Errata
(Updated December 3, 2022)

Counterfactuals and Causal Inference:
Methods and Principles for Social Research (Second Edition)

by

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Errata corrected after the first two printings

[Note: All of these errors were corrected in printings that include "Reprinted with corrections 2015" on the bibliography page in the front matter.]

- page 38, second line from bottom: replace "childs" with "child's"
- page 54, line 17: replace "causal of effect" with "causal effect"
- page 67, line 1: replace "31 percent" with "23 percent"
- page 67, paragraph 3, line 2: replace "31 percent" with "23 percent"
- page 67, line 2: replace "1 out of 3" with "1 out of 4"
- page 86, Equation 3.3: replace C with D to match Figure 3.6. The equation is then

$$Y = a_Y + b_D D + b_P P + b_{D \times P}(D \times P) + b_N N + b_{D \times N}(D \times N) + e_Y$$

- page 86, line 6 following Equation 3.3: replace C with D to match Figure 3.6. The expression $\hat{b}_C C + \hat{b}_P P + \hat{b}_{C \times P}(C \times P)$ is then $\hat{b}_D D + \hat{b}_P P + \hat{b}_{D \times P}(D \times P)$
- page 87, footnote 12, last three sentences: replace C with D to match Figure 3.6. The final three sentences are then "For example, an interactive effect of D and P on Y can be represented altogether by three paths $D \to Y$, $P \to Y$, and $(D \times P) \to Y$. The entity $(D \times P)$ is not a new source of variation with an exogenous component but rather is a deterministic function defined in D and P. This functional dependence is signified in the diagram by including both $D \rightsquigarrow (D \times P)$ and $P \rightsquigarrow (D \times P)$."
- page 95, paragraph 4, line 3: replace "from" with "form"
- page 113, footnote 10, line 1: replace "Hernn" with "Hernán"
- page 136, paragraph 2, line 9: replace "uses to the" with "uses the"
- page 138, line 13: replace "a theory says" with "a theory that says"
- page 138, path 1 in the numbered list at the bottom: replace $D \leftarrow A \to B \leftarrow C \to D$ with $D \leftarrow A \to B \leftarrow C \to Y$
- page 156, Equation 5.14: replace "n^1" with "1" in the denominator of the first term so that the equation is

$$\hat{\delta}_{\text{ATC,weight}} \equiv \left(\frac{\sum\limits_{i:d_i=1} y_i/\hat{r}_i}{\sum\limits_{i:d_i=1} 1/\hat{r}_i} \right) - \left(\frac{1}{n^0} \sum\limits_{i:d_i=0} y_i \right)$$

- page 158, line 16: replace "attached to the control cases" with "attached to the treatment cases"

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- page 158, paragraph 3, line 3: replace "indeed as many" with "indeed as many as"
- page 160, paragraph 4, line 6: replace "remedy these weakness" with "remedy these weaknesses"
- page 173, paragraph 1, line 5: replace "an observed values" with "observed values"
- page 173, paragraph 3, line 3: replace "that all of variables" with "that all of the variables"
- page 180, paragraph 2, line 7: replace "where this is" with "where there is"
- page 181, line 3: replace "still attempt balance" with "still attempt to balance"
- page 196, footnote 9, line 5: replace "is a consistent and unbiased" with "is consistent and unbiased"
- page 198, Table 6.2, first panel: In order to restrict the bias to differential baseline bias *only*, as required by the label on the first panel of the table, replace "20" with "10" in the first cell of the second row. Then, carry the changes across columns so that (a) the values for v_i^1 are 5 for the individual in the treatment group and -5 for the individual in the control group and (b) the value for $\{v_i^0 + D(v_i^1 - v_i^0)\}$ is 5 for the individual in the treatment group.
- page 198, paragraph 2: to align with the corrections to Table 6.2 (see above), change this paragraph to

    For the example in the first panel, δ_i is equal to 10 for both individuals. As a result, the true ATE is also equal to 10. The values of v_i^1 and v_i^0 are deviations of y_i^1 and y_i^0 from $E[Y^1]$ and $E[Y^0]$, respectively. Because $E[Y^1] = 15$, v_i^1 is equal to 5 for the individual in the treatment group and -5 for the individual in the control group. Likewise, because $E[Y^0] = 5$, v_i^0 is also equal to 5 for the individual in the treatment group and -5 for the individual in the control group.

