263	4.075	0.000	0.4

Table 4. T-Test results according to training program variable

p<0.05*

When examining Table 4, it is observed that the mean scores of individuals with a training program (\overline{X} =4.27) on the athlete conscious awareness scale are higher than those without a training program (\overline{X} =4.05) overall. Similarly, in the refocusing subscale, those with a training program have higher averages (\overline{X} =4.86) compared to those without a training program (\overline{X} =4.51). Higher averages are also noted for the awareness and non-judgment subscales among those with a training program. To determine if the differences in means between groups are significant, independent samples t-tests were conducted. The results show that there are significant differences in mean scores between groups overall and in the refocusing subscale (p < 0.05), indicating that individuals with a training program have higher scores. However, there were no significant differences in the awareness and non-judgment subscales (p > 0.05). While the effect size of the significant difference seen in the overall scale is small (Cohen's d = 0.3), the effect size seen in the refocus sub-dimension is medium (Cohen's d = 0.4).

	Research	Ν	Mean	St. Deviation	df	t	р	Cohen's d
General	Yes	198	4.27	0.627	293	3.660	0.000*	0.4
General	No	97	3.99	0.561	211.109	3.000	0.000*	0.4
	Yes	198	5.16	0.595	293	1.050	0.052	
Awareness	No	97	5.02	0.527	211.109	1.950	0.052	
Non-	Yes	198	2.77	1.267	293	1 469	0.142	
judgmental	No	97	2.54	1.211	211.109	1.468	0.143	
Deferre	Yes	198	4.87	0.677	293	5 225	0.000*	0.0
Refocus	No	97	4.41	.0732	211.109	5.325	0.000*	0.9

Table 5. T-Test results according to the variable of whether to do sports research or not

p<0.05*

When examining Table 5, it is evident that the mean scores of individuals engaged in sports research (\overline{X} =4.27) on the athlete conscious awareness scale are higher than those who do not engage in sports research (\overline{X} =3.99) overall. Similarly, in the refocusing subscale, those

engaged in sports research have higher averages (\overline{X} =4.87) compared to those who do not (\overline{X} =4.41). Higher averages are also observed for the awareness and non-judgment subscales among those engaged in sports research. To determine if the differences in means between groups are significant, independent samples t-tests were conducted. The results show that there are significant differences in mean scores between groups overall and in the refocusing subscale (p <0.05), indicating that individuals engaged in sports research have higher scores. However, there were no significant differences in the awareness and non-judgment subscales (p> 0.05). While the effect size of the significant difference seen in the overall scale is at a medium level (Cohen's d = 0.4), the effect size seen in the refocus sub-dimension is large (Cohen's d = 0.9).

	Education Status	Ν	Mean	St. Deviation	df	t	р	Cohen's d
General	Undergraduate	68	4.27	0.599	264	1.672	0.096	
General	Postgraduate	198	4.13	0.607	117.179	1.072		
A	Undergraduate	68	5.05	0.605	264	1 522	0.107	
Awareness	Postgraduate	198	5.17	0.525	117.179	-1.532	0.127	
Non-	Undergraduate	68	2.90	1.256	264	2 00 1	0.046*	0.2
judgmental	Postgraduate	198	2.55	1.236	117.179	2.001		0.2
Deferme	Undergraduate 68	4.87	0.703	264	1.000	0.040*	0.2	
Refocus	Postgraduate	198	4.67	0.701	117.179	1.983	0.048*	0.2

 Table 6. T-Test results according to education status variable

p<0.05*

When Table 6 is examined, it is seen that the averages of those with undergraduate degrees (\overline{X} =4.27) are higher than the averages of those with postgraduate degrees (\overline{X} =4.13) in the athlete consciousness awareness scale. Similarly, it is seen that the averages of those with undergraduate degrees are higher in the Non-judgmental and Refocus sub-dimensions. In the Awareness sub-dimension, it is seen that the averages of those with postgraduate degrees (\overline{X} =5.17) are higher than the averages of those with undergraduate degrees (\overline{X} =5.17) are higher than the averages of those with undergraduate degrees (\overline{X} =5.05). As a result of the independent samples t-test conducted to determine whether the differences between the means are significant, it is seen that the average differences between the groups are significant in the Non-judgmental and Refocus sub-dimensions (p<.05), but not significant in the overall scale and in the Awareness sub-dimension (p>.05). The effect size observed in the non-judgmental (Cohen's d=0.2) and refocus (Cohen's d=0.2) sub-dimensions is small.

