Turkish Journal of Sport and Exercise /
Türk Spor ve Egzersiz Dergisi
http://dergipark.gov.tr/tsed
Year: 2024 - Volume: 26 – Issue 3 - Pages: 498-510
10.15314/tsed.1471522

Turkish Journal of Sport and Exercise
Türk Spor ve Egzersiz Dergisi
ISSN: 2147-5652
https://dergipark.org.tr/tr/pub/tsed

Investigation of Mental Endurance Levels of Turkish Folk Dance Competition Athletes According to Various Variables

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Conflicts of Interest: The author(s) has no conflict of interest to declare.

Ethical Statement: It is declared that scientific and ethical principles have been followed while carrying out and writing this study and that all the sources used have been properly cited.

(Date Of Received): 21.04.2024 (Date of Acceptance): 31.08.2024 (Date of Publication): 31.12.2024
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Abstract

Folk dances are not only a form of cultural expression, but also represent a perfect combination of physical activity and coordination. In addition to being a cultural and artistic activity, the subject and purpose of this study is to examine the Mental Endurance Levels of the competition athletes performing folk dances, which are accepted as a sport branch, in terms of various variables. A total of 383 folk dance athletes, 216 women and 167 men, participated in this study, which is a descriptive research based on the Scanning model, one of the quantitative research methods, from 18 provinces as licensed in the teams competing in the "youth" category Turkish Championships organised by the Turkish Folk Dance Federation in the 2023-2024 season. In the study, "Mental Endurance Inventory in Sport" was used to determine the mental endurance levels of folk dance athletes. Independent Samples t-Test and One Way Anova from parametric tests were used in the measurements. According to the results of the research, it was determined that there was a statistically significant difference in favour of male athletes according to gender in the folk dance competition athletes participating in the study. While there was no significant difference according to the age variable, it was determined that there was a significant difference according to the year of doing sports. There was no significant difference between the groups according to the weekly training number variable.

Keywords: Folk dances, mental endurance, competition athletes.

Özet

Türk Halk Oyunları Yarışma Sporcularının Zihinsel Dayanıklılık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi

Halk oyunları, sadece kültürel bir ifade biçimi olmanın ötesinde, aynı zamanda fiziksel bir aktivite ve koordinasyonun mükemmel bir birleşimini de temsil etmektedir. Kültürel ve sanatsal bir faaliyet olmasının yanısıra bir spor dalı olarak da kabul edilen halk oyunlarını icra eden yarışma sporcularının Zihinsel Dayanıklılık Düzeylerinin Çeşitli Değişkenler Bakımından incelenmesi bu çalışmanın konusunu ve amacını oluşturmaktadır. Nicel araştırma yöntemlerinden, Tarama modeline dayalı, Betimsel bir araştırma olan bu çalışmaya Türkiye Halk Oyunları Federesyonunca 2023-2024 sezonunda düzenlenen "gençler" kategorisi Türkiye Şampiyonasında yarışan takımlarda lisanslı olarak 18 ilden yarışmaya katılan 216'sı kadın, 167'si erkek olmak üzere toplam 383 halk oyunu sporcu katılmıştır. Araştırmada, halk oyunu sporcularının zihinsel dayanıklılık seviyelerini tespit etmek amacıyla "Sporda Zihinsel Dayanıklılık Envanteri" kullanılmıştır. Ölçümlerde Parametrik testlerden Independent Samples t-Test ve One Way Anova kullanılmıştır. Araştırma sonucuna göre, çalışmaya katılan halk oyunları yarışma sporcularında cinsiyete göre erkek sporcular lehine istatistiki bakımdan anlamlı fark olduğu belirlenmiştir. Yaş değişkenine göre anlamlı fark bulunamazken, spor yapma yılı değişkenine göre anlamlı fark olduğu tespit edilmiştir. Haftalık antrenman sayısı değişkenine göre gruplar arasında anlamlı bir fark olmadığı görülmüştür.

Anahtar Kelimeler: Halk oyunları, zihinsel dayanıklılık, yarışma sporcuları.

INTRODUCTION

Traditional folk dances are one of the cultural products that have a great contribution to the protection of cultural heritage by transferring the history, values, beliefs, rituals and social structure of a society from generation to generation. Folk dances, which symbolize the behaviors of the culture of a community or ethnic group, are one of the cultural building blocks that enable a society to express aspects of its cultural and social life through music, figures and movement structures. These movements often carry a specific meaning and include references to traditional stories or the history of the community. Gestures are used to express emotions, stories or characters. From this point of view, folk dances can be explained as a folk art in which physical movements and gestures are used together, traditional music, rhythm and traditional clothing become a whole and come to life in the human body.

Folk dances are not only a form of cultural expression, they also represent a perfect combination of physical activity and coordination. In addition to being a cultural and artistic activity, dance is also recognized as a branch of sport (18, 1, 64). Folk dances, which are observed to have an important role in the development of individuals in physical and mental aspects, are a physical activity that involves more intense and difficult combinations of physical movements than most types of sportive activities with the intense mobility it contains (48). According to Gerek (17), folk dances, which are one of the cultural products, should be evaluated as a sports activity, considering that folk dances, which are one of the cultural products, have a competition and competition environment like all sports branches, are evaluated by referees within the framework of certain rules, players show physical activity during the competition, and competitions are held in front of the audience.

Several studies (26, 67, 24, 28, 73, 65) addressed the physical characteristics of dancers, their mental, psychological and sociological dimensions in different age groups, and their training and physical capacity-enhancing aspects in the field of sports sciences. At the same time, in these studies, it is revealed that folk dances are accepted as a sport branch, dancers should have physical abilities that require high-level coordination, flexibility and endurance, and on the other hand, it is also necessary to use the mental skills necessary for success in a competitive environment effectively.

