

S2 Table. *Linear mixed-effects model predicting learning performances.*

| Fixed effect | beta | 95% CI | t | p | BDI | AMI |
|--|-------------|---------------|----------|----------|------------|------------|
| (Intercept) | 79.78 | [77.96 81.60] | 86.33 | <0.001 | <0.001 | <0.001 |
| Group (<i>HC vs mPFC</i>) | 3.22 | [1.03 5.42] | 2.90 | 0.004 | 0.004 | 0.013 |
| Group (<i>LC vs mPFC</i>) | -0.66 | [-3.71 2.38] | -0.43 | 0.668 | 0.562 | 0.628 |
| Others (<i>patient vs impulsive</i>) | 0.47 | [-1.22 2.15] | 0.55 | 0.584 | 0.626 | 0.633 |
| Group (<i>HC vs mPFC</i>) x Others | 1.68 | [-0.34 3.71] | 1.64 | 0.103 | 0.091 | 0.093 |
| Group (<i>LC vs mPFC</i>) x Others | 0.64 | [-2.16 3.45] | 0.45 | 0.651 | 0.639 | 0.615 |

Note. HC: healthy control group; mPFC: mPFC lesion group; LC: lesion control group; 95% CI: 95% confidence intervals. BDI: supplementary analysis controlling for participants' levels of depression (BDI scores) by including this as a fixed effect in the model (main effect of depression on learning accuracy $p = 0.444$). AMI: supplementary analysis controlling for participants' levels of apathy (AMI scores) by including this as a fixed effect in the model (main effect of apathy on learning accuracy $p = 0.354$). The mPFC lesion group as the reference group.