

# The Role of Cognitive Capacity in the Processes Underlying Easy and Difficult Risky Monetary Decision-Making

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## Introduction

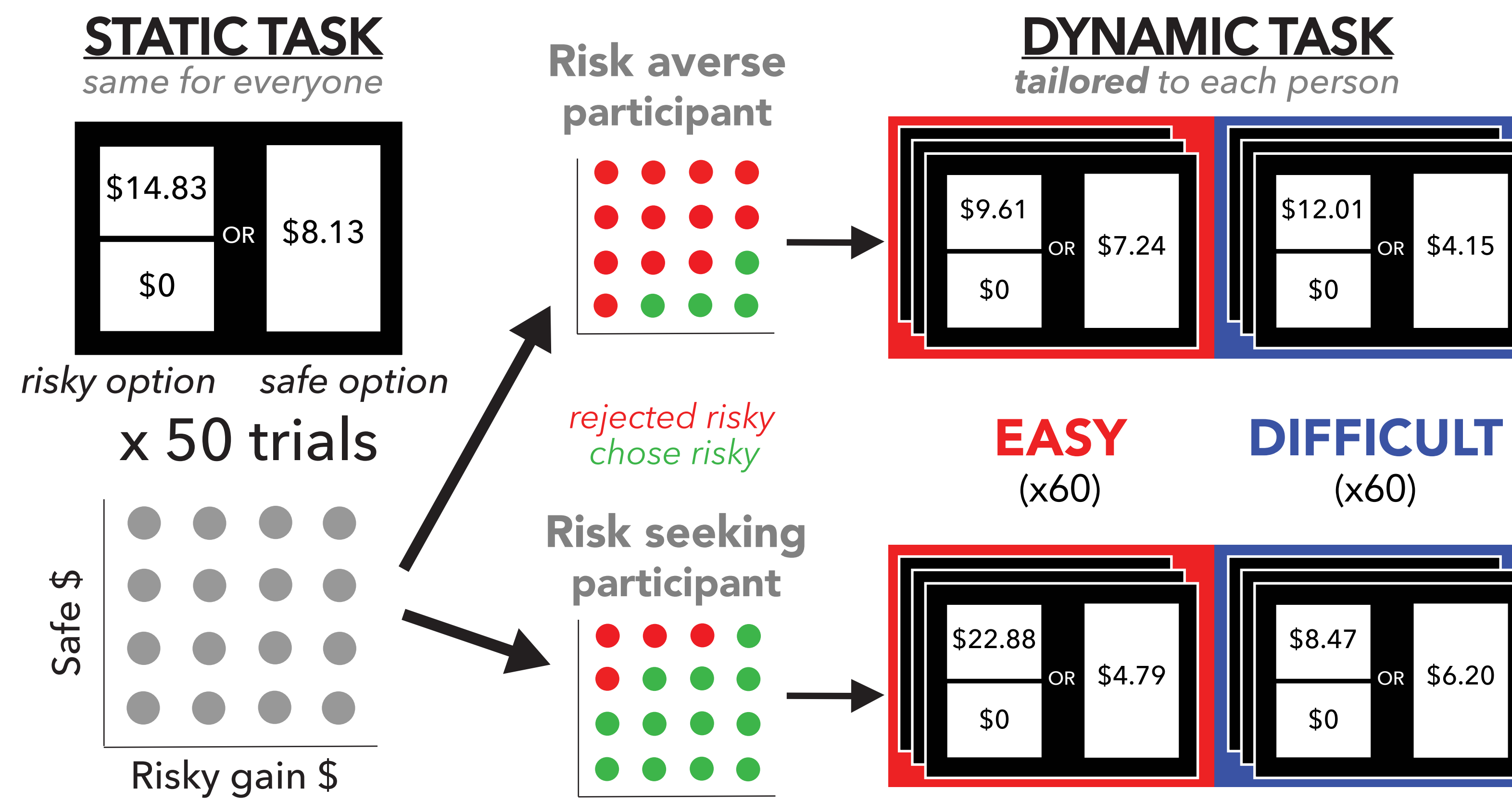
People make different risky choices, and may **experience the process** of making choices differently.

