

Abstract

Previous empathy model in the context of pain suggested that people being confronted with other in pain would likely engage in self-oriented response (e.g., distress feeling) when failed to self-regulate emotion and maintaining a self-other distinction. This study investigated the role of cognitive empathy (emotional recognition accuracy) in interacting with self-regulation ability when perceiving other's pain in a young adult sample in Hong Kong. Self-regulation ability is operationalized by a physiological measurement, Heart Rate Variability (HRV). The results suggested that there is a significant interaction between cognitive empathy and self-regulation ability. Higher HRV is significant associated with higher perceived pain, however, only in relatively high cognitive empathy group only. Also, people with high cognitive empathy but low HRV demonstrated an underestimation of pain when compared with other participants. The interaction effect is discussed. Result of this study implicated that heart rate variability (HRV) training seems to be a promising way of promoting other oriented prosocial response in the context of pain.