	Mean	SD		Sum of Squares	df	Mean Square	F	р	Tukey	η²
	4.13 ¹	0.65	Between							
	4.13 ²	0.59	Groups	1.040	4	0.200				
General	4.11^{3}	0.56	Within	111.723	290	0.260 0.385	0.675	0.610		
General	4.25^{4}	0.65	Groups	112.763	294	0.385				
	4.22^{5}	0.62	Total							
	4.98^{1}	0.73								
	5.20^{2}	0.48	Between							
Awareness	5.14 ³	0.52	Groups Within	1.213 96.714		0.303 0.333	0.910	0.459		
	5.09^{4}	0.63	Groups	97.927						
	5.16 ⁵	0.49	Total							
	2.99^{1}	1.33	Between							
Non-	2.54^{2}	1.23	Groups	8.014	4	2.003				
judgmental	2.55^{3}	1.14	Within	452.616	290	2.003 1.561	1.284	0.276		
Judgmentai	2.83^{4}	1.28	Groups	460.630	294	1.501				
	2.60^{5}	1.26	Total							
	4.43 ¹	0.76	_							
	4.66^{2}	0.76	Between	7.042	4					
Refocus	4.64 ³	0.74	Groups Within	7.043 148.661	4 290	1.761 0.513	3.435	0.009*	4>1 5>1,3	0.04
	4.82^{4}	0.69	Groups	155.704	294	0.313			J>1,5	
	4.925	0.61	Total							

Tablo 7. Anova results according to time spent on sports

p<0.05* 1 days per week ¹, 2 days per week ², 3 days per week ³, 4 days per week ⁴, 5 days per week and above ⁵

When examining Table 7, the results of the ANOVA conducted for the variable of time allocated to sports show that there is no significant difference in the overall scale (F=0.675, p>0.05), awareness (F=0.910, p>0.05), and non-judgment (F=1.284, p>0.05) subdimensions. However, a significant difference is observed in the refocusing subdimension (F=3.435, p<0.05). To determine the source of the significant difference in the refocusing subdimension, a Tukey post-hoc multiple comparison test was conducted. The findings from this test indicate that the significant difference favors individuals who exercise 4 days a week compared to those who exercise 1 day a week; and individuals who exercise 5 days a week compared to those who exercise 1 day or 3 days a week. The effect size observed in the refocus sub-dimension is medium level (Eta squared =0.4).

DISCUSSION AND CONCLUSION

In the study, the conscious mindfulness levels of individuals doing sports in gyms were examined by taking into account variables such as gender, education level, doing sports research, training programs and time devoted to sports. The relationship between athlete-oriented mindfulness and these variables, evaluated in light of existing literature, revealed the following results:

No significant difference was observed in the conscious mindfulness of athletes according to gender in the overall scale and all sub-dimensions. This situation shows that gender is not a factor in the conscious awareness levels of athletes. In other words, mindfulness levels are similar between women and men who do sports. This finding is supported by other studies in the literature (Baer et al., 2011; Cengiz et al., 2016; Acar & Eker, 2019; Baba Kaya & Namlı, 2020; Konan & Yılmaz, 2020; Tingaz, 2020; Alper et al., 2021; Altun Ekiz, et al., 2023; Göncü & Balcı, 2023). However, there are studies that found gender to be a significant variable affecting mindfulness levels. Some studies show significant differences favoring female athletes (Akyıldız, 2019; Aydınlı, 2019; Amemia & Sakairi, 2020; Bulgay, 2020; Kozak et al., 2021), while others found significant differences favoring male athletes (Gür, 2020; Kesler, 2020). The variations in results might be due to differences in research samples.