The definition of traditional dance as a sport has transformed this art form into a discipline that is not only a means of aesthetic expression, but also includes the principles of sports sciences such as disciplined training, competition preparations and training psychology. In the Katen (32) study on the emotional state of dancers in the competition environment, Katen said, "Mind and body are not separate or separable elements. The greater the risk, the greater the possible emotional effects", drawing attention to the emotional state that competitions create in the mind and body of dancers.

Considering that the main goal in the majority of folk dance activities is to participate in folk dance competitions organized by institutions and organizations and win awards; "mental endurance", which is an important factor in optimizing the performance of folk dance athletes, increasing their success and overcoming the difficulties they face throughout their sports life, emerges as an important psychological state that needs to be overcome and developed by working on it.

Mental toughness is one of the psychological factors that occur in athletes during training or matches (60). Mental toughness, which is a concept that includes an athlete's ability to cope with stress, focus, maintain motivation and overcome difficulties, is an issue that has a positive effect on athletes' performance and has a positive effect on achieving their goals. This can also be considered as a psychological state that can help athletes to be resistant to stress (38).

The concept of mental toughness, which refers to the ability of athletes to cope with stress, pressure, and challenges while maintaining a strong sense of determination and belief in their ability to achieve their goals, is a psychological state that, according to Yılmaz (76), is very important in continuing the work started without allowing it to negatively affect performance without losing focus and motivation in failure, unexpected and difficult situations.

When mental toughness, which is accepted as one of the important psychological characteristics in reaching elite performance level, is evaluated in general (22, 5, 4, 29, 36, 39) failure in situations such as competitions and training, increased sense of responsibility, self-confidence due to the belief that they are superior to their competitors despite the pressures they are exposed to, better able to fight and despite the stress factors around the individual, determined and confident, health, performance and psychology is interpreted as a state of being able to improve. Although folk dances have their own distinctive characteristics, the preparation processes in the background are based on physical and mental processes, as in most professional sports branches. This process also requires attention and focus, emotional control and creativity. Therefore, it is very important for folk dance competition athletes to develop their endurance by going through physical, mental and psychological preparation stages.

This study aims to understand the mental endurance levels of athletes especially in the field of folk dances. In many studies, both applied and observational, there are studies on Mental Endurance on athletes and different sports branches (57, 9, 69, 71) are observed. However, when the relevant literature is scanned to the extent that it can be reached, it is quite remarkable that there are no studies on the subject in the field of "folk dances" and makes it valuable to examine this issue.

From this point of view, the subject and purpose of this study is to examine the Mental Endurance Levels of the competition teams competing in the "youth" category Turkish Championship organized by the Turkish Folk Dance Federation in the 2023-2024 season in terms of various variables.

For this purpose, the individuals who participated in the study;

1- Gender

2- Age

3- Duration interested in folk dances

4- Weekly training days

5- According to the daily training hours, answers will be sought to the questions of the level of mental endurance of folk dance athletes.

METHOD

Research Model

This research was designed as a descriptive research based on quantitative research method and survey model. Survey models are research approaches that aim to describe a past or present situation as it exists (31). In descriptive design; “what a situation, condition, person, relationship is” means description, description and clarification. Thus, it provides basic information about the characteristics of certain variables (15).

Population-Sample (Research Group)

The population of the research is the folk dance athletes who are licensed athletes in associations, institutions and organizations engaged in educational activities in different provinces of Turkey in the 2023-2024 academic year and who participate in folk dance activities. The sample of the research consists of a total of 383 folk dance athletes, 216 of whom are women and 167 of whom are men, who participated in the competition as licensed athletes in the teams competing in the "youth" category Turkish Championship organized by the Turkish Folk Dance Federation in the 2023-2024 season.

Since the competition was a Turkish championship, finalist teams from almost all regions of Turkey participated in the competition. In the study, 18 provincial competition teams from 6 regions of Turkey (Thrace, Marmara, Aegean, Mediterranean, Eastern Anatolia, Central Anatolia) participated. In terms of scope, it can be said that the study has a large population to cover the whole Turkey. All athletes participating in the study were evaluated according to the parameters of their demographic and physical characteristics and the results obtained were tried to be explained in a descriptive way.

Data Collection Tools

In the study, the "Mental Endurance Inventory in Sports" developed by Sheard, Golby and Van Wersch (56), whose Turkish adaptation was tested for validity and reliability by Altıntaş and Koruç (2), was used to determine the mental endurance levels of folk dance athletes. The inventory, which consists of 3 sub-dimensions (Confidence, Control, Continuity) and 14 items, is a four-point Likert type. Cronbach's Alpha reliability coefficient was found to be .70. The Cronbach's Alpha reliability coefficient of the trust sub-dimension was found to be .66, the reliability coefficient of the continuity sub-dimension was found to be .56 and the reliability coefficient of the control sub-dimension was found to be .60.

Data Analysis

The data obtained from the folk actors participating in the research were analyzed using SPSS (version 20.0) program. "Frequency and percentage" calculations were made in order to determine the characteristics of the folk actors participating in the research regarding the predetermined variables.

In terms of examining the variables determined in the research, normality test was performed on the data and it was determined that it was suitable for normal distribution. In this case, the study was continued with parametric tests. In order to determine whether there is a significant difference between the scores obtained from the scale, Independent Samples t-Test and One Way Anova tests were applied. In the arithmetic averages and standard deviation values of the variables, 0.05 significance level was accepted statistically.

Table 1. Test for Conformity of Data to Normal Distribution

Scale and Subscales	N	Min	Max.	Mean	SD	Skewness	Kurtosis
Total Score	383	30,00	55,00	42,31	4,77	,244	-,152
Trust	383	10,00	24,00	18,95	2,94	-,057	-,385
Continuity	383	7,00	16,00	13,23	2,05	-,446	-,386
Control	383	6,00	16,00	10,33	1,86	,295	-,057

Ethical approval and institutional permission

Ethics committee approval was obtained with the decision of Burdur Mehmet Akif Ersoy University Non-Interventional Clinical Research Ethics Committee dated 03.01.2024 and numbered 2024/1-GO2024/2. During the current research, the "Higher Education Institutions Scientific Research and Publication Ethics Directive" was followed.

