Introduction: This submission provides SAS® code for creating an intraclass (or intracluster) correlation coefficient (ICC) for a binary outcome.

Keyword Categories:

Clinical: Recruitment from Nursing Homes, Clinics, Hospitals, and so forth

Genetics: Not Applicable (NA)

Statistical: Clustered Data, Dependent Observations

Software: SAS® 9.2

References:

Hayes, Richard J., Moulton, Lawrence H. *Cluster Randomised Trials*. Chapman & Hall/ CRC: Boca Raton, FL., 2009, pages 15-19.

Component Files:

a. PDF file: BinaryICCSummaryVanNess.pdf

b. SAS® program: BinaryICCProgramVanNess.sas

c. Plain text data file: BinaryICCDataVanNess.txt

d. Plain text output file: BinaryICCOutputVanNess.txt

Optimal Use:

This submission is for SAS® users; it simply provides code specific to this software package that manipulates data outputs in order to perform the sequence of calculations needed for the binary ICC.

Prerequistes:

There are no prerequisites other than access to a version of the SAS[®] software.

Potential Applications:

The binary ICC is useful when researchers are trying to estimate the extent of the dependency in clustered observations of binary outcomes. These observations might occur when study participants are recruited from nursing homes, clinics, or other locations in which people at the location are more likely to be similar to persons in the same location than to persons from other locations. This version of the ICC is not especially useful for reliability testing because there are more appropriate techniques for testing things like inter-rater reliability for binary outcomes.

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