

Ready, set, explore! Event-related potentials reveal the time-course of exploratory decisions

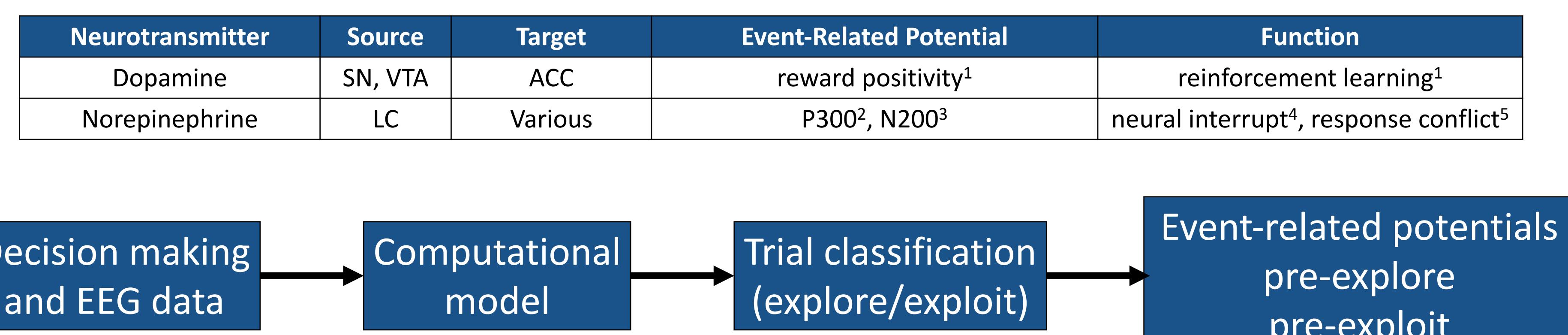
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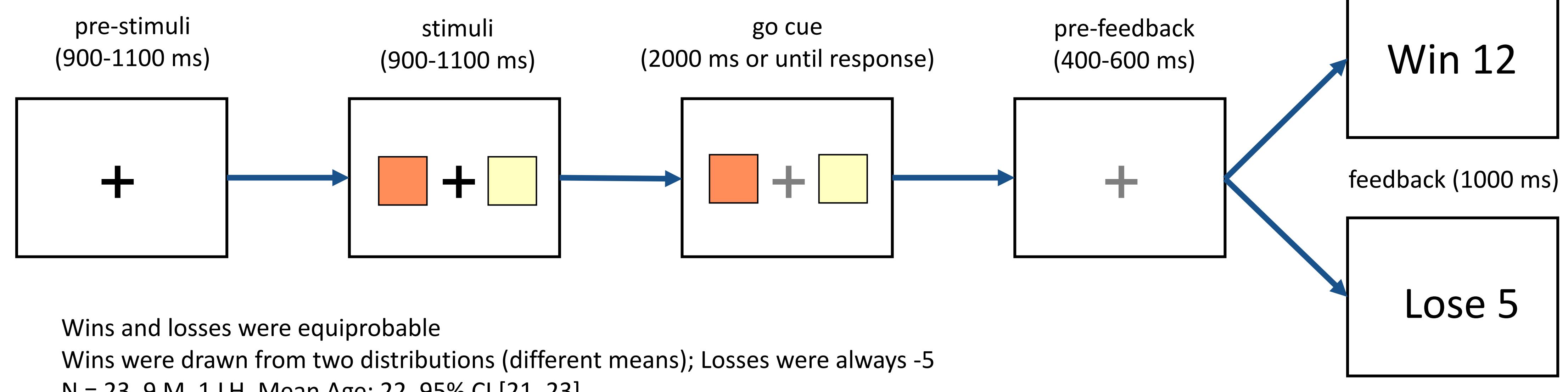
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INTRODUCTION

