A STUDY ON VISUAL REACTION TIME OF MALE BADMINTON AND TABLE TENNIS PLAYERS, AND THE EFFECT OF WARM-UP ON REACTION TIME

T. DASSANAYAKE¹, M. ILEPERUMA¹, V.S. WEERASINGHE^{1*} AND N. SENANAYAKE²

¹Department of Physiology and ²Department of Medicine, Faculty of Medicine, Peradeniya

Simple reaction time is a measure of perceptual-motor skills, which is an important aspect of certain competitive sports. The objectives of the present study were to assess a) the association between reaction time oriented sports training with simple visual reaction time and b) the effect of light physical exercise (warm up) on simple visual reaction time.

Resting reaction time (RTr) of competitive male badminton and table tennis players (group 1, with reaction time oriented training) (n = 22) compared with that of a group with comparable physical fitness (group 2, i.e. competitive long distance runners) (n = 22) and with that of a sedentary group (n=22) matched for age and sex. Group 1 was given a warm up run on a treadmill for 5 minutes and post warm up reaction time (RTw) was measured.

Though there was a trend for the RTr of subjects to be lower (213.84+/-16.07) compared to that of control runners (221.69+/-21.95) and that of sedentary controls (220.95+/-21.89) the differences were not statistically significant (group1 vs. group 2: t=1.353, p=0.183. group 1 vs. group 3: t=1.227, p=0.227). However RTw of the badminton and table tennis players (206.11+/-17.99) was significantly lower than their RTr (213.84+/-16.07) (p=0.02).

These results suggest that there is no significant difference in the simple visual reaction time between sportsmen who engaged in sports specific reaction time tasks and the sportsmen without such training or sedentary individuals. However, warm up appears to be improving the reacting speed to a visual stimulus in badminton and table tennis players.