

Intraclass Correlation

Intraclass correlation (Furfey, 1927; Guilford, 1936; Hayes, 1963; Shrout & Fleiss, 1979; Guion, 1998) is the statistic of choice when both members of the bivariate distribution whose scores will be correlated have equal status in the sense that neither represents a predictor or a criterion. Traditional criterion-related validity studies rely on a Pearsonian correlation model in which members of the sample have test scores and criterion scores. In this model, means and variances of test score and criterion score distributions are calculated separately within each group. The value of Pearson product moment correlation coefficients are different when test scores are regressed on criterion scores, rather than vice versa—regressing criterion scores on test scores. In intraclass correlation model, members of the two classes are interchangeable, so means and variances can derive from pooled estimates.

References

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