# Applied Longitudinal Analysis, 2nd Edition

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## Typos, Errors and Omissions:

Despite our best efforts, the first printing contains the following typos and errors. For your convenience, the errata is divided into two lists: (i) errata that may potentially cause confusion, and (ii) errata unlikely to cause any confusion.

### (i) Errata that may potentially cause confusion:

- Page 12, Table 1.5: For Child's gender, count for Female should be 1294 (not 1284)
- Page 97, line -14: "...then  $LCov(\hat{\beta})L'$  is..." should be "...then  $LCov(\hat{\beta})L'$  is..."
- Page 103, line -6:  $\Sigma$  should be  $\Sigma_i$
- Page 133, line -6: "...then strategy 4 and strategy 2 are completely equivalent and produce identical tests and estimates of effects." should be "...then strategies 2 and 4 yield identical estimates of effects, but strategy 2 yields slightly more powerful tests."

The interested reader is referred to Liu et al. (2009) [Statistics in Medicine, 28, 2509-2530] for more detailed comparisons between strategies 2 and 4.

- Page 159, line -1: "2551.7" should be "2511.7"
- Page 212, line -1:  $I_d$  should be  $I_q$
- Page 245, line -16: Summations on j should have  $n_i$ , not n, as their upper limit

$$\left(\sum_{i=1}^{N}\sum_{j=1}^{n}X_{ij}^{*}X_{ij}^{*'}\right)^{-1}\left(\sum_{i=1}^{N}\sum_{j=1}^{n}X_{ij}^{*}Y_{ij}^{*}\right) \text{ should be } \left(\sum_{i=1}^{N}\sum_{j=1}^{n_{i}}X_{ij}^{*}X_{ij}^{*'}\right)^{-1}\left(\sum_{i=1}^{N}\sum_{j=1}^{n_{i}}X_{ij}^{*}Y_{ij}^{*}\right)$$

• Page 322, line 3: "Section 11.2" should be "Section 11.3.2"

- Page 378, line -4: " $\phi > 0$ " should be " $\phi > 1$ "
- Page 483, lines -12 and -11: 22% and 60% should be reversed
- Page 518, lines 5-7: "Next the missing values in the third response can be imputed based on an appropriate model for predicting  $Y_{i3}$  from  $Y_{i1}$  and both the *observed* and *imputed* values of  $Y_{i2}$ ." should be "Next, based on an appropriate model, the missing values in the third response can be imputed by predicting  $Y_{i3}$  from  $X_i$ ,  $Y_{i1}$ , and both the *observed* and *imputed* values of  $Y_{i2}$ ."

#### (ii) Errata unlikely to cause any confusion:

- Page 18, line -2: "Kleinbaum et al. (1999)" should be "Kleinbaum et al. (1998)"
- Page 30, line -6: "obtaining closely" should be "obtained close"
- Page 38, line 12: "variable" should be "variables"
- Page 38, line -18: "all others things" should be "all other things"
- Page 40, line 13: "estimates" should be "estimate"
- Page 53, line -1: "pattern" should be "patterns"
- Page 56, line -12: "comprised" should be "composed" Incorrect usage of "comprised" also corrected on Page 149, line -2; Page 197, line 14; Page 243, line -6; Page 275, line -1; Page 405, line 4; Page 518, line -11
- Page 84, Figure 3.9 (caption): "can by" should be "can be"
- Page 95, line 20: "can by thought of" should be "can be thought of"
- Page 101, line 17: "Satterthwaite (1944)" should be "Satterthwaite (1946)"
- Page 102, lines 9-10: "in small samples" should be "in finite samples"
- Page 103, line -14: "that usual" should be "the usual"
- Page 103, line -12: "adjustments" should be "adjustment"
- Page 104, line 13: "to comparing" should be "in comparing"
- Page 108, line 9: "...question that is..." should be "...question is..."
- Page 108, line 22: "...interaction among them" should be "...interaction among the factors"
- Page 121, line -9: "setting" should be "settings"
- Page 125, line -7: "show" should be "show that"

- Page 131, line -18: "score" should be "scores"
- Page 135, line 9: "permit" should be "permits"
- Page 141, line 2: "group" should be "groups"
- Page 163, line 5: "(1964" should be "(1964)"
- Page 163, Problem 6.1, line 3: "rats" should be "rats"
- Page 165, line -3: "choice" should be "choices"
- Page 167, line 11: "within-individuals" should be "within-individual"
- Page 169, line 9: "measurement" should be "measurements"
- Page 176, line -6: "model" should be "models"
- Page 184, line -13: "setting" should be "settings"
- Page 207, line -14: "restrictions" should be "restriction"
- Page 221, line 5: "6.4" should be "6.5"
- Page 230, line -5: "degree" should be "degrees"
- Page 231, line 12: "signs" should be "sign"
- Page 237, line 12: "can by" should be "can be"
- Page 256, line 5: "result" should be "results"
- Page 258, line 6: "yields" should be "yield"
- Page 262, Bibliographic Notes, line 1: "(1976)" should be "(1978)"
- Page 269, line 18: "...is given in..." should be "...are given in..."
- Page 274, line -16: "...less that..." should be "...less than..."
- Page 278, line 7: "...often that..." should be "...often than..."
- Page 286, line -5: "diagnostic" should be "diagnostics"
- Page 296, line -20: "principal" should be "principle"
- Page 297, line 3: "observation" should be "observations"
- Page 304, line -2: "mother's" should be "mothers"
- Page 305, line 11: "depends" should be "depend"

