

How can I create a scatterplot with a regression line in SPSS?

Authored by
stats writer

June 30, 2024

RECOMMENDED CITATION

stats writer (2024). *How can I create a scatterplot with a regression line in SPSS?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=162415>

To create a scatterplot with a regression line in SPSS, follow these steps:

1. Open the data set that you want to work with in SPSS.
2. Go to the "Graphs" menu and select "Legacy Dialogs."
3. Choose "Scatter/Dot" from the options and click "Define."
4. In the "Select the Scatter/Dot" dialog box, choose "Simple Scatter" and click "Define."
5. Select the variables you want to use for the X and Y axes in the "Simple Scatter" dialog box and click "OK."
6. Right-click on the graph and select "Chart Editor."
7. In the "Chart Editor," go to the "Element Properties" tab and select "Regression Line."
8. Customize the regression line by choosing the desired type, color, and other properties.
9. Click "OK" to save the changes and view the scatterplot with the added regression line.

By following these steps, you can easily create a scatterplot with a regression line in SPSS for your data analysis needs.

How can I create a scatterplot with a regression line in SPSS? | SPSS FAQ

There are at least two ways to make a scatterplot with a regression line in SPSS. One way is to use the graph command, and another way is to use the ggraph command. Both are illustrated below.

Let's read in an example dataset, hsb2, which contains data from the High School and Beyond study.

```
get file 'c:hsb2.sav'.
```

Let's do a scatterplot of the variables write with read.

Note that after running the code below, you need to

double click

on the graph, which will open up the chart editor window. Select "chart" from the menu at the top and then

"options" (which is the first item in the menu). On the right of the dialogue box is a check box called "Total" under the heading "Fit Line". Click on the box to

put in the check, or click on "Fit Options" to select a different type

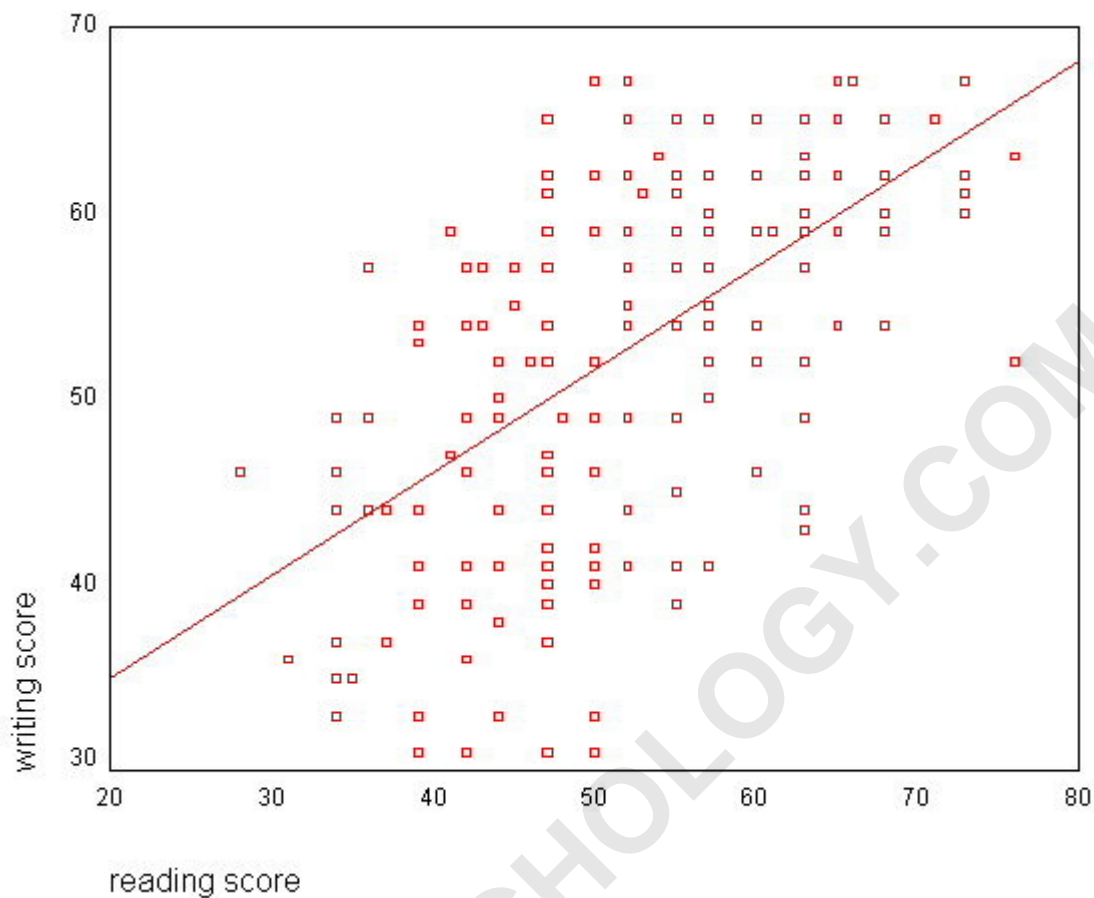
of fit method, such as lowess, quadratic or cubic. Close the chart editor

so that the changes to take effect on your graph.

Using the graph command

graph

/scatterplot(bivar)=read with write.



Using the
ggraph command

The ggraph command was introduced in version 14 of SPSS. This command can be used to create and edit scatterplots. Below is the syntax for creating a scatterplot with the regression line.

```
GGRAPH  
/GRAPHDATASET           NAME="graphdataset"
```

```
VARIABLES=read write  
/GRAPHSPEC SOURCE=INLINE.  
BEGIN GPL  
SOURCE: s=userSource(id("graphdataset"))  
DATA: read=col(source(s), name("read"))  
DATA: write=col(source(s), name("write"))  
GUIDE: axis(dim(1), label("reading score"))  
GUIDE: axis(dim(2), label("writing score"))  
ELEMENT: line( position( smooth.linear(read*write ) ) )  
ELEMENT: point(position(read*write))  
END GPL.
```

