## Abstract

Previous studies focused on examining correlation between cognitive processes and strategies of emotion regulation as a whole. Current study comprised two experiments, which aim to identify possible connections between two sub-processes of executive control: interference monitoring and inhibition, and two specific strategies of emotion regulation: cognitive reappraisal and response suppression, respectively. First experiment enhanced response inhibition temporarily and observed if there were impacts on subsequent performance of behavioral suppression. Second experiment enhanced interference monitoring temporarily and observed if there were effects on subsequent performance of cognitive reappraisal. In the former experiment, response inhibition-facilitated group suppressed expressions of emotion significantly better than its counterparts, which produced preliminary results supporting neural correspondence between response inhibition and expressive suppression. However, in the latter experiment, interference-facilitated group did not perform significantly better than its counterparts in cognitive reappraisal. The difference in task nature between behavioral suppression and cognitive reappraisal may be an alternative explanation to such discrepancy. Lastly, current study suggested new lines of research that may integrate results from increasing number of research studying differences in the pattern of emotion regulation between different cultures.

過往有關情緒控制和認知功能的相互關係研究重視各自總合功能如何影響情緒管理,並未深入探索細分認知功能和較細節的情緒管理方法。以此為目標,是次研究嘗試利用兩個實驗以在功能層面上分別聯繫兩種認知功能及兩種情緒管理方法:反應控制和行為抑制以及干擾控制和情緒調節。實驗一利用短暫性增強認知功能的反應控制任務去測量情緒控制中行為抑制的能力有否進步。實驗二則利用短暫性增強認知功能的干擾控制任務去測量情緒控制中情緒調節的能力有否進步。實驗一被短暫性增強認知功能的参加者較對照組的参加者較有效地抑制情緒行為。實驗二被短暫性增強認知功能的参加者較對照組的参加者在調節的能力上卻沒有明顯的差別。個中不因可能源於抑制情緒行為和調節的能力在本質上的差異。是次研究除了確認過往有關的研究結果,同時伸延有關文化差異和情緒控制習慣的研究。