



### Annotated Summary of:

Brewer, Neil, Lynne Socha, and Rob Potter (1996), "Gender Differences in Supervisors' Use of Performance Feedback." *Journal of Applied Social Psychology* 26(9): 786–803.

#### Chapter 6: Multivariate Analysis of Variance

*Multivariate Data Analysis*, Sixth edition

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This article examines whether supervisor gender affects the nature of performance feedback toward subordinates. Feedback delivery varies based upon frequency, timing, sign (positive/negative/neutral), and specificity. Through the use of MANOVA, the authors are able to measure the impact of variations in supervisor and subordinate gender as well as subordinate performance (above or below average) on the delivery of performance feedback. The authors hypothesize that male supervisors use specific and general negative feedback more frequently and earlier for poor subordinate performance; whereas female supervisors use more specific positive feedback for good performance and more general positive and neutral (encouragement) feedback for both good and poor performance. Testing the hypotheses requires eight treatment conditions in a 2x2x2 (supervisor gender by subordinate gender by performance) factorial design. Using a sample of 30 male and 30 female undergraduate students acting in supervisory roles, the authors collected data on the delivery of performance feedback in a controlled laboratory setting.

Through multivariate (MANOVA) and univariate (ANOVA) techniques, the authors find that frequencies of general negative, specific positive, general positive, and neutral feedback are unaffected by supervisor gender. To assess the individual differences of the dependent variables and to account for the unique contribution of each dependent variable, the authors also perform a stepdown analysis. Similar to stepwise regression, this approach computes a univariate F statistic for a dependant variable after eliminating the effect of the other dependent variables in the preceding analysis. Although the MANOVA results do not indicate a significant main effect for supervisor gender, the stepdown analysis supports the hypothesis that males use negative feedback in response to poor performance both sooner and more frequently. In sum, the results confirm prior laboratory and field research, which has found males to have a more directive leadership style.

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