Non-Parametric Analysis using Bootstrapped Samples: All non-parametric tests were performed by generating 1000 bootstrapped samples from participants’ original responses in every condition. Each bootstrap sample was drawn with replacement and contained the same number of responses as the original data. The average error Average Error (AE) = \bar{X} (Absolute Value of Error Distribution) for each bootstrapped sample was calculated, then collapsed across the 4 subjects, creating a distribution of 1000 group accuracy estimates per condition. The identical process was repeated for the calculation of precision Standard Deviation of Error (SDE) = \sigma (Error Distribution).

To compare the distribution between 2 conditions, we took the 1000 sample group accuracy distribution from each condition as described above and generated a distribution of difference scores by repeatedly sampling one point from each accuracy distribution and recording the difference. The resulting “difference sample” was compared against a null hypothesis of zero; p values were taken as the proportion of the difference sample that fell on the opposite side of zero from the hypothesized direction of the difference. This calculation yielded a one-tailed p value. All p –values reported have been transformed into two-tailed p values by multiplying the one-tailed p value by 2.

Error Bars: The group distributions for each condition described above were obtained and the standard deviation of this sample was calculated to create the error bars in the graphs.