**Dual-task methodology: The use of video games as a surrogate for traditional laboratory tasks**

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The purpose for this research was to investigate the use video games within the dual-task methodology, and eventually, to extend the use of the games as a diagnostic tool for Attention Deficit Disorder (ADD). The video games used were the worm game and a variant of the Whack-A-Mole (WAM) game. Participants play each of the games separately and the two games simultaneously. For this investigation, the dependent measures are the percent hits and the percent misses for the WAM game when it is a single game and when it is combined with the worm game. Participants (N= 8) participated in two 1-hr sessions. During the first session, participants completed the TOVA or the CPT and then the game. During the second session participants completed the TOVA or the CPT whichever was not competed during the first session and the game. As expected, the number of hits for the WAM single game and the WAM combined game increased from session-1 to session-2 and the number of misses decreased across both sessions. Additionally, the number of hits for the combined game was less than the number of hits for the single game and the number of misses was greater for the combined game relative to the number of misses for the single game. Presently, these results suggest that the video game appears to result in the same type of dual-task performance as traditional laboratory tasks, such as a tracking task combined with a reaction time task.