Supplementary Data

Behavioral data
Participants successfully completed all three runs. Due to a technical defect of the response box, insufficient responses were acquired in the second session in one pathological gambler. Overall compliance was high, on average both the pathological gamblers and the controls only missed two out of 237 responses (PG: 2.4±0.91; controls: 1.5±0.34 (mean ± sem); t(22) = 0.9, p = n.s.). Although pathological gamblers were slower to respond, this difference did not reach significance (PG: 787±71ms (mean ± sem); controls: 696±36ms; t(22)=1.1, p = n.s.). Furthermore we tested for categorical differences in guessing behavior, e.g. individual preferences for a certain stack of cards. For each participant we estimated the absolute deviation from choosing both stacks equally often and compared the average deviation between groups. This revealed no significant difference in guessing behavior (deviation from expected 50% PG: 8±2% (mean ± sem); controls: 12±2%; t(22) = 1.5, p = n.s.).