No significant difference was found in the overall scores of the Athlete Mindfulness Scale or in the mindfulness subdimension based on the education level variable. However, significant differences were observed in the non-judgment and refocusing subdimensions. The significant differences in the non-judgment and refocusing subdimensions were in favor of the bachelor's degree holders. There are no studies in the literature that examine the relationship between mindfulness and education level in sports. This aspect of the study is thought to contribute to the field and serve as a resource for future research. While literature does not show findings on education level in studies focused on mindfulness in athletes, there are studies with different sample groups that include education level as a variable. For example, Aydın (2019) found no significant difference between education level and mindfulness in his study on religiosity and mindfulness. Similarly, Arslan (2018) found no significant difference between education level and mindfulness in adults. Güler and Usluca (2021) also reported no significant difference between education level and mindfulness in their research on adults. The study shows higher mindfulness due to the nature of the sport (with visible results) and the physical involvement of the individual, which differs from other results. This aspect of the study is also believed to contribute to the field.

Significant differences in athlete-oriented mindfulness levels were found based on sports research involvement. Statistical differences were observed in the overall scale score and the refocusing sub-dimension, but no differences were noted in the awareness and non-judgment sub-dimensions. The significant difference observed in the overall scale and the refocusing sub-dimension was in favor of individuals who engage in sports research. It was found that sedentary athletes who engage in sports research have higher levels of mindfulness compared

to those who do not. This suggests that sports literacy positively affects individuals' levels of mindfulness.

Regarding the training program variable, athlete with a training program showed higher levels of mindfulness compared to those without one. This suggests that those who engage in sports consciously prefer to do so with a training program. However, no statistically significant differences were observed in the mindfulness and non-judgment sub-dimensions.

For the variable of time allocated to sports per week, no significant differences were found in the overall scale score, awareness, and non-judgment sub-dimensions, but a significant difference was observed in the refocusing sub-dimension. The significant difference in the refocusing sub-dimension was in favor of individuals who engage in sports 4-5 days a week. This suggests that individuals who engage in sports 4-5 days a week are quicker to refocus. There is no study in the literature examining whether there is a difference between the conscious awareness levels of athletes and variables such as training programs, time devoted to sports, and sports research. Since the studies did not address these variables, similar results were not found in the literature. However, literature does include studies on intervention types affecting mindfulness levels in athletes (Kabat-Zinn et al., 1985; Goodman et al., 2014; Scott-Hamilton et al., 2016; Chuang et al., 2023) and studies on relational aspects of mindfulness (Coffey et al., 2010; Aherne et al., 2011; Birrer et al., 2012; Li et al., 2019; Myall et al., 2023). This aspect of the study is also believed to contribute to the field and serve as a resource for future research.

In conclusion, the general results of the study show that gender is not an important factor on athlete conscious mindfulness and is not a sufficient variable on its own, while educational status is not an important variable on the athlete conscious mindfulness in terms of the general scale. The higher mindfulness levels in individuals who engage in sports research indicate that acquiring information and research about sports can deepen this process. It is expected that individuals with a high level of conscious mindfulness will have a regular training program. The higher mindfulness levels in individuals who engage in sports 4-5 days a week in the refocusing sub-dimension indicate that regular sports participation can strengthen focus and mindfulness. These findings highlight the importance of sports research, training programs, and regular sports participation. Future research should examine the effects of these variables more comprehensively.

Based on the independent variables used in the research process and the research results related to these variables, the following suggestions for future studies are proposed.

Accordingly, future research could investigate how gender differences are factor in certain subdimensions and how these effects vary across age groups or types of sports. Additionally, studies could be conducted to explore more deeply the factor of gender on athletes' mindfulness. Research examining the relationship between education level and mindfulness in more comprehensive ways could evaluate how education levels impact mindfulness and the role of educational programs in this process. Furthermore, studies exploring the impact of engaging in sports research on mindfulness could analyze how acquiring knowledge about sports and research strengthens this factor. Additionally, research investigating the effects of training programs on mindfulness could examine how different types of training and programs shape this effect. Finally, research assessing the relationship between the time allocated for sports and mindfulness in a larger sample group could determine the long-term effects of the time factor.