FINDINGS

In this section, the results of the analyzes made in the direction of the level of mental endurance of the folk dance competition athletes participating in the research according to various variables are included.

Table 2. Demographic Characteristics of Participants

Variables	Groups	N	%
Gender	Female	216	56,4
	Male	167	43,6
Age	14	17	4,4
	15	72	18,8
	16	91	23,8
	17	128	33,4
	18	75	19,6
Participating Provinces	Adana	35	9,1
	Amasya	8	2,1
	Ankara	32	8,4
	Aydın	11	2,9
	Balıkesir	26	6,8
	Bitlis	12	3,1
	Çorum	9	2,3
	Denizli	32	8,4
	Elâzığ	32	8,4
	Gümüşhane	21	5,5
	İstanbul	41	10,7
	Konya	31	8,1
	Kocaeli	8	2,1
	Nevşehir	12	3,1
	Sivas	11	2,9
	Tekirdağ	26	6,8
	Trabzon	11	2,9
	Van	25	6,5
Years of practicing folk dance sport	1-2 Years	145	37,9
	3-4 Years	58	15,1
	5-7 Years	71	18,5
	8 Years and over	109	28,5
Number of Weekly Trainig	2	100	26,1
	3	126	32,9
	4	37	9,7
	5	99	25,8
	6	12	3,1
	7	9	2,3

According to Table 2, the total number of folk dance competition athletes who participated in the study was 383 and 216 of them were female (56.4%) and 167 (43.6%) were male athletes. The age range of the athletes participating in the study was between 14 and 18 years old. Athletes from 18 different provinces of Turkey participated in the study. The years of doing folk dance sports vary between 1 and 8 years. The number of weekly training days of the athletes participating in the study varies between 2 and 7 days.

Table 3. T-Test results of mental toughness scores according to gender variable

Scale and Subscales	Gender	N	X̄±SD	t	df	p	η²
Total Score	Female	216	41,12±4,36	-3,394	381	,001	,029
	Male	167	42,76±5,11				
Trust	Female	216	18,17±2,99	-3,746	381	,000	,036
	Male	167	19,28±2,74				
Continuity	Female	216	13,00±1,95	-,290	381	,772	,000
	Male	167	13,06±2,17				
Control	Female	216	9,94±1,76	-2,450	381	,015	,016
	Male	167	10,41±1,97				

According to Table 3, it was determined that there was a statistically significant difference (p=,001) in favor of male athletes (x=42,76) in terms of gender variable (p<0,05). When the effect values are examined, it is seen that all sub-dimensions except the continuity sub- dimension have a moderate effect in favor of male athletes (p2=,036 - ,016) (p2>,001) in terms of gender variable.

Table 4. Anova Test Results according to age variable

Scale and Subscales	Age	N	X̄±SD	f	p	Tukey
Total Score	14	17	42,88±4,75	5,329	,000	18>15-16-17
	15	72	40,37±4,30			
	16	91	41,58±4,63			
	17	128	41,57±4,42			
	18	75	43,76±5,37			
Trust	14	17	18,76±2,61	6,323	,000	18>15
	15	72	17,55±2,72			
	16	91	18,49±2,79			
	17	128	18,64±3,00			
	18	75	19,90±2,87			
Continuity	14	17	13,82±2,03	,846	,497	-
	15	72	12,81±1,85			
	16	91	13,08±1,99			
	17	128	13,01±2,02			
	18	75	13,01±2,32			
Control	14	17	10,29±1,31	3,438	,009	18>17
	15	72	10,00±1,78			
	16	91	10,00±2,00			
	17	128	9,91±1,60			
	18	75	10,84±2,16			

According to Table 4, the total scores of folk dance competition athletes from the mental toughness in sport inventory show a statistically significant difference (p<,05) (p=,000). As a result of the Tukey test conducted to determine from which groups this difference originated, it is seen that 18-year-old athletes have higher scores in the sub-dimensions of "Trust and Control" than all other age group athletes according to the total scores**.**

In the "Trust" sub-dimension, the mean scores of 18-year-old athletes were higher than those of 15-year-old athletes, and in the "Control" sub-dimension, the mean scores of 18-year-old athletes were higher than those of 17-year-old athletes.

Table 5. Anova test results according to years of practicing sports

Scale and Subscales	Years of Sport	N	X̄±SD	f	p	Tukey
Total Score	(1) 1-2 Years	145	40,78±3,98	6,773	,000	4>1
	(2) 3-4 Years	58	41,53±5,16			
	(3) 5-7 Years	71	41,78±4,86			
	(4) 8 Years and over	109	43,43±5,08			
Trus	(1) 1-2 Years	145	18,08±3,04	5,812	,001	4>1,2
	(2) 3-4 Years	58	18,29±2,45			
	(3) 5-7 Years	71	18,71±2,74			
	(4) 8 Years and over	109	19,56±2,96			
Continuity	(1) 1-2 Years	145	12,58±1,95	4,619	,003	4>1
	(2) 3-4 Years	58	13,27±2,02			
	(3) 5-7 Years	71	13,01±1,91			
	(4) 8 Years and over	109	13,50±2,17			
Control	(1) 1-2 Years	145	10,11±1,81	,717	,542	-
	(2) 3-4 Years	58	9,96±1,93			
	(3) 5-7 Years	71	10,05±1,63			
	(4) 8 Years and over	109	10,35±2,05			

A statistically significant difference (p<0,5) was observed between the groups in terms of the scores of the athletes who participated in the study according to their years of practicing sports (p=.000). As a result of the Tukey test conducted to determine which groups this difference originated from, it is seen that the athletes who have been performing folk dance for 8 years or more have higher scores in the sub-dimensions of "Trust and Continuity" compared to all other athletes.

