

Abstract

The omnipresence of music in our lives exerts great influence in many of our behaviors. Previous research showed that music influences cognitive task performance. The current study investigated the effects of musical complexity and musical familiarity on the performance in two cognitive tasks in a college student sample ($n = 239$). Participants completed a logical reasoning task or a memory task whilst listening to music varied in levels of complexity and familiarity or in silence. Results indicated that music impaired task performance in both tasks. Possible underlying mechanisms of task concentration and arousal fluctuations were discussed to provide explanation for the observations. These findings have implications for the study habit of music listening whilst handling different cognitive tasks.