

## Network Structure and Naive Sequential Learning - Experiment (#5250)

### Author(s)

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

No, no data have been collected for this study yet

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

Subjects in a sequential learning game learn correctly more often with sparser networks, in which most participants observe few neighbors, than with denser networks, in which most participants observe many neighbors.

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

Fraction of the last eight agents in a trial who correctly guess the state.

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

Two conditions: each participant observes each predecessor independently with probability  $p=.25$  (the link formation probability) and each participant observes each predecessor independently with probability  $p=.75$ .

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

Linear regression of the dependent variable on the link formation probability  $p$ . The same regression with the dependent variable replaced by the fraction of all agents in a trial who correctly guess the state.

### 6) Any secondary analyses?

None.

### 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.

Each subject will participate in 10 trials and each trial will contain 40 participants. We intend to enroll 1040 participants (funding permitting).

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

Participants who incorrectly answer comprehension questions will be excluded. Participants who do not complete all trials will be excluded.