**Project working title: Sequences of active and passive learning**

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**A. Hypotheses**

In this project, we test the hypothesis that active (i.e., self-directed) learning is more effective in category learning task after people gain passive experience with a task, building a stronger task representation.

We predict to see an overall advantage in classification accuracy for active learning over passive learning, and an advantage for people who receive passive-first compared to people who receive active-first. We also predict an interaction with experimental block such that we see more growth in the second block for people in the passive-first condition.

We are not including a explicit manipulation check because by design people in different conditions will have to proceed through the task based on the different levels of the independent variable. We are, however, measuring the amount of time people spend during training, and we expect that active learners should take longer. This provides a sanity check that people were in fact experiencing different kinds of training.

**B. Methods**

Design:

* IV is training condition: Active-Active, Passive-Passive, Active-Passive, and Passive-Active.
* DVs are post-test classification accuracy: relational test and entity test

Planned sample:

* Data will be collected from participants from Amazon Mechanical Turk. Participants will need to have a US IP address and have an approval rating above 85%.
* For our pilot, we plan to test 40 participants, with 20 in the Active-Active and 20 in the Passive-Passive condition.
* The data collection termination rule is to stopping at 40 participants.