# Experiment Flow

This document outlines the structure of performance experiments we conduct on Mechanical Turk.

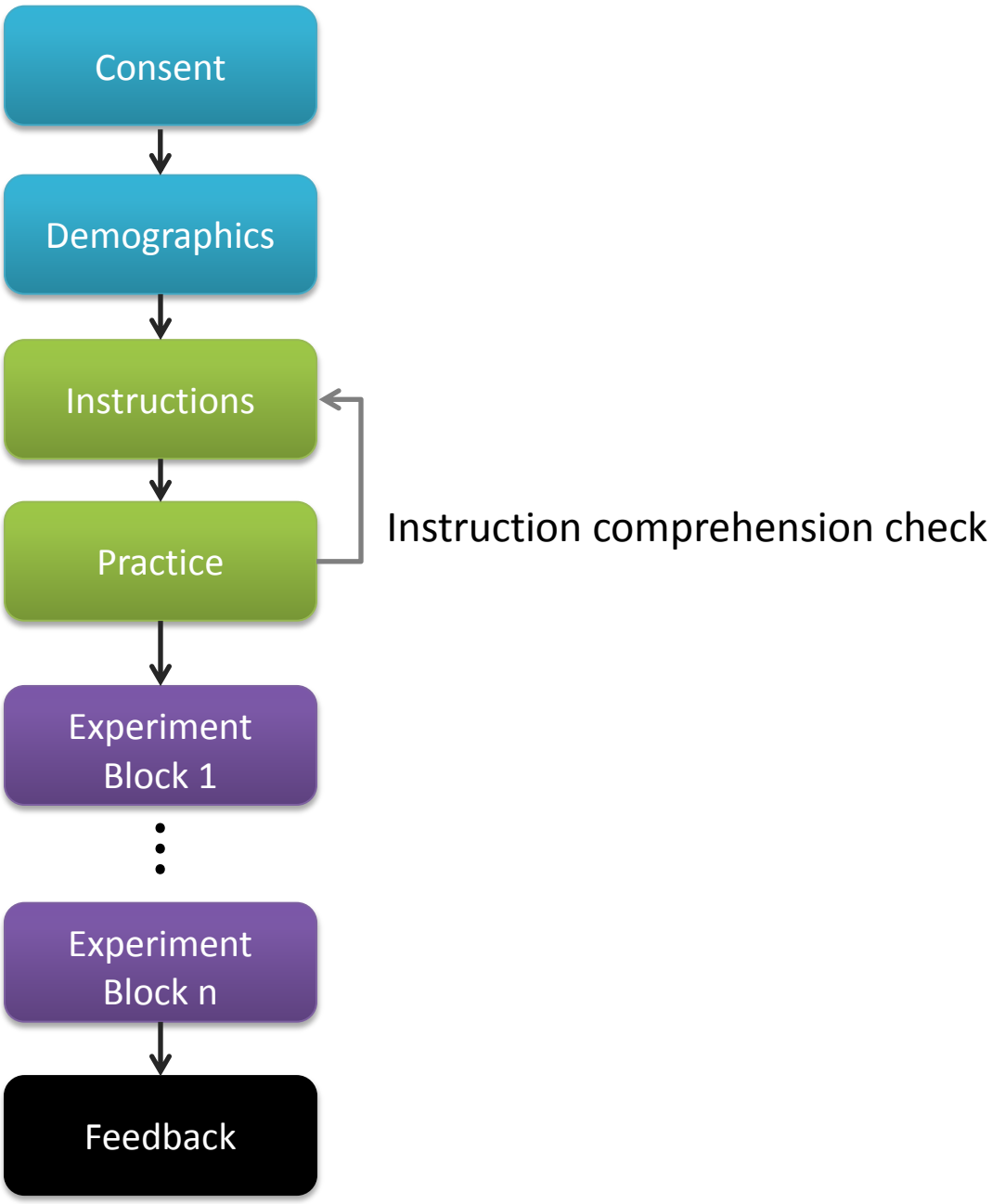


