## Errata (Updated December 18, 2014)

## Counterfactuals and Causal Inference: Methods and Principles for Social Research (1st Edition)

by

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Errata in first through fourth printings (fall 2007 through spring 2009 printings, respectively):

- page 9, last paragraph, line 1: remove "the" in "of the Campbell's perspective"
- page 34, line 4, replace "of population" with "of the population"
- page 34, line 8, replace "individuals's" with "individual's"
- page 34, notes line 3, replace "observational" with "observed"
- page 36, line 17, replace "the causal effect" with "the expected causal effect"
- page 37, line 2, replace "In general, the average causal effect is" with "The average causal effect is also"
- page 37, line 15 from the bottom, replace "as well" with "as well as"
- page 46, 7th line below Equation 2.12: replace  $\{(1-\pi)E[\delta|D=1]-E[\delta|D=0]\}$  with  $(1-\pi)\{E[\delta|D=1]-E[\delta|D=0]\}$  (Note: Equation 2.12 is correct, and the  $\{$  in the text is misplaced).
- page 52, line 15 from the bottom, replace "that is" with "that it is"
- $\bullet$  page 54, Table 2.4, line 2: Add "..." between "Observable as Y" and "Counterfactual" in the column under the heading "..."
- page 62, line 9 from the bottom: remove one "to" from "shock to to the cause"
- page 69, line 4: remove one "any" from "any any sequence of edges"
- page 77, footnote 14, line 7, replace E[Y|do(D=1)] with E[Y|do(D=1)]
- page 94, third displayed equation: replace 3(.6) + 2.4(.4) = 2.64 with 3(.4) + 2.4(.6) = 2.64
- page 103, Equation 4.13: replace " $n^1$ " with "1" in the denominator of the first term so that the equation is

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

- page 131, line 5 from the bottom: replace "panel (a)" with "in panel (a)"
- page 148, line 4 from the bottom: replace "(see Angrist and Krueger 1999, Section 2.3.1)" with (see Section 2.3.1 of Angrist and Krueger 1999)
- page 154, first line below Equation 5.29, replace "reamins that same" with "remains the same"
- page 160, third paragraph, line 5: replace "we agree that" with "we argue that"

- page 162, second paragraph, line 5: replace "public schools" with "public school"
- page 172, section 6.3, line 4: replace "the causal effects" with "causal effects"
- page 176, subsection 6.3.2, line 4: replace "in following passage" with "in the following passage"
- page 185, Equations 6.10 and 6.11: replace  $\frac{f(Z\phi)}{[1-F(Z\phi)]}$  with  $\frac{f(Z\phi)}{F(Z\phi)}$  in Equation 6.10 and  $\frac{-f(Z\phi)}{F(Z\phi)}$  with  $\frac{-f(Z\phi)}{[1-F(Z\phi)]}$  in Equation 6.11
- page 208, Equations 7.29 and 7.30: swap the weights in these two equations so that

$$58 = \frac{.089}{.089 + .8} E[Y^{1} | \tilde{C} = c] + \frac{.8}{.089 + .8} 60$$

$$50 = \frac{.089}{.089 + .111} E[Y^{0} | \tilde{C} = c] + \frac{.111}{.089 + .111} 50$$

instead read as

$$58 = \frac{.089}{.089 + .111} E[Y^{1} | \tilde{C} = c] + \frac{.111}{.089 + .111} 60$$

$$50 = \frac{.089}{.089 + .8} E[Y^{0} | \tilde{C} = c] + \frac{.8}{.089 + .8} 50.$$

- page 216, second full paragraph, line 11: remove "and" from "and or full"
- page 227, second to last paragraph, lines 10-12: replace the sentence "And, even though ..." with "Moreover, the effect of D on M is also not identified because there is now an unblocked back-door path between D and M as  $D \leftarrow U \rightarrow M$ ."
- page 227, last paragraph, lines 4-10: replace the final three sentences of the paragraph (starting with "For Figure 8.4 ..." and ending with "conditioning on U.") with "For Figure 8.4, if U were an observed variable, then the back-door paths  $D \leftarrow U \rightarrow M$  and  $M \leftarrow U \rightarrow Y$  could be blocked by conditioning on U. In this case, we could then use the front-door criterion in a conditional variant, estimating the effect of D on Y by estimating the effects  $D \rightarrow M$  and then  $M \rightarrow Y$  by conditioning on U."
- page 239, line 15 from the top: replace "casual" with "causal"
- page 280, last paragraph, line 5: remove "a" from "simultaneously a large"
- page 309, last citation: replace "Inference" with "Inference"

## Errata in fifth and sixth printings (summer and fall 2009 printings):

- page 54, Table 2.4, line 2: Replace "..." in the column under the heading  $Y^{D2}$  with "Observable as Y" and then add "..." between the inserted "Observable as Y" and the existing "Counterfactual" in the column under the heading "..."
- page 103, Equation 4.13: replace " $n^1$ " with "1" in the denominator of the first term so that the equation is

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

• page 208, Equations 7.29 and 7.30: swap the weights in these two equations so that

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- page 227, second to last paragraph, lines 10-12: replace the sentence "And, even though ..." with "Moreover, the effect of D on M is also not identified because there is now an unblocked back-door path between D and M as  $D \leftarrow U \rightarrow M$ ."
- page 227, last paragraph, lines 4-10: replace the final three sentences of the paragraph (starting with "For Figure 8.4 ..." and ending with "conditioning on U.") with "For Figure 8.4, if U were an observed variable, then the back-door paths  $D \leftarrow U \rightarrow M$  and  $M \leftarrow U \rightarrow Y$  could be blocked by conditioning on U. In this case, we could then use the front-door criterion in a conditional variant, estimating the effect of D on Y by estimating the effects  $D \rightarrow M$  and then  $M \rightarrow Y$  by conditioning on U."

Errata in seventh printing onward (spring 2010 printing onward):

• page 103, Equation 4.13: replace " $n^1$ " with "1" in the denominator of the first term so that the equation is

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

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