In the "Trust" sub-dimension, it was concluded that the average scores of the athletes who performed folk dance for 8 years and more were higher than the athletes who performed folk dance for 1-2 and 3-4 years, and in the "Continuity" sub-dimension, the athletes who performed folk dance for 8 years and more were higher than the athletes who performed folk dance for 1-2 years.

Table 6. Anova Test Results According to Wekly Training Hours Variable

Scale and Subscales	Weekly Training	N	X̄±SD	f	p
Total Score	2	100	40,76±5,09	2,093	,066
	3	126	42,32±4,80		
	4	37	42,00±4,35		
	5	99	42,35±4,47		
	6	12	39,91±2,99		
	7	9	43,22±5,82		

It was determined that there was no statistically significant difference between the groups according to the number of weekly training (P>.05) (p=.066).

Table 7. Anova Test Results According to Daily Training Hours Variable

Scale and Subscales	Daily Training Hours	N	X̄±SD	f	p
Total Score	1 saat	11	44,00±5,00	1,267	,285
	2 saat	286	41,86±4,94		
	3 saat	54	41,07±4,08		
	4 saat	32	42,15±4,01		

It was determined that there was no statistically significant difference between the groups according to the daily training hours variable (P>.05) (p=.285).

DISCUSSION

Mental resilience in dance has been a topic of interest in recent years. Studies generally underline the importance of dance in the context of mental toughness and emphasize the psychological aspects of dance performance, self-efficacy in dance, and the importance of applying sport psychology to dancers (11, 25, 47, 45, 72). The function of mental endurance in sports is to enable folk dance athletes to develop resistance to the challenges they experience during the training process and during the competition, and to avoid stress by taking control of behavior during the competition.

Since the rhythmic movements in folk dances are usually performed with musical accompaniment and at the right rhythmic times, folk dance performers need to have a high level of neuromuscular coordination (77). These qualities are necessary for dance performance and are similar to the qualities required in other sports branches. However, dancers also have unique characteristics that distinguish them from other athletes (52). The movements performed in harmony with the rhythm of the music are performed both individually and collectively.

Koutedakis et al (37), who define dancers as athletes who perform, mention the importance of understanding the physiological and psychological elements of dance. These factors consist of technical, physical, mental and emotional characteristics that determine the quality of performance. Mental focus and endurance are also related to the dancer's mental focus on the choreography. The dancer's mind must be ready to make the right movements by focusing on the choreography.

According to the results of this research conducted to examine the mental endurance levels of folk dance competition athletes, it was determined that there was a statistically significant difference in favor of male athletes according to the gender variable in the folk dance competition athletes participating in the study. It was seen that the mean scores of male athletes were higher than female athletes in the sub-dimensions of Confidence and Control, except for the Continuity sub-dimension. This result is explained by O'Brien et al. (42) as "inequality in sports, body image problems and increasing mental challenges faced by young female athletes".

This result obtained in this study coincides with some studies in the literature (43, 44,16, 58, 35, 60, 61, 71, 35) overlaps with the study results.

Contrary to this result, Sevinç et al. (55) concluded that mental endurance levels differed significantly from male athletes in favor of female athletes according to gender variable. In addition, unlike the result of the study, there are also studies in the literature that concluded that there is no statistically significant difference in the mental endurance levels of athletes in terms of gender variable (62, 75, 30, 21, 8, 10).

Folk dance trainings are usually spent in the form of demonstrating and teaching the steps of the game. Although the trainings are done with different age groups and for different purposes, it is necessary to determine a final goal in order to reduce the mental and psychological effects of the activity and to make physical preparation (3).

When the mental endurance levels of folk dance competition athletes are analyzed according to the age variable, which is another problem of the research, there is a statistically significant difference over the total scores. As a result of the Tukey test conducted to determine from which groups this difference originates, it is seen that 18-year-old athletes have higher scores in the "Trust and Control" sub-dimensions than all other age group athletes according to total scores. In the "Trust" sub-dimension, the mean scores of 18-year-old athletes were higher than those of 15-year-old athletes, and in the "Control" sub-dimension, the mean scores of 18-year-old athletes were higher than those of 17-year-old athletes. This situation can be explained as an increase in the mental resilience levels of individuals as a result of the difficulties they face and the experiences they have gained in life.

In the related literature review, parallel to the results of this study according to the age variable, there were studies in which the level of mental resilience gave parallel results with age (33, 74, 22, 9, 4, 14, 64). In the literature, unlike the results of the research, Kayhan et al. (33), Çakıcı et al. (7) concluded that the mental endurance levels of athletes engaged in individual and team sports did not create a statistically significant difference according to age.

As in all sporting competitions, there is a preparation period for folk dance teams to enter the competition (13). In their study, Lakes et al. (40) reported that experienced dancers have more self-perceived physical, social and cognitive benefits compared to novice dancers. They emphasize that dedicated dancers have higher physiological and psychological well-being such as physical fitness and mood.

It was seen that there was a statistically significant difference between the folk dance competition athletes who participated in the study according to the variable of years of sport. As a result of the Tukey test conducted to determine from which groups this difference originated, according to the total scores, it is seen that the athletes who have been performing folk dance for 8 years or more have higher scores in the sub-dimensions of "Trust and Continuity" than all other athletes. In the "Confidence" sub-dimension, it was concluded that the average scores of the athletes who performed folk dance for 8 years and more were higher than the athletes who performed folk dance for 1-2 and 3-4 years, and in the "Continuity" sub- dimension, the athletes who performed folk dance for 8 years and more were higher than the athletes who performed folk dance for 1-2 years. This situation can be explained as an increase in their self-confidence by developing skills in stress management by starting folk dance studies at an early age and developing skills in stage experiences they have gained over the years, adapting to changing situations in training and competitions, and taking behavioral control in the face of the difficulties they have experienced, creating a positive increase in their mental endurance levels. This result obtained in the study coincides with the studies that obtained similar results in the literature according to the variable of years of doing sports (57, 68, 23, 27, 39, 63, 59). Contrary to the result of the study, Efe (12) concluded that there was no significant relationship between the year of doing sports and the mental endurance levels of athletes.