Figure 1: High-level view of the experiment flow

# 1. Consent

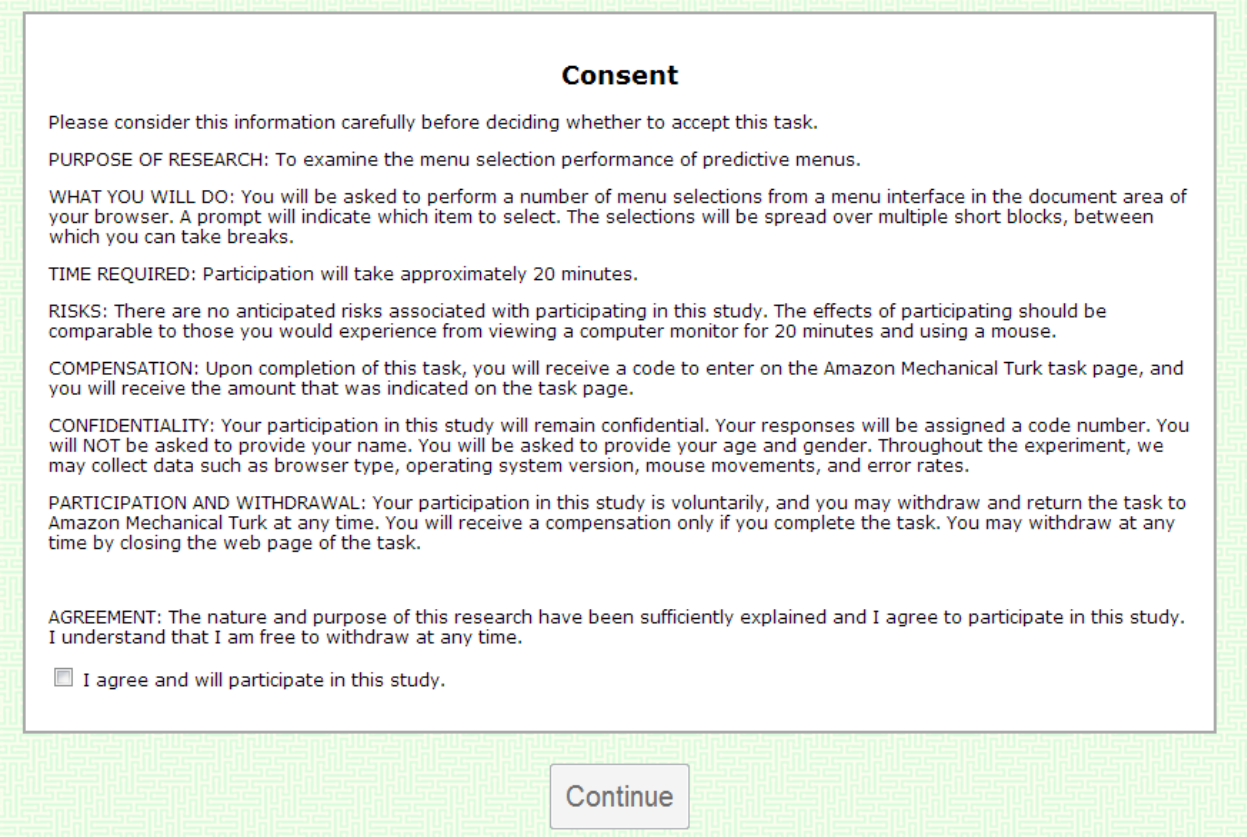


Figure 2: A standard consent form is displayed at the beginning of the experiment.

