Supplement 1. Supplemental information and statistics for behavioral analyses.
Table S1. Repeated measures ANOVA of affect ratings (study 1)

| Within subjects effect | SSs | $d f$ | Mean Square | $F$ | $p$ | $\eta_{p}^{2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| condition | 2018.4 | 1.31 | 1545.60 | $28.84^{\mathrm{a}}$ | $<.001$ | .43 |
| error | 2729.2 | 50.93 | 53.59 |  |  |  |
| outcome valence | 79377.8 | 1.00 | 79377.77 | 60.92 | $<.001$ | .61 |
| error | 50819.7 | 39.00 | 1303.07 |  |  |  |
| affect | 9904.4 | 1.00 | 9904.39 | 17.45 | $<.001$ | .31 |
| error | 22142.1 | 39.00 | 567.74 |  |  |  |
| condition * outcome valence | 4760.4 | 1.37 | 3466.75 | 48.51 a | $<.001$ | .55 |
| error | 3826.8 | 53.55 | 71.46 |  |  |  |
| condition * affect | 389.4 | 1.31 | 297.16 | $12.87^{a}$ | $<.001$ | .25 |
| error | 1180.4 | 51.11 | 23.10 |  |  |  |
| outcome * affect | 9825.2 | 1.00 | 9825.19 | 70.10 | $<.001$ | .64 |
| error | 5466.4 | 39.00 | 140.16 |  |  |  |
| condition * outcome valence * affect | 548.5 | 1.29 | 426.98 | 11.44 a | $<.001$ | .23 |
| error | 1869.5 | 50.10 | 37.32 |  |  |  |

Note. Type III sum of squares; SSs=Sum of Squares; Results are Greenhouse-Geisser corrected; a Mauchly's test indicates deviation from sphericity assumption.

Table S2. Repeated measures ANOVA of affect ratings (study 2)

| Within subjects effect | $S S s$ | $d f$ | Mean Square | $F$ | $p$ | $\eta_{p}^{2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| condition | 328.1 | 1 | 328.06 | 8.38 | .006 | .18 |
| error | 1487.8 | 38 | 39.15 |  |  |  |
| outcome valence | 132177.8 | 1 | 132177.83 | 174.83 | $<.001$ | .82 |
| error | 28728.8 | 38 | 756.02 |  |  |  |
|  |  |  |  |  |  |  |
| affect | 998.3 | 1 | 998.26 | 12.69 | .001 | .25 |
| error | 2989.2 | 38 | 78.66 |  |  |  |
| condition * outcome valence | 2517.4 | 1 | 2517.41 | 40.23 | $<.001$ | .51 |
| error | 2377.7 | 38 | 62.57 |  |  |  |
| condition * affect | 119.7 | 1 | 119.75 | 3.24 | .080 | .08 |
| error | 1404.7 | 38 | 36.97 |  |  |  |
| outcome * affect | 2009.8 | 1 | 2009.83 | 31.52 | $<.001$ | .45 |
| error | 2423.1 | 38 | 63.76 |  |  |  |
|  |  |  |  |  |  |  |
| condition * outcome valence * affect | 249.3 | 1 | 249.26 | 9.08 | .005 | .19 |
| error | 1043.6 | 38 | 27.46 |  |  |  |

Note. Type III sum of squares; SSs=Sum of Squares.

Table S3. Repeated measures ANOVA of pride ratings (study 3)

| Within subjects effect | SSs | $d f$ | Mean Square | $F$ | $p$ | $\eta_{p}^{2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| condition | 1917 | 1 | 1916.95 | 18.33 | $<.001$ | .27 |
| error | 5125 | 49 | 104.59 |  |  |  |
| outcome valence | 30745 | 1 | 30744.92 | 136.19 | $<.001$ | .74 |
| error | 11062 | 49 | 225.76 |  |  |  |
| condition * outcome valence | 3171 | 1 | 3171.08 | 35.98 | $<.001$ | .42 |
| error | 4319 | 49 | 88.15 |  |  |  |

Note. Type III sum of squares; SSs=Sum of Squares.

Table S4. Reaction times and number of valid trials

|  |  | Median reaction times <br> $(\mathrm{ms})$ |  | Number of valid trials |  | Number of <br> trials planned |
| :--- | :---: | ---: | :--- | ---: | ---: | :---: |
|  | condition | $M$ | $S D$ | $M$ | $S D$ |  |
|  | LC | 751 | 89 | 29.10 | 1.11 | 30 |
|  | MC | 778 | 101 | 29.05 | 0.93 | 30 |
| Study 1 | HC | 820 | 90 | 28.56 | 1.19 | 40 |
|  | MC | 1428 | 380 | 38.80 | 1.30 | 40 |
| Study 3 | HC | 2041 | 400 | 38.13 | 1.99 | 32 |
|  | MC | 1223 | 325 | 30.76 | 1.24 | 32 |

Note. ms = milliseconds; $M=$ mean; $S D=$ standard deviation; LC = low control; MC = medium control; $\mathrm{HC}=$ high control.

Table S5. Items regarding subjects' experience of the experimental task (study 3)

| Variable | Item |
| :--- | :--- |
| subjectively  <br> received \%WIN How often do you think that you guessed correctly / identified the brightest <br> difficulty (inv.) square in the different tasks? (in percent) <br> effort How easy were the different tasks for you? <br> fun How much effort did you put into the different tasks? <br> exciting How much fun did you have doing the different tasks? <br> exhausting How exciting / thrilling do you think the different tasks were? |  |

Table S6. Rank correlation of pride response and choice preference (study 3)

|  | rho | $p^{\text {a }}$ | statistics of control variables |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \mathrm{HC} \\ M(S D) \\ \hline \end{gathered}$ |  | $\begin{gathered} M C \\ M(S D) \end{gathered}$ |  | $t$ | $p^{\text {b }}$ |
| Correlation of pride response with p(choose $\mathrm{HC} \mid \mathrm{HC}=\mathrm{MC})$ | . 47 | <. 001 |  |  |  |  |  |  |
| controlling for subjectively received \%WIN | . 47 | <. 001 | 54.51 | (12.07) | 46.66 | (11.75) | 5.34 | <. 001 |
| difficulty | . 49 | <. 001 | 55.16 | (13.83) | 38.90 | (26.15) | 3.93 | <. 001 |
| effort | . 44 | <. 001 | 81.26 | (12.50) | 45.05 | (28.03) | 9.02 | <. 001 |
| exhausting | . 42 | . 001 | 62.15 | (17.51) | 21.65 | (24.18) | 10.01 | <. 001 |
| fun | . 41 | . 002 | 62.58 | (17.92) | 36.83 | (18.96) | 8.12 | <. 001 |
| exciting | . 51 | <. 001 | 58.13 | (23.14) | 30.45 | (22.82) | 7.07 | <. 001 |

Note. rho $=$ (partial) correlation coefficients computed using rank transformed variables; HC = high control; MC = medium control; $M=$ mean; $S D=$ standard deviation; $\mathrm{a}=$ one-sided; $\mathrm{b}=$ two-sided.

