**S2 Table**

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|  | **Accuracy and complexity: Experiment 1** |
|  | *Effort* | *Delay* |
|  | **ACCURACY** | **COMPLEXITY** | **MODEL EVIDENCE** | **ACCURACY** | **COMPLEXITY** | **MODEL** **EVIDENCE** |
|  | **hyp** | **sig** | **hyp** | **sig** | **hyp** | **sig** | **hyp** | **sig** | **hyp** | **sig** | **hyp** | **sig** |
| **s1** | -172.14 | -36.92 | 5.12 | 12.84 | -177.26 | -49.76 | -97.27 | -109.75 | 6.81 | 7.32 | -104.08 | -117.07 |
| **s2** | -150.73 | -134.72 | 6.03 | 10.32 | -156.77 | -145.04 | -91.10 | -84.76 | 6.85 | 7.93 | -97.95 | -92.70 |
| **s3** | -146.98 | -138.17 | 5.89 | 9.53 | -152.87 | -147.70 | -181.06 | -181.15 | 2.77 | 2.71 | -183.82 | -183.86 |
| **s4** | -180.55 | -30.01 | 4.70 | 11.87 | -185.25 | -41.88 | -178.49 | -178.33 | 4.99 | 5.33 | -183.47 | -183.66 |
| **s5** | -166.65 | -81.46 | 5.46 | 11.63 | -172.11 | -93.09 | -173.83 | -174.10 | 5.58 | 6.27 | -179.41 | -180.37 |
| **s6** | -107.67 | -101.30 | 6.63 | 7.58 | -114.30 | -108.88 | -164.61 | -163.99 | 5.97 | 6.57 | -170.58 | -170.55 |
| **s7** | -109.73 | -107.36 | 6.35 | 7.04 | -116.08 | -114.40 | -156.07 | -156.79 | 5.95 | 6.34 | -162.02 | -163.13 |
| **s8** | 1.91 | 13.26 | 6.05 | 10.99 | -4.14 | 2.27 | -182.19 | -182.22 | 2.68 | 2.67 | -184.87 | -184.89 |
| **s9** | -136.93 | -76.59 | 5.79 | 10.91 | -142.72 | -87.50 | -71.41 | -70.65 | 6.81 | 8.07 | -78.22 | -78.72 |
| **s10** | -25.71 | -25.57 | 5.94 | 6.24 | -31.64 | -31.81 | -62.52 | -101.49 | 6.57 | 7.44 | -69.09 | -108.92 |
| **s11** | -124.53 | -80.40 | 6.56 | 11.31 | -131.09 | -91.71 | -62.03 | -68.23 | 6.32 | 8.04 | -68.35 | -76.27 |
| **s12** | -147.71 | -110.27 | 6.22 | 11.09 | -153.93 | -121.36 | -177.18 | -177.10 | 4.94 | 5.20 | -182.12 | -182.30 |
| **s13** | -170.95 | -121.13 | 5.46 | 10.55 | -176.40 | -131.68 | -179.40 | -177.35 | 4.30 | 5.19 | -183.71 | -182.54 |
| **s14** | -148.12 | -143.15 | 6.18 | 7.75 | -154.31 | -150.90 | -178.34 | -177.74 | 5.26 | 5.95 | -183.61 | -183.69 |
| **s15** | -94.54 | -62.22 | 6.21 | 12.51 | -100.75 | -74.73 | -177.22 | -176.50 | 5.30 | 5.81 | -182.52 | -182.31 |
| **s16** | -140.11 | -54.10 | 4.59 | 11.84 | -144.70 | -65.94 | -184.17 | -184.18 | 2.59 | 2.59 | -186.76 | -186.77 |
| **s17** | -131.71 | -5.33 | 5.10 | 14.87 | -136.81 | -20.20 | -82.16 | -82.33 | 6.96 | 7.78 | -89.12 | -90.12 |
| **s18** | -136.57 | -128.69 | 6.29 | 7.50 | -142.86 | -136.18 | -173.40 | -173.41 | 5.15 | 5.42 | -178.55 | -178.83 |
| **s19** | -145.80 | -145.64 | 4.67 | 4.66 | -150.46 | -150.30 | -175.75 | -174.56 | 5.44 | 6.23 | -181.19 | -180.79 |
| **s20** | -146.33 | -142.89 | 6.28 | 7.21 | -152.62 | -150.10 | -179.73 | -179.37 | 4.83 | 5.68 | -184.56 | -185.05 |
| **s21** | -120.18 | -88.86 | 5.66 | 11.61 | -125.84 | -100.46 | -188.26 | -188.67 | 4.41 | 4.77 | -192.67 | -193.44 |
| **s22** | -76.17 | -74.13 | 6.48 | 7.18 | -82.64 | -81.32 | -180.66 | -185.05 | 3.90 | 6.02 | -184.55 | -191.08 |
| **s23** | -92.23 | -92.34 | 5.92 | 5.95 | -98.15 | -98.29 | -184.22 | -184.28 | 2.59 | 2.57 | -186.81 | -186.85 |
|  |  |  |  |  |  |   |  |  |  |  |  |  |
| **Mean** | -124.79 | -85.56 | 5.81 | 9.70 | -130.60 | -95.21 | -151.35 | -153.57 | 5.09 | 5.73 | -156.44 | -159.19 |
| **SEM** | 9.29 | 9.68 | 0.13 | 0.55 | 9.24 | 9.35 | 9.53 | 8.80 | 0.30 | 0.36 | 9.32 | 8.51 |

**S2 Table, Accuracy, complexity, and log-evidence (Experiment 1)**

Accuracy, complexity and log-evidence values estimated for each participant and model. These values determine the results of the Bayesian model comparison shown in **Fig 3B** (Experiment 1). Note that log model evidence = accuracy – complexity.