Lab 2: Describing Variables

Getting Numerical Summaries

Same general menu as for frequency tables, but with some different settings.

- Menu: “Analyze -> Descriptive Statistics -> Frequencies”.
- Choose the variable(s) you want. Use arrow to move to the right side.
- “Display frequency tables” should NOT be checked (unless you really want that too. can be long).
- “Statistics” submenu, choose the statistics you want:
  - Mean and Median are over to the right
  - Std. Deviation and min/max are near the bottom
  - Quartiles are on the left. Make sure to at least select the “Quartiles” check-box.
  - Can add specific percentiles, e.g. 0.1 for the 10th percentile.
- Results in table in output viewer.

Identifying points in plots

When a plot contains points, we can use labels to identify those points

- Done while creating the graph in “Graphs -> Chart Builder”
- Switch to the “Groups/Point ID” tab. Check “Point ID label”
- Drag the variable to use as label to the “Point Label Variable” box in the graph.
- Points will now have labels to them.
- You can change the labels (add/remove all or individual) when editing the graph (double-click the graph to edit).

Panel Variables

You can create separate graphs for each value of a categorical variable.

- Done while creating the graph in “Graphs -> Chart Builder”
- Switch to the “Groups/Point ID” tab. Choose row or column panel variable.
- Drag a variable to the newly created spot in the graph area.
- This will create different panels for each value of that variable
- Avoid using too many panel variables. The resulting graphs are not easy to process.

Comparative Boxplots

You can use boxplots to compare how the values of one scalar variable vary in relation to the values of a categorical variable.

- Done while creating the boxplot in “Graphs -> Chart Builder”
- Put the scalar variable in the long axis direction, and the categorical variable in the short axis direction.

Copying Graphs

You will invariably need at some point to move your graphs over to Word or Powerpoint. Some things to keep in mind when doing so:

- Graphs do not resize well once they are outside of SPSS.
- Keep the graphs as they should be in SPSS, by saving the output viewer in addition to the data.
- You can clean up the output viewer by deleting unnecessary graphs and tables.
- Resize your graphs in SPSS first, before copying them over. Never resize graphs in the target application.
- You may have to create separate graphs for Word and for PowerPoint.
- To copy the graph, simply select it, then right-click and select “Copy”. Then Paste it in any other applicatoin.
- For PowerPoint you may end up with small fonts. Make the font bigger in SPSS, before moving to PowerPoint. Test the resulting slide, to make sure people can easily read from a distance.