Incidental Attitude Formation via the Surveillance Task: A Pre-Registered Replication of Olson and Fazio (2001)

**Supplement Materials**

**Deviations from the Preregistration**

1. **Implementation of the analyses.**
2. The original preregistered code used a bootstrapping method to calculate effect sizes, CIs, and SEs for each data collection site, to be used in the meta-analyses. However, the unexpectedly small number of participants collected at some sites meant that results - particularly heterogeneity metrics such as *I*2 and *H*2- were computationally unstable when re-running the analysis script. For the sake of computational reproducibility, we therefore exchanged the bootstrapping method for the arithmetic method throughout. Inspection of the effect sizes and CIs suggested the impact of this decision on the results was smaller than Hedge’s *g* = 0.01.
3. This point is not technically a deviation from the preregistration, but rather an elaboration of the implementation of our preregistered analyses. For the moderation of EC effect by individuals' awareness analyses, the “metafor” R package by default treatment codes the conditions. As such, its output provides *p* and *z* values for the model intercept (i.e., no awareness condition) and the difference between the two conditions, but not for the awareness condition by itself. However, our preregistration stated that we would report *p* and *z* values for both conditions individually. It should also be noted that, because the moderation model in principle can provide different estimates for the ‘unaware’ condition when considered in a regular meta-analysis versus in the multilevel moderation meta-analysis, we therefore chose to provide an estimate of the effect in the ‘aware’ condition using the same method as in the preregistered analyses for the ‘unaware’ condition. In order to do this, we fitted (not-preregistered) meta-analysis models which included only aware participants. Estimates of effect size for both aware and ‘unaware’ conditions reported in the manuscript therefore come from separate models fitted to each condition. *p* and *z* values for differences between these conditions were calculated from the preregistered multilevel moderator meta-analyses. Comparison of the estimates for estimates and CIs for each condition between the two methods (i.e., separate meta-analyses by condition vs. multilevel moderator meta-analyses including both) was smaller than Hedge’s *g* = 0.01.
4. **Sampling Strategy**

The original preregistered sample strategy was that each lab will collect data from between 100 to 150 participants, based on their local resources. We had a hard deadline of the end of Semester 1 2020 for completing this project (i.e., submitting the manuscript for Stage 2 RR review), and data collection were originally expected to end before Christmas. However, the lab of the original author experienced some unexpected delays in the collection of the data, requiring us to update our data collection stopping rule. We wished to balance the two goals of (a) allowing this lab (in particular) to fully participate in the entire process of this project, given that they were co-authors of the study being replicated, and (b) meeting our project deadline of submission by the end of Semester 1 2020. In order to do so, we created a second registration that modified our data collection stopping rule (see [osf.io/uyng7](file:///C:\Users\tmoranyo\Downloads\osf.io\uyng7)). The original preregistration stated that each site would collect between 100 to 150 participants and did not state a data collection end date. In the new registration, made on 2020-02-11, we explicated that that we will instead use the data from all sites even if the sample size is below the original preregistered minimum number of participants; and that data collection will cease on 2020-02-19 and sites will return whatever sample they had at that time. This was deemed to unproblematic given that the preregistered analyses involve a meta analytic strategy, so even small sample sizes contribute usefully to results. This updated strategy also accommodated the fact that some sites returned more than the max of 150 completed participants to us for analysis.

**Sample Size and Characteristics**

Table S1 details the sample size and sample characteristics at each site and percent of exclusions for each of the contingency awareness/recollective memory exclusion criteria.

**Table S1**

*Sample size, sample characteristics, and percent of exclusions for each of the contingency awareness/recollective memory exclusion criteria, as a function of data-collection site.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Age** | | **Gender** | | | | **Percent excluded** | | | | |
| **Site** | ***n* manual exclusions** | ***n* for analysis** | **Mean** | **SD** | **Female** | **Male** | **Other identity** | **Did not answer** | **Surveillance task performance** | **Olson & Fazio (2001)** | **Olson & Fazio (2001) modified** | **Bar-Anan et al. (2010)** | **Bar-Anan et al. (2010) modified** |
| **Balas** | 6 | 100 | 26.5 | 4.7 | 57 | 43 | 0 | 0 | 3.0 | 2.1 | 19.6 | 41.2 | 16.5 |
| **Mierop** | 1 | 99 | 21.7 | 4.2 | 66 | 33 | 0 | 0 | 2.0 | 8.2 | 17.5 | 43.3 | 21.7 |
| **Gast** | 0 | 120 | 23.6 | 7.2 | 91 | 26 | 1 | 2 | 2.5 | 6.0 | 26.4 | 49.4 | 24.7 |
| **Gawronski** | 0 | 155 | 18.9 | 1.1 | 113 | 41 | 1 | 0 | 2.6 | 7.2 | 74.1 | 51.2 | 30.2 |
| **Hütter** | 2 | 148 | 22.7 | 6.2 | 109 | 39 | 0 | 0 | 1.4 | 18.4 | 41.6 | 57.3 | 43.6 |
| **Kurdi** | 0 | 151 | 19.3 | 1.3 | 120 | 31 | 0 | 0 | 1.3 | 8.0 | 21.4 | 39.4 | 21.4 |
| **Moran** | 1 | 99 | 20.0 | 3.2 | 75 | 24 | 0 | 0 | 1.0 | 2.0 | 28.6 | 46.9 | 27.6 |
| **Olson** | 0 | 21 | 20.0 | 0.0 | 10 | 11 | 0 | 0 | 0.0 | 9.5 | 28.6 | 42.9 | 33.3 |
| **Douglas** | 0 | 148 | 18.6 | 0.8 | 98 | 50 | 0 | 0 | 2.0 | 6.9 | 19.9 | 58.2 | 35.6 |
| **Stahl** | 0 | 100 | 21.7 | 5.1 | 80 | 20 | 0 | 0 | 3.0 | 13.4 | 32.0 | 54.6 | 35.1 |
| **Unkelbach** | 0 | 142 | 23.6 | 7.0 | 82 | 57 | 1 | 2 | 1.4 | 10.0 | 36.3 | 51.2 | 29.9 |
| **Vadillo** | 0 | 195 | 19.9 | 3.0 | 166 | 25 | 3 | 1 | 1.5 | 1.0 | 15.0 | 39.3 | 12.9 |

*Note.* Each lab is identified by the last name of the corresponding author. *n* manual exclusions: exclusions made manually before the analysis due to incomplete data file (1 case at Moran’s site, 2 cases at Hütter’s site), technical problems (4 cases at Balas’s site), unusual participant behaviour (1 case at Balas’s site), participant eligibility (1 case at Balas’s site), and data recoding issues (1 case at Mierop’s site). *n* for analysis: represents the sample size after the manual exclusions. Age and gender are characteristics are calculated from the sample for analysis after manual exclusions. Percent excluded surveillance task performance: percent of exclusions based on the number of errors made during the surveillance task (percentage accuracy < mean – 3 SD per site). Percent excluded for Olson & Fazio (2001), Olson & Fazio (2001) modified, Bar-Anan et al. (2010), and Bar-Anan et al. (2010) modified represent the percent of the sample excluded *after* surveillance task exclusions had been excluded. These mirror the way these exclusions have been reported in the manuscript.