

- DATE: The date the analysis was conducted
- TIME: The time the analysis was conducted
- REPS: The number of replicates used for the analysis
- INFILE: data used for the analysis
- SELCRIT: selection criteria used for the analysis

## Computing Logistic Regression Coefficients with Plausible Values

Logistic regression is used to predict a binary response based on one or more predictor variables. To compute logistic regression statistics with variables that include plausible values, you need to select “**Logistic Regression**” from the **Statistic Type** dropdown menu, and under **Plausible Value Options** select “**Use PVs**”. When selecting “**Use PVs**”, you must select at least one set of plausible values for your independent variable list.

This analysis type requires the selection of the following variables for the analysis:

Grouping Variables<sup>28</sup> This is the list of variables that are to be used to define the subgroups. The list can consist of one or more variables. The IDB Analyzer always includes IDCNTRY or its equivalent as the first grouping variable and there should always be at least one grouping variable. If the option “Exclude Missing from Analysis” is checked, only cases that have non-missing values in the grouping variables will be used in the analysis.

Independent Variables This is the list of analysis variables used as predictors in the logistic regression model. The independent variables can be classified as categorical or continuous. Variables classified as categorical will be contrast coded according to the specifications of the SPSS engine. You have the options of entering categorical variables using INDICATOR, DEVIATION, SIMPLE, DIFFERENCE, HELMERT or REPEATED contrast coding. For each categorical variable you will need to specify the reference category, or use the default (highest one). For more information on the use of each of these contrast specifications please refer to the corresponding SPSS documentation.

Variables classified as continuous will be entered in the equation without further recoding. You can enter any combination of categorical or continuous variables. While plausible values are treated as continuous variables, they have to be entered in a separate window. In addition you can enter interaction effects between the variables.

Please note that ANY case with a missing value on any variable classified as categorical will be deleted from the analysis. If you want

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<sup>28</sup> Note that due to a bug in the SPSS Logistic Regression module, when the grouping variables defines a single group in the file, the program crashes. You will know this is the case by checking the descriptive statistics at the beginning of the output file. When this happens you will need to set the parameter ONEGRP = Y.