

Neural correlates of choosing between bundles of description and experience-based risky  
options

A. Zeynep Enkavi<sup>1</sup>, Gabriela Tavares<sup>2</sup>, & Antonio Rangel<sup>1</sup>

<sup>1</sup> Division of Humanities and Social Sciences, California Institute of Technology

<sup>2</sup> Google

Author Note

The authors made the following contributions. A. Zeynep Enkavi: Formal Analysis,  
Writing - Original Draft Preparation, Writing - Review & Editing; Gabriela Tavares:  
Conceptualization, Investigation; Antonio Rangel: Conceptualization, Writing - Original  
Draft Preparation, Writing - Review & Editing.

Correspondence concerning this article should be addressed to A. Zeynep Enkavi, 1200  
E. Colorado Blvd., Pasadena, CA 91125. E-mail: zenkavi@caltech.edu

13

## Abstract

14

Enter abstract here

15

*Keywords:* risk, uncertainty, lottery, reinforcement learning

16

Word count: X

Neural correlates of choosing between bundles of description and experience-based risky options

## Introduction

## Methods

### Participants

27 Caltech undergraduates were recruited for the experiment. Two subjects could not be scanned due to discomfort in the scanner so data from 25 subjects (10 female, mean age = 21) are analyzed. Each subjects completed 300 trials broken down to five runs completed in a single sessions. Participants were compensated \$30 for their time and received additional earnings based on their performance as described below. All procedures were approved by the Caltech's IRB and all subjects provided informed consent prior to participation.

### Task

### Procedure

### Behavioral data preprocessing

### Neuroimaging data preprocessing

### Data analysis software

The list of software packages and their versions used for analyses can be found at ...

## Results

### Raw behavioral results

### Cognitive modeling

### Neuroimaging results

## Discussion

## References