



Investigation of Kinesiophobia, Psychological Performance and Achievement Motivation Levels of Athletes

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ABSTRACT

The study aimed to investigate the relationships among athletes' levels of kinesiophobia, psychological performance, and achievement motivation, as well as the effects of variables such as gender, sport branch, sports license, and athletic background on these concepts. The research was conducted using quantitative methods and designed as a descriptive study, involving a total of 371 athletes. The "Tampa Kinesiophobia Scale", the "Psychological Performance Assessment in Sports Scale" and the "Sport-Specific Achievement Motivation Scale" were utilized for data collection. The data exhibited a normal distribution and were analyzed using parametric methods. No significant differences were observed concerning the gender variable. However, statistically significant differences were identified in kinesiophobia levels based on sport branch, in both kinesiophobia and achievement motivation levels based on sports license, and in achievement motivation levels based on athletic background. Additionally, a weak negative correlation was found between kinesiophobia and psychological performance, while a moderate positive correlation was identified between psychological performance and achievement motivation. In this context, it is suggested that gender, sport branch, sports license, and athletic background are significant variables influencing kinesiophobia, psychological performance, and achievement motivation, and that the relationships among these concepts may directly impact athletes' performance.

Keywords: Kinesiophobia; Psychological Performance; Achievement Motivation; Athletic Performance

INTRODUCTION

Kori et al. (1990) characterized kinesiophobia as "an intense, unfounded, and incapacitating horror of engaging in physical action and action, originating from a perception of sensitization pain injury or re-injury" (Knapik et al., 2011). When individuals believe that repeated exposure to specific stimuli will intensify their pain or distress, avoidance or withdrawal behaviors are likely to emerge. Over time, this can lead to the development of kinesiophobia. Evasion behavior, a result of this fear, is often considered a natural response disability; however, when extended, it negatively impacts physical and psychological functionalities (Larsson et al., 2014; Vincent et al., 2013). Fear of movement

or reinjury subsequently results in restricted activities, long-term cessation of physical engagement, increased depression, and greater disability. Reducing every single day activity and functionalities capacities as a strategy to prevent pain often leads to reduced physical mobility, out of use, injury, and the chronic persistence of pain.

Kinesiophobia is linked to the amygdala and insula, which are important structures of the limbic system in the brain (Meier et al., 2016). These regions are the main anatomical centers where emotions are processed, which play a role in the regulation of fear and anxiety in particular, as well as memory processes and survival instincts (Phelps et al., 2001). Fear is a defense mechanism for survival that involves innate or learned emotional

responses. Learned fear can cause an individual to develop an avoidance or escape response to a specific situation, stimulus or event that the individual has experienced or observed in the past. In particular, situations that pose a potential threat such as pain or suffering may predispose individuals to the emergence of learned fear (Riccio et al., 2009).

Individuals with fear of re-injury may experience physical and psychological discomfort such as fatigue, exhaustion and pain by worrying about the possible consequences of movements. This may lead them to develop an over-controlled and idiosyncratic behavior model in order to avoid past negative experiences (Özkal et al., 2017; Uçurum & Kalkan, 2018).

In this context, Oğuz (2025) examined the effect of physical activity on kinesiophobia and quality of life and found that there was a decrease in kinesiophobia levels in repeated measurements taken at 0, 8 and 20 weeks. Although the result obtained has a positive effect on the individual, individuals with kinesiophobia often avoid higher levels of physical activity due to permanent and unnecessary sensitivity in their bodies. However, systematically increasing physical activity levels is typically considered a prerequisite for recovery. Studies have shown that individuals with high levels of kinesiophobia exhibit reduced physical performance and significant limitations in physical activity (Schmidt, 2003). Considering these limitations, it is important for athletes to have both physical and psychological well-being in order to improve their performance. In this context, the concept of psychological performance is an important factor that contributes to the psychology of athletes.

