Characterization of the behavior of young people identified as having problematic use of electronic games and evaluation of possible impairments in cognitive performance

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Playing videogame allows intense contact with the virtual world and a pleasurable relationship with this technological model, however, recent studies have reported problem video game playing and dependence. After having performed the validation of the Problem Video Game Playing (PVP) scale, our research group proposes in this new work, identify students with problematic use of video games, characterize changes in their behaviors and to evaluate possible losses in the development of reasoning. We have identified 74 students, which are considered problematic video game players according to the PVP scale. These 74 young people were submitted to several tests according to the battery of reasoning tests - 5 (RPA-5) that include verbal, abstract, spatial, mathematical and mechanical reasoning. A group of 61 young people who did not practice video games or had no problematic use, was used as control. Participants who were considered problematic players have more often choose items of scale which relates to restlessness , the loss of control and problems in the family or school environment. Our results showed that the majority of players with problematic use practice video games in the bedroom and living environments takes about 6-12 hours of dedication every 24 hours, including day and night. The players start practicing between 5 and 8 years old, both non problematic players and those who had problematic use. Results showed that players with problematic use had lower performance than their peers who did not have known problematic use for the RPA-5 test. We have concluded that the intense use of video games may lead to a lack of interest in other activities interfering with age-appropriate performance or causing disruptions in different areas of cognitive development.

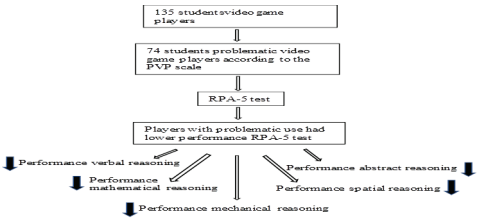

Figure 1. Distribution of participants with problematic use of electronic games according to the PVP scale and evaluation of reasoning abilities according to the RPA-5 test.

Biography

Husten Carvalho is a professor and researcher with a background in Molecular Biology and Morphology, recently has been working with his research group to research on the negative effects of excessive practice of electronic games by adolescents. His research includes the validation of scales of problematic use of electronic games and addiction of games. In addition, it has been dedicated to evaluations of the effects of the practice of electronic games in the performance of cognitive processes, especially reasoning and attention.

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