In the study, no statistically significant difference was found between the groups when the weekly training number variable was analyzed. It can be said that this situation may be due to the fact that individuals interested in folk dances regularly train on certain days and hours of the week, whether there is a competition or not. From another point of view, it can also be said that it may be due to the fact that they perform on stage on certain days and weeks, national holidays and celebrations other than competitions, and that they are constantly confronted with the audience in tourism promotion activities such as Turkish nights, and because of this situation, they have confidence in their own abilities and believe that they are better than their competitors. This finding coincides with other studies in the literature (67, 29, 19). In contrast to this result, concluded that there was a significant difference (6, 53) between the number of weekly training sessions and mental endurance.

CONCLUSIONS AND RECOMMENDATIONS

Today, sports science and psychology emphasize that performance is not only based on physical abilities, but also on mental factors. Different branches, disciplines and competition types of sports require the examination of the factors affecting the mental endurance of the athlete. In this context, competition sports, which include traditional and cultural elements such as folk dance, emerge as a special performance area that requires the athlete to use many physical and mental skills simultaneously.

Folk dance competition athletes can emotionally affect the audience while providing them with an artistic experience. Athletes are often, if not always, in an effort to do their best and achieve high performance. A competition performance includes important components such as the quality of the movement sequence, technical skills, emotional expression and stage preparation, as well as the ability to move in synchronization with the music, to display creative and technical skills, to move in harmony with the costume and stage design, and to make an emotional connection with the audience. Due to the nature of the competition, the ultimate goal of all teams is to win first place, so the importance of physical preparation as well as the application of artistic and sporting skills, nutrition monitoring, and planning and management of training sessions can be shown as key elements of success in the competition.

According to the results of this research conducted to examine the mental endurance levels of folk dance competition athletes, it was determined that there was a statistically significant difference in favor of male athletes according to the gender variable in the folk dance competition athletes participating in the study. Except for the Continuity sub-dimension, the mean scores of male athletes in the Confidence and Control sub-dimensions were higher than those of female athletes. When the mental endurance levels of folk dance

competition athletes were examined according to the age variable, there was a statistically significant difference over the total scores. It was seen that there was a statistically significant difference between the competition athletes according to the year of doing sports. It was seen that there was no statistically significant difference between the groups according to the weekly training number variable.

Determining the mental endurance levels of folk dance competition athletes in order to train elite level athletes is very important in terms of both increasing the performance of the ensembles that will participate in the competition in the future and the techniques to be applied by coaches/trainers. In this context, based on the results of this study, evaluating the mental endurance levels of folk dance competition athletes can help us better understand and improve the performance of athletes in terms of both dance training and performance optimization, as well as offer new perspectives to training programs.

In the light of these fındings, it can be suggested to increase the number of samples in future studies, to determine the age range differently and to examine different parameters by conducting similar studies with athletes competing in different categories. According to the results of such studies, folk dance competitions can improve the mental endurance of athletes. In this study, only the mental endurance level of folk dances branch was taken as a basis, it may be recommended to examine the relationship between athletes' physical fitness status and mental endurance levels in future studies. In addition, it may be recommended to examine what kind of changes the experimental studies create in the mental endurance levels of the athletes.

