

## Introduction

- Skewed gambles have large, asymmetric outcomes.
- Most studies use delayed or hypothetical rewards, and few have examined the effects of alternative rewards on skewed decision making.
- Studies show that people usually prefer positively-skewed **monetary** gambles (Burke & Tobler, 2011; Wu, et al. 2011). A prior study found the opposite effect with **non-monetary** rewards.
- Here, we compare skewed decision-making behavior between **monetary** and **non-monetary** rewards.

We predict participants will accept:

- more positively-skewed gambles with **monetary** rewards
- more symmetric and negatively-skewed gambles with **non-monetary** rewards

## Method

Sample: 24 of 27 healthy young adults (18-27 y/o)

### Decision-Making Tasks

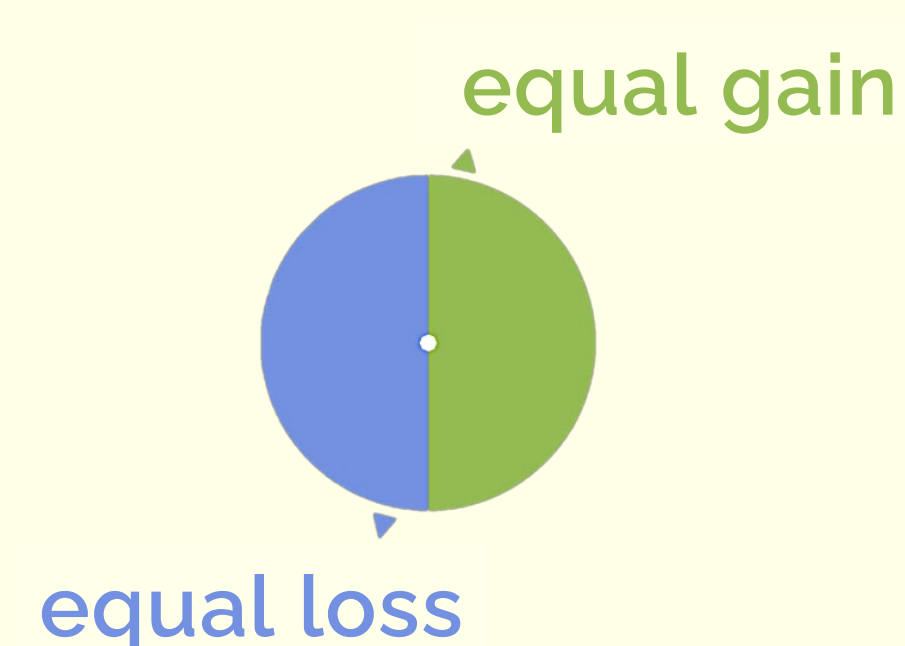
Each task consists of 30 decision trials (10 for each condition)

