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Abdi et al.
Experimental Design & Analysis for Psychology
Errata. February 27, 2014

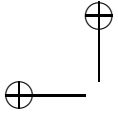
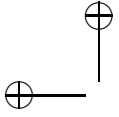


Table 2.2 on page 25 should be

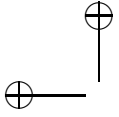
| Word | Length Y | Number of Lines W | y | w | $w \times y$ | y^2 | w^2 |
|-------------|---------------|------------------------|-----|-----|--------------|-----------------------|-----------------------|
| bag | 3 | 14 | -3 | 6 | -18 | 9 | 36 |
| across | 6 | 7 | 0 | -1 | 0 | 0 | 1 |
| on | 2 | 11 | -4 | 3 | -12 | 16 | 9 |
| insane | 6 | 9 | 0 | 1 | 0 | 0 | 1 |
| by | 2 | 9 | -4 | 1 | -4 | 16 | 1 |
| monastery | 9 | 4 | 3 | -4 | -12 | 9 | 16 |
| relief | 6 | 8 | 0 | 0 | 0 | 0 | 0 |
| slope | 5 | 11 | -1 | 3 | -3 | 1 | 9 |
| scoundrel | 9 | 5 | 3 | -3 | -9 | 9 | 9 |
| with | 4 | 8 | -2 | 0 | 0 | 4 | 0 |
| neither | 7 | 2 | 1 | -6 | -6 | 1 | 36 |
| pretentious | 11 | 4 | 5 | -4 | -20 | 25 | 16 |
| solid | 5 | 12 | -1 | 4 | -4 | 1 | 16 |
| this | 4 | 9 | -2 | 1 | -2 | 4 | 1 |
| for | 3 | 8 | -3 | 0 | 0 | 9 | 0 |
| therefore | 9 | 1 | 3 | -7 | -21 | 9 | 49 |
| generality | 10 | 4 | 4 | -4 | -16 | 16 | 16 |
| arise | 5 | 13 | -1 | 5 | -5 | 1 | 25 |
| blot | 4 | 15 | -2 | 7 | -14 | 4 | 49 |
| infectious | 10 | 6 | 4 | -2 | -8 | 16 | 4 |
| Σ | 120 | 160 | 0 | 0 | -154 | 150 | 294 |
| | | | | | <i>SCP</i> | <i>SS_Y</i> | <i>SS_W</i> |

Table 2.2 Raw scores, deviations from the mean, cross-products and sums of squares for the example length of words and number of lines. $M_W = 8$, $M_Y = 6$. The following abbreviations are used to label the columns: $w = (W - M_W)$; $y = (Y - M_Y)$; $w \times y = (W - M_W) \times (Y - M_Y)$; *SS* stands for sum of squares (see Appendix A, page 417).



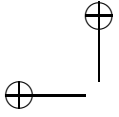
4

Page 40, In Table 3.1, the value of Y_2 is equal to $Y_2 = 10$



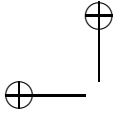
Page 111, Lines 5 and 6 should read:
When X and T are orthogonal

$$c = \frac{SCP_{TY}}{SS_T}$$



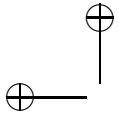
6

Page 191, Equation 10.2 replace $M_{...}$ by $M_{..}$.



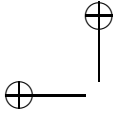
Page 203 (Equation 10.28) and page 210, the formula for $\hat{\rho}_{A,Y}^2$ should read

$$\hat{\rho}_{A,Y}^2 = \frac{MS_A - MS_{S(A)}}{MS_A + (S - 1)MS_{S(A)}}$$



Page 278, the table in mid-page should read:

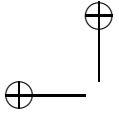
| | Experimental Group | | | | |
|---------|--------------------|------|------|---------|---------|
| | Contact | Hit | Bump | Collide | Smash |
| Contact | — | 1.56 | 4.00 | 7.56* | 16.00** |
| Hit | | — | 0.56 | 2.25 | 7.56* |
| Bump | | | — | 0.56 | 4.00 |
| Collide | | | | — | 1.56 |
| Smash | | | | | — |



