Proper Labeling of Charts and Graphs

The Dos and Don’ts
Common Mistakes 1

• The single most common mistake is trying to include too many data sets onto a single chart/graph (CG).
  – For instance, if you asked a survey question and also asked for age, gender, and educational status, do not put into a single chart/graph.
  – You would create either two or three graphs.
    • For two in one: You might graph both age and gender together for instance.
    • For two in one: You might put age and educational status.
    • Or make a separate graph for age, gender and for educational status as they relate to your survey question.
Common Mistakes 2

• The second common error is not correctly labeling the chart or graph.
  – In part this is due to the labeling used in computer programs such as MS Word.
  – Even if the dialog box is labeled as Chart, if you constructed a graph indicate this both charts and graphs as figures.

• What is the difference between charts and graphs?
  – In general, if you are constructing a ‘pie chart’, label as Figure 1 (if the first figure in your paper).
    • Use a chart when you are comparing the parts of a whole.
  – If you constructed a bar graph or a line graph the label should be Figure 1.
    • The graph is used to show comparisons.
    • The line graph should only show 1 comparison and is great for showing relationships that include time
    • The bar graph can show more than 1 (say 2).
General Comments on Labels

• You MUST label correctly for each type of chart or graph.

• The title should include the following:
  – Use the term Figure (APA formatting requirement).
  – The number as 1, 2, and so on
  – A description of the chart or graph that is detailed enough that the audience knows is presented.
    • Should be capitalized, except for prepositions and articles (unless first word in the title).
    • In the format of a sentence without the verb included.

• Examples:
  – Figure 1: Responses to the Question, “What Do You Like about Anthropology?” OR
  – Figure 1: ESL Student Attendance for Five Class Sessions.
The Pie Chart

- Organize so that the largest portion is first, then proceed clockwise with each progressively smaller portion.
- If the portions are too small, think about ‘collapsing categories”. This means you combine similar responses.

Figure 1: Responses to the Question, “What Do You Like about Anthropology?” (n=25)

- Fun: 48%
- Different: 32%
- Historical: 12%
- Other: 8%

- Note on the chart, that I labeled each portion by percentage (I could have chosen number instead). Only use percentage if you include the number of responses as a part of the title (here n=25).
- Notice the three parts of the title: Figure, 1, and the verb-free sentence.
The Vertical Bar (or Column) Graph

- Remember, graphs allow for comparisons.
- Bar graphs allow you to make more than one comparison using the same graph.
- Here I decided to compare both session number and gender on the same graph.

Figure 1: ESL Student Attendance for Five Class Sessions by Gender

- Note on the graph, I labeled the x-axis and the y-axis. I also included information on the numbers (or category name) for both axes.
- Notice the three parts of the title: Figure, 1, and the verb-free sentence.
Example of a Line Graph

Figure 1: ESL Student Attendance for Five Class Sessions by Gender

A link that might be of help:
http://nces.ed.gov/nceskids/createagraph/default.aspx?ID=363d6cd1d60b42da8bc9ad3ee4e0caea