

A First Course in Design and Analysis of Experiments
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Errata in the First Printing

Substantive Changes

Page

21 Last element of Table 2.2 should be .82.

37 Displayed equations should be $y_{ij} = \mu_i + \epsilon_{ij}$ and $y_{ij} = \mu + \epsilon_{ij}$.

47 The second line of Display 3.3 should read

$$SS_E = \sum_{i=1}^g \sum_{j=1}^{n_i} (y_{ij} - \bar{y}_{i\bullet})^2$$

86 Line -2 should end

$$= \sqrt{4 \times 4.782} = 4.37 ,$$

94 $g - 2, g - 1, \dots, 2$ should be $g - 2, g - 3, \dots, 2$.

117 The Seeded and Unseeded labels should be switched in Table 6.1.

153 Lines 3 and 4. Initial sample size is 19.2, or 20 rounding up.

158 Example 7.5. The Type I error rate is .01, although it is not explicitly stated.

179 Lines 13 and 14. Some plus and minus signs should be switched to read

$$\begin{aligned} \widehat{\alpha\beta}_{21} &= 2.153 - (2.065 + .234 + -.134) = -.012 \\ \widehat{\alpha\beta}_{12} &= 1.952 - (2.065 + -.234 + .134) = -.012 \end{aligned}$$

245 The sequential ANOVAs given in Exercise 10.1 are not adequate to answer the question. The ANOVAs should be

| | DF | SS | MS |
|-------|----|--------|--------|
| a | 1 | 1.9242 | 1.9242 |
| b | 2 | 1584.2 | 792.1 |
| a . b | 2 | 19.519 | 9.7595 |
| c | 1 | 1476.7 | 1476.7 |
| a . c | 1 | 17.527 | 17.527 |

| | | | |
|-------|----|--------|--------|
| b.c | 2 | 191.84 | 95.92 |
| a.b.c | 2 | 28.567 | 14.284 |
| Error | 11 | 166.71 | 15.155 |

| | DF | SS | MS |
|-------|----|--------|--------|
| b | 2 | 1573 | 786.49 |
| c | 1 | 1428.7 | 1428.7 |
| b.c | 2 | 153.62 | 76.809 |
| a | 1 | 39.777 | 39.777 |
| b.a | 2 | 69.132 | 34.566 |
| c.a | 1 | 27.51 | 27.51 |
| b.c.a | 2 | 28.567 | 14.284 |
| Error | 11 | 166.71 | 15.155 |

| | DF | SS | MS |
|-------|----|---------|---------|
| c | 1 | 1259.3 | 1259.3 |
| a | 1 | 9.0198 | 9.0198 |
| c.a | 1 | 0.93504 | 0.93504 |
| b | 2 | 1776.1 | 888.04 |
| c.b | 2 | 169.92 | 84.961 |
| a.b | 2 | 76.449 | 38.224 |
| c.a.b | 2 | 28.567 | 14.284 |
| Error | 11 | 166.71 | 15.155 |

- 269** Lines 2, -7, and -10. $F_{(1-\varepsilon)/2, \nu_1, \nu_2}$ should be replaced by $F_{1-\varepsilon/2, \nu_1, \nu_2}$.
- 323** Line -4. $\nu_{crd} = r(g - 1)$ should be $\nu_{crd} = g(r - 1)$.
- 355** Line 14. Added: Analyze these data to determine if there is a difference in liking between the two kinds of potato chips.
- 403** Line 11. 3^p and 3^{k-p} in marginal note should be 3^q and 3^{k-q} .
- 410** Lines -5, -7. Add superscript ones to labels for two degree of freedom splits.
- 504** Line -7. -ADHN should be ADHN.
- 523** Line 2. Replace p with q in Table 19.1.
- 524** Line 2. Replace p with q in Table 19.2.
- 524** Line -18. Replace α with m in marginal note.
- 576** Line 15. "basis X " should be "matrix X ."
- 577** Line -2. " s_a " should be " s_g ."
- 578** Lines -8 and -13. Lower limits of summation should be $i = 1$ and upper summation limits of a should be replaced by g .

608 Row 4, column 2 element of first 6x6 Latin square should be F.

Editorial and Style Changes

Page

10 Lines 4 and –14. Spacing changes.

62 Line 9. “plies” should be “flies.”

75 Lines –4 and –6. Leading parentheses in part labels.

108 Lines –8, –10, and –12. Leading parentheses in part labels.

136 Line –4. Remove indexing reference.

138 Line 11. Remove indexing reference.

179 Line 9. Changed spacing.

184 Line –8. Change “the all” to “all the”.

181 Line 11. Extra space after H_0 removed.

227 Lines 18, and 21. Change $SS(A, 1)$ to $SS(A|1)$.

326 Line 7. Change “may two” to “may have two”.

368 Line –4. Change “occurring and” to “occurring an”.

422 Line 6, line –4. y_{ijk} should be y_{ijkl} .

423 Line –13. y_{ijk} should be y_{ijkl} .

429 Line –8. y_{ijk} should be y_{ijkl} .

477 Line 13. ABDE should be –ABDE.

482 Line –6. No hyphen in j-factors.

491 Line –14. Remove indexing reference.

564 Line –4. Change “kind restriction” to “kind of restriction”.

The second printing also contains some changes to the front matter and stylistic changes to running heads in the Bibliography, Appendices, and Index. The mysterious indexing references on pages 136, 138, and 491 now appear as items in the index.

Data Files

Computer files containing data from the book exist. Early versions of these files are incorrect for Problem 10.6 and Problem 14.4. Early versions mislabel data for Problem 9.2 as being for Exercise 9.2.