*Negative Skew*



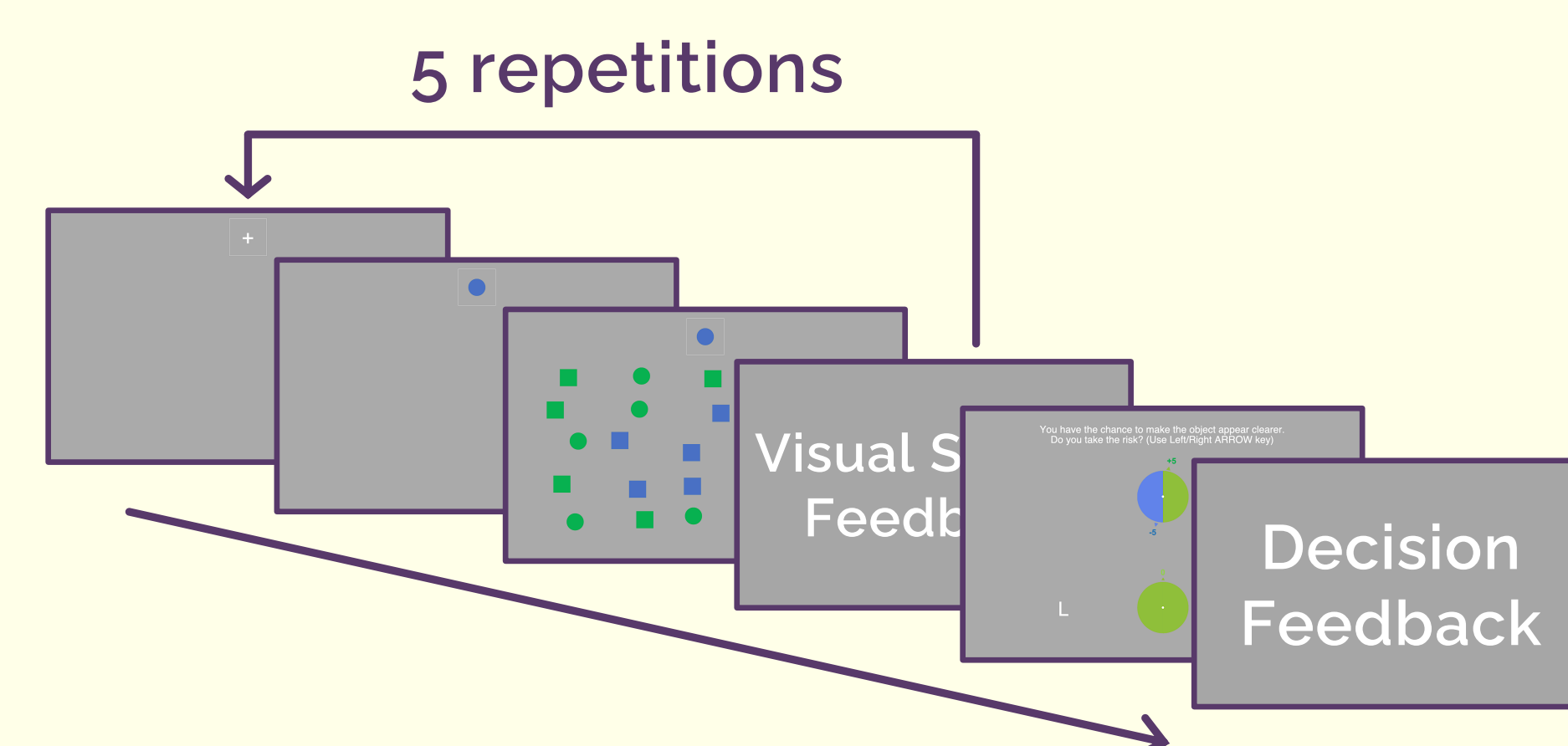
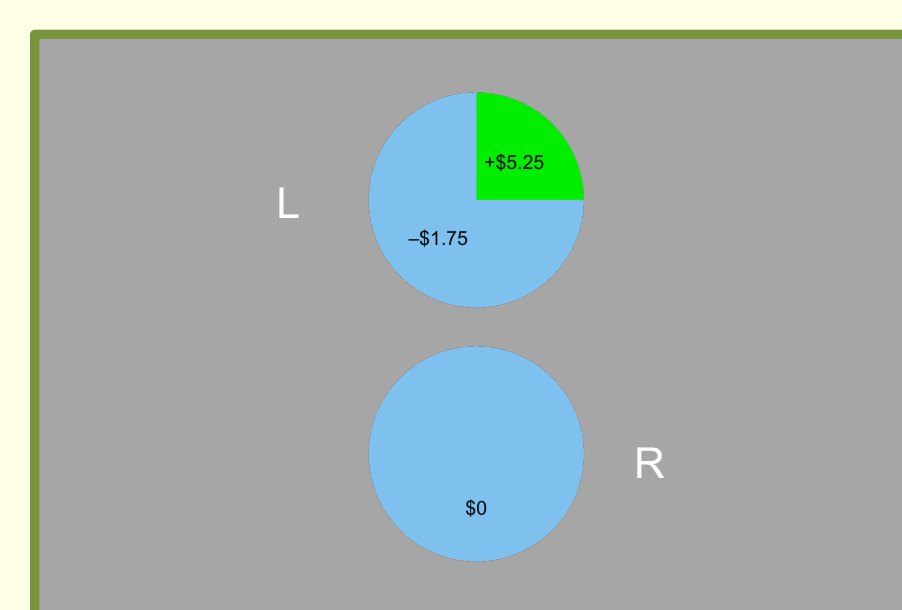
**Monetary**

