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Comparison of Self-Efficacy of Individual and Team Athletes

Serhat ERAİL[1], Recep Nur UZUN[2]

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ORİJİNAL ARAŞTIRMA

[1]Ondokuz Mayıs University, Yaşar Doğu Faculty of Sport Science, Samsun/Türkiye

[2]Dokuz Eylul University, Necat Hepkon Faculty of Sports Sciences, İzmir/Türkiye

Corresponding Author:
Recep Nur UZUN
recepnuruzun@outlook.com.tr

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Abstract

This study aims to compare the self-efficacy of individual and team athletes. The population of the study consists of athletes over 18. The sample group consists of 200 athletes, 101 individual athletes and 99 team athletes. Athlete Self-Efficacy Scale and were used as data collection tools. The Independent Sample T-Test was used to compare the variables for data analysis. In the comparing athletes' self-efficacy according to the type of sport, there is no statistical difference in the sub-dimensions according to the findings related to the type of sport ($p>0.05$). However, when the mean scores are analysed, team athletes have higher mean scores than individual athletes in the sub-dimensions of Sports Competence and Personality. Individual athletes had higher mean scores than team athletes in the sub-dimensions of Psychological Competence and Professional Thinking, individual athletes had higher mean scores than team athletes. In the comparison of self-efficacy of individual and team athletes according to gender, there was no statistical difference in sub-dimensions ($p>0.05$). In the comparison of self-efficacy of individual and team athletes according to their height, there is a statistical difference between athletes with a height of 175 cm and below and athletes with a height of 176 cm and above in the sub-dimension of professional thinking in athletes ($p<0,05$). It is recommended that more research and studies should be carried out to improve the self-efficacy levels of athletes in all branches of sports.

Keyword: Athlete, Self-efficacy, Psychology.

Bireysel ve Takım Sporcularının Öz Yeterliklerinin Karşılaştırılması

Öz

Bu çalışmanın amacı bireysel ve takım sporcularının öz yeterliklerinin karşılaştırılmasıdır. Araştırmanın evrenini 18 yaş üstü sporcular oluşturmaktadır. Örneklem grubunu 101 bireysel sporcu, 99 takım sporcusu toplamda 200 sporcu oluşturmaktadır. Veri toplama aracı olarak, Sporcu Öz Yeterlik Ölçeği kullanılmıştır. Veri analizinde değişkenleri karşılaştırmak için Bağımsız Örneklem T-Testi yapılmıştır. Sporcuların öz yeterliklerinin spor türüne göre karşılaştırılmasında alt boyutlarda istatistiksel olarak farklılık yoktur ($p>0,05$). Ancak puan ortalamalarına bakıldığında Spor Dalı Yeterliği ve Kişilik alt boyutunda takım sporcuları bireysel sporculara göre yüksek puan ortalamasına sahiptir. Psikolojik Yeterlik ve Profesyonel Düşünme alt boyutunda ise bireysel sporcular takım sporcularına göre yüksek puan ortalamasına sahiptir. Cinsiyete göre bireysel ve takım sporcuların öz yeterliklerinin karşılaştırılmasında alt boyutlarda istatistiksel olarak farklılık yoktur ($p>0,05$). Boy uzunluklarına göre bireysel ve takım sporcuların öz yeterliklerinin karşılaştırılmasında sporcularda profesyonel düşünce alt boyutunda 175 cm ve altı boy uzunluğuna sahip sporcularla 176 cm ve üzeri boy uzunluğuna sahip sporcular arasında istatistiksel olarak fark vardır ($p<0,05$). Sporun tüm branşlarında sporcuların öz yeterlik düzeylerinin geliştirilmesi adına daha fazla araştırma ve çalışmaların yapılması önerilmektedir.

Anahtar Kelime: Sporcu, Öz Yeterlik, Psikoloji.

Introduction

Sport is a surreal endeavor to improve physical and mental health, to compete, to excite, to compete, to win and to increase the difficulty of achievement in the primary, to bring it to the highest level in terms of personal care within the limits of competition standards in accordance with a certain harmony (Kılıçaslan, 2015). Nowadays, each sport branch has a different meaning for countries and athletes (Akarçeşme, 2004). In order to be successful in sports, vital, physical and mental development, personality development, as well as internal and external motivation and self-sufficiency are needed (Karadağ, 2013; Bozkurt and Karahan, 2023).

