Data Management

Compiling the data from the surveys can be done through hand tabulations or data entry programs. Your choice will depend on a variety of factors such as sample size, staff size and data entry experience, and computer hardware and software. You can set up your data entry system as soon as you send out the surveys. This will allow you to begin entering data as soon as surveys are returned.

Hand Tabulation

If you anticipate having a small sample size (about 30), performing a hand tabulation of the data would be manageable. A sample form and instructions for hand tabulation are available for downloading in Appendix F. However, if you have a spreadsheet program (e.g., Excel or QuattroPro), we recommend using it. Entering data into a spreadsheet may save time in the long run. When checking the data to ensure that it was entered correctly, you will be able to look at a specific number entered for a respondent rather than repeating the hand tabulation and comparing it to the first one. Additionally, the spreadsheet program can produce descriptive information to save you from having to count tally marks. Having the data in a spreadsheet file will also make comparisons between past and future surveys easier. If you would like to have your state s data included in the next national report in 2004, the data will need to be sent to Arizona in spreadsheet form.

Data Entry Programs

If you already have appropriate computer software and hardware or your sample size is greater than 30, using a data entry program would be more efficient. There are a variety of easy-to-use data entry programs. Some examples follow. We recommend that you speak to someone at your university for assistance in making this decision and in setting up the program.

First, data can be entered into a spreadsheet (e.g., Excel, QuattroPro), with one column for each question and one row for each participant. A number corresponding to the participant s response would be entered in the relevant cell. These spreadsheet programs will compute basic descriptive statistics such as mean, median, mode, standard deviation, and frequency distributions. Some programs will also perform inferential statistical analyses such as t-test, chi-square, correlation, and regression.

Second, data can be entered directly into SPSS (http://www.spss.com) or SAS (http://www.sas.com). The file works like a spreadsheet. These programs are also used for data analysis. It will perform the basic descriptive and inferential statistical analyses described above in addition to other advanced statistics.

Third, SPSS has a program called Data Entry Builder which allows you to set up the

computer screen in a way that is identical to the survey or allows you to enter data in a spreadsheet-style layout, (http//www.spss.com/spssbi/data_entry_builder). In creating the file, you can place restrictions on what values are allowed to be entered for each variable. For example, if responses to a question range from 1 to 5, you can specify that 0, 6, 7, and 8 are not valid entries and the computer will beep and not let you continue until you have entered a valid number. The file is saved in a format to be used with SPSS for data analysis; it does not perform statistical analyses without SPSS.

Fourth, Principia Products (http://www.principiaproducts.com) has a software program called Remark Office OMR that allows a standard image scanner to read filled-in bubbles on a survey and convert them to numbers. Surveys are formatted such that the answer bubbles are next to the questions; there is not a separate survey and answer sheet. This data can be saved in a variety of formats for further statistical analyses, including Excel and SPSS. This method of data entry would be useful if you have a large number of surveys (at least 200) or plan to develop future surveys which use this technology.

Developing a Codebook

When entering, checking, or analyzing data, a codebook serves as a reference for the names of the variables (the survey items), their descriptions, range of responses, and column positions. People often develop a table in a word processing program to display this information. For example:

Item Number	Variable Name (or Survey Item)	Variable Label (or Description)	Value Labels (or Range of Responses)	Position (or Column Numbers)
57.	gender	Participant s Gender	1 = male 2 = female	1
48b.	knowrisk	Knowledge of Risk and Resilience Factors	1 = poor 2 = fair 3 = good 4 = excellent	2

If you are using SPSS as your data analysis program, SPSS will create a codebook although it will look different from the one above. To do this, use the following command or syntax:

Display dictionary.

We have provided a codebook which should be used if you plan to have your state s data included in the next national report (download codebook from Appendix G). Be sure to use the variable names, variable labels, value labels, and positions exactly as indicated in this codebook when entering your state s data. This will allow Arizona to combine data from all participating states.