Since the 1930s, public and private institutions have employed various methods to assess both individual and organizational performance. During the 1970s, theoretical and empirical research on performance and its evaluation witnessed a significant rise. Despite this growing body of literature, a universally accepted definition of performance has yet to be established (Erkiş, 2014).

Performance is a concept that assesses the outcomes of an activity, either qualitatively or quantitatively, in relation to a predetermined objective and structured plan. In other words, it refers to the extent to which a specific goal has been achieved (Özer, 2009). Additionally, performance encapsulates the attainment of planned objectives while also encompassing service efficiency, productivity, and resource optimization in production processes (Kubalı, 1999). It is further defined as the degree to which a task is completed under specified

conditions or the results achieved by an employee in fulfilling assigned responsibilities within a given timeframe (Bayram, 2006).

Psychological performance in sports has emerged as one of the primary focuses of contemporary sports research. The influence of psychological science on preventing performance declines, maintaining peak performance, and surpassing standard levels of achievement has gained increasing significance. In this context, many sports clubs have incorporated sports psychologists, performance coaches, and other psychological counseling professionals into their organizational structures. Efforts to manage fluctuations in psychological performance and enhance it are no longer confined to physical parameters but increasingly involve the support of abstract psychological processes. Consequently, psychological performance is progressively being recognized as an equally critical component alongside physical performance in enhancing and sustaining athletic success (Aydoğan & Konaş, 2022).

Gucciardi and Gordon (2011) defined psychological performance as a set of internal values, attitudes, emotions, cognitions and behaviors that an individual develops through experience and that enable him/her to achieve his/her goals consistently. This concept shapes the individual's approach, reactions and evaluation processes in the face of both positive and negative perceived pressures, challenges and adversities.

Psychological performance is considered as both a personality trait and a state of mind. Mental resilience is a concept that includes being realistic, confident, humorous, tough, practical and having a mature temperament (Jones, 2002). However, in recent years, researchers have argued that it is insufficient to limit mental resilience only to reactions to difficulties. This is because this concept also encompasses factors that help the individual to maintain focus and motivation while structures and processes are running smoothly (Crust, 2009).

Mentally resilient individuals tend to be social and outgoing. Due to their capacity to stay composed and at ease, they are frequently more competitive and experience lower anxiety levels than others. Moreover, their high self-confidence and strong belief that they are in control of their own destiny contribute to them being less affected by competition and challenges (Horsburgh et al., 2009). Therefore, it can be said that these characteristics of psychological performance also interact positively with athletes' motivation.

A clear understanding of the concept of motivation is essential for achieving high

performance in a given task. Therefore, athletes who actively participate in sports or have an interest in athletic activities must comprehend and internalize this process. Motivation, which is rooted in the fundamental principles of sports and sports psychology, plays a crucial role in various aspects of an athlete's performance and development (Terzioğlu, 1992).

Athlete motivation is driven by two main factors: intrinsic and extrinsic motivation. Intrinsic motivation develops as a result of the athlete playing sports voluntarily and being satisfied with the feeling of winning. This type of motivation directly affects the athlete's drive to achieve success. Athletes with high intrinsic motivation prefer to be in environments where their performance is evaluated and they have the opportunity to achieve success. The attitudes and approaches of coaches are of great importance in increasing the achievement motivation of athletes. For this reason, coaches need to determine how to approach athletes and the effectiveness of their training methods by conducting various tests and measurements. This is due to the direct correlation between athlete motivation and performance (Yiğit, 2019).

