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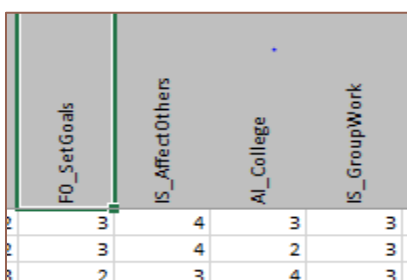
# TIP SHEET: USING EXCEL TO MANAGE SURVEY DATA

There are many software tools on the market that are designed for statistical analysis. While these tools are very powerful, they can be expensive to license and/or complex to use in a typical nonprofit context. Often, Microsoft Excel is all you need for basic data management and analysis. This tip sheet covers the basics of using Excel to manage survey data.

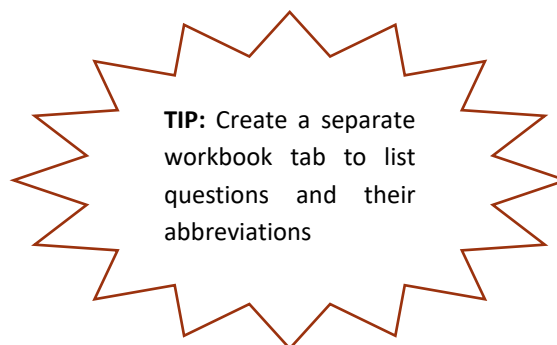
## ENTERING DATA

If you use an online survey utility, you can generally export results into Excel. In SurveyMonkey, for example, choose “All responses data” as your export option. If you are entering data from a paper survey, follow these general guidelines:

- Each question on your survey should be one column. You may want to use an abbreviated version of the question as a column header so that you can keep your data straight. You can also orient header cells vertically as shown:



	FO_SetGoals	IS_AffectOthers	AL_College	IS_GroupWork
3	3	4	3	3
2	3	4	2	3
1	2	3	4	3



- Each respondent should be one row. While you can enter text responses, it is customary to translate responses into numeric form. For example, if your question is yes/no, enter “1” for yes responses and “0” for no responses. For Likert-scale responses, use a negative-to-positive coding scheme such as:
  - Strongly Disagree = 1
  - Somewhat Disagree = 2
  - Neutral = 3
  - Somewhat Agree = 4
  - Strongly Agree = 5
- Once you have entered all responses, you can summarize your data in numerous ways. The next section shows some functions that are useful for the management of survey data.

## BASIC ANALYSIS FUNCTIONS

The following table shows some useful formulas for generating basic descriptive statistics from survey data. “Range” in this context refers to the cells where your data is located. “Criteria” allows you to specify the conditions that the data should meet. For example, if you have Likert-type data (1-5 responses corresponding to an agreement scale as shown above) in column C, rows 3-250, and you want to see how many people entered a “strongly agree” response, you can enter the following in the address bar: =COUNTIF(c3:c250, “=5”)

Measure	Definition	Excel Command(s)
Frequency	How often a value occurs in a dataset	=COUNT(range), =COUNTIF(range, criteria)
Mean	The average of a set of numbers	=AVERAGE(range)
Median	The middle value in a dataset	=MEDIAN(range)
Standard Deviation	Shows how tightly data is clustered around the mean	=STDEV.S(range), =STDEV.A,(range), =STDEV.P(range)
Minimum	The minimum value in a dataset	=MIN(range)
Maximum	The maximum value in a dataset	=MAX(range)

## USING PIVOT TABLES AND CHARTS

The Pivot Table feature in Excel permits you to create simple frequency tables without using formulas. To create a simple table like the one shown, click in an empty cell (you may want to use a new worksheet), and choose “Insert Pivot Table” and then select the data that you want to include.

Question: I trust my future will turn out well		
Row Labels	Count of FO_Trust	Count of FO_Trust2
Strongly Disagree	5	9%
Somewhat Disagree	10	18%
Neutral	17	30%
Somewhat Agree	18	32%
Strongly Agree	6	11%
<b>Grand Total</b>	<b>56</b>	<b>100%</b>

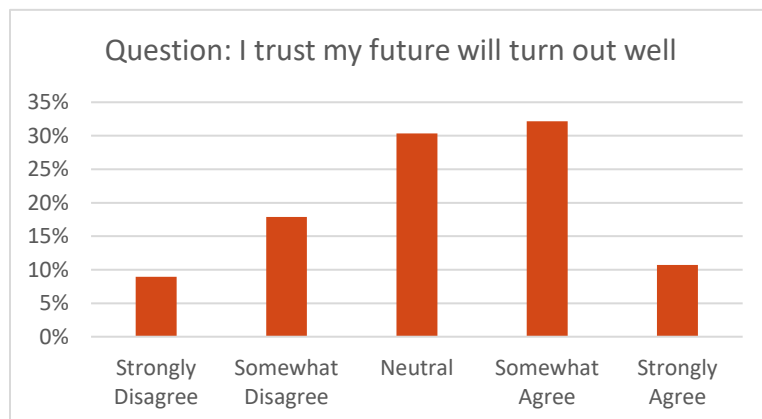
1. Using the Pivot Table Fields dialog, drag the data you have selected into the Rows box and into the  $\Sigma$  Values box *twice*.

2. Change the row labels on the resulting table into text (if applicable)

3. In the  $\Sigma$  Values box, select the first field and click on “value field setting.” Change “sum” to “count.”

4. Do the same for the second field, but this time click on “show values as” and select “% of grand total.” Change the number format to percentages, change the decimal places to 0, add a title and you are done!

You can also create a Pivot Chart from this table in much the same way, by selecting “Insert Pivot Chart” and placing data in the Rows and  $\Sigma$  Values boxes (just once this time, and then you can choose to show either numbers



OR percentages-remember to change “sum” to “count”):

### FOR MORE INFORMATION...

There are countless Excel tutorials freely available on the web. These range from the most basic Excel functions to much more sophisticated applications, and can be found using a basic Google search.