## **IBM SPSS Missing Values**

IBM SPSS Missing Values provides three main functions:

- 1. It describes the pattern of missing data. Where are the missing values located? How extensive are they? Do pairs of variables tend to have values missing in multiple cases? Are data values extreme? Are values missing randomly?
- 2. It provides estimates of statistics like means, standard deviations and correlations for data series that contain missing values.
- 3. It fills in (imputes) missing data with estimated values using special methods like regression or EM (expectation-maximization).
- IBM SPSS Missing Values helps address several concerns caused by incomplete data. By
  investigating patterns of missing data it can address questions such as 'Why are the data
  missing?'. Moreover, the means estimation procedures address questions such as 'How
  does the missing data affect summary statistics?' and the imputation procedures are able to
  address questions such as 'What are the likely values for the missing data?'

