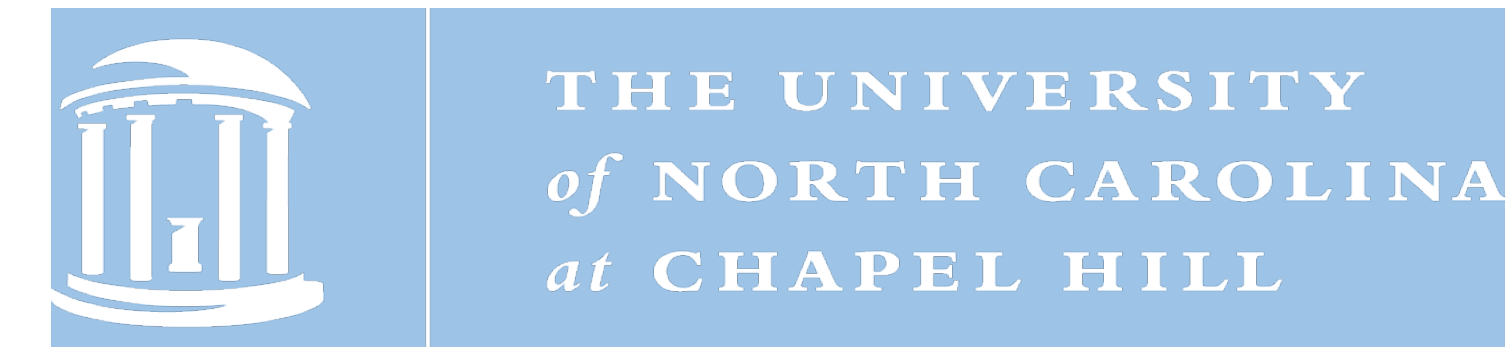


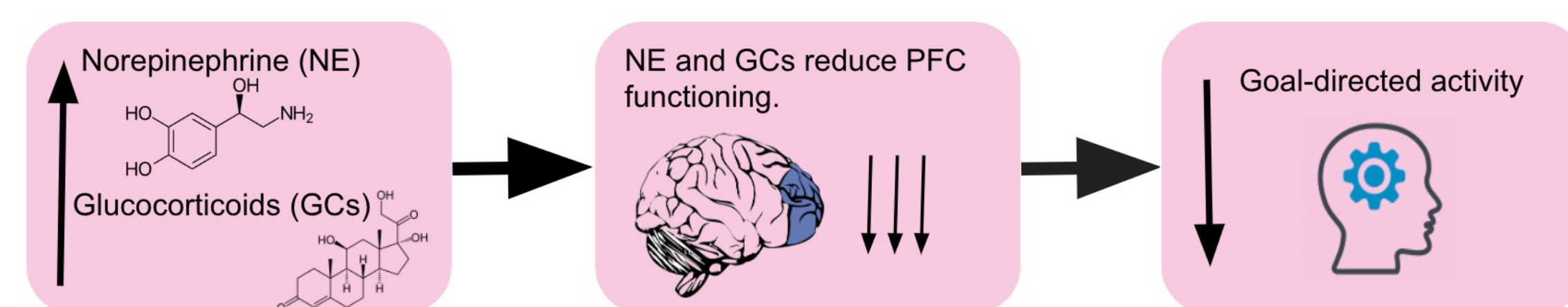
ACUTE STRESS INFLUENCES DECISION-MAKING BY DIMINISHING THE CONSIDERATION OF LONG-TERM REWARD

Hannah L. Evans



INTRODUCTION

- 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.



