

# Readings on Statistical Significance in Studies with Multiple Dependent Comparisons

## General Readings

- [Benjamini, Y., & Hochberg, Y. \(1995\). Controlling the false discovery rate: A practical and powerful approach to multiple testing. \*Journal of the Royal Statistical Society, Series B \(Methodological\)\*, 57\(1\), 289-300.](#)
- [Benjamini, Y., & Yekutieli, D. \(2001\). The control of the false discovery rate in multiple testing under dependency. \*The Annals of Statistics\*, 29\(4\), 1165–1188.](#)
- Benjamini, Y., Hochberg, Y., & Kling, Y. (1993). *False discovery rate control in pairwise comparisons* (Working Paper 93-2): Department of Statistics and O.R., Tel Aviv University.
- Benjamini, Y., Hochberg, Y., & Kling, Y. (1997). *False discovery rate control in multiple hypothesis testing using dependent test statistics* (Research Paper 97-1): Department of Statistics and O.R., Tel Aviv University.
- [Bland, J. M., & Altman, D. G. \(1995\). Multiple significance tests: The Bonferroni method. \*BMJ\*, 310, 170.](#)
- Bonferroni, C. E. (1935). Il calcolo delle assicurazioni su gruppi di teste. In *Studi in Onore del Professore Salvatore Ortu Carboni*. Rome: Italy, pp. 13–60.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Curran-Everett, D. (2000). Multiple comparisons: Philosophies and illustrations. *American journal of physiology. Regulatory, integrative and comparative physiology*, 279, R1-R8.
- [Dunnnett, C. \(1955\). A multiple comparisons procedure for comparing several treatments with a control. \*Journal of American Statistical Association\*, 50, 1096–1121.](#)
- [Hochberg, Y. \(1988\). A sharper Bonferroni procedure for multiple tests of significance. \*Biometrika\*, 75, 800-803.](#)
- Keselman, H. J., Cribbie, R., & Holland. (1999). The pairwise multiple comparison multiplicity problem: An alternative approach to familywise and comparisonwise Type I error control. *Psychological Methods*, 4(1), 58-69.
- [Scheffe, H. \(1953\). A method for judging all contrasts in the analysis of variance. \*Biometrika\*, 40, 87–104.](#)
- [Williams, V. S. L., Jones, L. V., & Tukey, J. W. \(1999\). Controlling error in multiple comparisons, with examples from state-to-state differences in educational achievement. \*Journal of Educational and Behavioral Statistics\*, 24\(1\), 42-69.](#)

## Applications

See [Technical Details of WWC-Conducted Computations](#) for details about how the What Works Clearinghouse applies the B-H correction for multiple comparisons.

Please send your comments on these readings or suggested additions to:  
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