Experiences experienced by the individual refer to the positive or negative experiences of the individual themselves (Figen & Mete, 2009). In addition to their own experiences, people develop self-efficacy beliefs based on the experiences of others (Özerkan, 2007). Self-efficacy is the belief in being aware of one's capacity to do a job. This belief depends not on what the individual actually is; but on what people accept as accurate (Kurbanoğlu, 2004). In addition, self-efficacy is how people try to cope with the situation they face and how long they can perform when they face a problem. People with high self-efficacy make great efforts to bring their work to a conclusion and decide to continue the task even if they encounter an obstacle. People with low self-efficacy do not make an effort to finish the job and quit in a short time (Reeve, 2018). Self-efficacy perception is effective in an individual's expectation of success or failure in a certain task. Individuals with a high level of self-efficacy can be more comfortable and efficient when faced with tasks with a high level of difficulty (Canpolat and Çetinkalp, 2011). Self-efficacy perception plays an important role in the self-regulation of motivation. Individuals produce their motivation cognitively, motivate themselves and guide their actions predictably thanks to their predictive capacity (Bandura, 1994). People with low self-efficacy beliefs, on the other hand, believe that the work they will do is even more difficult than it actually is. This type of thinking increases anxiety and stress and narrows the perspective required to solve a problem in the best way (Canpolat & Çetinkalp, 2011).In the literature, the concept of self-efficacy is evaluated in three different ways. One of these is the task-specific self-efficacy concept. The other self-efficacy concept is domain-specific self-efficacy. The third self-efficacy concept is the general self-efficacy perception (Çetin, 2011).

Success in sport and sportive performance are affected by factors such as mental or physical error, pain, illness, cheating by opponents or seeing their success, being penalized by the referee and being forced by the coach (Bahramizade & Besharat, 2010). Therefore, one of the most important parts of sport preparation is mental and psychological preparation. Athletes who are strong in the psychological field will thus gain an advantage over their rivals (Metan, 2022).Emotion regulation and self-efficacy are important variables that need to be investigated in psychological aspects due to

the positive and negative effects experienced in sports environments on sports performance (Molina et al., 2018). Because; self-efficacy in sports is an important concept that affects people's thoughts and behaviors in the face of an event (Yılmaz et al., 2019). Therefore, it is crucial to investigate the issue of self-efficacy in individual and team athletes.

Method

Working Group

The population of the study consists of athletes over the age of 18. The sample group consists of 200 athletes, 101 individual athletes and 99 team athletes.

Data Collection Tool

The Athlete Self-Efficacy Scale and "Personal Information Form" were used to measure athlete self-efficacy by Koçak (2020), which was used as a data collection tool in the study. Athlete Self-Efficacy Scale by Koçak (2020) consists of 17 items and sub-dimensions of sport branch competence, psychological competence, professional thinking and personality. It is a 5-point Likert scale for self-evaluation. These items were scored as 1-Disagree, 2-Slightly Agree, 3-Moderately Agree, 4-Very Agree, 5-Totally Agree. The Cronbach Alpha reliability coefficient value of the scale was found to be 0.88.

Data Collection Method

The athletes forming the research group were reached online (instagram, telegram, whatsapp, etc.) and questions were asked via Google form.

Analysing the Data

SPSS 28.0 programme was used for data analysis. The Kolmogorov-Smirnov test was used to determine the data's normality. The Independent Sample T-Test was used to compare the variables, and the significance level was determined as 0.05 in the comparison of all variables.

Findings

Table 1

Comparison of Self-Efficacy of Athletes According to Sport Type

Sub Variables	Sport Type	n	'X̄'±Ss	t	p
Sport Proficiency	Individual	101	4.11±0.87	-1.901	0.058
	Team	99	4.32±0.67		
Psychological Competence	Individual	101	3.97±0.70	0.198	0.843
	Team	99	3.94±0.78		
	Individual	101	3.96±0.68	1.586	0.114

Psychological Competence	Team	99	3.79±0.88		
Personality	Individual	101	4.05±0.53	-0.270	0.787
	Team	99	4.07±0.58		

Table 1 shows the comparison of athletes' self-efficacy according to sport type. According to the table in question: There is no statistical difference in the sub-dimensions according to the findings related to the type of sport (p>0.05). However, when the mean scores are analysed, it is seen that team athletes have higher mean scores than individual athletes in the sub-dimensions of Sports Competence and Personality. Individual athletes have higher mean scores than team athletes in the Psychological Competence and Professional Thinking sub-dimensions.

