# Theory of Factorial Design: Single- and Multi-Stratum Experiments 

## Errata

- P.18, line 3: $\frac{\mathbf{c}^{T} \hat{\boldsymbol{\theta}}}{s \sqrt{\mathbf{c}^{T}\left(\mathbf{X}^{T} \mathbf{X}\right)^{-\mathbf{c}}}}$ " should be $\quad \frac{\mathbf{c}^{T} \widehat{\boldsymbol{\theta}}-\mathbf{c}^{T} \boldsymbol{\theta}}{s \sqrt{\mathbf{c}^{T}\left(\mathbf{X}^{T} \mathbf{X}\right)^{-\mathbf{c}}}} "$.
- P.49, 3rd line: "entry" should be "entries".
- P.88, line 7 from the bottom: "nested in" should be "the same as or nested in".
- P.94, the line after (7.2): " $\left.\frac{1}{2}((1)-a-b+a b)\right)$ " should be " $\frac{1}{2}((1)-a-b+a b)$ ".
- P.122, 2nd line: "number" should be "the number".
- P.133, line 4: Insert "and $\mathbf{O}_{2}$ is saturated" after "as rows of $\mathbf{L}$ ".
- P.138, Exercise 8.9: As stated on p. 121, line 8, the results in this exercise hold for two-level orthogonal arrays only.
- P.141, line 14 from the bottom: Change "nonzero linear combinations" to "linear combinations".
- P.144, 9th line from the bottom: " $n$ - 1-flats" should be " $(n-1)$-flats".
- P.190, line 2: Change " $1 \leq g \neq h \leq 1$ " to " $1 \leq g \neq h \leq N$ ".
- P.191, line 16 from the bottom: Change " $\tau^{2}=\sigma_{0}^{2}\left\{\prod_{i=1}^{n}\left(1+r_{i}\right)\right\}^{-1}$ " to $" \tau^{2}=2^{-n} \sigma_{0}^{2}\left\{\prod_{i=1}^{n}\left(1+r_{i}\right)\right\}^{-1} "$.
- P.192, line 3: Change " $\tau^{2}=\sigma_{0}^{2}(1+r)^{-n}$ " to " $\tau^{2}=2^{-n} \sigma_{0}^{2}(1+r)^{-n "}$.
- P.208, line 24: Change "size $2 N$ and, by Theorem 11.19, can be" to "size $2 N$. By Theorem 11.19, such a projection can be".
- P.227, line 4: "bock" should be "block".
- P.254, line 2: Replace " $=\left\{\mathbf{v}_{1} \otimes \mathbf{v}_{2}: \mathbf{v}_{1} \in V_{\mathcal{F}_{1}}, \mathbf{v}_{2} \in V_{\mathcal{F}_{2}}\right\}$ " with " $=<$ $\left\{\mathbf{v}_{1} \otimes \mathbf{v}_{2}: \mathbf{v}_{1} \in V_{\mathcal{F}_{1}}, \mathbf{v}_{2} \in V_{\mathcal{F}_{2}}\right\}>"$ or delete it. Note that $<\left\{\mathbf{v}_{1} \otimes \mathbf{v}_{2}: \mathbf{v}_{1} \in\right.$ $\left.V_{\mathcal{F}_{1}}, \mathbf{v}_{2} \in V_{\mathcal{F}_{2}}\right\}>$ is the space spanned by $\left\{\mathbf{v}_{1} \otimes \mathbf{v}_{2}: \mathbf{v}_{1} \in V_{\mathcal{F}_{1}}, \mathbf{v}_{2} \in V_{\mathcal{F}_{2}}\right\}$.
- P.256, line 9 from the bottom: Change "The" to "the".
- P.261, lines 9 and 10 from the bottom: Change "the splitting effects play the double roles of splitting and blocking the whole plots, and are confounded with blocks" to "a set of independent splitting effects play the double roles of splitting and blocking the whole plots and, together with all their generalized interactions, are confounded with blocks".
- P.267, 2nd line from the bottom: Change " $W_{\mathcal{E}_{\mathcal{B}}}$ " to " $W_{\mathcal{B}}$ ".
- P.270, line 4 from the bottom: " $W_{\mathcal{E}_{R} \mathcal{E}_{c}}^{\Im}$ " should be " $W_{\mathcal{E}_{R} \mathcal{E}_{C}}^{\Im}$ ".
- P.273, last line and P.274, first line: Change "with $q$ replaced by $q-g$ " to "with $\mathbf{0}_{n-q, q}$ and $\mathbf{I}_{q}$ replaced by $\mathbf{0}_{n-q, q-g}$ and $\mathbf{I}_{q-g}$, respectively".
- P.284, line 4 from the bottom: Change " $\left\{\mathbf{a}_{1}^{i}, \cdots, \mathbf{a}_{r_{i}}^{i}\right\}$ and $\left\{\mathbf{a}_{1}^{j}, \cdots, \mathbf{a}_{r_{j}}^{j}\right\}$ are linearly independent" to " $\mathbf{a}_{1}^{i}, \cdots, \mathbf{a}_{r_{i}}^{i}, \mathbf{a}_{1}^{j}, \cdots, \mathbf{a}_{r_{j}}^{j}$ are linearly independent".
- P.299, lines 2 and 3: Change "whose interactions are used to define the added factors" to "whose interaction is used to define the added factor".
- P.305, lines 9 and 10 from the bottom: Change " $Y$ contains at least one column treatment factor" to " $Y$ involves at least one column treatment factor and no row treatment factor".
- P.322, line 3 from the bottom: "row" should be "column" and "column" should be "row".
- P.322, line 2 from the bottom: " $\xi_{\mathcal{R}}$ " (two occurrences) should be " $\xi_{\mathcal{C}}$ ", and " $\xi_{\mathcal{C}}$ " (two occurrences) should be " $\xi_{\mathcal{R}}$ ".
- P.341, line 19: Change "the estimation capacity" to "maximum estimation capacity".
- P.349, line 16: Delete one "for".
- P. 350, line 3: Replace " $s^{n-p}$ regular fractions" with "regular $s^{n-p}$ fractions".
- P.352, line 19: Replace " $\left(\mathbf{g}_{1}-\lambda \mathbf{g}_{2}\right)^{T} \mathbf{x}$ " with " $\mathrm{g}_{1}-\lambda \mathbf{g}_{2}$ ".
- P.357, line 12: " $1<e<1$ " should be " $0<e<1$ ".