- page 199, line 1: to align with the corrections to Table 6.2 (see above), change "value of 0 for the error term" to "value of 5 for the error term"
- page 199, line 5: to align with the corrections to Table 6.2 (see above), delete "rather than y_i^0"
- page 213, lines 8 and 9: replace "$E[Y^0|S = 1, D = 0]$, $E[Y^1|S = 1, D = 0]$, and $E[Y|S = 1, D = 0]$" with "$E[Y^0|S = 1, D = 1]$, $E[Y^1|S = 1, D = 1]$, and $E[Y|S = 1, D = 1]$"
- page 256, second line from the bottom: replace "that true" with "that the true"
- page 271, paragraph 2, line 8: replace "these effect" with "these effects"
- page 286, paragraph 3, line 2: replace "with the respect the" with "with respect to the"
- page 295, fourth line from the bottom: replace "$Z..$" with "$D.$"
- page 296, fourth line from the bottom and also the last line: replace "Reiersl" with "Reiersøl"
- page 333, footnote 6, line 2: replace "$E(Y|do(D = 1) - E(Y|do(D = 0))$" with "$E[Y|do(D = 1)] - E[Y|do(D = 0)]$"
- page 396, footnote 24, line 2: replace "Hernan" with "Hernán"
- page 398, last full paragraph, line 2: replace "$D_{10}, Y_{10}, D_{10}, Y_{12}$" with "$D_{10}, Y_{10}, D_{12}, Y_{12}$"
- page 403, Equation 11:46, line 2: replace "$(.8 \times .34) + (.8 \times .66)$" with "$(.8 \times .34) + (.4 \times .66)$"
- page 405, last paragraph, line 2: replace "the same as for" with "the same for"
- page 406, last full paragraph, line 5: replace "the D_{12}" with "D_{12}"
- page 409, fourth line after Equation 11.60: replace "in the tenth grade" with "in the tenth and twelfth grade"
- page 447, second line from bottom: replace "exclusions" with "exclusion"
- page 458, line 21: replace "—. 2007a" with "Cartwright, Nancy S. 2007a"
- page 497, index, column 1: replace "bound,422" with "bound, 422"
- page 497, index, column 2: replace "deffer, 306–14, 320–21" with "defier, 306–14, 320–21"

- page 498, index, column 1: replace "instrumental variable(IV)" with "instrumental variable (IV)"
- page 498, index, column 1: replace "LATE assumptions,k" with "LATE assumptions,"

Remaining errata

[Note: All of these errors were discovered after the original errata above were fixed. They are present in all printings, including those that include "Reprinted with corrections 2015" on the bibliography page in the front matter.]

- page 13, line 8: replace "Hedstrm" with "Hedström"
- page 40, last paragraph, line 4: replace "suggests" with "suggest"
- page 46, first paragraph of Section 2.4, line 5: replace "can de" with "can be"
- page 52, footnote 16, last line: replace "measured treatment-level variables" with "measured variables"
- page 59, first full paragraph, line 8: replace "have been been" with "have been"
- page 64, footnote 30, line 4: replace "Others studies" with "Other studies"
- page 71, footnote 35, line 3: replace "do not have" with "have"
- page 75, second full paragraph, line 8: replace "in order use" with "in order to use"
- page 84, footnote 6, last line: replace "effect of D on Y" with "effect of E on Y"
- page 100, footnote 30, line 4, replace " twinned network" with " twin network"
- pages 123, line 14, replace "$(\mu^1 - \mu^0) + \{v_i^0 + d_i(v_i^1 - v_i^0)\}$" with "$(\mu^1 - \mu^0) + (v_i^1 - v_i^0)$"
- page 167, footnote 24, line 4: replace "less important that" with "less important than"
- page 174, footnote 32, line 5: replace "Equation 5.21" with "Equation (5.21)"
- page 178, line 5: replace "in between" with "between"
- page 186, third full paragraph, lines 2 and 3: replace "and the propensity score is defined as a single dimension of the predictors of the model" with "and the covariate-balancing score is calculated as the dot product of the estimated coefficients and each individual's values for the predictors"
- page 209, line 14: replace "an inverse function" with "the reciprocal of"
- page 212, footnote 19, third and fourth lines from the bottom: replace both "D equal to d" with "D equal to 1"
- page 256, line 12: replace "even adjusting" with "even while adjusting"
- page 275, line 10: replace "individual-specific standard" with "individual-specific"
- page 276, Table 8.1 header: replace "a common a cause" with "a common cause"
- page 279, last paragraph, last line: replace "is it" with "it is"
- page 286, second paragraph, line 2: replace "Education Progress" with "Educational Progress"
- page 289, last paragraph, line 1: replace "CREO" with "CREDO"
- page 292, footnote 1, line 2: replace "α and β" with "α and δ"
- page 313, footnote 28: replace all three "$E_N[d_i = 0, z_i = 0]$" with "$E_N[y_i|d_i = 0, z_i = 0]$"
- page 320, footnote 34, line 1: replace "figure A2" with "figure 14.A2"
- page 333, first and second lines below the displayed equation without a number: replace "Y on M" and "Y on N" with "D on M" and "D on N"
- page 346, first block quote: remove the quotation mark at the end
- page 357, line 9: replace "June" with "January"
- page 374, line 15: replace "casual" with "causal"
- page 375, second bullet point, line 10: replace "is equal to" with "will become"