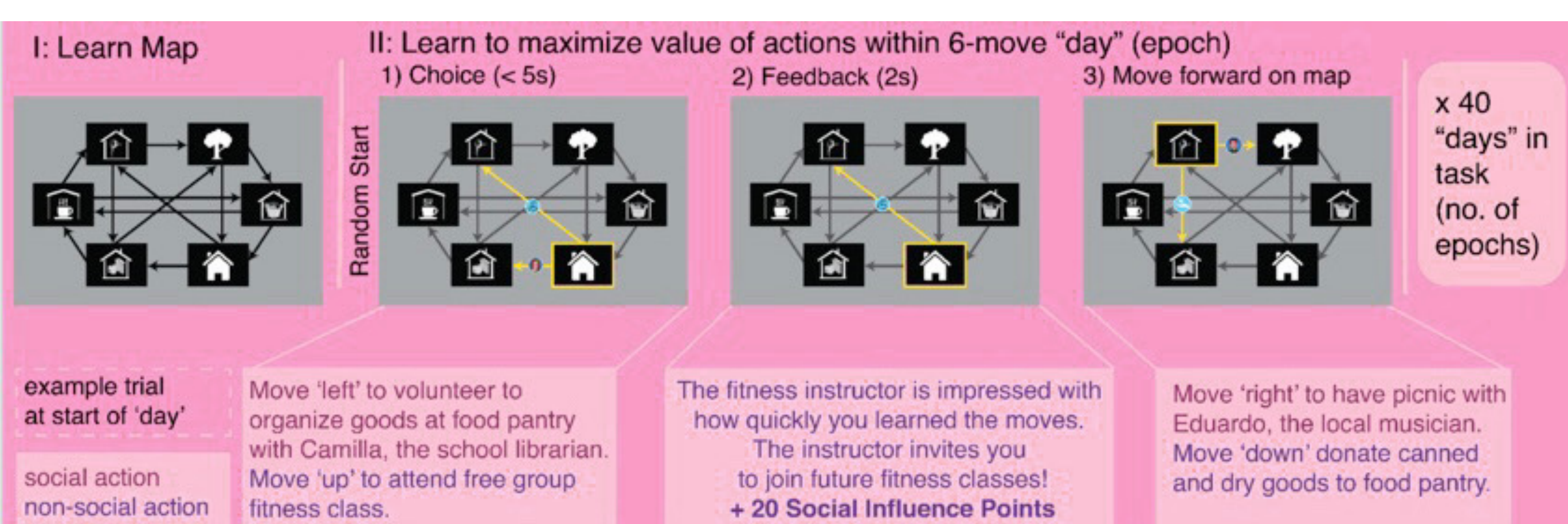
We hypothesized that stress enhances the tendency to choose suboptimal, immediate rewards by reducing goal-directed learning.

METHOD

Participants. $N = 261$ participants (57.9% female, 76.2% white, $M_{age} = 39$ years)

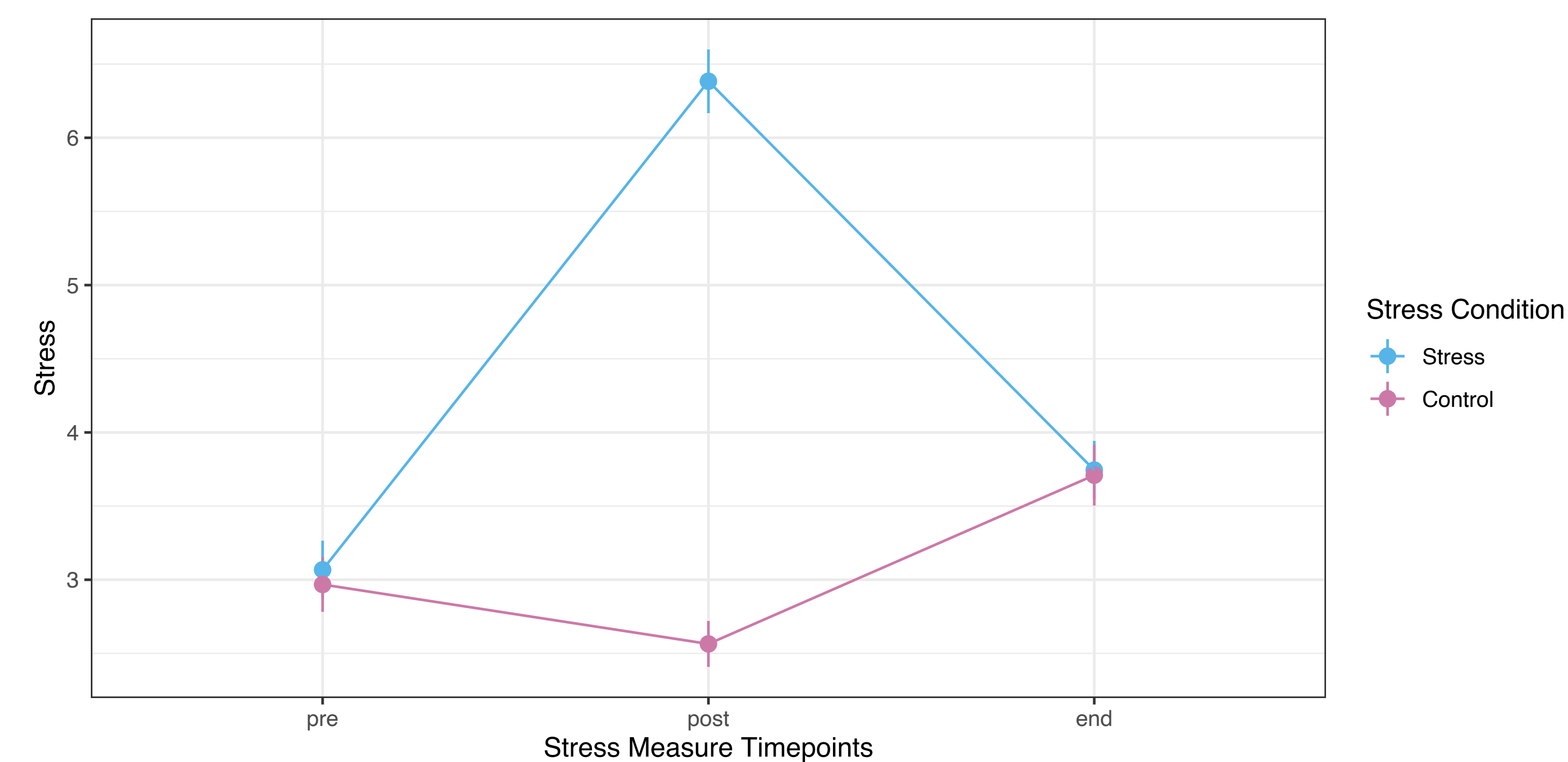
Measures. Subjective stress scale

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.