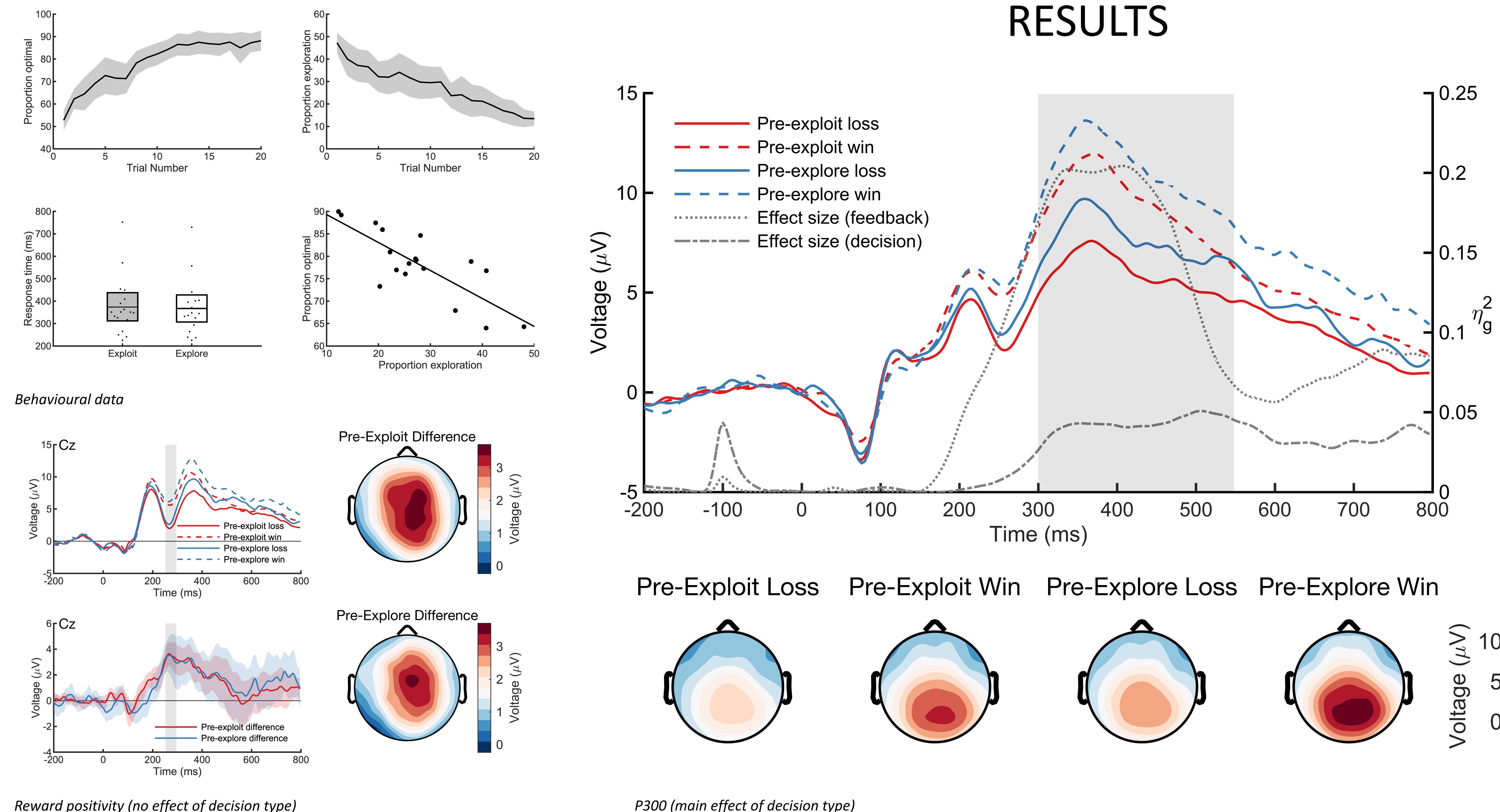
When do we *exploit* previous learning, and when do we *explore*?
Which neural systems are involved?



METHODS



RESULTS



CONCLUSIONS

- Phasic activity of the LC-NE system, as indexed by a feedback-locked P300, plays a critical role in triggering a switch from exploitative to explorative decision making
- Phasic midbrain dopamine does not appear to play this same role
- The period just prior to a decision to explore involves response conflict

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