Cognitive control is the ability to flexibly allocate mental resources to accomplish a goal - like **making a difficult choice**.

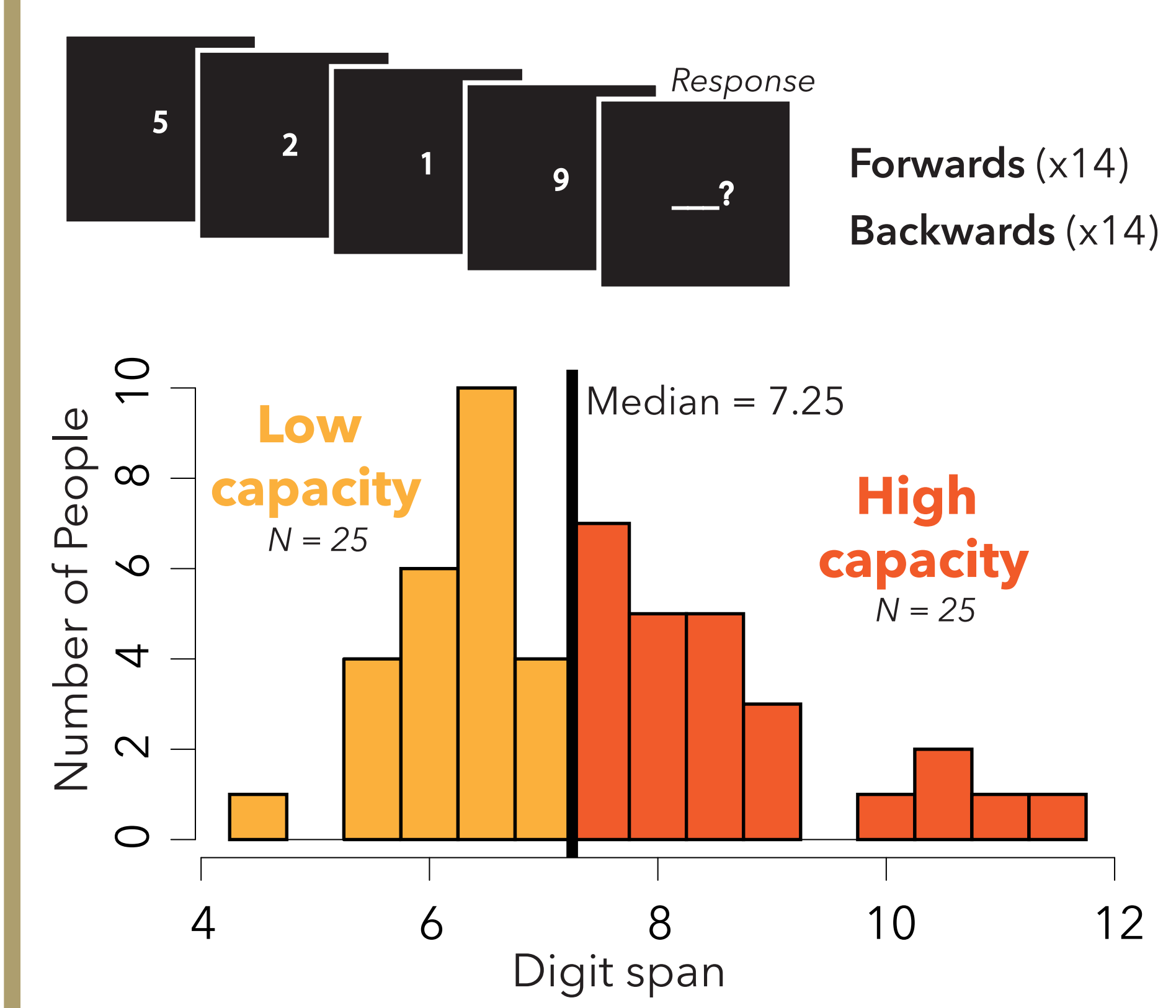
How does **cognitive capacity** influence the experience of **choice difficulty**?

