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Investigating the Effects of Stress on Cognitive and Emotional Moral Decision Making

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Presenter Information

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Abstract

The dual-process theory accounts for how moral judgments are made: personal emotional dilemmas and impersonal cognitive dilemmas (Greene, 2007). In the Fisher and Ravizza (1992) Trolley Problem personal dilemma, you stop a runaway trolley and save all the workmen by pushing and killing one person on the tracks. In the Trolley Problem impersonal dilemma, you divert a runaway trolley and save all the workmen by throwing a switch and diverting the trolley killing one person on the tracks. In support of the dual-process theory, brain imaging research has demonstrated that brain regions linked with emotion (e.g., amygdala) are activated during the personal dilemmas, and brain regions associated with working memory (prefrontal cortex, parietal lobe) are activated during the impersonal dilemmas. Stress can interfere with rational, deliberative processes, causing decision-makers to rely on intuitive, automatic processes. In the present study, we are including two stressful conditions - physiological and cognitive - in order to see if stress has a differential effect on utilitarian decisions. Participants listened to moral dilemmas while experiencing baseline, stressor and control conditions. Stress was self-reported on an 11-point scale. Significance was found in utilitarian decisions, with the majority of participants reporting it "was appropriate to kill" during baseline and cognitive stress (i.e., counting backwards). Participants reported it was "not appropriate to kill" during physiological stress (i.e., cold pressor task). In addition, participants reported more stress during cognitive stress and more pain during physiological stress. In conclusion, utilitarian decision making seems to be affected when experiencing physiological stress.