REFERENCES

- Acar, E., & Eker, C. (2019). Psikolojik danışman adaylarının bilinçli farkındalık düzeylerinin çeşitli değişkenlere göre incelenmesi. *Akdeniz Eğitim Araştırmaları Dergisi*, 13(29), 421-443. https://doi.org/10.29329/mjer.2019.210.22
- Aherne, C., Aidan, P. M., & Lonsdale, C. (2011). The effect of mindfulness training on athletes' flow: An initial investigation. *The Sport Psychologist*, 25, 177–189.
- Akça, N. Ş., & Sunay, H. (2012). Özel spor merkezlerine üye olan bireylerin spora yönelme nedenleri ve beklentilerinin gerçekleşme düzeyleri. Opus International Journal of Society Researches, 11(18), 1474-1493.
- Alper, R., Akpınar, S., & Akpınar, Ö. (2021). Spor bilimleri fakültesi öğrencilerinin bilinçli farkındalık düzeylerinin belirlenmesi. *Düzce Üniversitesi Spor Bilimleri Dergisi*, 1(1), 1-8.
- Altun-Ekiz, M, Tunçel, M., & Tunçel, S. (2022). Beden eğitimi ve spor yüksekokulunda ve spor bilimleri fakültesinde öğrenim gören öğrencilerin sınav kaygısı, genel özyeterlik algısı ile bilinçli farkındalık arasındaki ilişkinin incelenmesi. *Uluslararası Psiko-Sosyal Eğitim Araştırmaları Dergisi*, 3(4), 63-76.
- Amemiya, R., & Sakairi, Y. (2020). The role of self-compassion in athlete mindfulness and burnout: Examination of the effects of gender differences. *Personality and Individual Difference*, 166, 110167. https://doi.org/10.1016/j.paid.2020.110167
- Arslan, I. (2018). Bilinçli farkındalık, depresyon düzeyleri ve algılanan stress arasındaki ilişki. *Birey ve Toplum Sosyal Bilimler Dergisi*, 8(2), 73-86.
- Aydın, C. (2019). Dindarlık ile bilinçli farkındalık arasındaki ilişkinin incelenmesi. *Ondokuz Mayıs Üniversitesi* İlahiyat Fakültesi Dergisi, (47), 241-269.
- Aygün, M. (2020). Spor lisesi ve düz lise öğrencilerinin kariyer kaygısı ve bilinçli farkındalıklarının incelenmesi. *Beden Eğitimi ve Spor Bilimleri Dergisi, 22*(4), 90-100.