# 2. Demographics

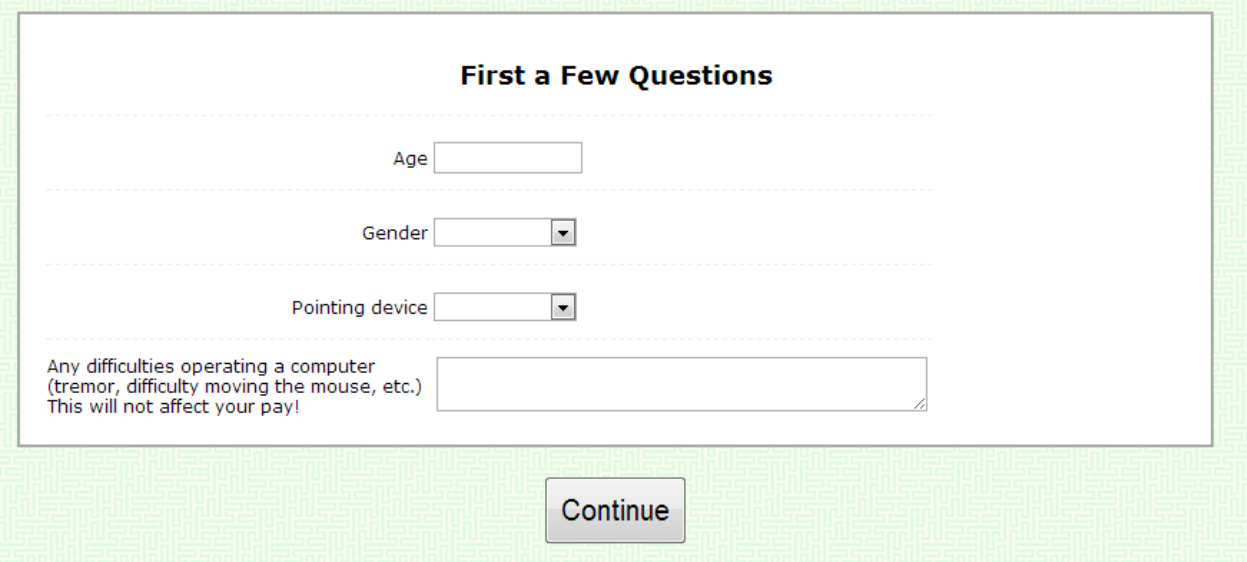


Figure 3: Collecting demographics. All questions are optional to encourage honest reporting. No participants are denied reimbursement based on their answers, however some may be excluded from the analysis: e.g., participants with medical conditions.