Achievement motivation elucidates the reasons behind individuals' engagement in specific activities, the persistence of effort in completing challenging tasks, and how this effort is maintained over extended periods (Hayashi, 1996). Individuals with high need for achievement show more dedication to their work and try to improve their performance to a better level than other individuals. Research shows that people with a high need to succeed have a higher success rate than people with a low fear of failure (Cüceloğlu, 1999). The connection between the intensity of motivation and success is evidently crucial, particularly in the domain of sports. Individuals with lower motivation levels are more prone to experiencing failure. People generally tend to avoid uncomfortable situations while seeking environments that provide them psychological satisfaction and peace of mind. These avoidance and seeking tendencies play an important role in an individual's motivational structure. Whichever orientation becomes dominant, the individual's motivation is shaped in that direction. In this context, achievement motive may manifest itself in the form of avoiding failure or the tendency to succeed, while social motives may manifest themselves in the form of gaining respect or avoiding rejection (Aydın, 2001). In terms of athletes, achievement motive refers to intrinsic motivation towards competitions and is closely related to the concepts of self-confidence, strength, competence, and individual expertise. Individuals with high levels

of these characteristics are thought to be more likely to participate in environments where they can achieve success compared to those with lower levels (Cox, 1990).

For athletes to achieve success, it is essential that they accurately assess their proficiency within their respective disciplines and possess a clear understanding of their skill levels. Upon reaching their targeted performance level, athletes may no longer feel compelled to strive for further improvement. Such circumstances can result in a balance between the risk of failure and the hope of success. While suboptimal performance may suffice in certain disciplines or competitions, it is generally perceived as a failure under standard conditions. Therefore, it is crucial for athletes to establish their own benchmarks for success within their specific fields (Mungan, 1995).

For coaches working in sports disciplines, the primary factor influencing an athlete's performance is the integration of physiological, biological, and psychological attributes that drive action. In this context, fostering athletes' motivation by considering their personality traits, belief systems, personal aspirations, and existing technical skills facilitates their development and enhances their ability to achieve their desired success (Çakıroğlu, 1987).

Misconceptions regarding the concept of motivation in sports activities are common. The first of these is the confusion between motivation and stimulation. Pre-competition or halftime speeches delivered by coaches to energize athletes are often mistakenly equated with motivation. The second misconception relates to positive thinking. While emphasizing hard work in both team and individual sports or acknowledging the presence of talented athletes can foster a positive mindset, it does not inherently constitute motivation (Tiryaki & Gödelek, 1997).

In light of these discussions, this study aims to examine the relationship between the concepts of kinesiphobia, psychological performance and achievement motivation, which may positively or negatively affect athletic performance. It will also examine how these concepts are influenced by variables such as gender, sport branch, sports license, and athletic background

METHOD

Research Model

This study was conducted using quantitative methods and designed as a descriptive study (Baltacı, 2018).

Study Group

This study was carried out on 371 athletes involved in either individual or team sports. The study was conducted with 371 volunteers, of which 174 (%46.9) were female and 197 (%53.1) were male. It was found that 187 (%50.4) of the athletes were involved in team sports, 257 (%69.3) had a sports license and 76 (%20.5) had "1-2 years" of sports experience. Non-probability convenience sampling was used to select the sample for the study. When evaluated using quantitative research methods, this study is descriptive in nature, examining the predictive effects of relationships between variables. The research was conducted in accordance with the Declaration of Helsinki after receiving approval from the Ethics Committee of the Health Sciences Institute of Ankara Yıldırım Beyazıt University on 01.07.2024 (Approval No.: 06/779).

Data Collection Tools

The demographic information of the individuals participating in the study and information on independent variables were obtained by using the "Personal Information Form", "Tampa Kinesiophobia Scale", "Psychological Performance Evaluation Scale in Sport" and "Sport Specific Achievement Motivation Scale".

Personal Information Form: This questionnaire, developed by the researchers, contains questions on the socio-demographic characteristics of the participating athletes. The Personal Information Form included questions about the participants' gender, sport branch, sport license and athlete background.

