

Introduction

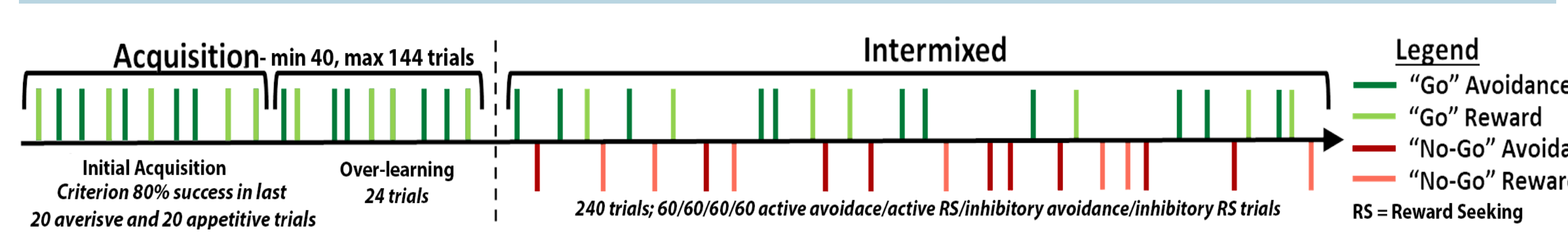
- Depression and anxiety are highly comorbid, and research assessing how concurrent symptoms effect behavior has been limited.
- **Avoidance and reward-seeking** behaviors are often impaired in anxiety and depressive disorders, respectively.

