Reaction time is one of the important factors on performance in many sports. The purpose of this study was to investigate the possible differences between simple, choice and discrimination components of visual reaction times in different genders and different athletic events. 25 men and 25 women from each swimming and track & field totally 100 athletes answered a knowledge form and performed Donder’s visual reaction time test. A knowledge form was used to determine some social-demographic characteristics like age, sports age, gender, athletic event, state of being a national or local athlete, dominant hand of the athlete. The mean age of the participant athletes was 20.50 ± 2.93 and the mean sports age of the participant athletes was 7.49 ± 4.05. Donder’s reaction time test is a software that can measure all 3 components of the reaction time. The simple reaction time was measured as the shortest reaction time component (276.85 ± 44.43) whereas choice reaction time was the longest (326.80 ± 39.46). Discrimination reaction time took place between these two (313.70 ± 49.21). No significant difference between male and female athletes or athletes of swimming and track & field were found for simple, choice or discrimination reaction times. In-group comparisons were made between swimmers and monofin swimmers and; throwers (shot put, javelin, disk, hammer), jumpers (long, high, 3 steps), sprinters and middle-long distance runners and no significant differences were found for simple, choice or discrimination reaction times. No correlation between age, sports age, state of being a national or local athlete, dominant hand and reaction times were found. These results may indicate that the personal differences for visual reaction times between the athletes could be because of the factors other than the factors which were investigated in this study.

Keywords: Reaction Time