# 3. Instructions

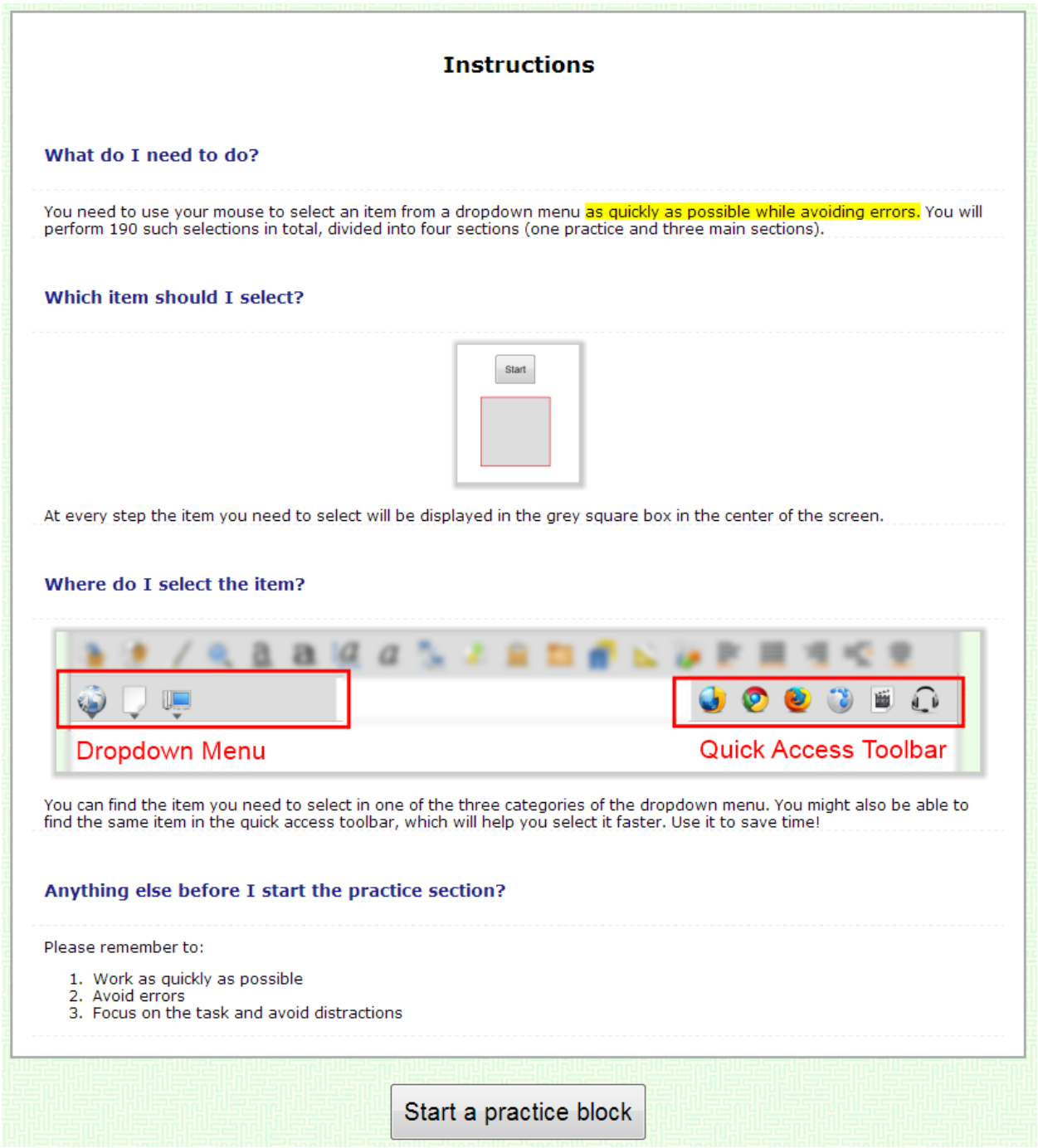


Figure 4: The instructions section explains the task.

