First-level General Linear Model (GLM)

Each block (novel and repeated) was convolved with a canonical hemodynamic response function to form task regressors. Additionally, the GLMs included a constant term per run, a high frequency signal filtering (cutoff = 1/260 Hz), motion parameters, and regressors for bad points. Bad points were defined as any of the following: (1) spike in the data that was more than 2.5 standard deviations of the average variation; (2) the subject moved more than 0.75 mm between TRs; or (3) the subject rotated more than 1.5 degrees. Fixation periods were not modeled.

Automated quality control excluded any imaging run that had >20 bad points (~20% of data), overall motion >3 mm, or overall rotation >5 degrees. Quality control also included manually inspecting the raw time series, pre-processed time series (smoothed normalized images) and first-level results. Two individuals from the placebo group were excluded at week-24 due to image artifacts that could not be corrected (likely due to motion).