Comparing correlated means in the presence of incomplete data using a permutation test

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Analysis of incomplete pairs arises in both observational and experimental studies when some of the data are in the form of a paired sample and the rest of the data comprise two independent samples. We proposed a permutation based test. Our method uses the data from the two types of samples to test the difference between the mean responses. Our test statistic combines the observed mean difference for the complete pairs with the difference between the two means of the independent samples. We show by a simulation study that our statistic performs well in comparison to other methods. We apply our method to compare two methods for extracting DNA from coyote blood samples.

Biography

Desale Habtzghi has completed his Ph.D. in 2006 from the University of Georgia. Currently, he is working as an Assistant Professor in Department of Statistics at the University of Akron. His research interest is in Survival Analysis, Biostatistics, and Statistical Inferences (parametric and nonparametric).

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