Page 383, the test table for an $\mathcal{S}(\mathcal{A}) \times \mathcal{B}$ design (first table in the page) with \mathcal{A} and \mathcal{B} random should be

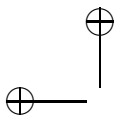
| Source | MS_{test} |
|-----------------------------|------------------------|
| <i>Between Subjects</i> | |
| \mathcal{A} | — |
| $\mathcal{S}(\mathcal{A})$ | $MS_{BS(\mathcal{A})}$ |
| <i>Within Subjects</i> | |
| \mathcal{B} | MS_{AB} |
| \mathcal{AB} | $MS_{BS(\mathcal{A})}$ |
| $\mathcal{BS}(\mathcal{A})$ | — |

Page 383 (again) the section title should be
20.8 Score model (Model III), $\mathcal{S}(\mathcal{A}) \times \mathcal{B}$ design: One fixed and one random.



10

Page 393, last paragraph line -4 read: $F'(1, 5) = 29.33$ instead of $F'(1, 5) = 29.22$



Page 406, the two tables in page 406 should be replaced by the two tables below (i.e., the number 1 at the intersection of row \mathcal{B} and column \mathcal{A} should be deleted).

| | σ_e^2 | $\mathcal{BS}(\mathcal{A})$ $\sigma_{bs(a)}^2$ | \mathcal{AB} $S\sigma_{ab}^2$ | $\mathcal{S}(\mathcal{A})$ $B\sigma_{s(a)}^2$ | \mathcal{B} $AS\vartheta_b^2$ | \mathcal{A} $BS\sigma_a^2$ |
|-----------------------------|--------------|---|------------------------------------|--|------------------------------------|---------------------------------|
| \mathcal{A} | 1 | | | 1 | | 1 |
| \mathcal{B} | 1 | 1 | 1 | | 1 | |
| $\mathcal{S}(\mathcal{A})$ | 1 | | | 1 | | |
| \mathcal{AB} | 1 | 1 | 1 | | | |
| $\mathcal{BS}(\mathcal{A})$ | 1 | 1 | | | | |

| | σ_e^2 | $\mathcal{BS}(\mathcal{A})$ $\sigma_{bs(a)}^2$ | \mathcal{AB} $S\sigma_{ab}^2$ | $\mathcal{S}(\mathcal{A})$ $B\sigma_{s(a)}^2$ | \mathcal{B} $AS\vartheta_b^2$ | \mathcal{A} $BS\sigma_a^2$ | $\mathbf{E}\{MS\}$ |
|-----------------------------|--------------|---|------------------------------------|--|------------------------------------|---------------------------------|--|
| \mathcal{A} | 1 | | | 1 | | 1 | $\sigma_e^2 + B\sigma_{s(a)}^2 + BS\sigma_a^2$ |
| \mathcal{B} | 1 | 1 | 1 | | 1 | | $\sigma_e^2 + \sigma_{bs(a)}^2 + S\sigma_{ab}^2 + AS\vartheta_b^2$ |
| $\mathcal{S}(\mathcal{A})$ | 1 | | | 1 | | | $\sigma_e^2 + B\sigma_{s(a)}^2$ |
| \mathcal{AB} | 1 | 1 | 1 | | | | $\sigma_e^2 + \sigma_{bs(a)}^2 + S\sigma_{ab}^2$ |
| $\mathcal{BS}(\mathcal{A})$ | 1 | 1 | | | | | $\sigma_e^2 + \sigma_{bs(a)}^2$ |

Table 22.1 Final stage of the table used to derive the expected values of the mean squares for an $\mathcal{S}(\mathcal{A}) \times \mathcal{B}$ design with \mathcal{A} , \mathcal{S} being random factors, and \mathcal{B} being a fixed factor.