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The Relationship between Inhibitory control and Creativity

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Abstract

There is a debate in the literature as to whether inhibitory control improves or hinders creativity. Alternatively, we propose that flexible alterations between these two states would actually benefit creativity best. Therefore, the purpose of the current study was to resolve the debate by inducing inhibited/disinhibited/flexible states of mind and subsequently examine the influence on creative performance. To do so, the Stop-Signal task (SST) was deployed through the use of differential task instructions. Afterwards, participants completed two creativity tasks: a free association task (FAT) and the alternate uses task (AUT). Results indicated that while the inhibited group scored higher in the FAT, the flexible group scored higher in the AUT. Based on the results, we propose that there is an inverted U-shaped relationship between inhibitory control and creativity: while some cognitive control is needed to generate original ideas; excessive control might hinder creativity as it may lead to premature closure of ideas that could otherwise be further developed.