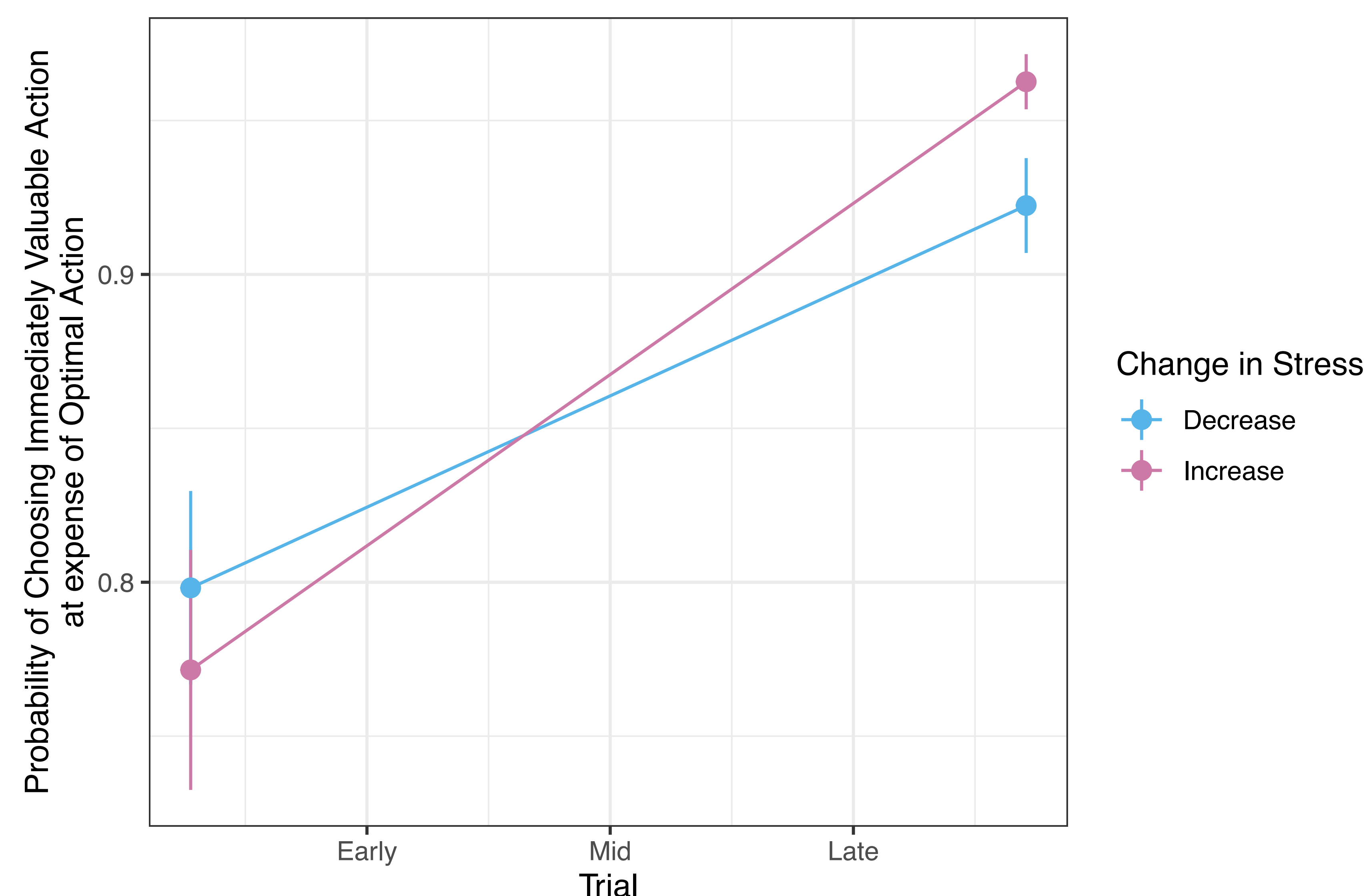


RESULTS

Validation of Stress Manipulation



Mixed-Effects Logistic Regression



DISCUSSION

- 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.

ACKNOWLEDGEMENTS

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QUESTIONS?

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

