

A PROPOSAL OF DATA TRANSFORMATION FOR PRINCIPAL COMPONENT ANALYSIS

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- **ABSTRACT:** *The principal component (PC) analysis is not independent of the data scale, ie results of standardized and data-based PC estimates differ. The choice of the scale to be adopted is therefore a task of central importance, directly related to the study results. The data transformation through the coefficient of variation unites all variables on the same measurement scale, but with different variances. This transformation circumvents the disadvantages caused by the standardization, where the same mean (zero) and variance (one) are applied to all variables, and avoids the effects of the measurement scales on the original data.*
- **KEYWORDS:** *Multivariate analysis; measurement scale; variability; data simulation.*

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