Methods

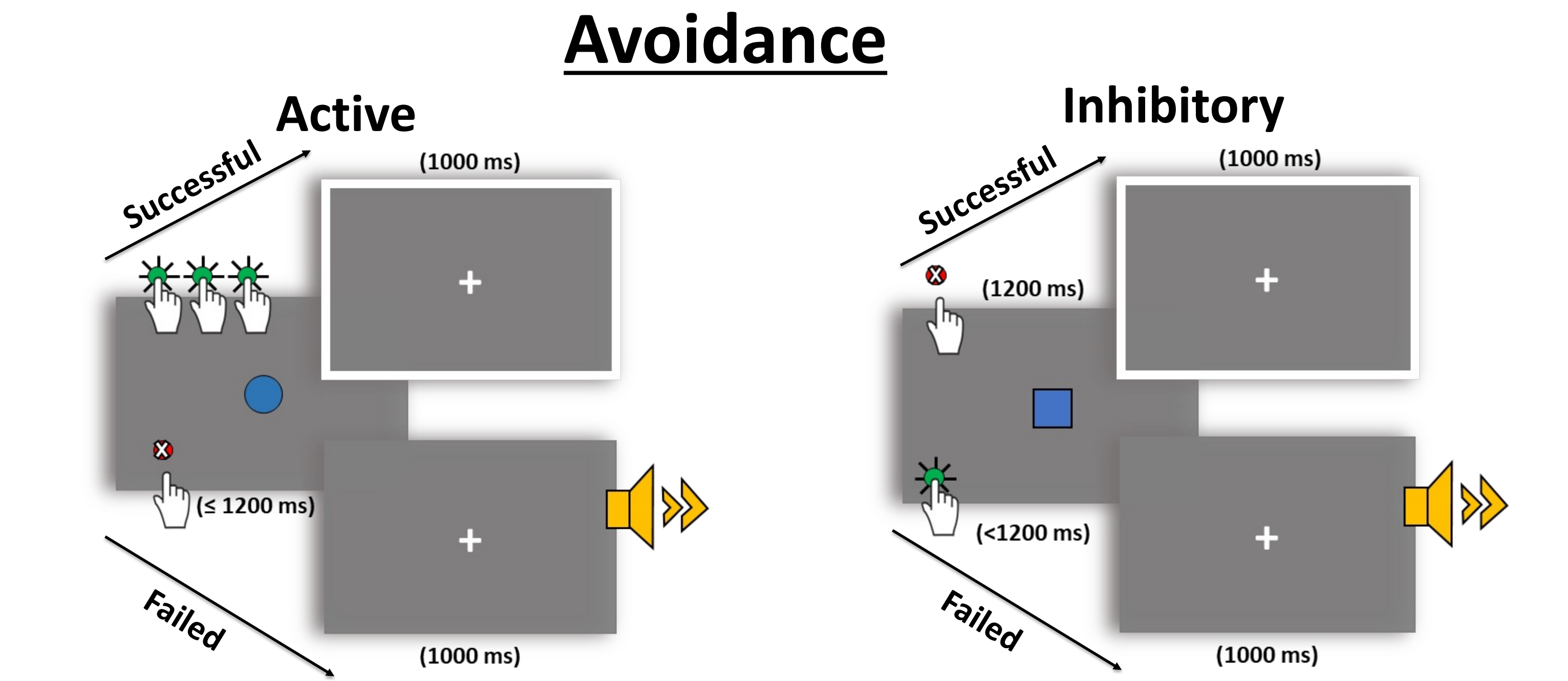
Participants and Stimuli

- Undergraduates were recruited from the University of British Columbia.
- 8 aversive sounds were used for the *go/no-go task*, in addition to visual stimuli depicted below. Points were exchanged for monetary reward.
- The *Beck Depression Inventory (BDI)* and the *Beck Anxiety Inventory (BAI)* we used to assess depressive and anxiety symptoms, respectively.