- page 377, Figure 11.6 title: replace "favor" with "factor"
- page 385, footnote 17: replace all three instances of "p" with "n"
- page 387, third line after Equation (11.32): replace " $\tau_i = \mu_{\tau,D^*=0} + \tau'_{i\lambda,D^*=0}$" with "$\tau_i = \mu_{\tau,D^*=0} + \tau'_{i,D^*=0}$"
- page 397, footnote 25, first displayed equation: replace "Y_{12}^0" with "Y_{10}^0"
- page 400, line 4: replace "is U is" with "U is"
- page 401, third paragraph, lines 3 and 4: change punctuation for consistent usage to "The total causal effect of D_{10} on D_{12}, which is composed of the two directed paths ($D_{10} \to Y_{10} \to D_{12}$ and $D_{10} \to D_{12}$)"
- page 403, displayed equation without a number: add subscript N so that

$$E_N[d_{i12} = 1|d_{i10} = 1, y_{i10} = 1] - E[d_{i12} = 1|d_{i10} = 0, y_{i10} = 1],$$

  is replaced with

$$E_N[d_{i12} = 1|d_{i10} = 1, y_{i10} = 1] - E_N[d_{i12} = 1|d_{i10} = 0, y_{i10} = 1],$$

- page 404, line 4: replace "D_{10} on Y_{12}" with "D_{10} on D_{12}"
- page 405, second line from the bottom: replace "based of" with "based on"
- page 405, footnote 31: for clarity, replace the final three sentences "This counterfactual effect is ... interpretations." with "This counterfactual effect is an example of a natural direct effect that probably does not deserve much attention. The controlled direct effects are sensible and have clear interpretations on their own. In contrast, the weighting of Equation (11.53) that yields the natural direct effect is based on the relative probabilities of entering or not entering Catholic school in the twelfth grade among students in public schools in the tenth grade. More weight is given to the controlled direct effect equal to 0, which corresponds to the relatively large proportion of students who do not switch from public to Catholic schools between the tenth and twelfth grades."
- page 408, line 11: replace "estimate of $D \to Y$" with "estimate of the effect of D on Y"
- page 421, first full paragraph, line 4: replace "Honor and Powell" with "Honoré and Powell"
- page 423, line 21: replace "are" with "and" and then later in the same line "and" with "are"
- page 431, first full paragraph, line 1: replace "after after" with "after"
- page 431, last line: replace "against the reasonable objections of either" with "against either the reasonable objections of"
- page 439, second full paragraph, line 5: replace "his section 3.4" with "his section 3.5"
- page 441, line 4: replace "relative of importance" with "relative importance"
- page 442, block quote from Humphreys, line 2: replace "It is *de re* knowledge of the causes" with "It is *de re* knowledge, often incomplete knowledge of the causes"
- page 443, footnote 7, line 1: replace "Following in the" with "Following the"
- page 449, eighth line from the bottom: replace "instrumented" with "instrumental"