- Baer, R. A., Samuel, D. B., & Lykins, E. L. (2011). Differential item functioning on the five facet mindfulness questionnaire is minimal in demographically matched meditators and nonmeditators. *Assessment*, 18(1), 3-10. https://doi.org/10.1177%2F1073191110392498
- Baltzell, A., & Akhtar, V. L. (2014). Mindfulness meditation training for sport (mmts) intervention: Impact of mmts with division I female athletes. *The Journal of Happiness* & *Well-Being*, 2(2), 160-173.
- Berk, Y., & Bingöl, M. (2023). Fitness ve vücut geliştirme yapan bireylerin sağlıklı yaşam alışkanlıklarının incelenmesi. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 8(1), 93-105.
- Birrer, D., Röthlin, P., & Morgan, G. (2012). Mindfulness to enhance athletic performance: Theoretical considerations and possible impact mechanisms. *Mindfulness*, *3*(3), 235-246.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822–848. https://doi.org/10.1037/0022-3514.84.4.822.
- Bühlmayer, L., Birrer, D., Röthlin, P., Faude, O., & Donath, L. (2017). Effects of mindfulness practice on performance-relevant parameters and performance outcomes in sports: A meta-analytical review. *Sports Medicine*, 47, 2309-2321.
- Bulğay, C., Tingaz, E. O., Bayraktar, I., & Çetin, E. (2022). Athletic performance and mindfulness in track and field athletes. *Current Psychology*, *41*(7), 4482-4489.
- Carraça, B., Serpa, S., Guerrero, J. P., & Rosado, A. (2018). Enhance sport performance of elite athletes: The mindfulness-based interventions. *Cuadernos De Psicología Del Deporte*, *18*(2), 79-109.
- Cathcart, S., Mcgregor, M., & Groundwater, E. (2014). Mindfulness and flow in elite athletes. *Journal Of Clinical Sport Psychology*, 8(2), 119-141.
- Chuang, H.Y., Wang, F.J., & Chi, L.K. (2023). Mechanisms of mindfulness for professional golfers: The mediating role of basic psychological needs. *Current Psychology*, 42(7), 5462–5469. https://doi.org/10.1007/s12144-021-01877-333.
- Coffey, K. A., Hartman, M., & Fredrickson, B. L. (2010). Deconstructing mindfulness and constructing mental health: Understanding mindfulness and its mechanisms of action. *Mindfulness*, *1*, 235–253.
- Cohen, L. Manion. L. & Morrison, K. (2007). Research Methods in Education. London: Routledge.
- Çolakoğlu, F.F. (2003). 8 Haftalık koş-yürü egzersizinin sedanter orta yaşlı obez bayanlarda fizyoloji, motorik ve somatotip değerleri üzerine etkisi. *Gazi Üniversitesi, Gazi Eğitim Fakültesi Dergisi, 23(3),* 275-290.
- De Petrillo, L. A., Kaufman, K. A., Glass, C. R., & Arnkoff, D. B. (2009). Mindfulness for long-distance runners: An open trial using mindful sport performance enhancement (Mspe). *Journal of Clinical Sport Psychology*, 3(4), 357-376.
- Dönmez, G. & Aydos, L. (2000). Kalistenik calışmaların orta yaşlı sedanter bayanların fizyolojik ve fiziksel parametreleri üzerine etkisi. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, *5*(2),17-25.
- Ekiz, M. A., Tunçel, M., & Tunçel, S. (2023). Spor bilimleri fakültesinde öğrenim gören öğrencilerin sınav kaygısı, genel özyeterlik algısı ile bilinçli farkındalık arasındaki ilişkinin incelenmesi. UluslararasıPsiko-Sosyal Eğitim Araştırmaları Dergisi 3(4),63-76.

