- Open the Analysis Module of the IDB Analyzer (Start → All Programs → IEA → IDBAnalyzerV3 → IDBAnalyzer).
- 2. Select the data file named **Merged_PIRLS_Data.sav**.
- 3. As Analysis Type, select **PIRLS (Using Student Weights)**. The weight variable is automatically selected by the software. As this is an example for analysis on student level, the weight TOTWGT is selected by default. For the correct weight and variance estimation variables, please refer to the technical documentation specific to the study.
- 4. From the Statistic Type dropdown menu, select Correlation. Leave the other dropdown menus unchanged. Note that there are two options under the Missing Data Option dropdown menu Pairwise and Listwise²⁴. Depending on how you want to treat the missing data, you might want to change it. For the time being, we will leave the default setting (Listwise). When choosing Pairwise, all available data are used in the analysis, when choosing Listwise only cases with complete data are used in the analysis.
- 5. In the next steps, all variables need to be specified:
 - As Grouping Variable, the software always selects variable IDCNTRY by default, or its equivalent. No other variable needs to be added for this example.
 - The next step is to select the analysis variables. To activate this section, you will need to click into the area of the **Analysis Variables** field. Now you will need to select variables ASBGSLR, ASBGSMR and ASBGSCR from the list of variables and move them to the analysis variables window by pressing the right arrow button in this section.
- 6. Click on the **Define/Modify** button next to **Output Files** and specify the name of the output files. For our example we will use the name "Correlations". This filename will be used to create an SPSS file with the syntax to perform the analysis, a set of SPSS and Excel files with the statistics from the analysis (one with descriptive statistics, and one with the correlation coefficients), and the SPSS output file with summary statistics from the analysis. The suffixes _Desc, or _Corr are added to the filename to identify the statistics contained in the corresponding file. This name will also be used to create and name a new output window with the results from this analysis.
- 7. Click on the **Start SPSS** button to create the SPSS syntax file and open it in an SPSS syntax window ready for execution. The syntax file must then be executed by opening the **Run** menu of the syntax window and selecting the **All** menu option. Alternatively you can also submit the code for processing with the keystrokes **Ctrl+A** (to select all), followed by **Ctrl+R** (to run the selection). The IDB Analyzer will give a warning if it is about to overwrite an existing file in the specified folder.

Figure 21 shows the IDB Analyzer Setup Screen for this analysis, Figure 22 shows the SPSS Syntax file created by the IDB Analyzer.

The SPSS output from the analysis displays unweighted and weighted descriptive statistics for all the variables in the analysis, along with their means, standard deviations and standard errors and the correlation coefficients between them.

SPSS output obtained from SPSS, Excel files and SPSS files with the results from this sample analysis can be found in the Examples folder.

²⁴ For information about how SPSS treats data under each of these options, please review the documentation for the MISSING subcommand within the CORRELATION command.