## Methods

### Risky Decision Making Task

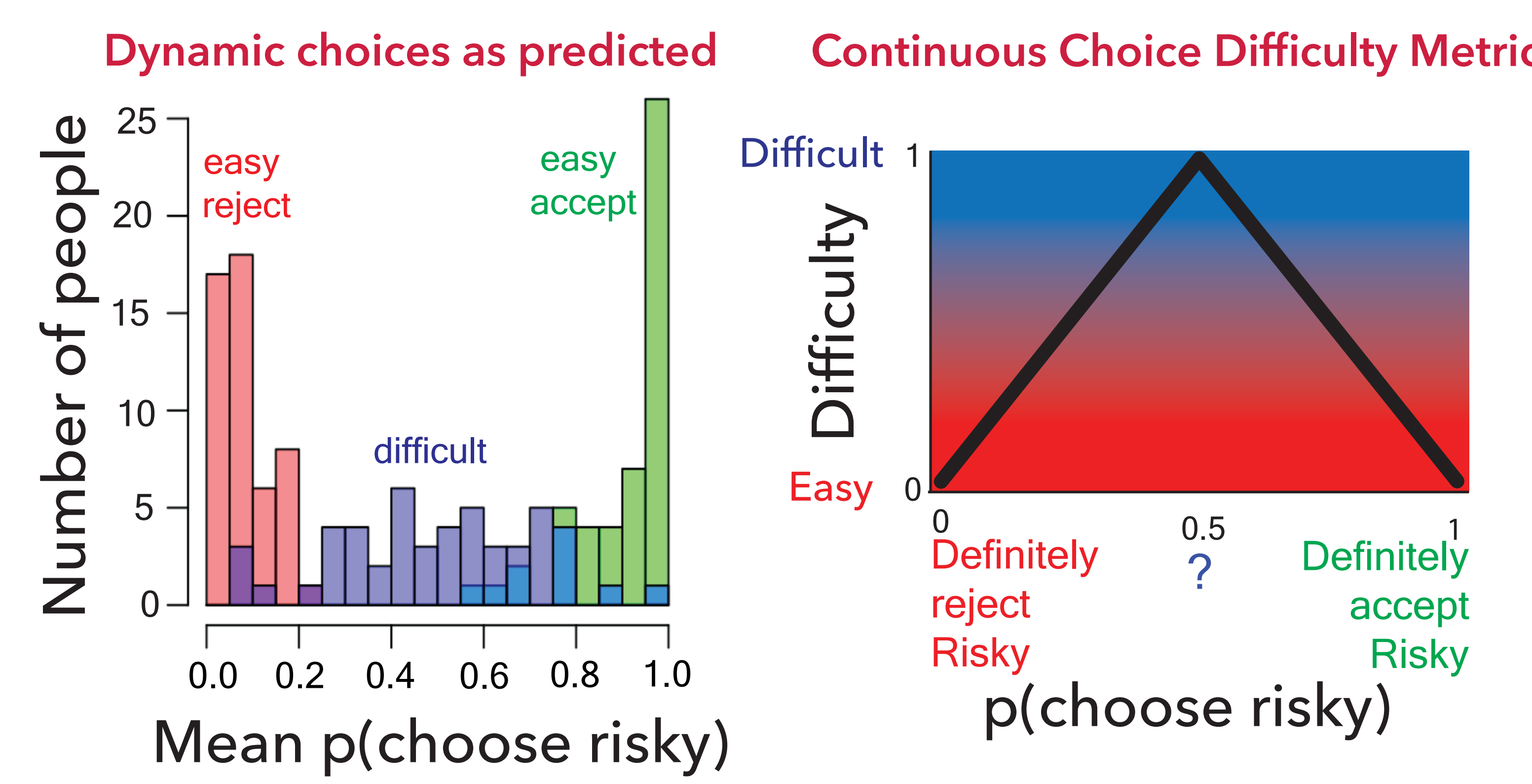


### Digit Span Task



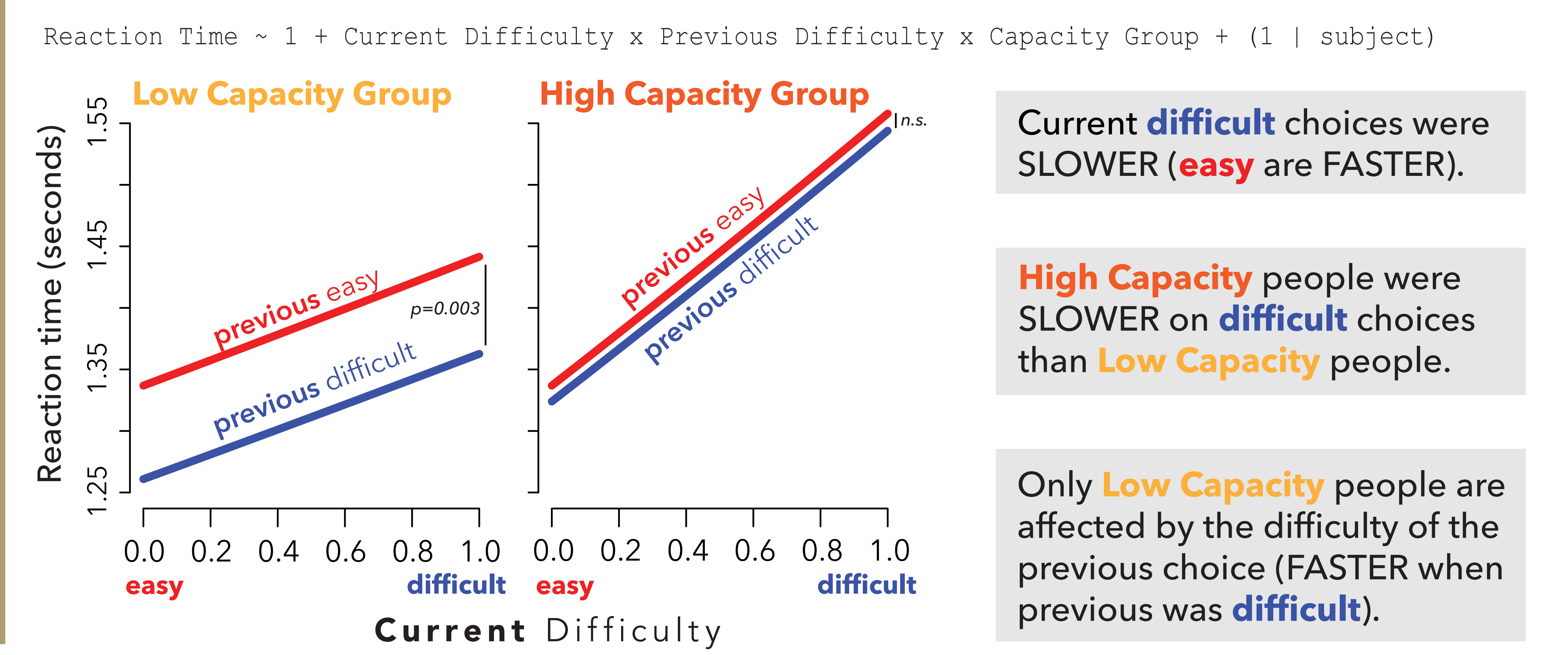
## Results

### Choice Difficulty



We accurately captured **easy** and **difficult** choices and created a continuous metric of choice difficulty

### Cognitive Capacity, Choice Difficulty, and Reaction Time



## Conclusions

Variability in the experience of easy and difficult choices is related to cognitive capacity. Unexpectedly, high capacity people are slower to make difficult choices, perhaps reflecting greater willingness to deploy cognitive resources, based on greater availability of those resources.

Parameter	Estimate (SE)	P value
Intercept	1.16 (0.02)	<2e-16
Current Difficulty	0.068 (0.008)	<2e-16
Previous Difficulty	-0.019 (0.008)	0.014
Current x Previous Difficulty	0.003 (0.02)	0.82
Capacity Group	0.001 (0.02)	0.94
<b>Capacity Group x Current Difficulty</b>	<b>0.024 (0.008)</b>	<b>0.003</b>
Capacity Group x Previous Difficulty	0.014 (0.008)	0.08
Capacity Group x Current Difficulty x Previous Difficulty	-0.018 (0.01)	0.12