- Esentürk, O. K., & Yalçın, S. (2019). Beden eğitimi ve spor öğretmeni adaylarının bilinçli farkındalık düzeyleri ile kendilerine ilişkin yeterlik algıları arasındaki ilişkinin incelenmesi: Bir yem analizi örneği. *İnönü Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, 6(3), 22-34.
- Ferrand, A., Robinson, L., & Valette, P. (2010). The intention-to-repurchase paradox: A case of the health and fitness industry. *Journal of Sport Management*, 24, 83–105.
- Gardner, F. L., & Moore, Z. E. (2004). A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, 35(4), 707-723. https://doi.org/10.1016/S0005-7894(04)80016-9
- Gardner, F. L., & Moore, Z. E. (2012). Mindfulness and acceptance models in sport psychology: A decade of basic and applied scientific advancements. *Canadian Psychology/ Psychologie Canadienne*, *53*(4), 309.
- Gardner, F. L., & Moore, Z. E. (2017). Mindfulness-based and acceptance-based interventions in sport and performance contexts. *Current Opinion in Psychology*, *16*, 180-184.
- Gardner, F. L., & Moore, Z. E. (2020). Mindfulness in sport contexts. Handbook of Sport Psychology, 738-750.
- George, D., & Mallery, P. (1999). SPSS for windows step by step: A simple guide and reference. *Contemporary Psychology*, 44, 100-100.
- Göncü, B. S., & Balcı, B. (2023). Sporda mücadele ve tehdit algısı açısından bilinçli farkındalığın önemi. *International Journal of Sport Exercise and Training Sciences-IJSETS*, 9(2), 59-60.
- Goodman F.R., Kashdan T.B., Mallard T.T., & Schumann M. (2014). A brief mindfulness and yoga intervention with an entire NCAA Division I athletic team: An initial investigation. *Psychology of Consciousness: Theory, Research, and Practice, 1(4),* 339–356. https://doi.org/10.1037/cns0000022.
- Güler, K., & Usluca, M. (2021). Yetişkin bireylerde bilinçli farkındalık ile yaşam doyumu arasındaki ilişkinin incelenmesi. *Uluslararası Anadolu Sosyal Bilimler Dergisi*, 5(1), 372-383.
- Gür, Y., & Alataş, M. (2022). Engelli sporcu antrenörlerinin bilinçli farkındalık seviyelerinin incelenmesi. *Spor Eğitim Dergisi*, 6(1), 57-62.
- Hussey, J., Weinberg, R., & Assar, A. (2020). Mindfulness in sport: An intervention for a choking-susceptible athlete. *Case Studies in Sport and Exercise Psychology*, *4*(1), 1-10.
- Josefsson, T., Ivarsson, A., Gustafsson, H., Stenling, A., Lindwall, M., Tornberg, R., & Böröy, J. (2019). Effects of mindfulness-acceptance-commitment (MAC) on sport-specific dispositional mindfulness, emotion regulation, and self-rated athletic performance in a multiple-sport population: An RCT study. *Mindfulness*, 10, 1518-1529.
- Josefsson, T., Ivarsson, A., Lindwall, M., Gustafsson, H., Stenling, A., Böröy, J., ... & Falkevik, E. (2017). Mindfulness mechanisms in sports: Mediating effects of rumination and emotion regulation on sportspecific coping. *Mindfulness*, 8, 1354-1363.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. Clinical psychology: *Science and Practice*. 10(2), 144-156.
- Karakaya, İ. (2012). Bilimsel araştırma yöntemleri. A. Tanrıöğen (Edt.) Bilimsel araştırma yöntemleri. Ankara: Anı.
- Karasar, N. (2008). Bilimsel araştırma yöntemi (18. baskı). Ankara: Nobel Yayın Dağıtım.