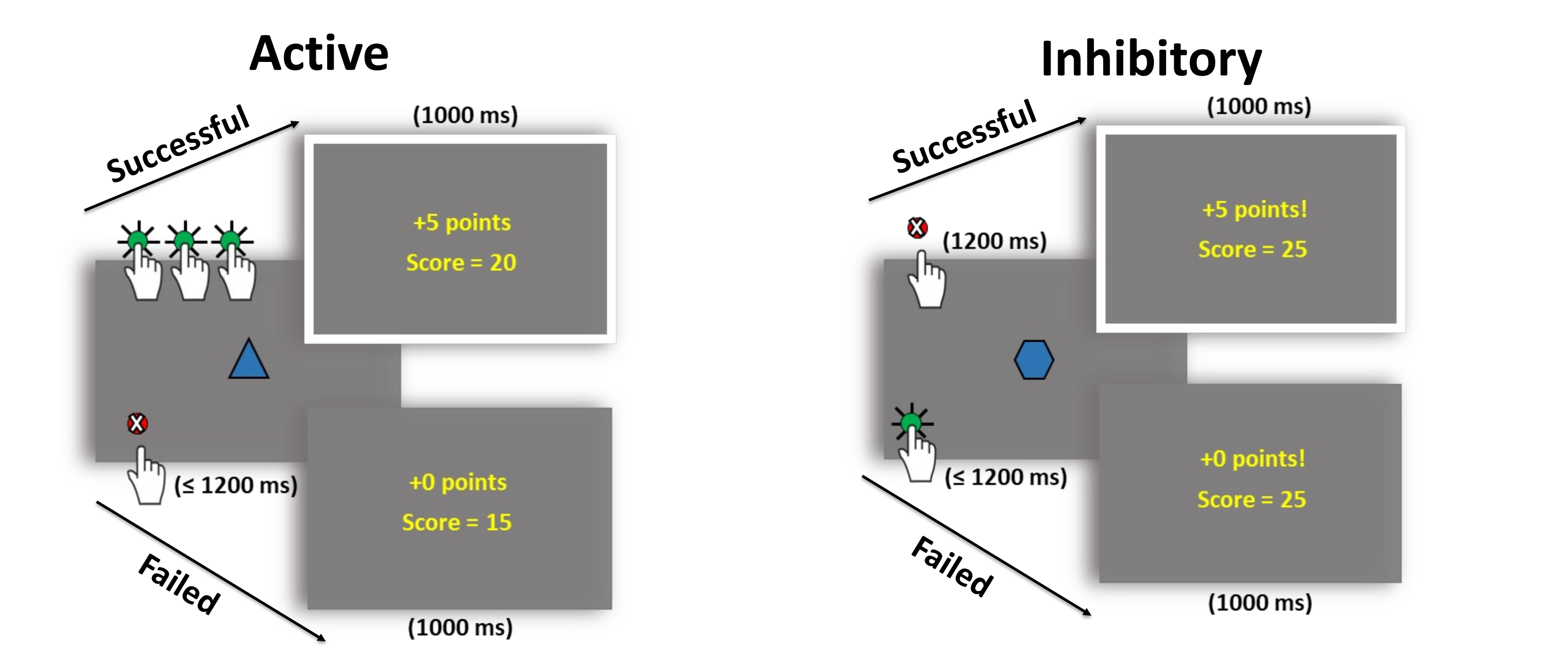
Task Structure



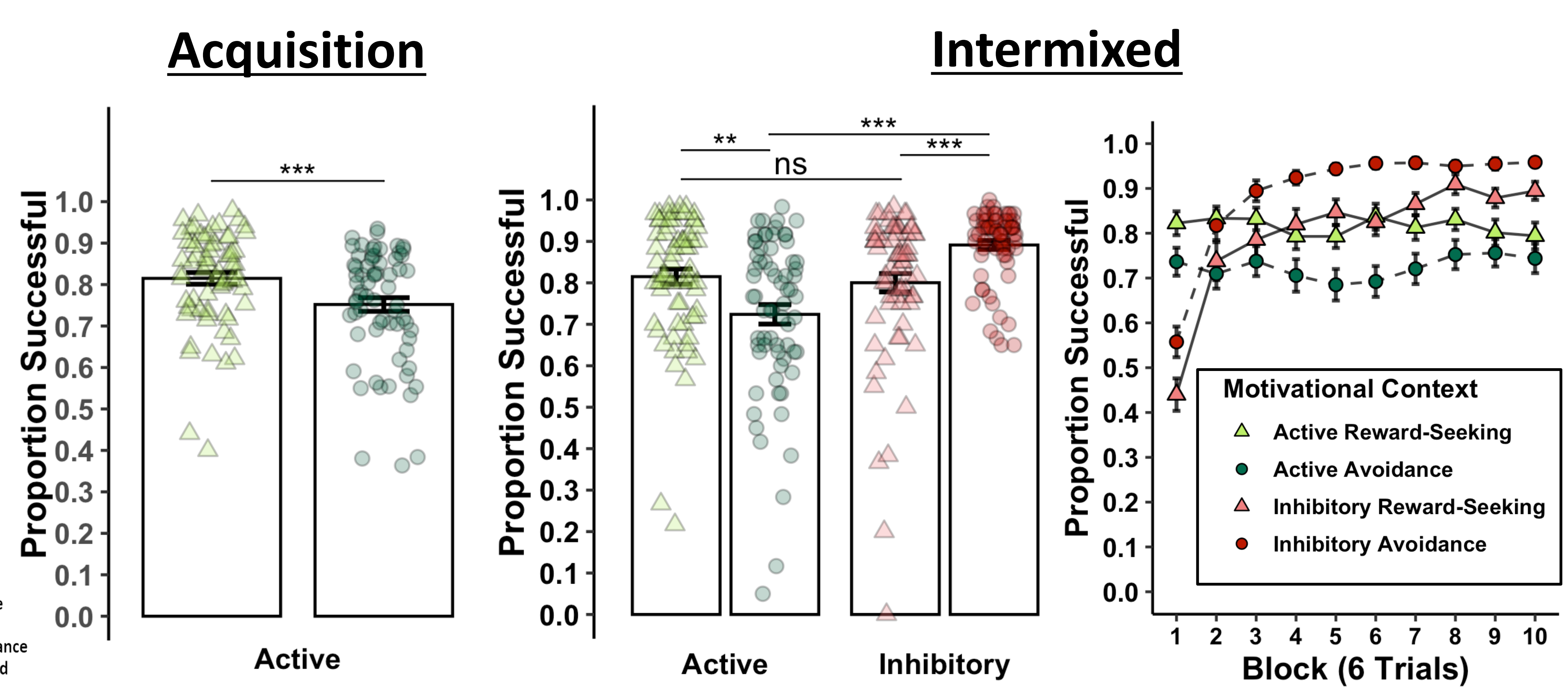
Trial Outcomes



