

## NARPS exclusion criteria (#7420)

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### 1) Have any data been collected for this study already?

It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid pre-registration nevertheless.

### 2) What's the main question being asked or hypothesis being tested in this study?

This AsPredicted is for the purpose of declaring the exclusion criteria and sample size for a multi lab analysis with market prediction study.

### 3) Describe the key dependent variable(s) specifying how they will be measured.

Participants' engagement and comprehension throughout the task. See Questions 6 for further explanation

### 4) How many and which conditions will participants be assigned to?

Two conditions - pseudo-random assignment of participants, according to participants' odd/even numbering (to maintain counterbalancing):

1) Equal indifference condition: subjects will be assigned a matrix of gambles where the range of potential gains is twice the range of potential losses (as in Tom et al., 2007);

2) Equal range condition, subjects will

be assigned a matrix in which the range of potential gains is equal to the range of potential losses (as in De Martino, 2010).

### 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

We will run a bayesian regression analysis, with gains and losses as independent regressors and acceptance or rejection of the gamble as the dependent variable, to see whether participants' choices were affected from the different gains and losses (i.e. fully understood the task and were not indifferent to the task).

### 6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

The following will be used as exclusion criteria:

1. Participants with over 10% of missed trials (in one or more runs) will be excluded from analysis

2. Subjects who do not show a significant effect of both gains and losses on their choices (Bayesian logistic regression,  $p < 0.05$ ) will be excluded, under the assumption that this reflects a lack of understanding of the task. In a preliminary analysis of the first 10 subjects, all subjects showed a significant effect of both.

### 7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

We will recruit participants until a sample of 100 valid participants is achieved with  $n=50$  per condition.

### 8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

The behavioral data of the first 10 participants was analyzed behaviorally to determine the exclusion criteria, none of whom were excluded. No statistical analyses were performed on the imaging data; they were only examined for quality control of the scans purposes.