Tampa Kinesiophobia Scale: Tampa Kinesiophobia Scale was developed by Vlaeyen et al. (1995) and Turkish adaptation and validity and reliability analysis were conducted by Yılmaz et al. (2011). The Tampa Kinesiophobia Scale is a 17-question scale to measure the fear of re-injury. The questions in the scale are evaluated in likert type

between "1- Strongly Disagree" and "4-Strongly Agree". As a result of the questionnaire, the person receives a score between the lowest 17 and the highest 68 points according to his/her answers. The higher the scores obtained from the scale, the higher the person's fear of movement and injury (Vlaeyen et al., 1995). In this study, the Cronbach's alpha coefficient of the scale was found to be 0.71.

Psychological Performance Assessment in Sports Scale: Psychological Performance Assessment in Sports Scale developed by Aydoğan and Konaş (2022) was used. The scale was designed as a five-interval measurement tool. Participants' degree of agreement with the scale items was categorized as (1) "Never", (2) "Rarely", (3) "Sometimes", (4) "Mostly" and (5) "Always". The scale consists of 32 items and 3 sub-dimensions. In this study, the Cronbach Alpha coefficient of the scale was found to be 0.85.

Sport-Specific Achievement Motivation Scale: "Sport Specific Achievement Motivation Scale" was developed by Wills (1982) and Turkish adaptation and validity and reliability analysis were conducted by Tiryaki and Gödelek (1997). Scale aims to measure achievement motivation. The scale was designed as a five-interval measurement tool. The scale includes three sub-dimensions: showing strength, approaching success and avoiding failure. In this study, the Cronbach Alpha coefficient of the scale was found to be 0.83.

Procedure and Data Analysis

The data collected from the athletes were analysed by examining their frequencies, arithmetic means, standard deviations, t-tests, ANOVA analyses and Pearson correlation coefficients. A decision regarding parametric and non-parametric conditions was made based on skewness and kurtosis values (Alpar, 2001). The skewness and kurtosis results of all sub-dimensions of the scales used in the study were examined and showed that all values fell within the ± 3 range. Skewness and kurtosis values within this range indicated that a univariate normal distribution was achieved in the data (Büyüköztürk, 2014). The data were analysed using the IBM SPSS 23 software package, with a type I error rate of 5%. The statistical data collected are systematically presented in the findings section according to the purpose of the research.

Table 1. Skewness and Kurtosis Values Regarding the Normality of the Research Scales and Sub-Dimensions.

Variable	n	\bar{X}	ss	Min	Max	Skew	Kurt
Kinesiophobia	371	2.22	0.36	1.06	3.76	0.17	0.76
Physical and Cognitive Anxiety	371	2.58	0.81	1.00	5.00	0.32	-0.15
Motivation	371	4.03	0.86	1.00	5.00	-1.12	0.98
Self Confidence	371	3.48	0.82	1.00	5.00	-0.30	-0.05
Psychological Performance Level	371	3.14	0.52	1.00	4.69	-0.42	1.49
Showing Strength	371	3.37	0.45	2.08	4.83	0.12	0.51
Approaching Success	371	3.70	0.51	1.82	4.82	-0.54	0.99
Avoiding Failure	371	3.01	0.74	1.18	5.00	-0.32	-0.10
Sport Specific Achievement Motivation Level	371	3.41	0.44	1.90	4.75	0.09	0.89

n=Number of Participants, X=Mean, ss=Standard Deviation, Min.=Minimum, Max.=Maximum

In Table 1. it is seen that the Skewness Kurtosis values of the scales and sub-dimensions used in the

research are within the range of ± 3 . Therefore, parametric analysis methods were used in the study (Alpar, 2001; Kalaycı, 2008).

RESULTS

Table 2. Results of t-Test for Kinesiophobia, Psychological Performance, and Achievement Motivation Mean Scores According to Athletes' Gender

Variable	Gender	n	\bar{X}	ss	sd	t	p
Kinesiophobia	Female	174	2.24	0.38	369	1.23	0.21
	Male	197	2.19	0.34			
Psychological Performance	Female	174	3.13	0.52	369	0.25	0.80
	Male	197	3.15	0.51			
Achievement Motivation	Female	174	3.39	0.40	369	0.90	0.36
	Male	197	3.43	0.46			

n=Number of Participants, X=Mean, ss=Standard Deviation, sd=Degrees of Freedom, t=Type of Analysis, p=Significance Level $p < 0.05$.