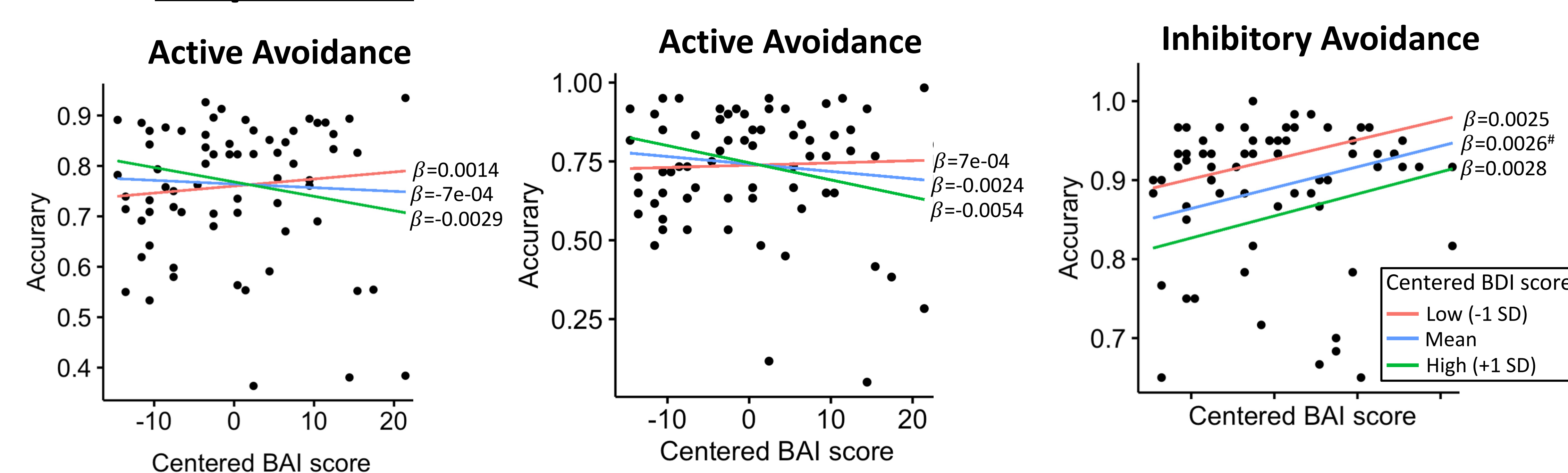
Reward-Seeking



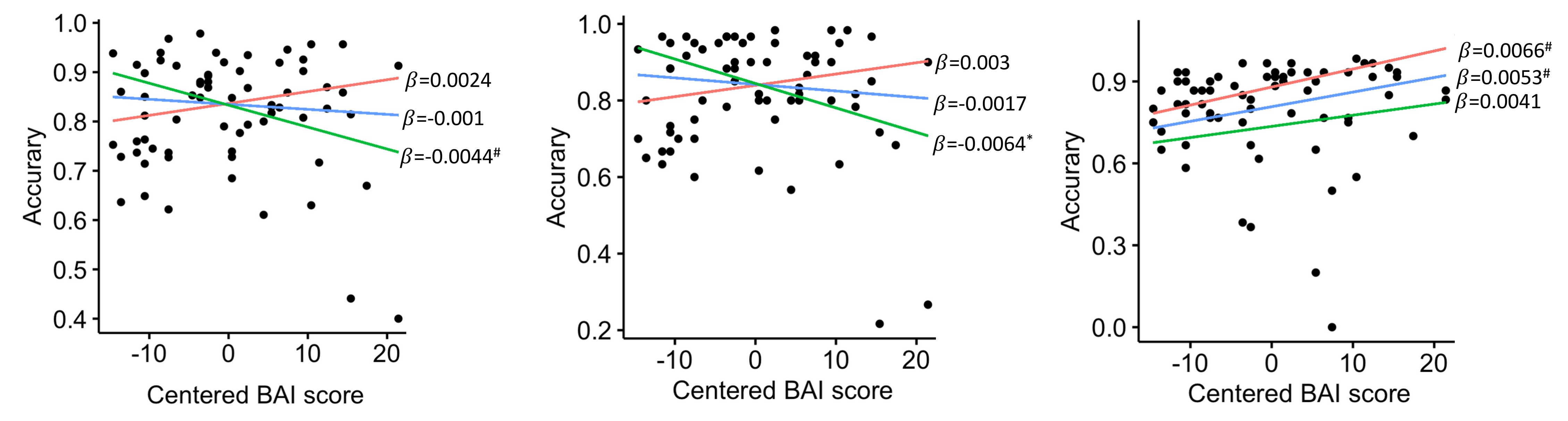
Pilot Results (N=68)