REFERENCES

1. Ağırbaş Ö, Çolak M, Ağgön E. Erzincan yöresi halk oyunlarının görsel ve işitsel reaksiyon zamanları üzerine etkisi. CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi, 2015; 10(1): 47-55.
2. Altıntaş A, Koruç PB. Sporda zihinsel dayanıklılık envanteri'nin psikometrik özelliklerinin incelenmesi (SZDE). Spor Bilimleri Dergisi, 2017; 27(4): 162-171.
3. Arısoy A, Koçyiğit B. Halk oyunları ve zihinsel antrenman. K. Öner (ed), Sportif yönleriyle Türk halk oyunları. İçinde. 2022; 179-190. İstanbul: Efe Akademi Yayınları.
4. Ayaş EB, Murathan F, Murathan G. Farklı liglerdeki futbolcuların zihinsel dayanıklılık özellikleri ile fiziksel uygunluk durumlarının incelenmesi. Kesit Akademi Dergisi, 2020; 6(22): 80-89.
5. Bahadır G, Adïloğulları İ. The relationship between of emotional intelligence and mental toughness in athletes studying in universities. International Journal of Sport, Exercise & Training Sciences, 2020; 6(4): 117-128.
6. Birinci MC. Futbol ve voleybol sporcularının zihinsel dayanıklılık ve öz yeterlilik ilişkinin incelenmesi. Beden Eğitimi Spor Sağlık ve Efor Dergisi, 2022; 1(2): 117-125.
7. Çakıcı HA, Taşpinar HA, DereliOğlu M. Futbol oyuncularının pozisyonel rekabet düzeyleri ile zihinsel dayanıklıkları arasındaki ilişkinin incelenmesi. ÇOMÜ Spor Bilimleri Dergisi, 2023; 6(3): 118-135.
8. Çetinkaya T, Ayhan R. spor bilimleri fakültesi öğrencilerinin serbest zaman okuryazarlık ve zihinsel dayanıklılık düzeyleri. Gazi Beden Eğitimi ve Spor Bilimleri Dergisi, 2023; 28(4): 300-307.
9. Demir P, Çelebi M. Spor bilimleri fakültesinde eğitim gören mücadele sporcularının zihinsel dayanıklılıklarının incelenmesi. International Journal of Contemporary Educational Studies (IntJCES), 2019; 5(2): 188-99.
10. Demir G, Türkeli A. Spor bilimleri fakültesi öğrencilerinin egzersiz bağımlılığı ve zihinsel dayanıklılık düzeylerinin incelenmesi. Spor Bilimleri Araştırmalır Dergisi, 2019; 4(1): 10-24.
11. Dwarika MS, Haraldsen H M. Mental health in dance: A scoping review. Movement Science and Sport Psychology, a section of the journal Frontiers in Psychology, 2023; 1.
12. Efe M. Profesyonel ve amatör futbolcuların zihinsel dayanıklılık ve imgeleme durumlarının sporculuk düzeyi ve sporculuk yılı değişkenleri açısından incelenmesi. Spor, Sağlık ve Eğitim Araştırmaları Dergisi 2023; 2(1): 68-79.
13. Ekmekçioğlu İ, Bekâr C, Kaplan M. Türk Hak Oyunları. 1.Baskı, 2001; İstanbul: Esin Yayınevi.
14. Erbaş Ü. Mücadele sporcularının zihinsel dayanıklılıklarının bazı değişkenler açısından İncelenmesi. International Journal Of Eurasia Social Sciences, 2022; 48.
15. Erdoğan, İ. Pozitivist Metodoloji. 2007Ankara: Erk Yayınları.
16. Erdoğan M, Bezci Ş. Fiziksel aktivite ve zihinsel dayanıklılık düzeylerinin uyku kalitesine etkisi. Özgür Yayınları; 2023.
17. Eroğlu O, Ünveren A, Ayna Ç, Müftüoğlu NE. Spor bilimleri fakültesindeki öğrencilerin sporda zihinsel dayanıklılık ve sporda ahlaktan uzaklaşma düzeyleri arasındaki ilişkinin incelenmesi. Türkiye Spor Bilimleri Dergisi, 2020; 4(2): 100-10.
18. Gerek Z. Halk oyunları ve szpor eğitimi alan üniversite öğrencilerinin fiziksel uygunluklarının Eurofit ile karşılaştırılması. Ankara: Gazi Üniversitesi Sağlık Bilimleri Enstitüsü; 2007.

19. Gerek Z. Halk oyunları ve spor eğitimi alan üniversite öğrencilerinin fiziksel uygunluklarının Eurofit ile karşılaştırılması. Atatürk Beden Eğitimi ve Spor Bilimleri Dergisi, 2010; 9(1): 11-21.
20. Göktaş Z, Güzel MC. Spor bilimleri fakültesi öğrencilerinin egzersiz bağımlılığı ve zihinsel dayanıklılık düzeylerinin incelenmesi. Bağımlılık Dergisi, 2023; 24(1): 61-72.
21. Gupta S, McCarthy PJ. The sporting resilience model: A systematic review of resilience in sport performers. Front Psychol, 2022; 13:1003053.
22. Gülhan A, Şahin A. Sporcularda duygusal öz yeterliliğin zihinsel dayanıklılığı belirlemedeki rolü. International Journal of Turkish Sport and Exercise Psychology, 2021; (1): 58-73.
23. Gürer B, Alıncak F, Özen G. Bir doğa turizmi olarak macera yarışlarına katılan sporcuların zihinsel dayanıklılıklarının incelenmesi. Gazi Beden Eğitimi ve Spor Bilimleri Dergisi, 2019; 24(4): 215-226.
24. Güvendi̇ B, Can HC, Işim AT. Triatlon sporcularının zihinsel dayanıklılıklarının karar verme stilleri ile ilişkisinin incelenmesi. International Journal of Contemporary Educational Studies (IntJCES), 2020; 6(1): 146-160.