Table 2, the mean scores of the athletes regarding the levels of "Kinesiophobia", "Psychological Performance" and "Achievement Motivation" were analyzed according to the gender variable. It is seen that there is no statistically significant difference in the levels of "Kinesiophobia",

"Psychological Performance" and "Achievement Motivation" ($p > 0.05$). In addition, it is seen that the mean kinesiophobia scores of female athletes are higher than male athletes, while the mean scores of psychological performance and achievement motivation scores of male athletes are higher than female athletes.

Table 3. Results of t-Test for Kinesiophobia, Psychological Performance, and Achievement Motivation Mean scores by Athletes' Sport Branch

Variable	Sport Branch	n	\bar{X}	ss	sd	t	p
Kinesiophobia	Team	187	2.25	0.36	369	1.97	0.05
	Individual	184	2.18	0.36			
Psychological Performance	Team	187	3.12	0.51	369	0.79	0.42
	Individual	184	3.16	0.52			
Achievement Motivation	Team	187	3.42	0.44	369	0.05	0.95
	Individual	184	3.41	0.44			

n=Number of Participants, X=Mean, ss=Standard Deviation, sd=Degrees of Freedom, t=Type of Analysis, p=Significance Level $p < 0.05$.

Table 3, the mean scores of the athletes regarding "Kinesiophobia", "Psychological Performance" and "Achievement Motivation" levels were analyzed according to the sport branch variable. It is seen that there is a statistically significant difference in the levels of "Kinesiophobia" and the mean scores of team athletes on kinesiophobia are higher ($p < 0.05$). There was no

statistically significant difference in "Psychological Performance" and "Achievement Motivation" levels ($p > 0.05$). In addition, it is seen that the mean psychological performance scores of individual athletes are higher than team athletes, and the mean achievement motivation scores of team athletes are higher than individual athletes.

Table 4. Results of t-Test for Kinesiophobia, Psychological Performance, and Achievement Motivation Mean scores by Athletes' Sport License

Variable	Sports Licence	n	\bar{X}	ss	sd	t	p
Kinesiophobia	Exists	257	2.25	0.36	369	2.99	0.00
	Nonexists	114	2.13	0.34			
Psychological Performance	Exists	257	3.17	0.51	369	1.48	0.13
	Nonexists	114	3.08	0.53			
Achievement Motivation	Exists	257	3.45	0.44	369	2.26	0.02
	Nonexists	114	3.34	0.43			

n=Number of Participants, X=Mean, ss=Standard Deviation, sd=Degrees of Freedom, t=Type of Analysis, p=Significance Level $p < 0.05$.

Table 4, the mean scores of the athletes regarding "Kinesiophobia", "Psychological Performance" and "Achievement Motivation" levels were analyzed according to the variable of sports license. It is seen that there is a statistically significant difference in the levels of "Kinesiophobia"

and "Achievement Motivation" and the mean scores of kinesiophobia, psychological performance and achievement motivation of athletes with sports license are higher ($p < 0.05$). There was no statistically significant difference in "Psychological Performance" levels ($p > 0.05$).