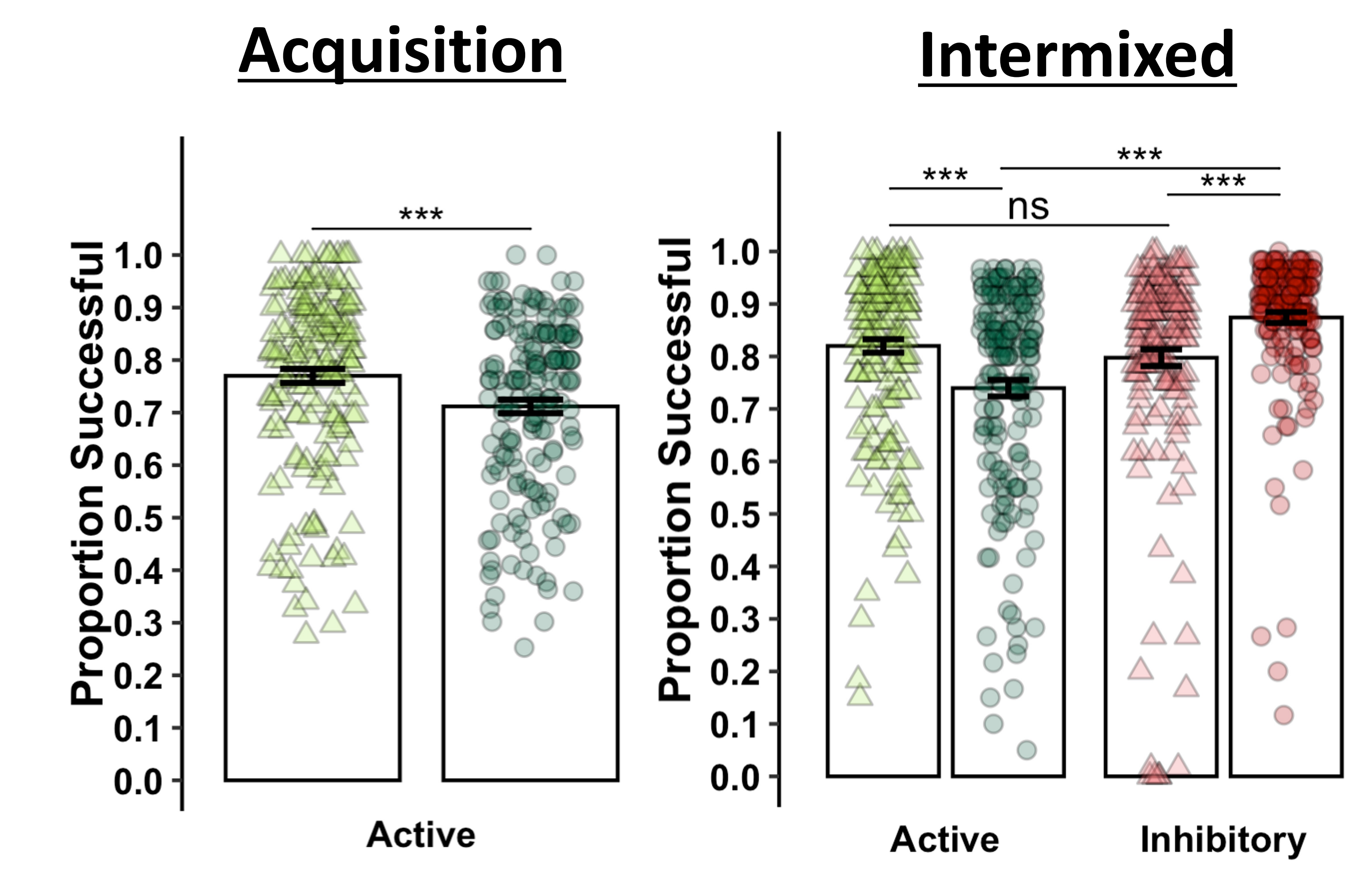
Acquisition Intermixed



Active Reward-Seeking Inhibitory Reward-Seeking



Replication Sample (N=170)



Discussion

- In active contexts, participants demonstrated better performance during reward-seeking than avoidance trials.
- In inhibitory contexts, participants demonstrated better during avoidance than reward-seeking trials.
- Similar performance in active vs. inhibitory reward-seeking but asymmetrical performance in active vs. inhibitory avoidance suggests that the motivational context (reward-seeking vs. avoidance) is important for guiding action vs. inhibition.
- Furthermore, there was a negative relationship between anxiety symptom scores and active reward-seeking accuracy – but only in participants scoring high in depressive symptoms.
- This translational task may provide future utility in understanding the pathophysiology underlying depression and anxiety disorders.
- **Future Directions:** Increase participants in the current study. Perform fMRI study in healthy population. Assess task in MDD population with and without comorbid anxiety. Assess sex differences.

References

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