Chronic stress and HPA dysregulation underlie many clinical disorders characterized by impulsive decision-making. Stress increases temporal discounting, the preference for immediate over delayed rewards. Stress shifts the balance of the learning systems that guide decision-making. We hypothesized that stress enhances the tendency to choose suboptimal, immediate rewards by reducing goal-directed learning.

**Participants.** N = 261 participants (57.9% female, 76.2% white, M<sub>age</sub> = 39 years)

**Measures.** Subjective stress scale

**Experimental Task.** Social Decision Tree Task extends Huys et al.'s (2012) deterministic decision tree task. Participants either receive a stress or control induction prior to the task.

**Results.**

Validation of Stress Manipulation

Mixed-Effects Logistic Regression

- The results suggest that stress enhances the tendency to choose immediately valuable actions at the expense of optimal ones due to a reduction in goal-directed learning.
- This research provides evidence that the evaluation of long-term reward may be contingent on the goal-directed system, shedding light on the connection between reinforcement learning and temporal discounting.
- Researchers should explore how these findings translate to maladaptive decision-making in clinical disorders.

**Discussion**

**Introduction**

**Method**

**Participants.** N = 261 participants (57.9% female, 76.2% white, M<sub>age</sub> = 39 years)

**Measures.** Subjective stress scale

**Experimental Task.** Social Decision Tree Task extends Huys et al.’s (2012) deterministic decision tree task. Participants either receive a stress or control induction prior to the task.

**Questions?**

Please direct any questions or comments on this poster to hlyndsey@live.unc.edu.

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