- Klinger, E., Barta, S. G., & Glas, R. A. (1981). Thought content and gap time in basketball. *Cognitive Therapy and Research*, *5*(1), 109-114.
- Konan, N., & Yılmaz, S. (2020). Üniversite öğrencilerinin bilinçli farkındalık düzeyleri. *Mustafa Kemal* Üniversitesi Eğitim Fakültesi Dergisi, 4(6), 42-50.
- Kozak, M., Zorba, E., & Bayrakdar, A. (2021). Sporcularda zihinsel antrenman becerileri ile bilinçli farkındalık. *Herkes için Spor ve Rekreasyon Dergisi*, *3*(2), 89-97.
- Kumartaşlı, M., & Atabaş, E. (2015). Spor merkezi fitness salonunu kullanan bireylerin beklentilerinin değerlendirilmesi. *International Journal of Sport Culture and Science*, 2 (Special Issue 1), 898-904.
- Li, C., Zhu, Y., Zhang, M., Gustafsson, H., & Chen, T. (2019). Mindfulness and athlete burnout: A systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 16 (3), 449.
- Moen, F., Federici, R. A., & Abrahamsen, F. (2015). Examining possible relationships between mindfulness, stress, school-and sport performances and athlete burn out. *International Journal of Coaching Science*, 9(1).
- Myall, K., Montero-Marin, J., Gorczynski, P., Kajee, N., Sheriff, R. S., Bernard, R., ... & Kuyken, W. (2023). Effect of mindfulness-based programmes on elite athlete mental health: A systematic review and metaanalysis. *British Journal of Sports Medicine*, 57(2), 99-108.
- Sassatelli, R. (2015). Healthy cities and instrumental leisure: The paradox of fitness gyms as urban phenomena. *Modern Italy*, 20(3), 237-249.
- Scott-Hamilton J., Schutte N. S., & Brown R. F. (2016). Effects of a mindfulness intervention on sports-anxiety, pessimism, and flow in competitive cyclists. *Applied Psychology: Health and Well-Being*, 8(1), 85–103. https://doi.org/10.1111/aphw.1206330.
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373-386.
- Tabachnick B. G., & Fidell L. S. (2013) Using multivariate statistics, 6th ed. Boston, MA: Pearson.
- Thienot, E., Jackson, B., Dimmock, J., Grove, J. R., Bernier, M., & Fournier, J. F. (2014). Development and preliminary validation of the mindfulness inventory for sport. *Psychology of Sport and Exercise*, 15(1), 72-80.
- Tingaz, E. O. (2020). Spor bilimleri fakültesindeki sporcu öğrencilerde bilinçli farkındalığın (mindfulness) bazı değişkenler açısından incelenmesi. *Türk Spor Bilimleri Dergisi*, *3*(1), 21-28.
- Tingaz, E. O. (2020). Sporcu bilinçli farkındalık (mindfulness) ölçeği: Türkçeye uyarlama, geçerlik ve güvenirlik çalışması. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, *18*(1), 71-80.
- Topal, A., Yılmaz, M., Dal, M., & Alıncak, F. (2021). Lise düzeyindeki öğrencilerin farklı değişkenler açısından bilinçli farkındalık düzeylerinin incelenmesi. *Eğitim ve Yeni Yaklaşımlar Dergisi*, 4(2), 165-175.
- Vural, C., & Okan, İ. (2021). Sporda bilinçli farkındalık: Atıcılık spor branşları üzerine bir araştırma. Akdeniz Spor Bilimleri Dergisi, 4(2), 265-273.
- Woessner, M. N., Tacey, A., Levinger-Limor, A., Parker, A. G., Levinger, P., & Levinger, I. (2021). The evolution of technology and physical inactivity: The good, the bad, and the way forward. *Frontiers in Public Health*, *9*, 655491.

Yalçın, S., Tingaz, E. O., & Bilgin, U. (2023). Bilinçli farkındalık ve yarışma kaygısı arasındaki ilişki: Kadın voleybolcular üzerine bir araştırma. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 28(1), 42-47.

Zorba, E. (2012). Herkes için yaşam boyu spor. Ankara: Nehir Yayınları.

KATKI ORANI CONTRIBUTION RATE	AÇIKLAMA EXPLANATION	KATKIDA BULUNANLAR CONTRIBUTORS					
Fikir ve Kavramsal Örgü Idea or Notion	Araştırma hipotezini veya fikrini oluşturmak Form the research hypothesis or idea	Turan BAŞKONUŞ					
Tasarım Design	Yöntem ve araştırma desenini tasarlamak To design the method and research design.	Turan BAŞKONUŞ					
Literatür Tarama Literature Review	Çalışma için gerekli literatürü taramak Review the literature required for the study	Turan BAŞKONUŞ					
Veri Toplama ve İşleme Data Collecting and Processing	Verileri toplamak, düzenlemek ve raporlaştırmak Collecting, organizing and reporting data	Turan BAŞKONUŞ					
Tartışma ve Yorum Discussion and Commentary	Elde edilen bulguların değerlendirilmesi Evaluation of the obtained finding	Turan BAŞKONUŞ					
Destek ve Teşekkür Beyanı/ Statement of Support and Acknowledgment							

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Çatışma Beyanı/ Statement of Conflict

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Researchers do not have any personal or financial conflicts of interest with other people and institutions related to the research.

Etik Kurul Beyanı/ Statement of Ethics Committee

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This research was conducted with the decision of Kırşehir Ahi Evran University Ethics Committee dated 15.06.2033 and numbered E-51450103-010.99-00000531624.



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