

Abstract

Chronic heavy media multitaskers have been found impaired cognitive performance on certain cognitive tasks (Ophir, Nass & Wagner, 2009). However, the poor performance may be caused by their breadth-biased style of cognitive control that they tend to pay attention to all information available in the environment but not a deficit in cognitive abilities. In this study, the original media multitasking index used in the study of Ophir et al. (2009) was modified to differentiate heavy and light media multitaskers. Also, four different cognitive tasks, which access the ability of attentional capture, attention allocation to infrequent information, task switching and multimodal integration, were used to investigate whether the poor performance of heavy media multitaskers is general to a wider range of tasks. Results found that heavy media multitaskers were better at focusing attention on frequent information and were better at integrating auditory event and visual object in the Pip and Pop Paradigm (Van der Burg, Olivers, Bronkhorst, & theeuwes, 2008). It could be concluded that heavy media multitaskers are not generally deficient in cognitive ability but just have a tendency to allocate their attention to all information available in the environment and this style of cognitive control can result in their better performance in certain cognitive tasks.