



Coordinative Ability Differences Between Two Distinguished Racket-Sports' Players

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Abstract

The aim of the study was to compare the coordinative abilities of players of table tennis and tennis. Orientation Abilities, Differentiation Abilities, Reaction Abilities, Balance Abilities, and Rhythm Abilities were the coordinative abilities that were chosen. Thirty male table tennis and tennis players who competed at the national and intercollegiate levels and were between the ages of 19 and 24 were chosen as the study's participants. The numbered medicine ball run test, backward medicine ball throw test, long nose test, ball reaction exercise test, and sprint at given rhythm test were the coordinative abilities tests that were chosen for data collection. Players of table tennis and tennis were compared using the T-test to determine whether there were any significant differences in their use of the five coordinated abilities. The coordinative abilities showed no significant differences.

Keywords: Balance Ability, Orientation Ability and Rhythm Ability

Introduction

The mechanism involved in movement control and regulation is what largely determines coordination skills, which are performance prerequisites (Mülling et al., 2013; Rodrigues et al., 2002). Coordination skills aid with higher level performance, learning that is quicker and more effective, and coordination skills that are more efficient for physical training.

Table tennis and tennis are both racket sports, which gives them many things in common. Both sports require rackets. Both require hitting anything over the net and scoring when your opponent cannot return it. Both sports can be played 1-on-1 or 2-on-2. Both table tennis and tennis are Olympic sports that are popular all around the world. There are numerous traits that are extremely similar to one another (Robertson et al., 2018). Both table tennis and tennis place a strong emphasis on athletic abilities like reaction time because both sports need players to act fast in response to an opponent's strike. Despite this, the researcher believed that there would undoubtedly be a variety of other characteristics that set coordinative abilities apart from one another (Gaber Radwan, 2014).

As a result, in order to compare the coordinative skills of players in table tennis and tennis the researcher felt it was required.

Methodology

Male athletes who competed at the national and intercollegiate levels in tennis and table tennis and were between the ages of 19 and 24 were chosen as the study's participants. According to Peter Hirtz's recommendation in *Coordinative Feahigkeiten in School Sports*, the data was gathered throughout various competitions, including inter-university contests, state championships, state ranking tournaments, and other regular practice sessions. The selected coordinative abilities tests for the purpose of data collection are as follows: -

1. Numbered Medicine Ball run Test (to measure the Orientation Ability)
2. Backward Medicine Throw Test (to assess the Differentiation ability)
3. Long nose Test (to assess balance ability)
4. Ball Reaction Exercise Test (to measure the Reaction Ability)
5. Sprint At Given Rhythm (to measure the Rhythmic Ability)

Prior to administering each test, All the tests were demonstrated and explained to the subjects. The subjects had a chance to practise so they would be comfortable with the exam. The test had no time limit, but the participants were asked to give it their best. To determine the significance difference of the five coordinative abilities' between players in table tennis and tennis. T-test was used for testing the hypothesis. The significance level was chosen at 0.05.

Results

Table 1. Comparison of the Means of Coordinative Abilities of Table Tennis and Tennis Players

S. No.	Variables	Means of Table Tennis players	Means of Tennis Players	DM	Σ -DM	T-ratio
1.	Orientation Ability	16.77	16.77	0.1	0.40	0.811
2.	Differentiation Abilities	7.1	7.15	0.005	0.05	0.944
3.	Reaction Abilities	1.63	1.68	0.05	0.71	0.47
4.	Balance Ability	6.99	6.90	0.09	0.32	0.787
5.	Rhythm abilities	7.15	7.1	0.11	0.28	0.74

Total value required for significance at .05 level of significance with 38 degree of freedom – 2.02

In terms of Orientation Ability, there was no significant difference between players of table tennis and tennis because the computed value (0.81) was less than the table value (2.02) at the.05 level of significance. There was no significant difference between the players of table tennis and tennis in terms of differentiation ability because the computed value (0.94) was less than the table value (2.02) at the.05 level of significance. There was no significant difference in Reaction Ability because the calculated value (0.47) was lower than the table value (2.02). Similar results were obtained for the Balance Ability, since there was no significant difference between players of table tennis and tennis, with the computed value (0.78) being lower than the table value (2.02). Similar results were seen when Rhythmic Ability was tested in table tennis and tennis players, where the computed value (0.74) was lower than the table value (2.02).

Discussions and Conclusions

This might be explained by the fact that both games have identical traits and characteristics (Sahan & Erman, 2009). Table tennis and tennis players share a lot of traits that are practically identical (Ak & Koçak, 2010). Both table tennis and tennis focus on similar athletic. These outcomes may be ascribed to the similar fitness requirements for both sports.

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