Table 5. ANOVA Results for Kinesiophobia, Psychological Performance, and Achievement Motivation Mean Scores by Athlete Sport Background

Variable	Athletic Background	n	\bar{X}	ss	sd	F	p
Kinesiophobia	0-12 Months	24	2.19	0.29	5	0.48	0.78
	1-2 Years	76	2.19	0.34			
	3-4 Years	75	2.27	0.38			
	5-6 Years	59	2.21	0.33			
	7-8 Years	65	2.19	0.38			
	9 Years +	73	2.22	0.39			
Psychological Performance	0-12 Months	24	2.94	0.62	5	0.97	0.43
	1-2 Years	76	3.11	0.46			
	3-4 Years	75	3.15	0.52			
	5-6 Years	59	3.20	0.48			
	7-8 Years	65	3.18	0.58			
	9 Years +	73	3.13	0.50			
Achievement Motivation	0-12 Months	24	3.21	0.46	5	3.32	0.00
	1-2 Years	76	3.40	0.39			
	3-4 Years	75	3.31	0.45			
	5-6 Years	59	3.42	0.41			
	7-8 Years	65	3.50	0.46			
	9 Years +	73	3.52	0.41			

n=Number of Participants, X=Mean, ss=Standard Deviation, sd=Degrees of Freedom, F=Type of Analysis, p=Significance Level $p < 0.05$.

Table 5, the mean scores of the athletes in relation to "Kinesiophobia", "Psychological Performance" and "Achievement Motivation" based on the sport background variable. The results show

that there is a statistically significant difference in the levels of "Achievement Motivation" ($p < 0.05$). Although it was seen that the achievement motivation levels of athletes with a sports history of

nine years or more were higher, in the Post-Hoc test conducted to see which group the difference was due to, it was seen that this difference was due to athletes with a sports history of years or more, as in **Table 6.** Pearson Correlation Coefficients Results Regarding Athletes' Levels Kinesiophobia, Psychological Performance and Achievement Motivation.

the averages. There was no statistically significant difference in the levels of "Kinesiophobia" and "Psychological Performance" ($p>0.05$).

Regarding Athletes' Levels Kinesiophobia, Psychological

N=371	K	P.P	A.M
Kinesiophobia	1	-.232**	.038
Psychological Performance		1	.441**
Achievement Motivation			1

* $p<0.05$ (2-tailed)** $p<0.01$ (2-tailed)

Table 6 presents the results of the correlation analysis of the relationship between the total scores of "Kinesiophobia", "Psychological Performance" and "Achievement Motivation" of the participant athletes. In this context, a low level negative correlation was observed between kinesiophobia and psychological performance levels of athletes. However, it was also found that there was a positive moderate relationship between psychological performance and achievement motivation levels.

DISCUSSION AND CONCLUSION

This study examines the relationship between the concepts of kinesiophobia, psychological performance, achievement motivation, and their potential impact on athletic performance, with a view to establishing whether these factors may exert a positive or negative influence. Furthermore, the study considers the influence of additional variables, including gender, sport branch, sport license, athletic background on these concepts.

When kinesiophobia, psychological performance and achievement motivation levels were analyzed in terms of gender variable (Table 2.), it was seen that there was no statistically significant difference in kinesiophobia, psychological performance and achievement motivation of athletes ($p>0.05$). However, it is seen that the mean kinesiophobia of female athletes is higher than that of male athletes, and the mean psychological performance and achievement motivation of male athletes is higher than that of female athletes. In this context, this result shows that athletes' fear of injury, psychological performance and achievement motivation are at similar levels regardless of gender. When the studies in the literature were examined, it was seen that in parallel with our study, there were studies that did not obtain statistical difference in terms of gender in kinesiophobia levels (Kvist et al., 2005; Steffen er al., 2009), studies that did not obtain statistical difference in psychological performance levels (Şahan, 2007; Yıldız, 2019) and

studies that did not obtain difference in terms of gender in achievement motivation levels (Aydoğdu et al., 2018; Kavas, 2018).

