

Abstract

Creativity is a versatile, multifaceted and an elusive construct that encompasses multiple definitions, theories and models. The creative cognition approach conceptualises creativity as the formation of ideas that are novel and valuable. Although the importance of creativity is widely acknowledged, the cognitive basis of this phenomenon is poorly understood, especially in the elderly population. Research tends to focus on a sample that is comprised of either children or young adults, who are at their cognitive peak. This study aimed to elucidate the cognitive functions implicated in creative thinking and assess the relationship between various cognitive functions underlying creativity in the elderly. Given that various demographic factors potentially account for the type and amount of creative output generated, an additional aim of the current study was to investigate whether the demographic variables of age, multilingualism, socio-economic status (SES), level of education, and gender predicted each cognitive function identified as being implicated in the creative process. To address these two research aims, one hundred and twenty-five participants aged 65 and above were recruited and administered a battery of cognitive tests, which assessed divergent, convergent and associative thinking, as well as task-switching, inhibition and fluid intelligence. Multivariate structural equation modelling (SEM) was used to investigate the relationships between cognitive functions included in the model and group-difference analyses were used to assess whether various demographic variables predicted the individual processes implicated in creative thinking. The SEM analysis demonstrated that creativity entails the joint role of divergent and convergent thinking and that both these processes rely on associative thinking. In addition, creativity involves fluid intelligence and task-switching, but not inhibition. These findings suggest an associative basis of creativity and support the dual-process account of creative cognition, thereby recasting creativity as a higher-order cognitive function. On this basis, both associative and higher-order, executive functions should be considered when researching creativity. Finally, for the cognitive functions included in the model, statistically significant group differences were found between SES and education groups, respectively, with a higher level in both variables corresponding to better task performance. Overall, this study has significant implications in terms of informing theoretical frameworks of creative cognition which may help to elucidate the fundamental processing underlying creative thinking.