ERRATA FOR "SIMULATING CORRELATED MULTIVARIATE NONNORMAL DISTRIBUTIONS: EXTENDING THE FLEISHMAN POWER METHOD"

TODD C. HEADRICK AND SHLOMO S. SAWILOWSKY

EVALUATION AND RESEARCH
COLLEGE OF EDUCATION
WAYNE STATE UNIVERSITY

A procedure for generating multivariate nonnormal distributions is proposed. Our procedure generates average values of intercorrelations much closer to population parameters than competing procedures for skewed and/or heavy tailed distributions and for small sample sizes. Also, it eliminates the necessity of conducting a factorization procedure on the population correlation matrix that underlies the random deviates, and it is simpler to code in a programming language (e.g., FORTRAN). Numerical examples demonstrating the procedures are given. Monte Carlo results indicate our procedure yields excellent agreement between population parameters and average values of intercorrelation, skew, and kurtosis.

Key words: simulations, pseudo-random numbers, correlated data, nonnormality.

In an article by Headrick and Sawilowsky (1999, p. 26), the points and connecting dots in Figure 1 failed to appear in the final printing. The corrected figure appears below:
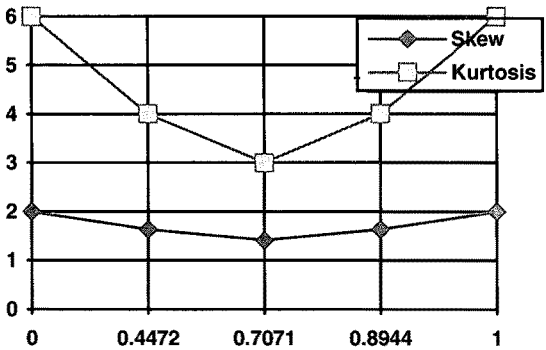

FIGURE 1.
Values of γ_1 and γ_2 as a function of ρ.

There was also an error in Equation (24) on page 30. In this equation Z should have had a subscript of 2 (i.e., Z_2). The corrected equation follows:

$$X_4 = r_4 Z_2 + \sqrt{1 - r_4^2} E_4 \tag{24}$$

References

Headrick, Todd C., & Sawilowsky, Shlomo S. (1999). Simulating correlated multivariate nonnormal distributions: Extending the Fleishman power method. *Psychometrika, 64*, 25–35.

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