Table 2

Comparison of Self-Efficacy of İndividual and Team Athletes According to Gender

Sub Variables	Gender	n	'X̄'±Ss	t	p
Sport branch competence in individual athletes	Woman	38	4.05±0.89	-0.488	0.626
	Male	63	4.14±0.85		
Individual Athletes Psychological Competence	Woman	38	4.05±0.69	0.991	0.324
	Male	63	3.91±0.70		
Individual Athletes Professional Thinking	Woman	38	4.04±0.69	0.889	0.376
	Male	63	3.92±0.67		
Individual Athletes Personality	Woman	38	4.12±0.49	0.924	0.342
	Male	63	4.01±0.56		
Team Sport branch competence in athletes	Woman	38	4.24±0.72	-0.930	0.354
	Male	61	4.37±0.63		
Team Athletes Psychological Competence	Woman	38	3.77±0.94	-1.755	0.113
	Male	61	4.05±0.64		
Team Athletes Professional Thinking	Woman	38	3.71±0.89	-0.707	0.482
	Male	61	3.84±0.88		
Team Athletes Personality	Woman	38	4.05±0.65	-0.281	0.779
	Male	61	4.09±0.53		

Table 2 shows the comparison of self-efficacy of individual and team athletes according to gender. According to the findings related to gender, there is no statistical difference in sub-dimensions (p>0.05). However, when the mean scores of the sub-dimensions are analysed, it is seen that men (4.14±0.85) have a higher mean score than women (4.05±0.89) in sport discipline competence. In the sub-dimensions of Psychological Competence, Professional Thinking, and Personality in Athletes, women have higher mean scores than men. In team sports, it was determined that men had higher mean scores than women in the sub-dimensions of Sport Branch Competence, Psychological Competence, Professional Thinking and Personality in Athletes.

Table 3

Comparison of Self-Efficacy of İndividual and Team Athletes According to Height

Sub Variables	Height (cm)	n	'X̄'±Ss	t	p
Sport branch competence in individual athletes	175 and Below	59	4.07±0.93	-0.513	0.609
	176 and Above	42	4.16±0.78		
Individual Athletes Psychological Competence	175 and Below	59	4.00±0.73	0.648	0.519
	176 and Above	42	3.91±0.64		
Individual Athletes Professional Thinking	175 and Below	59	4.08±0.71	1.985	0.050
	176 and Above	42	3.80±0.62		
Individual Athletes Personality	175 and Below	59	4.10±0.57	1.058	0.293
	176 and Above	42	3.99±0.48		
Team Sport branch competence in athletes	175 and Below	47	4.23±0.70	-1.181	0.241
	176 and Above	52	4.39±0.63		
Team Athletes Psychological Competence	175 and Below	47	3.86±0.90	-0.996	0.330
	176 and Above	52	4.02±0.65		
Team Athletes Professional Thinking	175 and Below	47	3.79±0.84	0.731	0.937
	176 and Above	52	3.78±0.92		
Team Athletes Personality	175 and Below	47	4.03±0.62	0.435	0.513
	176 and Above	52	4.11±0.53		

*p<0.05

Table 3 shows the comparison of self-efficacy of individual and team athletes according to their height. According to this table: In the sub-dimension of professional thinking in individual athletes, there is a statistical difference between athletes with a height of 175 cm and below and athletes with a height of 176 cm and above (p<0.05). When the mean scores of the sub-dimensions are examined, it is seen that those 176 cm and over (4.16±0.78) have a higher mean score than those 175 and under (4.07±0.93). In the sub-dimensions of psychological competence, professional thinking and personality in athletes, it was found that those with a height of 175 cm and below had a higher mean score than those with a height of 176 cm and above. In the sub-dimensions of Sports Competence, Psychological Competence and Personality in team athletes, it is seen that athletes with a height of 176 cm and above have a higher mean score than athletes with a height of 175 cm and below. In the sub-dimension of Professional Thinking, 175 cm and below athletes have a higher mean score than 176 cm and above athletes.