25. Hacicaferoğlu S. Hacıcaferoğlu B, Seçer M. Halk oyunları branşına katılan sporcuların yarışma öncesi kaygı düzeylerinin bazı değişkenler açısından incelenmesi. International Journal of Science Culture and Sport (IntJSCS), 2015; 3(12): 288-288.
26. Huang HC, Hsieh HH, Chang CM, Lu YC, Mui WC. An exploration of dance learning stress sources of elementary school dance class students with artistic abilities: the ınfluences of psychological capital and self-concept. International Journal of Environmental Research and Public Health, 2022; 19(12): 7398.
27. Hüdaver Ö, Karcılılar A. Morpa Spor Ansiklopedisi (5). 2005. İstanbul: Morpa Kültür Yayınları.
28. İlhan A. Tenis oyuncularının zihinsel dayanıklılık düzeyleri. Journal of Global Sport and Education Research, 2022; III(2): 28-35.
29. İri R, Yılmaz A, Aktuğ, ZB. Elit futbol ve hentbolcuların fiziksel uygunluk düzeyleri ve motorik özelliklerinin karşılaştırılması. Spor ve Performans Araştırmaları Dergisi, 2016; 8(1): 19-25.
30. Kalkavan A, Özdi̇lek Ç, Çakir G. Dağ bisikletçilerininin zihinsel dayanıklılık düzeylerinin araştırılması. Atatürk Beden Eğitimi ve Spor Bilimleri Dergisi, 2020; 22(2).
31. Kara R, Şahi̇n A. The role of social support in determining mental toughness in athletes. International Journal of Turkish Sport and Exercise Psychology, 2021; 1-14.
32. Karasar N. Bilimsel araştırma yöntemi. (19. Baskı), Ankara: Nobel Yayın. 2009
33. Katen j. Competition and cognition: Theorizing an autopoietic pedagogy of performance within competitive dance. Journal of Dance Education, 2021; 21(3): 140-148
34. Kayhan RF, Aydoğan H, Hacicaferoğlu S, Erdemi̇r İ. Takım ve bireysel sporlar ile ilgilenen sporcuların zihinsel dayanıklılık durumlarının incelenmesi. Sportif Bakış: Spor ve Eğitim Bilimleri Dergisi, 2018; 5 (2): 55-64.
35. Koç İ, Gençay ÖA. Badminton sporcularının zihinsel dayanıklılık düzeylerinin çeşitli değişkenlere göre incelenmesi. Beden Eğitimi ve Spor Bilimleri Dergisi, 2021; 15(1): 110-124.
36. Koç İ, Ergi̇n, Gencer E, Marangoz İ. Zihinsel dayanıklılık ile parkur performansı üzerine ilişkisel bir araştırma. Akdeniz Spor Bilimleri Dergisi, 2022; 5(4): 858-870.
37. Koçyi̇ğit B. Zihinsel dayanıklılık ile öz yeterlik arasındaki ilişki. Akdeniz Spor Bilimleri Dergisi, 2022; 5(4): 871-881.
38. Koutedakis Y, Kalinoglou AS, Metsios MG. The significance of muscular strength in dance. Journal of Dance MedicineScience, 2005; 9(1): 29-34.
39. Kurtulget E, Kaplan G, Çepi̇kkurt F. Basketbolculardа tutkunluk ve zihinsel dayanıklılığın tükenmişliği belirlemedeki rolü. Türkiye Spor Bilimleri Dergisi, 2018; 2(2): 82-91.
40. Kurudi̇rek Mİ, Kurudi̇rek A, Karababa B, Bi̇ndesen MA, Yılmaz E. Buz hokeyi oyuncularının sporda zihinsel dayanıklılık düzeylerinin incelenmesi. Akdeniz Spor Bilimleri Dergisi, 2022; 5 (Özel Sayı 1): 295-308.
41. Lakes KD, Marvin S, Rowley J, Nicolas MS, Arastoo S, Viray L, Orozco A, Jurnak F. Dancer perceptions of the cognitive, social, emotional, and physical benefits of modern styles of partnered dancing. Complementary Therapies in Medicine, 2016; (26): 117-122.
42. Levy, FJ. Dance/Movement Therapy: A Creative Arts Approach. Human Kinetic. 1992.
43. O'Brien McMKH, Rowan M, Willoughby K, Griffith K, Christino MA. Psychological resilience in young female athletes. International Journal of Environmental Research and Public Health, 2021; 18: 8668.
44. Meggs J, Chen MA. Mental toughness and attributions of failure in high performing male and female swimmers. Journal of Human Sport and Exercise, 2018; 13(2): 276-284.
45. Menteş G, Saygın Ö. Investigation of mental toughness and cognitive flexibility of e-sports and traditional sports. International Journal of Sport, Exercise & Training Sciences, 2019; 5(4): 238–250.
46. Meekums, B, Karkou, V, Koch, S. (Eds.). Dance and Mental Health: Towards a New Social Psychology of Dance. Routledge. 2017
47. Morgan PB, Fletcher D, Sarkar M. Recent developments in team resilience research in elite sport. Current Opinion in Psychology 2017; (16): 159–164.
48. Murcia, C. Q., Kreutz, G., Bongard, S., & Kotz, S. S. J. The psychological benefits of partner dance. Journal of Dance Medicine & Science, (2010); 14(1): 32-39.