# 4. Practice

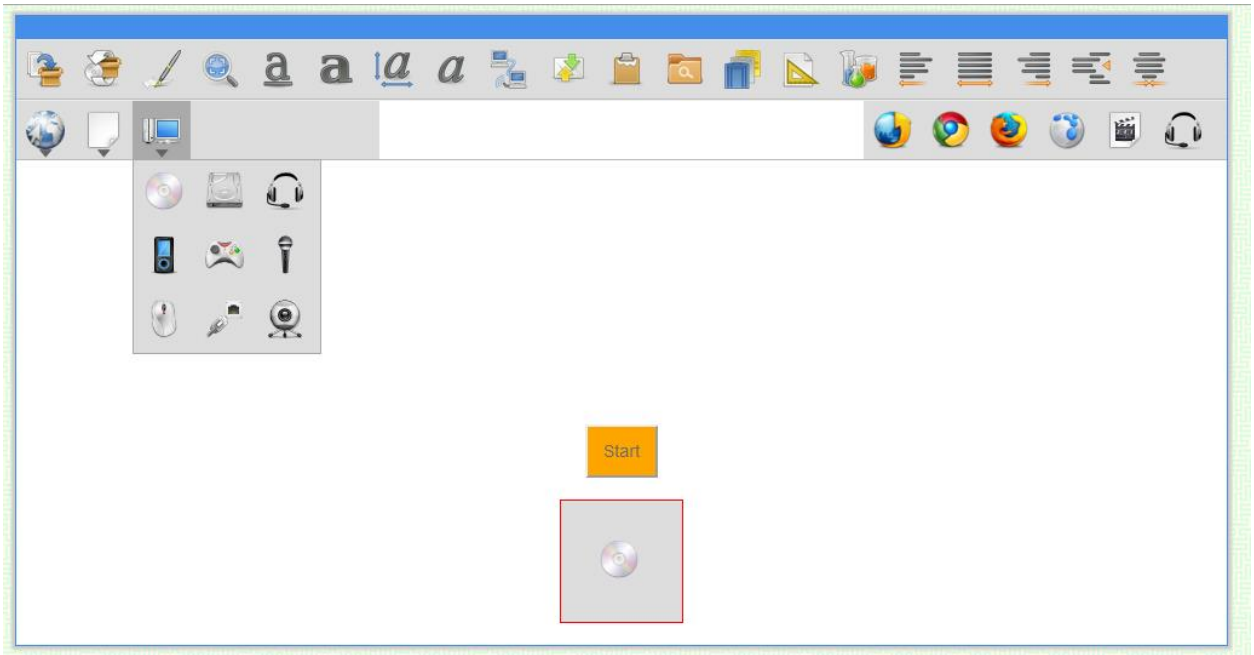


Figure 5: The practice section serves two purposes. First, it allows the participant to acquaint himself with the interface and the nature of the task. Second, it tests whether the participant understood the instructions.

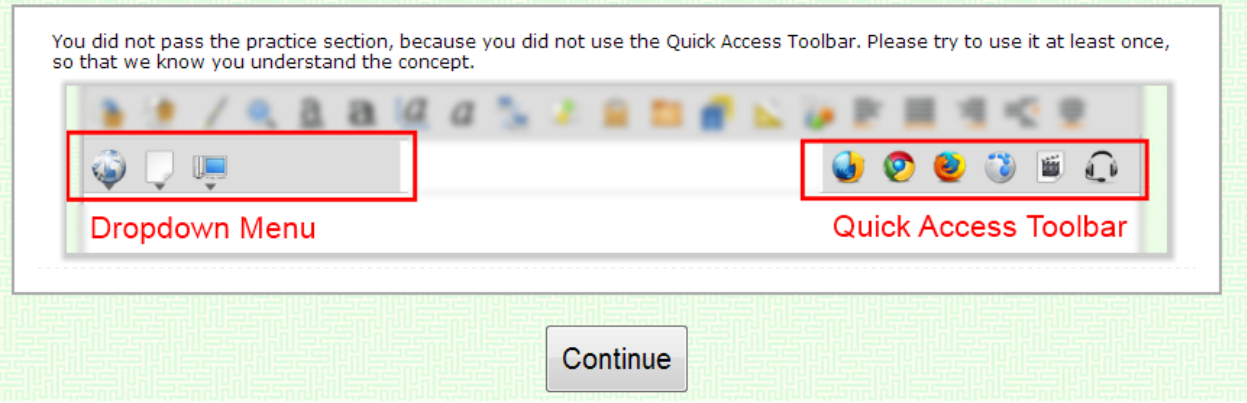


Figure 6: If the participant failed to demonstrate comprehension of the instructions (specifically, if the participant fails to use the Quick Access Toolbar at least once), he is asked to repeat the practice section until he passes.