Table 4

Comparison of Self-Efficacy of İndividual and Team Athletes According to Weight

Sub Variables	Weight (kg)	n	'X̄'±Ss	t	p
Sport branch competence in individual athletes	70 and Below	56	4.05±0.86	-0.718	0.475
	71 and Above	45	4.18±0.87		
Individual Athletes Psychological Competence	70 and Below	56	3.94±0.84	-0.712	0.465
	71 and Above	45	4.05±0.64		
Individual Athletes Professional Thinking	70 and Below	56	3.95±0.70	-0.203	0.840
	71 and Above	45	3.98±0.67		
Individual Athletes Personality	70 and Below	56	4.06±0.58	0.068	0.946
	71 and Above	45	4.05±0.48		
Team Sport branch competence in athletes	70 and Below	53	4.29±0.69	-0.486	0.628
	71 and Above	46	4.35±0.64		
Team Athletes Psychological Competence	70 and Below	53	3.98±0.88	-1.365	0.176
	71 and Above	46	4.19±0.54		
Team Athletes Professional Thinking	70 and Below	53	3.76±0.90	-0.315	0.753
	71 and Above	46	3.82±0.87		
Team Athletes Personality	70 and Below	53	4.04±0.62	-0.683	0.496
	71 and Above	46	4.12±0.52		

Table 4 shows the comparison of self-efficacy of individual and team athletes according to their weight. According to the findings related to weight, there is no statistical difference in the sub-dimensions ($p>0.05$). However, when the mean scores of the sub-dimensions are examined, it is seen that 71 kg and over athletes have a higher mean score than 70 kg and under athletes in Sport Branch Competence, Psychological Competence and Professional Thinking. In the personality sub-dimension, it was found that 70 and below athletes had a higher mean score compared to 71 and above athletes.

Discussion and Conclusion

In this study, the self-efficacy of individual and team athletes were compared: In the comparison of self-efficacy of athletes according to sport type, there is no statistical difference in sub-dimensions according to the findings related to sport type ($p>0.05$). However, when the mean scores are analysed, it is seen that team athletes have higher mean scores than individual athletes in the sub-dimensions of Sports Competence and Personality. In the sub-dimension of Psychological Competence and Professional Thinking, it was found that individual athletes had higher mean scores than team athletes. The study conducted by Özsarı and Altın (2021), it was determined that the self-efficacy values of individual sports coaches were statistically higher than those of team sports

coaches. Aslan (2016) found that team athletes used more effective stress-coping methods than individual athletes in coping with stress. In the study conducted by Alıncak and Akabay (2015), it was determined that people who were interested in team sports in coping with stress obtained higher scores than individual athletes. Gökçe & Arslan, (2014), Salar et al., (2012), there are studies suggesting that there are significant differences between self-efficacy and team or individual sports. They examined the relationship between self-efficacy, goal setting and team performance on 96 female hockey players in the USA. She analyzed the winning and losing percentages of the teams. He found that self-efficacy had a strong relationship with the team's winning percentage, while team goal setting had a stronger direct effect on winning percentages than strong self-efficacy (Feltz ve Lirgg, 2001).There is a partial similarity between the results of the studies in the literature and the results of this study. The differences are due to sample differences.

When we consider the self-efficacy of individual and team athletes according to gender variable; there is no statistical difference in sub-dimensions according to the findings related to gender ($p>0.05$). However, when the mean scores of sub-dimensions are analysed, it is seen that men (4,14±0,85) have higher mean scores than women (4.05±0.89) in sport branch competence. In the sub-dimensions of Psychological Competence, Professional Thinking, and Personality in Athletes, women have higher mean scores than men. Tuğyanoğlu, (2020), and Sawari and Mansor (2013) stated that there was a significant relationship between the self-efficacy scores of athletes and gender variables in their studies. Irom et al. (2016) concluded that there is a relationship between the gender variable in the related study. Ayyıldız & Sunay, (2021), Sevinç & Kapçak, (2021), Asan (2023), according to the findings of their study, it was found that students' athlete self-efficacy levels did not differ significantly in terms of gender and branch type. Aydın et al., (2019), Özer, (2015), when their studies are examined, it is emphasized that a significant difference was found in gender and self-efficacy findings. This study, found that men had higher mean scores than women in the sub-dimensions of Sport Branch Competence, Psychological Competence, Professional Thinking and Personality in Athletes in team sports.

Athletes need to be in a state of complete well-being in order to perform at the highest level in both individual and team sports. Therefore, the self-efficacy level of an athlete can directly or indirectly affect the possible success of the athlete. For this reason, it is recommended to carry out more scientific studies improve and develop self-efficacy in athletes.

Ethics Committee Permission Information

Ethics review board: Ondokuz Mayıs University Ethics Committee

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Declaration of Contribution Rates of Researchers

Both authors contributed equally to all stages of the study.

Conflict Statement

The authors do not have a conflict statement regarding the research.

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