



## THE EFFECT OF FOLK GAMES TRAINING ON QUICKNESS IN 14-16 YEARS OLD WOMEN

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### **Abstract:**

In this study, it was aimed to examine the effect of 8-week folk dances on women's quickness performance. A total of 60 women, including 30 experimental group and 30 control group, voluntarily participated in the study. The experimental group was played on Saturday and Sunday for three hours, two days a week, for three hours a week. The control group was not subjected to any training. Measurements were taken as pre-test and post-test at the beginning and end of the work program. The normality distribution of the data was determined by the Shapiro-Wilks test. Since the data has a normal distribution, the t-test, one of the parametric tests, was used for comparisons between groups. Paired t test was used for in-group comparisons. According to the analysis results, a statistical difference was found in the pre-test and post-test values of the experimental group's quickness values. In the control group, no difference was detected. As a result, it can be said that folk dance practices, which have an important place in our culture, positively affect the values of quickness.

**Keywords:** folk dances, training, quickness

### **1. Introduction**

Folklore is very important in defining a country's lifestyle, traditions and customs (Örnek, 2000). Folk dances are a historical document that revive concepts such as heroism and war (Erdem ve Pular, 1994). Folk dances are rhythmic movements that reflect the character, feelings, thoughts and spiritual values of people since the existence of humanity (Altuğ, 1991). The benefits of exercise for humans are a well-known fact. When exercise is done consciously, it increases the quality of life of the person (Zorba et al., 2004). It seems that regular exercises increase speed and flexibility (Yamaner & Hacıcaferoğlu, 1997). During the game, the speed performance came into prominence as the players were more effective and often changed direction. In the match analysis, it was

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determined that the most occurring sprints were less than 20 meters (Mathisen, 2014). Therefore, the purpose of this study is to examine whether the eight-week folk dance practice has an effect on quickness.

## 2. Method

A total of 60 women voluntarily participated in the study, 30 of which were experimental group and 30 control group, who had no sports background and did not play folk dances. For eight weeks, the experimental group played cozyri, maney and apostle games of Gaziantep region for three hours, two days a week, on Saturdays and Sundays. The control group was not subjected to any training. Measurements were taken as pre-test and post-test at the beginning and end of the work program.

### 2.1 Quickness Test

Photocells were placed at the starting point and 5 meters. At the starting point of the 5-meter distance (0 meters), the subjects took a standing position with one knee in front and the other in the back in a static standing position. No swaying motion of any kind was allowed. The subject started to run at maximum speed after waiting at least 3 seconds in this position, and the time obtained for the 0-5 meter interval was taken as speed performance. Subjects were given 2 trials. A 3-minute rest was provided between each trial and the best scores were noted as quickness scores. Quickness is a versatile skill that is the combination of explosiveness and acceleration. It is stated as first exit speed (0-5m), acceleration (0-10m) and maximum speed (0-30m) (Cronin ve Hansen, 2005).

### 2.2. Statistical Analysis

SPSS IBM 22 statistical package program was used to evaluate the data. The normality distribution of the data was determined by the Shapiro-Wilks test. Since the data has a normal distribution, the t-test, one of the parametric tests, was used for comparisons between groups. Paired t test was used for in-group comparisons. In this study, the error level was accepted as 0.05.

## 3. Results

**Table 1:** Physical characteristics of the subjects participating in the study

Variables	Experimental group (N=30)	Control group (N=30)
	Average ± S.D	Average ± S.D
Age (years)	15,65±0,743	15,82±0,329
Size (m)	1,60±0,431	1,61±0,546
Body weight (kg)	54,75±1,612	55,17±2,098

When Table 1 was examined, the mean age of the experimental group was found to be  $15.65 \pm 0.743$  years, the average height  $1.60 \pm 0.431$  m and the average weight  $54.75 \pm 1.612$  kg. In the control group, the average age was  $15.82 \pm 0.329$  years, the average height was  $1.61 \pm 0.546$  m and the average weight was  $55.17 \pm 2.098$  kg.

