

Exercise #2 - GraphPad Prism

Psyc 402 - Spring 2015 - Dr. Diehr

Due at end of class session for full credit (10 points)

In this exercise you will gain experience using the Prism statistical software package and the course website assignment manager.

Preparation:

Take the Online Survey (*most of you already did this in class - if so, skip this step*)

To take the survey, you'll need your Student ID (a 6 or 9 digit number). To take the survey:

<https://survey.diehr.com:8403/>

Get the Data File (XLSX format)

Once the instructor has prepared the data file, you can download it here:

<http://courses.csusm.edu/psyc402md/assignments/Exercise02/>

The data file has 4 columns:

SubjectID	a random # for each student (not your student id!)
Q000	Subject ratings "I currently feel grumpy" (not used for this assignment)
Q001	Male Face : This person has an angry expression.
Q002	Female Face : This person has an angry expression.

All questions were answered with a 7-point Likert scale:

1:Strongly Disagree 2:Disagree 3:Somewhat Disagree 4:Neutral 5:Somewhat Agree 6:Agree 7:Strongly Agree

Important: For this exercise, you will only use Q001 (Male) and Q002 (Female). Please follow the instructions slowly and carefully. Use the final checklist to verify your work. See the Sample assignment at the end. Please ask for help if you need.

Descriptive Statistics

Describe and graph distributions of the Male and Female face ratings:

1. Open Prism
2. Create a new data table (hint: It is easiest if you create one data table for each variable you analyze)
3. Rename your data table to match your variable (e.g. "Male" or "Male Face" or similar)
4. Copy & Paste *one column* from the XLS spreadsheet. (You should end up with a single "Y" column)
5. Add a Title to the column
6. Click Analyze Data. Choose *Column Statistics / Frequency Distribution*. You should end up with a Results table labeled *Descriptive Statistics* and a graph named *Histogram of Male Face* (or similar)
7. Find the Graph below in the Graphs folder. Clean up, edit, and label your graph per APA format.
8. Add a Legend showing the 7-point Likert scale.
9. Add a Caption "Figure 1:..." and be sure to include the Mean(SD) values as well
10. Repeat these steps for the Female face ratings, making a new Data Table and Graph.

Inferential Statistics

Do a linear regression of the male vs. female face ratings and make a nicely-labeled graph.

1. Create a new Data Table in XY format (hint: Prism will ask you how many Y values will be entered for each X value: one)
2. Copy & Paste your data into the XY format table. Use X for Male and Y for Female.
3. Add titles to the columns.
4. Rename your data table to match your analysis (e.g. "Male vs. Female" or similar)
5. Click Analyze Data. Choose Linear Regression. Leave all default settings. You should end up with statistics in the *Results* folder and a scatterplot graph in the *Graphs* folder.
6. Clean up and label your graph per APA format.
7. In the Caption (or in a separate legend box) include the Linear Regression results (N, R^2 and P value)

(Continued...)

Make a single-page Layout containing your graphs

Hint: You can make changes either on the Graph or on the Layout - it's usually easier to make changes on the graph itself. These are automatically updated on the Layout.

1. Click the Layouts folder. This will give you a new layout - choose the layout with 3 graphs vertically (1 across, 3 down).
2. Drag each graph to the place-holder in this order: 1: Male histogram, 2: Female histogram, 3 : Linear Regression.
3. Click the Text box tool (T) and add a header to the page: Your Name, Exercise 2, Today's Date.
4. Clean it up so it's nicely formatted and easy to read.

Checklist

1. Make sure your Layout includes 3 graphs, and the graphs are properly labeled as described above. (See below for a sample of what your assignment should look like)
2. Make sure your name is on the Layout page.
3. Save the Prism file (Prism files are in a .PZF format).
4. Quit the Prism Application (this ensures that your assignment has been saved on disk)

Turning it In

1. Go to the assignment manager: <https://survey.diehr.com:8403/> and log in with your username and Student ID.
2. Choose *Upload Exercise 02 - Prism*
3. Upload your file.

Sample Assignment

The Layout page of your submitted Prism file should look roughly like this. (minor variations in organization/wording are OK)

Your Name
Psyc 402 - Exercise 2 - Spring 2015 Dr. Diehr - Feb 10, 2015

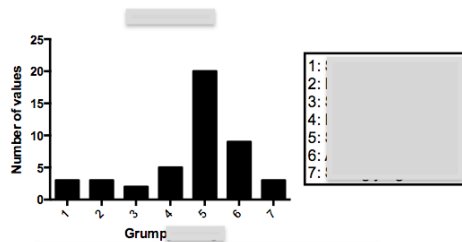


Figure 1:

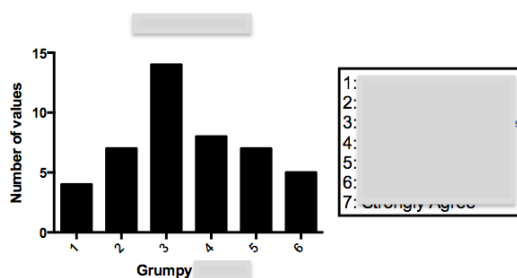


Figure 2:

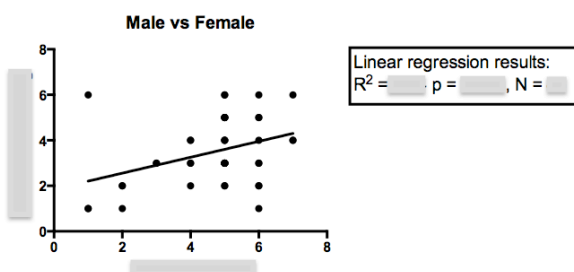


Figure 3: