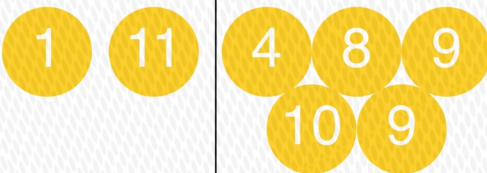
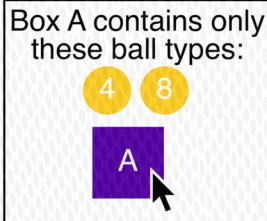

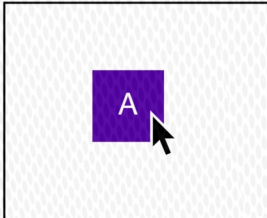


# Self-Reported Uncertainty in Decision-from-Experience Sampling



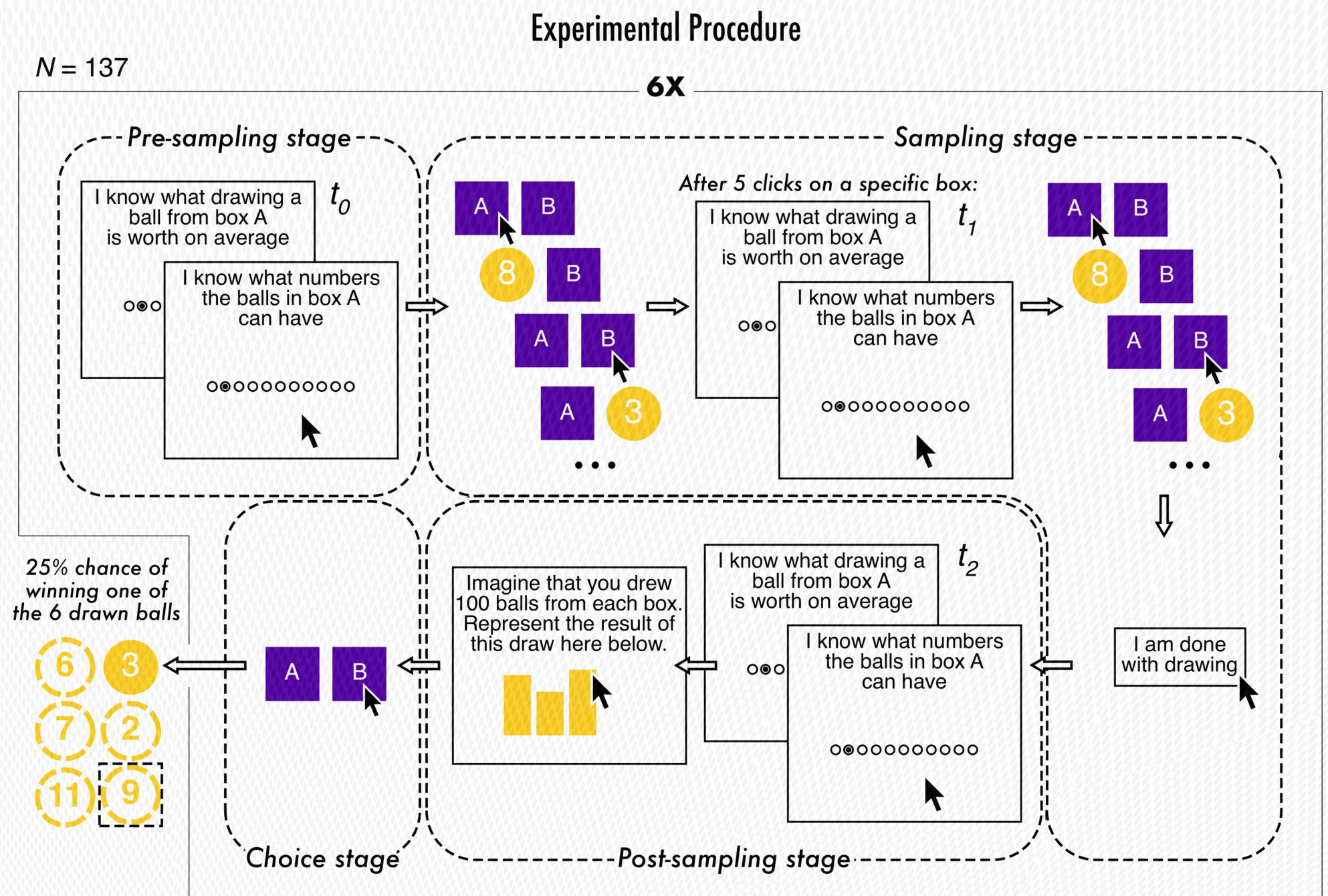
Conditions		
Variance	Outcome number	Information about the outcomes
HIGH		
LOW		

## INTRODUCTION

We search for information to reduce our uncertainty before making choices<sup>1-4</sup>. Currently, comparatively few studies<sup>3</sup> have examined the role of uncertainty in driving the sampling process of decision-from-experience (DFE) tasks.

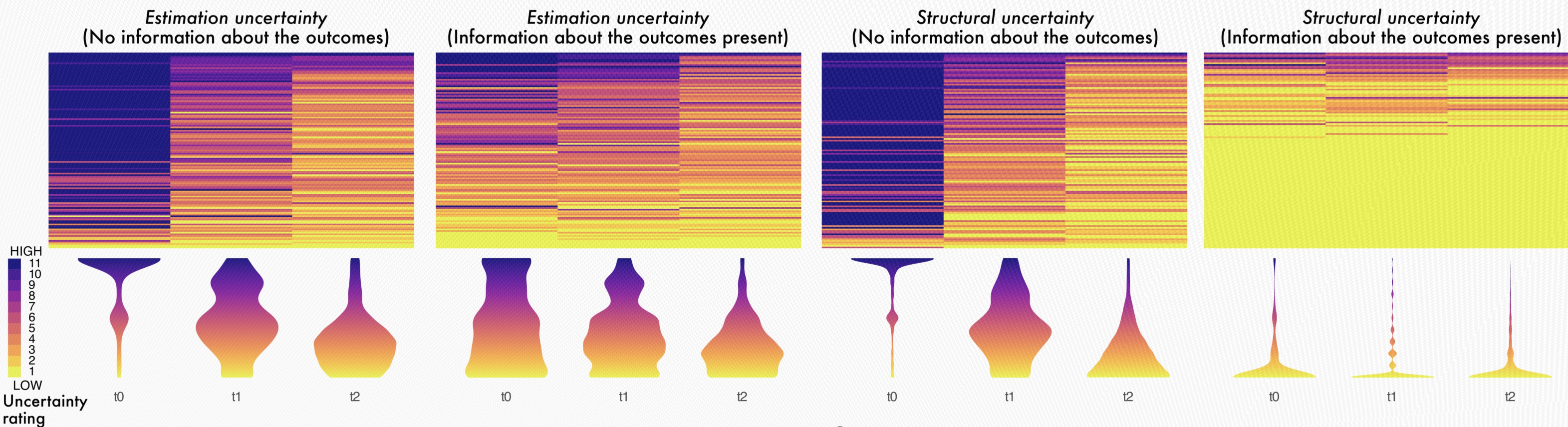
We set out to expand on past research and find out more about the role of self-reported estimation uncertainty and structural uncertainty in DFE tasks.

## METHODS

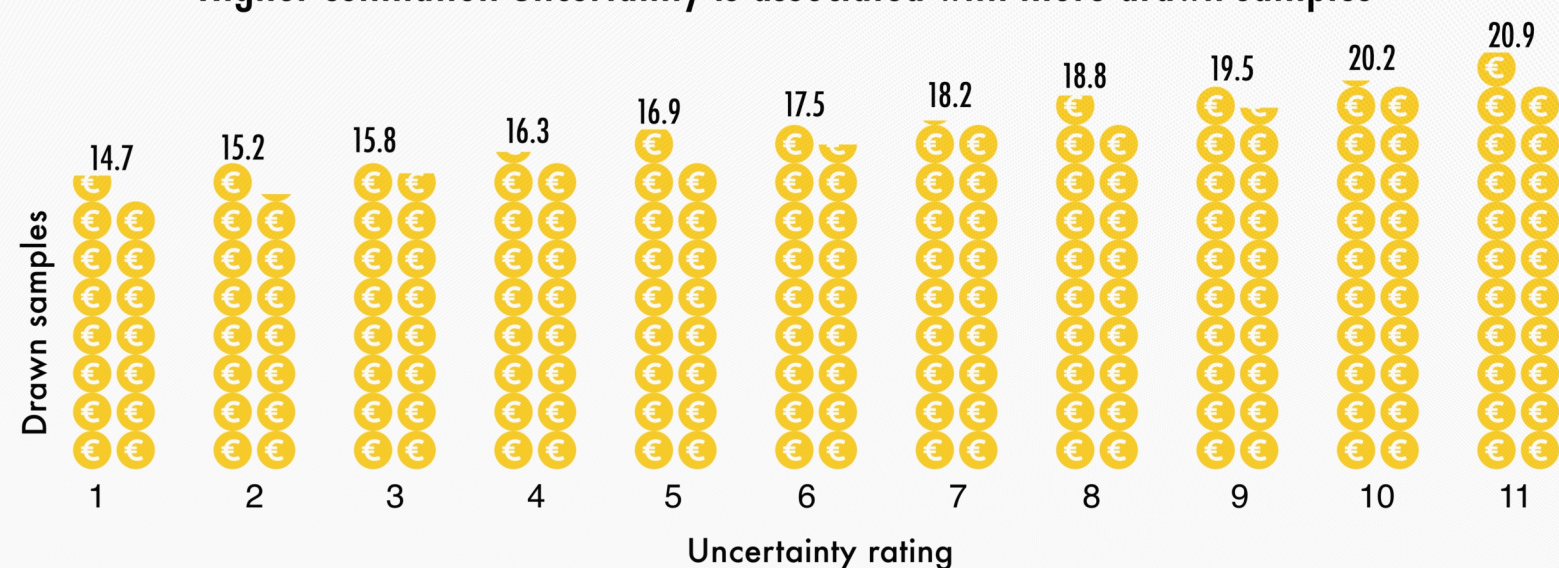


## RESULTS

Self-reported estimation and structural uncertainty: uncertainty is overall reduced with more sampling, but individual heterogeneity is high



Higher estimation uncertainty is associated with more drawn samples



① Some uncertainty manipulations were successful:

Higher variance was associated with higher estimation uncertainty at t<sub>1</sub>

A higher number of outcomes was not associated with either estimation or structural uncertainty at t<sub>1</sub>

② More uncertainty sometimes meant more sampling:

Higher reported estimation uncertainty at t<sub>1</sub> was associated with more sampling

Higher reported structural uncertainty at t<sub>1</sub> was not associated with more sampling

③ More sampling increased the accuracy of the representation of the distributions

## DISCUSSION

Results in line with theories that see search/sampling driven by the need to reduce uncertainty.

However: structural uncertainty played a smaller role than expected.

Self-report measures of uncertainty: *unexploited potential*

## NEXT STEPS

How much does uncertainty indirectly contribute to the *description-experience gap*?

How *reliable* are uncertainty self-report measures really?

Could we use *uncertainty manipulations* as a tool to affect the amount of information collected?

