



**S8 Fig. How the use of cost-first vs. evidence-first decision processes related to sampling bias and sampling variation.**

Correlations between cost-evidence strategy index ( $AICc_{\text{cost} \rightarrow \text{evidence}} - AICc_{\text{evidence} \rightarrow \text{cost}}$ ) and sampling bias (signed deviation from the optimal number of sampling, denoted  $\overline{n_s - n_{opt}}$ ) or sampling variation (standard deviation of actual number of sampling across trials, denoted  $SD(n_s)$ ) under different cost and evidence conditions were consistent with what we would expect if AQ affects these measures through cost-first vs. evidence-first preference in decision process. See Fig 6b for the corresponding plot for efficiency. Error bars represent 95% confidence intervals (FDR corrected). C:0 = zero-cost, C:0.1 = low-cost, C:0.4 = high-cost, E:0.6 = low-evidence, E:0.8 = high-evidence.