*Symmetric*



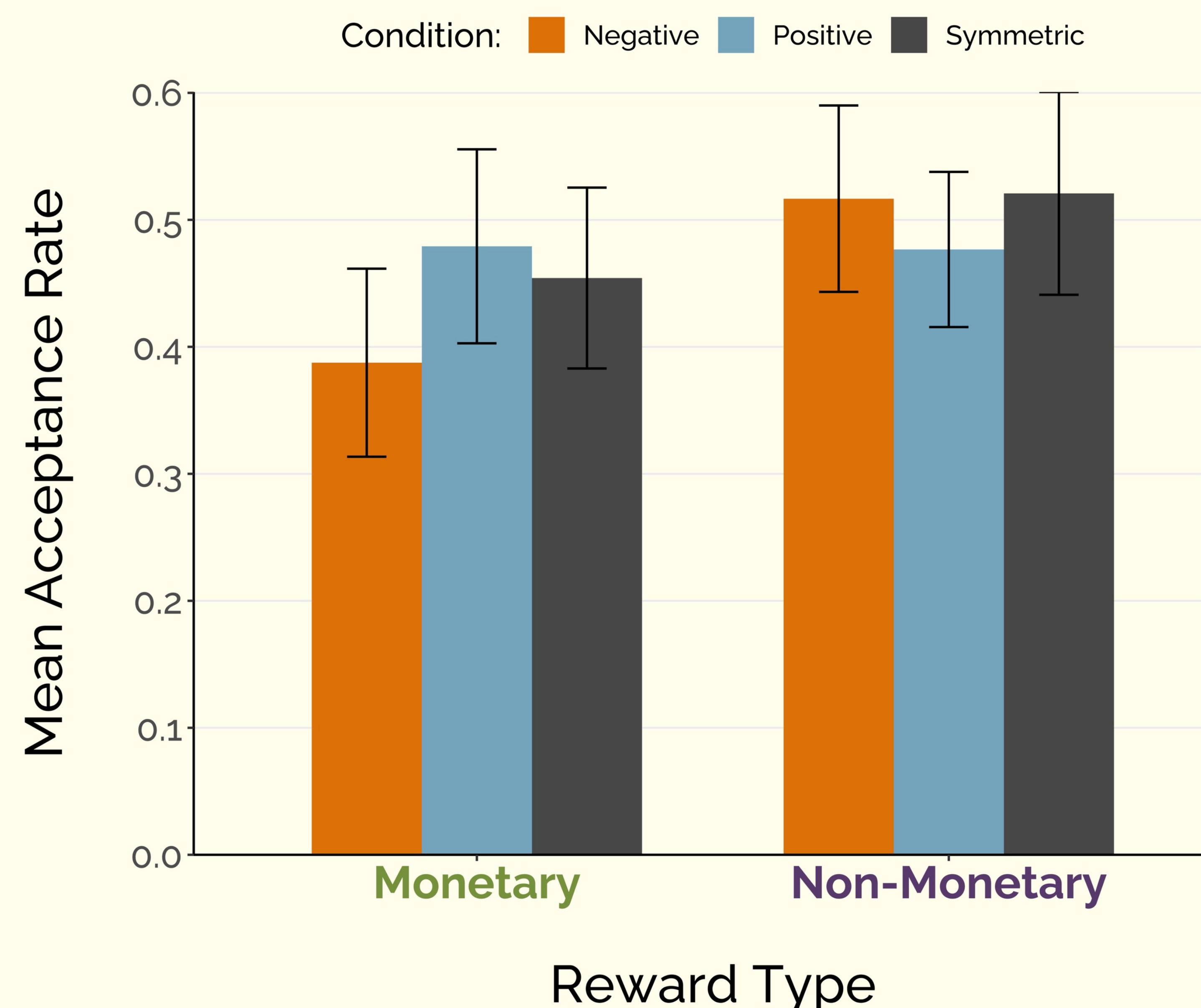
**Non-Monetary**

*Positive Skew*



## Results

### Effect of Reward Type on Gamble Acceptance



### Binary Logistic Regression

- Reward type and condition as predictors
- Main effect of reward type on gamble acceptance, regardless of condition

## Conclusion

- Participants were more likely to accept gambles when presented with **non-monetary** rewards.
- Ongoing direction: complete data collection for current sample and see if interaction between outcome and condition significantly predicts gamble acceptance.
- Exploratory analysis: investigate correlation between visual acuity and gamble acceptance for the **non-monetary** reward task.

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