

## **Comparison of Foot Posture, Hand Functions and Shoulder Proprioception of Individuals Playing Table Tennis and Court Tennis**

**Bahar Özgöl**

PhD, PT, Assistant Professor, Marmara University Health Sciences Faculty, Türkiye

**Rüveyda Aleyna Çelik**

Marmara University Health Sciences Faculty, Türkiye

**Yusuf Bağçacı**

Marmara University Health Sciences Faculty, Türkiye

**Oğuzhan Aktaş**

Marmara University Health Sciences Faculty, Türkiye

### **Abstract:**

Different musculoskeletal profiles might be seen in sports such as court and table tennis although similar in playing style. There have been limited number of comparative research on court and table tennis players. The aim of this research is to compare the foot and general body posture, hand grip muscle strength and upper extremity reaction speed & proprioception of table tennis and court tennis players. A total of 40 male subjects aged 20-35, who have been playing court tennis (n=20), playing table tennis (n=20) regularly at least one year were included. The foot postures of the subjects were evaluated with the foot posture index, hand grip strength with a hand dynamometer and upper extremity reaction speed with the Nelson hand reaction test. It was determined that the dominant and non-dominant side grip strength of table tennis players was lower than court tennis players ( $t=-2.195$ ,  $p=0.017$  &  $t=-2.377$ ,  $p=0.011$ ). Dominant side hand reaction speed of table tennis players was higher than court tennis players ( $t=-1.760$ ,  $p=0.043$ ). It is recommended that similar future studies be conducted in which a larger number of subjects from different age groups who have been doing these sports for longer time are evaluated in a comprehensive manner.