Errata

On Aronow, Coppock, Crawford and Green (2015), *Journal of Survey Statistics and Methodology* 3(1)

The maintained replication code behind these errata is at https://github.com/active-maintenance-aec/aronow_etal_2015 and is archived at Zenodo at https://doi.org/10.5281/zenodo.24168261, a DOI that always resolves to the latest version.

This note lists seven corrections to "Combining List Experiment and Direct Question Estimates of Sensitive Behavior Prevalence," published in *Journal of Survey Statistics and Methodology* 3(1):43–66, doi 10.1093/jssam/smu023. **None changes a number or a conclusion of the paper.** Four are in the article's mathematics: an expectation missing from display (2), the estimand printed for its estimate in two sentences, a condition in the proof of Lemma 2 stated as one where the proof requires zero, and a missing comma. Three are in the online supplement: the heading of a table, the sentence that lists the placebo tables, and a misspelled panel title.

Entry 3 was found by the maintained replication, which recomputes every cell of the supplement's tables from the deposited data and checks each against the printed value. Entry 4 was found on reading the supplement while the first was filed, and follows from it. Entries 1, 2, 5, 6, and 7 were found while the article and supplement were reset for the remastered edition, which reads every page beside the published one. The code supporting the maintained analysis is at github.com/active-maintenance-aec/aronow_etal_2015.

1. Display (2) writes the noise term for its expectation

Published, p. 48, display (2):

$$\mathrm{E}[V_i \mid Z_i = 1] - \mathrm{E}[V_i \mid Z_i = 0] = W_i + \mu - W_i = \mu.$$

Corrected:

$$\mathrm{E}[V_i \mid Z_i = 1] - \mathrm{E}[V_i \mid Z_i = 0] = \mathrm{E}[W_i] + \mu - \mathrm{E}[W_i] = \mu.$$

Both sides of the display are expectations. Under Assumptions 2 and 3 the two conditional expectations are $\mathrm{E}[W_i] + \mu$ and $\mathrm{E}[W_i]$, so the middle term equates a constant to the random variable W_i where it means its expectation. The term cancels either way, and the display's conclusion, that the difference in expectations is μ, is unaffected.

2. The proof of Lemma 2 orders on direct responses of one where it means zero

Published, p. 62:

> where we have reordered the indices so that $Y_1 = \cdots = Y_k = 1$.

Corrected:

> where we have reordered the indices so that $Y_1 = \cdots = Y_k = 0$.

The proof conditions on exactly k direct responses being zero, which is what $1 - \bar{Y} = k/n$ says, and display (4), which the sentence describes, conditions on $Y_j = 0$ for $j = 1, \ldots, k$. The reordering puts those k units first, so their direct responses are zero, not one. The display is right and the sentence that glosses it is not; the proof is unaffected.

3. Supplementary Table A4 is headed as Placebo Test I and reports Placebo Test II

Published, app. p. 6, Table A4:

> Table A4: Study A (Direct First): Placebo Test **I**

Corrected:

> Table A4: Study A (Direct First): Placebo Test **II**

Table A3, directly above it on the same page, is Placebo Test I: its estimates sit near one and its n is the count of admitters for each item (327, 281, 31, 42, 206). Table A4's estimates sit near zero and its n is 506, the full Study A sample, in every row, which is the form of Placebo Test II and the form of Table A7, its Study B counterpart, headed correctly on the next page. Every cell of Table A4 reproduces from the deposited data as Placebo Test II. Only the heading is wrong.

4. The supplement's list of placebo tables omits Table A4

Published, app. p. 5:

> Of particular note are the results of the placebo tests, presented in Tables **A3, A6, and A7**.

Corrected:

> Of particular note are the results of the placebo tests, presented in Tables **A3, A4, A6, and A7**.

The supplement reports four placebo tables, two for each study: Tables A3 and A4 for Study A and Tables A6 and A7 for Study B, each pair a Placebo Test I and a Placebo Test II. The sentence lists three. It leaves out Table A4, the Study A Placebo Test II, while naming its Study B counterpart, Table A7. The omission is of a piece with entry 3: with Table A4 headed as a second Placebo Test I, the headings distinguish three placebo tables rather than four, and the sentence names the three. The sentences that follow it, which count the questions failing each study's placebo test, are unchanged.

5. Two sentences on the direct-question admitters print the estimand where they mean its estimate

Published, p. 56:

> difference-in-means estimate β should be equal
>
> None of the values of β are

Corrected:

> difference-in-means estimate $\hat{\beta}$ should be equal
>
> None of the values of $\hat{\beta}$ are

The article defines β as a difference in conditional expectations, a population quantity, and its estimate as the difference in means $\hat{\beta}$, whose test against 1 is the one the article proposes. Both sentences are about the estimates computed from the data and the tests of them: an estimate is what should equal 1 under Assumptions 1 to 4, and values are what can be significantly different from it. The quantity in each is $\hat{\beta}$. The reported results are unchanged.

6. Display (7) drops the comma before the last index of a range

Published, p. 63, display (7):

$$Y_j = 0 \textbf{ for } j = 1, \dots k$$

Corrected:

$$Y_j = 0 \textbf{ for } j = 1, \dots, k$$

The second line of display (7) prints the index range without the comma before k that every other range in the proof of Lemma 2 carries, including the next line of the same display.

7. A panel title in Figure A1 misspells Variability

Published, app. p. 3, Figure A1:

> **Varibility** of responses to non-sensitive items

Corrected:

> **Variability** of responses to non-sensitive items

The title of Figure A1's fourth panel. The figure as regenerated from the maintained code prints the word correctly.