

Using the Analysis Module

To access the Analysis Module you need to click the corresponding button in the main screen of the IDB Analyzer. If you are currently using the Merge Module, you need to click the **Return to the Main Menu** button located at the bottom right corner of the screen.

The Analysis Module will automatically load the last merged or analyzed data file. You can choose a different file if needed.

The Analysis Module generates SPSS syntax for the computation of means, percentages, standard deviations, correlations, and linear and logistic regression coefficients for any variable of interest for a country overall, and for specific subgroups within a country. It also computes percentages of people in the population that are within benchmarks of performance, or within user-defined cut points in the proficiency distribution, and the percent of people who have exceeded such benchmarks or cut points in the distribution, as well as user-defined percentiles for continuous variables.

Please note that when the SPSS code is executed, it creates temporary files in the target directory or where you are saving the files. For this reason we recommend you to always direct your work to a directory located in your local machine. This avoids potentially overwriting of temporary files, and will considerably speed up processing of the files.

Regardless of the analysis type you choose, there are some selections that need to be made for all analyses. Specifically, you will need to select the data files that contain the data you will be working with, the analysis type you want to conduct, the statistics you want to compute, whether you want to use plausible values for the analysis, and whether to include cases with missing values in any of the classification or grouping variables. By default, the IDB Analyzer excludes those cases that have missing information for any of the classification or grouping variables. You can override this by deselecting this option.

For all statistic types you will need to use at least one grouping variable. By default, the program always performs analysis on a country-by-country basis, using the variable IDCNTRY or equivalent as the default grouping variable¹³. You can add other grouping variables as your analysis requires.

The first step after entering the Analysis Module is to select the **Analysis Type** based on the data you have merged and selected when using the Merge Module. When selecting the **Analysis Type**, the IDB Analyzer will check that the file has the necessary variables for the analysis. For each analysis you will need the sampling weight, and either the replicate weights or variables with replication information. If these are not found, the IDB Analyzer will issue a warning message and not let you continue. For further information on these variables, and the analysis types possible for each study, please refer to the technical documentation corresponding to each study.

Please note that the **Analysis Types** are preconfigured in the IDB Analyzer based on the analysis specifications of each of the studies. While new analysis types can be added to the configuration file, this is only possible by contacting the IEA-DPC software unit for further instructions.

Each analysis procedure in the IDB Analyzer calculates a so called “Table Average.” This corresponds to the average of the statistics calculated across the countries and/or jurisdictions included in the file used for the analysis and included in the table. These countries and

¹³ Throughout this manual, the term “country” is used to refer to reporting jurisdictions in the corresponding study. These include countries per se, “states”, “provinces”, “benchmarking participants”, “partner countries”, etc. Each study has adopted its own convention for naming and identifying these entities, but in general these are identified by a unique value in the variables usually called IDCNTRY, CNT, CNTRYID, etc.