

Abstract

Listening to music is a universal activity and with technological advances, more individuals are able to listen to their personal choice of music on their cellphones, MP3 players and iPods. Given that the brain has been shown to have limited capacity to process information, this study aimed to investigate how listening to music may affect the academic performance of undergraduate students when they are simultaneously studying or engaging in other academic activities. The study consisted of two parts; first, a survey was sent out to undergraduates currently registered at a South African university to gauge their current music usage behaviours, of which 197 undergraduates' complete responses were used. Following completion of the survey, these students were then invited to participate in a within-subject experiment to investigate whether different sound conditions affected their performance on working memory span assessments. The experimental responses of 35 participants were used to conduct a one-way repeated measures ANOVA, which indicated that although there is no significant difference in working memory performance between White Noise and Beethoven sound conditions, students' performance decreased significantly when they listened to the music of their choice. Whether or not students had been studying with music for many years did not have a significant impact on their performance on the corresponding working memory assessment. These findings indicate that working memory capacity may be overloaded when listening to one's own choice of music, which may affect how information is encoded when studying and completing other academic activities. Results further suggest that students can identify whether they are getting distracted by music, but this perception does not prevent them from listening to music, which could later affect how the studied information is recalled, thus having a negative impact on one's academic performance.

Keywords: *academic performance, music, working memory*