

The relationship of cognitive functions development with a passion for computer games of various genres

A.S. Bogomolov, O.A. Goncharov

The purpose of this paper is to examine the relationship between the passion to computer games of various genres and the level of cognitive functions in adolescents. We created a questionnaire that allows to identify gamers and differentiate adolescents according to game genres. It was carried out diagnostics of the level of development of attention, memory and spatial functions by techniques of Landolt rings, Koos cubes and diagnostic procedure of operational memory on a sample of 60 adolescents 16-17 years. It was found that gamers have significantly better operational memory, mental working capacity, stability of speed processing compared with the non-playing peers. The results also show a better development of attention in gamers who prefer action genre, and better development of operational memory in gamers in strategy genre. The assumption of the better level of spatial functions in gamers of strategy genre was not confirmed. Hypotheses about the connection between the level of cognitive functions and the gaming experience, as well as the daily playing time were not confirmed.

Keywords: computer games, video game addiction, cognitive development

Information about the authors

A.S. Bogomolov – Bachelor of psychology, Graduate of the Psychology Department at State University "Dubna".

E-mail: artyombogomolov@protonmail.com

O.A. Goncharov – Ph.D. in Psychology, Professor of the Psychology Department at State University "Dubna".

E-mail: oleggoncharov@inbox.ru