**Table 2:** Comparison of data related to subjects by groups

Variables		Experimental group (N=32)	Control group (N=32)	T	p
		Average ± S.D	Average ± S.D		
Quickness	Pre test	1,19±0,401	1,21±0,158	0,399	0,693
	Post test	1,14±0,399	1,22±0,301	3,101	0,009*

\*P<0,05

When Table 2 is examined, a statistically significant difference was not found between the experimental group and the control group in the comparison of the pre-test and post-test rapidity performance values of the subjects participating in the study between the groups. (P>0,05). However, a statistically significant difference was found between the experimental and control groups in the post-test values (P<0,05).

**Table 3:** Comparison of quickness pre-test and post-test values of the experimental group

Variables	N	Average	Standard Deviation	t	P
Quickness Pre test	30	1,19	0,401	2,599	0,022*
Quickness Post test	30	1,14	0,399		

\*P<0,05

When Table 3 is examined, it has been determined that there is a statistically significant difference in the quickness performance values of the experimental group participating in the study when comparing the pre-test and post-test values (P<0,05).

**Table 4:** Comparison of quickness pre-test and post-test values of the control group

Variables	N	Average	Standard Deviation	t	P
Quickness Pre test	30	1,21±0,158	0,158	0,376	0,749
Quickness Post test	30	1,22±0,301	0,301		

When Table 4 is examined, no statistically significant difference was found in the comparison of the pre-test and post-test values in the quickness performance values of the control group participating in the study (P>0,05).

#### 4. Discussion and Conclusion

Folk dances are a fun activity that gives the organism the ability to act in a coordinated manner accompanied by music and rhythm (Mertoğlu, 2002). When questioning how folk dances affect people physically, the fact that the game structure is fast or slow is an important factor. For this reason, the type of game played is directly related to physical fitness. In our study on women aged 14-16; in the comparison of the pre-test and post-test quickness performance values between groups, there was no significant difference in the pre-test values between the experimental group and the control group. However, a statistically significant difference was found between the experimental and control groups in the post-test values. In the pre-test and post-test values of the groups; there was no significant difference between the control group's quickness pre-test and post-test

values. However, significant differences were found between the experimental group's quickness pre-test and post-test values.

When we examine the studies in the literature; In a study on elite soccer players, it was found that different warm-up protocols affect athletes' Illinois agility test performance (Amiri-Khorasani et al., 2010). In the study conducted by Taşkın (2016) on young women, it was found that the core training program had a positive effect on acceleration. In the study investigating the effect of proprioception training on quickness, agility and acceleration; Significant differences were detected in the subjects' quickness, agility and acceleration values (Taşkın and Biçer, 2015). Singh et al. (2015), in their study with 30 elite male taekwondo athletes, reported that 6-week plyometric training caused an increase in quickness performance values. Davaran et al. (2014) found that 6-week plyometric studies caused positive increases in the quickness values of karate athletes.

In the study conducted by Miller et al., The effect of 6-week plyometric training on the agility test was examined; it has been determined that plyometric studies are effective in increasing agility (Miller et al., 2006). In another study, the effect of folk dances on hand and foot coordination skills was examined and it was found that folk dances education had positive effects on coordination characteristics (İnalcaç, 2016). When we examine the result of this research, it can be said that the vestibular system and coordination structures, which are important in agility performance, are compatible with each other. The effect of an 8-week plyometric exercise program on the performance of quickness and agility of athletes playing basketball in the 12-14 age group was examined. As a result of the examination, it was found that plyometric exercises had a positive effect on quickness (Kızılet et al., 2010).

In a study conducted on amputated football players, a positive correlation was found between speed and quickness skills (Taşkın et al., 2014). In a study conducted with male swimmers, the relationship between quickness, agility and acceleration was examined and a positive relationship was found between them (Sanioglu et al., 2013). The investigated studies support our study in terms of the issue that the agility performances of athletes can be affected by different training, exercise or warm-up protocols. As a result, it can be said that folk dance practices, which have an important place in our culture, positively affect the values of quickness.

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