When kinesiophobia, psychological performance and achievement motivation levels were analyzed in terms of the sport branch variable (Table 3.), it was seen that there was a statistically significant difference in the kinesiophobia levels of the athletes ($p<0.05$). There was no statistically significant difference in psychological performance and achievement motivation ($p>0.05$). However, it is seen that the averages of kinesiophobia and achievement motivation of team athletes are higher than individual athletes, and the averages of psychological performance of individual athletes are higher than team athletes. In this context, this result shows that athletes who are interested in team sports are generally affected by the fear of injury due to the fact that it involves contact and bilateral struggle. When the studies in the literature are examined, it is seen that there are studies that obtained statistical differences in terms of the sport branch variable in kinesiophobia levels in parallel with our study (Weiss & Troxel, 2006).

When kinesiophobia, psychological performance and achievement motivation levels were examined in terms of sports license variable (Table 4.), it was seen that there was a statistically significant difference in kinesiophobia and achievement motivation levels of athletes ($p<0.05$). There was no statistically significant difference in their psychological performance ($p>0.05$). However, it is also seen that the averages of kinesiophobia, psychological performance and achievement motivation of athletes with a sports license are higher than those without a sports license. In this context, it is thought that this result is due to the fact that athletes with sports licenses feel the fear of injury during the preparation periods for competitions and during competition times, and that they can remain success-oriented despite this feeling. When the studies in the literature are

examined, it is seen that there are studies that obtained statistical differences in kinesiophobia levels in terms of sports license variable (Mutlu & Çakmak Yıldızhan, 2023) and achievement motivation variable (Kavas, 2018) in parallel with our study.

When kinesiophobia, psychological performance and achievement motivation levels were analyzed in terms of athletic background variable (Table 5.), it was seen that there was a statistically significant difference in the achievement motivation levels of the athletes ($p < 0.05$). There was no statistically significant difference in kinesiophobia and psychological performance ($p > 0.05$). However, it is also seen that the averages of kinesiophobia, psychological performance and achievement motivation of athletes with an athletic background of 3-4 years or more are higher than those with an athletic background of 3-4 years or less. In this context, this result is thought to be due to the fact that athletes with more athletic background feel that they are closer to achieving success in their sports branch. When the studies in the literature are examined, it is seen that there are studies that obtained statistically significant differences in achievement motivation in terms of athletic background variable in parallel with our study (Özgün et al., 2017; Filiz & Demirhan, 2018).

As a result, it was seen that the variables of gender, sport branch, sport license and athletic background may have a positive or negative effect on kinesiophobia, psychological performance and achievement motivation levels and performances of the athletes participating in the study. In addition, our study showed that the concepts of kinesiophobia, psychological performance and achievement motivation, which are thought to have a significant effect on athletes, are negatively and positively related to each other. In the light of these findings, it is suggested that considering the effects of kinesiophobia, psychological performance and achievement motivation on performance would be beneficial for athletes in their ongoing sport careers. In addition, it is thought that it would be advantageous to continue training and competitions in accordance with these concepts. In order to underline the potential advantages that athletes can gain from these concepts, it is suggested to organize meetings and training sessions specifically focused on these topics. In addition, it is also recommended that the relationships between the aforementioned concepts and other factors that may positively affect performance be investigated in terms of different age categories, sports branches or variables such as amateur and professional status. The study population of this research is male and female adult

athletes and is limited to 371 athletes practicing team and individual sports branches. The results obtained in the study can only be generalized to people who have similar characteristics with the participants in the sample of the study.

Author Contributions

HAG: Study Design, HAG: Data Collection, HAG: Literature Search, HAG: Statistical Analysis and Original Draft Preparation, HAG: Review and Editing. Author have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

The research was conducted in accordance with the Declaration of Helsinki after receiving approval from the Ethics Committee of the Health Sciences Institute of Ankara Yıldırım Beyazıt University on 01.07.2024 (Approval No.: 06/779).

Informed Consent Statement

Informed consent was obtained from all subjects involved in this study.

Data Availability Statement

Datasets are available through the corresponding author upon reason-able request.

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Conflicts of Interest

The author unequivocally assert that this research was undertaken while devoid of any commercial or financial affiliations that might be perceived as potential conflicts of interest.

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