TESTING THE INTUITIVE RETRIBUTIVISM DUAL-PROCESS MODEL: ADDITIONAL ANALYSES

1. Preregistered analysis without exclusions by attention check

To investigate whether our results would change when we did not exclude participants who failed the instructional attention check, we re-ran the analyses reported in the main text on the full sample. The manipulation was again successful, b = -3.49, SE = 1.62, df = 539.0, t = -2.16, p = .031, such that participants in the Think Carefully condition (M = 28.8 s, SD = 41.1 s) took longer than participants in the Control condition (M = 25.3 s, SD = 26.9 s).

When we re-ran the planned contrast analysis, h2a and h2b were still supported. For participants in the Control condition, there was a significant difference between retributivism RPS (M = 8.57, SD = 3.00) and both deterrence RPS (M = 0.56, SD = 1.47), b = 8.01, SE = 0.24, df = 1617.0, t = 33.64, p < .001, and incapacitation RPS (M = 5.87, SD = 2.90), b = 2.70, SE = 0.24, df = 1617.0, t = 11.33, p < .001.

The other three hypotheses remained unsupported. Retributivism RPS did not significantly differ between the Think Carefully condition (M = 8.21, SD = 3.27) and the Control condition (M = 8.57, SD = 3.00), b = 0.36, SE = 0.23, df = 1617.0, t = 1.56, p = .118. Neither did deterrence RPS (M = 0.74, SD = 1.80 vs. M = 0.56, SD = 1.47), b = 0.18, SE = 0.23, df = 1617.0, t = 0.80, p = .425, nor incapacitation RPS (M = 6.05, SD = 3.00 vs. M = 5.87, SD = 2.90), b = 0.18, SE = 0.23, df = 1617.0, t = 0.76, p = .445.

2. Sensitivity power analysis

We chose a simulation-based approach to sensitivity power analysis (Brysbaert & Stevens, 2018), applied to the following model:

$$RPS_i = \beta_0 + \beta_1 ConditionxMotive_{h1a,i} + \beta_2 ConditionxMotive_{h1b,i} + \beta_3 ConditionxMotive_{h2a,i} + \beta_4 ConditionxMotive_{h2b,i} + \beta_5 ConditionxMotive_{h2c,i} + u_{0i} + \varepsilon_i ,$$

where i indexes the participant, $u_{0i} \sim N(0, \sigma^2_u)$, $\varepsilon_i \sim N(0, \sigma^2_\varepsilon)$, and h1a-h2c indicate the contrast being evaluated (see Electronic Supplementary Material 5).

The power analysis was run using the simr package (Green & MacLeod, 2016, nsim = 2000). It indicated that our study was sensitive enough to detect the smallest effect sizes of interest that we had specified in our original power analysis (β_1 = 1.5, β_2 = 1.5, β_3 = 1.5, β_4 = 2.0, β_5 = 2.0; see Electronic Supplementary Material 5) at a level of significance of α = 0.01 (Bonferroni

corrected) with power of at least 90% (Chambers et al., 2019).

3. References

Brysbaert, M., & Stevens, M. (2018). Power Analysis and Effect Size in Mixed Effects Models: A Tutorial. *Journal of Cognition*, *1*(1). https://doi.org/10.5334/joc.10

Chambers, C., Banks, G. C., Bishop, D., Bowman, S., Button, K., Crockett, M., Dienes, Z., Errington, T., Fischer, A., & Holcombe, A. O. (2019). Registered Reports. *OSF*. https://osf.io/8mpji/

Green, P., & MacLeod, C. J. (2016). SIMR : an R package for power analysis of generalized linear mixed models by simulation. *Methods in Ecology and Evolution*, *7*(4), 493–498. https://doi.org/10.1111/2041-210X.12504