Supplementary Procedure

The purpose of this document is to highlight several ways in which readers can assess the fidelity of our work as it is described in the manuscript, in line with JPSP guidelines.

Preregistration

Each study was preregistered. Permanent uneditable links to these preregistrations can be found at the below links:

Experiment 1: https://osf.io/2vt7y

Experiment 2: https://osf.io/rzc26

Experiment 3: https://osf.io/jtv24

Experiment 4: https://osf.io/6kv9x

Experiment 5: https://osf.io/e6q7g

Experiment 6: https://osf.io/s5ayx

Experiment 7: https://osf.io/t8qaj

Experiment 8: https://osf.io/q75pz

The complete OSF project can be found at https://osf.io/gv7cm/. Copies of the preregistrations can also be found at the above link.

We made several rounds of checks to ensure that our preregistrations matched up with the manuscript. This highlighted a number of ways in which the two diverged. Recent research has found that such preregistration-manuscript incongruences are common and should be explicated (e.g., https://www.sciencemag.org/news/2019/05/solution-psychology-s-reproducibility-problem-just-failed-its-first-test). That is, aesthetic standards for manuscripts should not trump precision (see Giner-Sorolla, 2012).

For example, in our preregistration for Experiment 2, we claimed that we would employ a paired-sample t-test to compare the size of a standard AMP effect with a non-influence aware (IA-)AMP effect. However, we later realised that a number of participants

would not produce a non-influence aware (IA-)AMP effect, as they may register all trials in the (IA-)AMP as influenced. Simply excluding these participants would not be appropriate as their effects are highly relevant to the hypothesis. We therefore opted to use a Partial-Overlap *t*-test, and highlighted this deviation from the preregistration in a footnote in the relevant section of the manuscript.

Other previously-detected and rectified incongruences between the manuscript and the preregistration include:

1. An exclusion criterion (namely, the ability for participants to ask for their data to be excluded) was preregistered and employed in the analysis code, but not reported in manuscript until preprint version 3.

2. Footnote 9 in the manuscript explains that we previously made an error in the code that implements another of our exclusion criteria (prior to preprint version 1), and as a result over-recruited too many participants for one experiment. We report this error to account for the incongruity between our final N and our data-collection stopping rule.

3. Our numbering of hypotheses for Experiments 2-5 deviates somewhat from that outlined in the preregistration,

4. The addition of non-pre-registered meta-analyses and structural validity analyses.

5. The addition of non-pre-registered Frequentist and Bayesian analyses comparing effect sizes in Experiment 2 and Experiment 5.

6. The addition of a heterogeneity test for comparing two Cohen's d effect sizes in Experiment 4.

Power

Power analyses were conducted for all studies, and our sample sizes are verifiably consistent with our stated data collection stopping rules (see Open Data section below).

We employed both multilevel models and meta-analyses to maximise power.

Open materials

Code for the measures was preregistered along with each study and is openly available at https://osf.io/gv7cm/.

Should it be the case that any aspect of our written description of a procedure was not sufficient in some regard, a reader can therefore easily inspect or run this code to know what was actually done with great certainty. This demonstrates the *methodological reproducibility* of the work and the *potential for trivial direct replication* by others.

For all studies, code for data processing and analyses is also available, along with .html reports of the canonical analyses that we report in our paper. This demonstrates the *computational reproducibility* of the work.

Open data

We have made not only the processed data openly available, but also the raw data. This has many benefits, including allowing others to check the *computational reproducibility* of our results (as noted above), but also their *robustness to alternative analytic approaches*. Moreover, this *enables data reuse* by others for novel purposes we have not foreseen, potentially conserving scarce research resources or allowing others to conduct meta-analyse using raw data.

Open Science synergistic benefits

In our opinion, when the above factors are all employed within in a single project they collectively provide an additional benefit to the reader. The full spectrum of the scientific process becomes visible, therefore increasing confidence that '*it was these measures that produced these data that produced these results*'. While our efforts can doubtless be improved and we seek to do so in future projects, the above strategies therefore seek to enable others to reproduce any step of our research process they so wish. As such, while readers may therefore have conceptual disagreements with our premises or conclusions, we hope that there will be little doubt that our empirical findings are accurate and robust - or to rapidly and easily expose and correct a mistake should we have made one. We have done this by making it as simple as possible to reproduce or replicate our work should they disagree.