Секция: Психологические науки

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SIMPLE AND COMPLEX VISUAL MOTOR RESPONSE IN LEFT AND RIGHT-HANDED WOMEN

Background and aims. To discover a) the time taken to process a signal and b) the ability to maintain that reaction speed with increasingly complex signals among women in women with progressive right hands and progressive left hand (PRH and PLH respectively).

Methods. 25 female students aged 20 years took part in the research. Their dominant hands were ascertained using the "Method for Determining Dominant Hands and Dominant Feet Using Fingerprints and Toeprints" (L.V. Litvinova, 2014). PRH was detected in 13 of the students and 9 showed PLH. Neutral hands were ascertained in the three remaining students, who were then removed from the research group. Simple Visual Motor Response (SVMR) and Complex Visual Motor Response (CVMR) were tested using a UPFT-1/30 Psychophisiolog device and the subjects' t-criteria.

Results. Students with PRH were assessed as "Very Good" when carrying out SVMR tasks, while those with PLH were assessed as "Good". Both groups showed a reliable comparative reduction in the functional state of the central nervous system when confronted with CVMR tasks: test subjects with PRH returned $p=0.03$ and those with PLH returned $p=0.02$. When carrying out SVMR tasks, students with PRH missed no signals and committed no false starts, and the overall number of mistakes was minimal, but during the CVMR phase the

error rate increased. The PLH group missed no signals during SVMR testing, but did commit false starts and mistakes. However, during CVMR there were no false starts ($p=0.05$) and a reduction in the error rate.

Conclusion. The reduction in the functional state of the central nervous system in both groups when conducting CVMR tasks notwithstanding, women with PRH have a more developed level of differential braking than those with PLH. In a training scenario, the latter require more time to master new material, but their eventual level of knowledge will ultimately exceed that of the former group.