49. Okdan B. Halk oyunları çalışmalarının kan oksidatif stres düzeyi ile lipid ve lipoproteinleri üzerine etkisi [Yayınlanmamış]. [İzmir]: Ege Üniversitesi Sağlık Bilimleri Ensitüsü; 2016.
50. Orhan S, Ünlü H. Futbolcularda zihinsel dayanıklılık ve hedef yöneliminin akıl dışı performans inançları ile ilişkisi: kesitsel çalışma. Turkiye Klinikleri J Sports Sci. 2022; 14(1): 11-21.
51. Özdinç, M. (2022). Halk oyunlarının diğer spor dallarıyla ilişkisi. K. Öner (ed.), Sportif Yönleriyle Türk Halk Oyunları. İçinde (329-336). Efe Akademi.
52. Parlak N. Amatör futbolcularda zihinsel antrenmanın zihinsel dayanıklılığa etkisinin incelenmesi. Aydın Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 2023; 10(1): 83-100.
53. Russel JA. Preventing dance injuries: current perspectives. Open Access Journal of Sports Medicine, 2013; (4): 199-210.
54. Sarı İ, Sağ S, Demir AP. Sporda zihinsel dayanıklılık: taekwondo sporcularında bir inceleme. Atatürk Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi, 2020; (22): 4.
55. Sarkar M, Fletcher D. Psychological resilience in sport performers: a review of stressors and protective factors. Journal of Sports Sciences, 2014; 1-16.
56. Sevĭnç K, Özmutlu İ, Kapçak V. Futbol ve basketbol sporcularının zihinsel dayanıklılık ile yaratıcılık düzeylerinin incelenmesi. Uluslararası Egzersiz Psikolojisi Dergisi, 2022; 4(2): 38-46.
57. Sheard M, Golby J, Van Wersch A. Progress towards construct validation of the Sports Mental Toughness Questionnaire (SMTQ). European Journal of Psychological Assessment, 2009; 25(3): 186-193.
58. Şahĭnler Y, Ersoy A. Sporcuların zihinsel dayanıklılıklarının farklı değişkenlere göre incelenmesi. International Journal of Social Sciences and Education, 2019;5(2): 168-77.
59. Şahĭnler Y, Beşler HK. Takım ve mücadele sporları yapan bireylerin zihinsel dayanıklılık düzeylerinin incelenmesi. Kilis 7 Aralık üniversitesi beden eğitimi ve spor bilimleri dergisi, 2021; 5(2): 133-144.
60. Şĭmşek B, Kartal A. Takım ve bireysel sporcuların zihinsel dayanıklılık düzeylerinin incelenmesi. Kilis 7 Aralık Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi, 2023; (7)1: 27-40.
61. Tangkudung AWA, Haqiyah A, Tangkudung J, Abidin D. Mental toughness of martial art athletes based on age and gender. Journal of Physical Education, Sport, Health and Recreation, 2021; 10 (2): 66-70.
62. Taşkın AH, Arı Y, Özmutlu İ. Farklı değişkenlere göre sporda zihinsel dayanıklılık: Spor bilimleri fakültesi örneği. International Journal of Contemporary Educational Studies (IntJCES), 2022; 8(2): 495,507.
63. Tekkurşun Demĭr, G., Türkelĭ, A. Spor bilimleri fakültesi öğrencilerinin egzersiz bağımlılığı ve zihinsel dayanıklılık düzeylerinin incelenmesi. Spor Bilimleri Araştırmaları Dergisi, 2019: 4(1): 10-24.
64. Toktaş S, Demir A. Aktif spor yapan üniversite öğrencilerinin duygusal zekâ ve sporda zihinsel dayanıklılık düzeylerinin incelenmesi. ROL Spor Bilimleri Dergisi, 2023; (özel Sayı 1): 455-472.
65. Turan, M., MaviBaş, M., Savaş, B. Ç. Spor bilimleri fakültesi öğrencilerinin sporda mental dayanıklılık düzeylerinin incelenmesi. Kafkas Üniversitesi Spor Bilimleri Dergisi, 2022; 2(2): 52-70.
66. Turan A, Turan Z. Zeybek ve kafkas halk oyuncularının fiziksel uygunluk parametrelerinin incelenmesi ve karşılaştırılması. Akdeniz Spor Bilimleri Dergisi, 2023; 6 (Özel Sayı 1): 790-807.
67. Türkay C, Adana yöresi halk oyunlarının kalp atım hızı değerlerini üzerine etkilerinin incelenmesi. Yayınlanmamış. Sakarya: Sakarya Uygulamalı Bilimler Üniversitesi Lisansüstü Eğitim Enstitüsü; 2019.
68. Uçar UM, Kaplan T. Konya amatör lig futbolcularında zihinsel dayanıklılığın incelenmesi. Beden Eğitimi ve Spor Bilimleri Dergisi, 2020; 14(2): 145-157.
69. Ulukan M. Güreşçilerde tutkunluk ile zihinsel dayanıklılık ilişkisinin farklı değişkenler açısından incelenmesi. Journal Of Social, Humanities And Administrative Sciences, 2020; 6(29): 1284-1295.
70. Ünver D, Karacabey K. Futbolda Fizyolojik ve Zihinsel Dayanıklılık: Profesyonel Futbolcular üzerine bir uygulama. International Journal of Turkish Sport and Exercise Psychology, 2022; 1: 19-29.
71. Ünveren, A. Düzenli halk oyunları çalışmalarının bazı fiziksel ve fizyolojik parametrelere etkisi. Beden Eğitimi ve Spor Bilimleri Dergisi, 2006; 8(1): 28-35.
72. Var L, Bozdağ B, Oğur YG, Kılınç İS. Spor bilimleri fakültesi öğrencilerinin zihinsel dayanıklılık düzeylerinin incelenmesi. Kuyulu, İ., Zorba, E. (ed). Spor Bilimlerinde Akademik Çalışmalar-18. İçinde. 2022; 41-63. İzmir: Duvar Yayınları.
73. Waugh, M., Grunseit, A. C., Mathieu, E., Merom, D. The psychometric properties of a novel task-based dance self-efficacy measure for older adult dance program participants. ArtsHealth, 2023; 15(1): 33-52.
74. Yalçın Y, Demĭrağ H, Kaya Ş, Eroğlu M. Halk oyuncularında zihinsel antrenmanın başarı motivasyonu düzeyini yordaması. SPORMETRE Beden Eğitimi ve Spor Bilimleri Dergisi, 2022; 20(1): 1-14.
75. Yarayan Y. E. Elit düzeyde bireysel ve takım sporu yapan sporcuların zihinsel dayanıklılık düzeylerinin çeşitli değişkenlere göre incelenmesi. Journal of International Social Research, 2018; 11(57): 992-999.
76. Yıldırım I. Ö, Kocaekşĭ S. Güreşçilerde zihinsel dayanıklılık, öz yeterlik inancı ve sportif kendine güven düzeylerinin incelenmesi. International Journal of Contemporary Educational Studies (IntJCES), 2020; 6(2): 392-406.
77. Yılmaz A. Sporda Zihinsel Dayanıklılık. Uluslararası Dağcılık ve Tırmanış Dergisi, 2021; 4(2): 23-42.
78. Zembat R, Mertoğlu E, Jeongsuk C. 5-6 Yaş çocuklarına yönelik hazırlanan ritm eğitimi programının çocukta ritm duyusunun gelişimine etkisinin incelenmesi. Kastamonu Eğitim Dergisi, 2010; 18(1): 47-60.

79. Casa DJ, Armstrong LE, Hillman SK, Montain SJ, Reiff RV, Rich BSE, Roberts WO, Stone JA. National athletic trainers' association position statement: fluid replacement for athletes. Journal of Athletic Training, 2000; 35(2): 212-224.

80. American College of Sports Medicine. Joint position stand: Nutrition and athletic performance. Med Sci Sports Exerc, 2000; 32(12): 2130–2145.

81. Cohen J. Statistical Power Analysis for the Behavioral Sciences. 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Assoc, 1988; 274–275.

82. Bangsbo J. Physiology of Training. In: Science and Soccer, Relly, T and Williams, AM, eds. New York: Roudlegde, 2003.