# 5. Experiment Block 1, 2, …, N

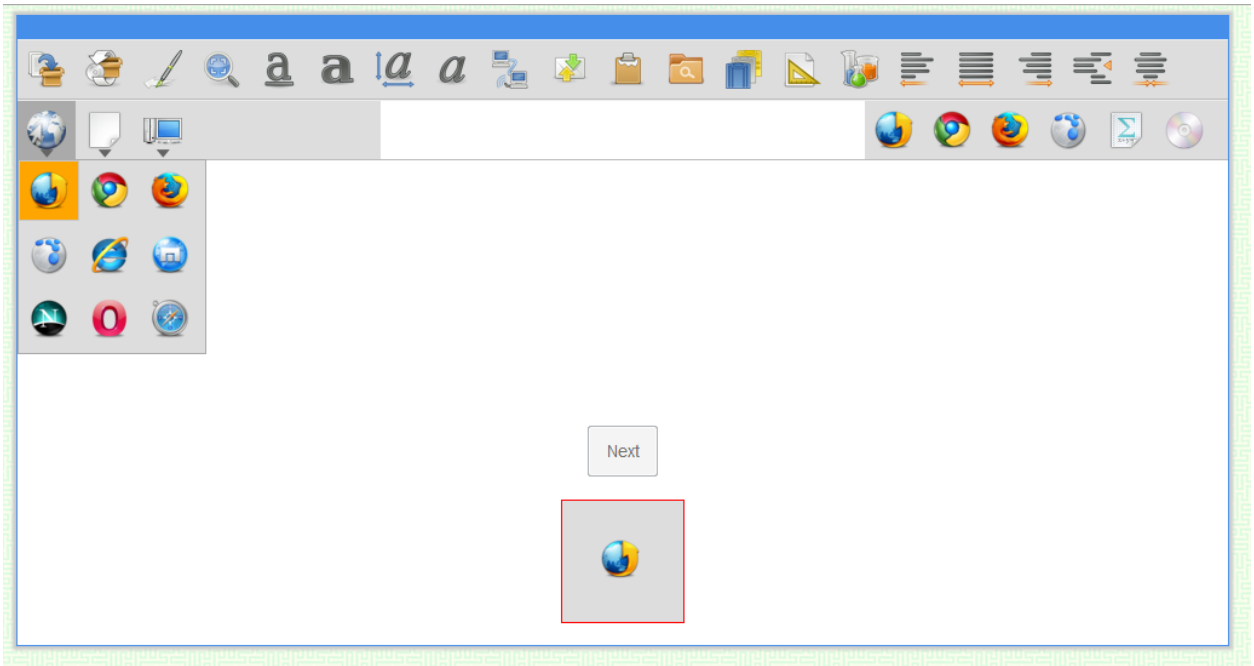


Figure 7: After successfully passing the practice section, the participant completes N experiment blocks, in which the variables of interest (speed, accuracy, etc.) are measured. Depending on the experiment the first few blocks and/or the first few trials of each block may be discarded as they serve as a warm-up and may not be indicative of the actual performance. If this is a within-subjects experiment, different blocks will represent different test conditions.

Implementation issues:

- All HTML resources (images, scripts, etc.) are preloaded before the participant begins each block.
- Performance data (logs) are sent back to the server asynchronously, at regular intervals.
- If the experiment is graphics-intensive (uses HTML5 Canvas), the browser rendering performance in terms of Frames per Second (FPS) is recorded.

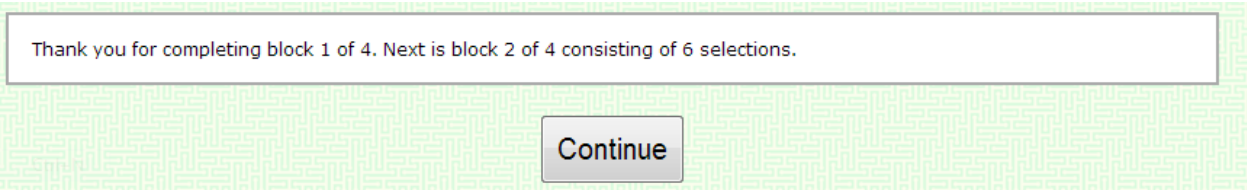


Figure 8: After each block the participant receives a progress update.

# 6. Feedback


Figure 9: At the end of the experiment, the participant has the opportunity to provide any feedback on the Amazon Mechanical Turk HIT page. The participant most commonly comment about the difficulty or enjoyment of the experiment. Occasionally, there are reports of technical issues.