Emotional intelligence and hot and cool working memory capacity

Emotional Intelligence (EI) is the ability to perceive, use, understand and manage our emotions and the emotions of others. EI, measured through performance-based ability models, seems to favour performance on hot tasks. The aim of the present study is to analyse the relationship between EI, measured through its three main models, and performance on a hot (emotional) and cool (non-emotional) working memory task. 203 undergraduate students of psychology took part in the experiment. They completed an EI test for each of its three main models (performance-based ability model, self-report ability model and self-report mixed model) and a hot and cool working memory task. We found a better performance for higher EI participants, measured through the performance-based ability model instrument (but not with self-report instruments), in the hot working memory task. This result was obtained for the managing branch of the EI instrument. Similar evidence was not found when using the cool working memory task. Our study takes a step forward in the conceptualization of the EI construct within the domain of cognitive processes. They show that, at least when using hot stimuli, the managing branch of the performance-based ability model of EI is a better determinant measure for the working memory capacity than the self-report models.