

Supplementary Table S2. Quantile comparison of the observed reaction time data with reaction time data simulated based on the drift diffusion model (500 simulations), as well as the standard deviation (std), standard error of means (SEM) and mean squared error (MSE) of the simulated data. The column “credible” indicates whether the data fall within the 95 % credible interval (if “True” the model is a 95% credible fit for the observed data). *ub* = upper boundary, *lb* = lower boundary.

Statistic	observed data	mean (simulated data)	Std	SEM	MSE	credible
Accuracy	0,802	0,805	0,208	0,000	0,043	True
mean_ub	1,119	1,154	0,329	0,001	0,110	True
std_ub	0,494	0,414	0,213	0,007	0,052	True
10q_ub	0,658	0,771	0,178	0,013	0,045	True
30q_ub	0,808	0,906	0,220	0,010	0,058	True
50q_ub	0,996	1,043	0,278	0,002	0,080	True
70q_ub	1,234	1,239	0,376	0,000	0,142	True
90q_ub	1,732	1,661	0,601	0,005	0,366	True
mean_lb	-1,209	-1,258	0,457	0,002	0,211	True
std_lb	0,589	0,420	0,314	0,029	0,127	True
10q_lb	0,645	0,877	0,340	0,054	0,169	True
30q_lb	0,827	1,004	0,372	0,031	0,169	True
50q_lb	1,049	1,148	0,433	0,010	0,198	True
70q_lb	1,362	1,359	0,542	0,000	0,294	True
90q_lb	2,086	1,752	0,768	0,111	0,700	True