- Page 308, line -15: "cigarette" should be "cigarettes" Also in footnote of Table 11.4 on page 309
- Page 308, line -10: "...increases the log..." should be "...increases the log..."
- Page 308, line -7: "e<sup>0.0316×20</sup>" should be "e<sup>0.0318×20</sup>"
- Page 308, line -4: "type A" should be "Type A"
- Page 310, lines 8-11: "type" should be "Type"
- Page 313, line -1: "are" should be "would be"
- Page 314, line 2: "choose" should be "chose"
- Page 314, line 10: "analyses" should be "analysis"
- Page 320, line 1: "...same as for..." should be "...same as..."
- Page 350, line 10: " $(U_{ij1}, ..., U_{ij,K-1})$ " should be " $(U_{ij1}, ..., U_{ij,K-1})$ "
- Page 350, line 10: "correlation" should be "correlations"
- Page 352, line -1: "1995" should be "1996"
- Page 355, line 12: "...is discussed..." should be "...are discussed..."
- Page 356, line 10: "derivative" should be "derivatives"
- Page 360, line 4: "association" should be "associations"
- Page 360, line -19: "distinct set" should be "distinct sets"
- Page 362, line 18: "interpretation" should be "interpretations"
- Page 363, line 20: "vector" should be "vectors"
- Page 370, lines 7-8:

 $\log \operatorname{OR}(Y_{ij}, Y_{ij-1}) = \alpha_1,$  $\log \operatorname{OR}(Y_{ij}, Y_{ij-2}) = \alpha_2.$ 

should be

 $\log \operatorname{OR}(Y_{ij}, Y_{ij+1}) = \alpha_1,$  $\log \operatorname{OR}(Y_{ij}, Y_{ij+2}) = \alpha_2.$ 

- Page 372, line -1: "depart" should be "departs"
- Page 376, line -1: "represents" should be "represent"
- Page 403, line 25: "If fact" should be "In fact"

- Page 406, line -18: "logs odds" should be "log odds"
- Page 409, line -1: "are" should be "is"
- Page 415, line 8: "a women" should be "a woman" Also on page 416, line -10; page 456, line -4.
- Page 427, line -6: "of of" should be "of"
- Page 434, line 4: "is" should be "are"
- Page 434, line 5: "Conoway" should be "Conaway"
- Page 434, line -9: "Spiessons" should be "Spiessens" Also on page 471, line 3.
- Page 447, line 6: "statistic" should be "statistics"
- Page 452, line 20: "Section 14.5" should be "Section 14.7" Also on page 453, line 1.
- Page 469, line 7: " $\delta(\mu_{ij})$ " should be " $\delta(\hat{\mu}_{ij})$ "
- Page 478, footnote, line 4: "are" should be "is"
- Page 481, line 9: "electrocardiograms" should be "electrocardiogram" Also on page 482, line -1.
- Page 481, line 13: "are" should be "is"
- Page 484, line -4: "individuals" should be "individual"
- Page 494, line 5: "is" should be "are"
- Page 510, line -1: "weighted" should be "weighting"
- Page 538, line -6: "contributes" should be "contribute"
- Page 539, line -17: "Table 18.6" should be "Table 18.5"
- Page 543, line -6: "include" should be "includes"
- Page 549, line 9: "command" should be "commands"
- Page 565, line -12: "is" should be "are"
- Page 565, line -11: "e.g" should be "e.g."
- Page 569, Table 19.4: " $\sigma_{b_{1,b_{2}}}^{2} = \text{Cov}(b_{1i}, b_{2i})$ " should be " $\sigma_{b_{1,b_{2}}} = \text{Cov}(b_{1i}, b_{2i})$ "
- Page 585, line -17: "includes" should be "include"

- Page 592, line 1: "sampe" should be "sample"
- Page 592, line -8: "requires" should be "require"
- Page 599, line -11:

$$\frac{\hat{\beta}_2^{(0)} - \hat{\beta}_2^{(1)}}{\sqrt{\text{Var}(\hat{\beta}_2^{(1)}) + \text{Var}(\hat{\beta}_2^{(2)})}}, \text{ should be } \frac{\hat{\beta}_2^{(1)} - \hat{\beta}_2^{(2)}}{\sqrt{\text{Var}(\hat{\beta}_2^{(1)}) + \text{Var}(\hat{\beta}_2^{(2)})}},$$

- Page 616, line 4: "1996" should be "1995"
- Page 616, line -9: "Alternately" should be "Alternatively"
- Page 622, lines 4 and 6:  $Z_{1i}$  and  $Z_{2i}$  should be  $Z_{i1}$  and  $Z_{i2}$  respectively
- Page 623, line 3: "response" should be "responses"
- Page 629, line -5: "clinics" should be "centers"
- Page 630, line 16: "can by" should be "can be"
- Page 633, line -5: "extensions" should be "extension"
- Page 640, lines 3 and 5: "0.06" should be "0.065" in denominator of fraction
- Page 640, line 8: "have" should be "has"
- Page 648, line -1: "mg/kg" should be "mg/kg/day" Also on page 649, line 5 and Table 22.6
- Page 667, line 2: "variable" should be "variables"
- Page 691, line 17: "leads" should be "lead levels"

Thanks to Aaron Aragaki and David Hoaglin<sup>1</sup> for finding many of these typos and errors.

Please report any additional typos, errors or omissions to fitzmaur@hsph.harvard.edu

(Last updated on June 11, 2012)

<sup>&</sup>lt;sup>1</sup>The co-authors are especially thankful to David Hoaglin for finding the lion's share of the typos and errors.