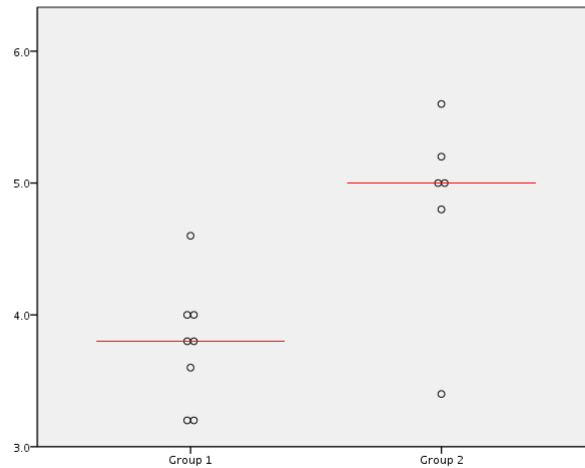


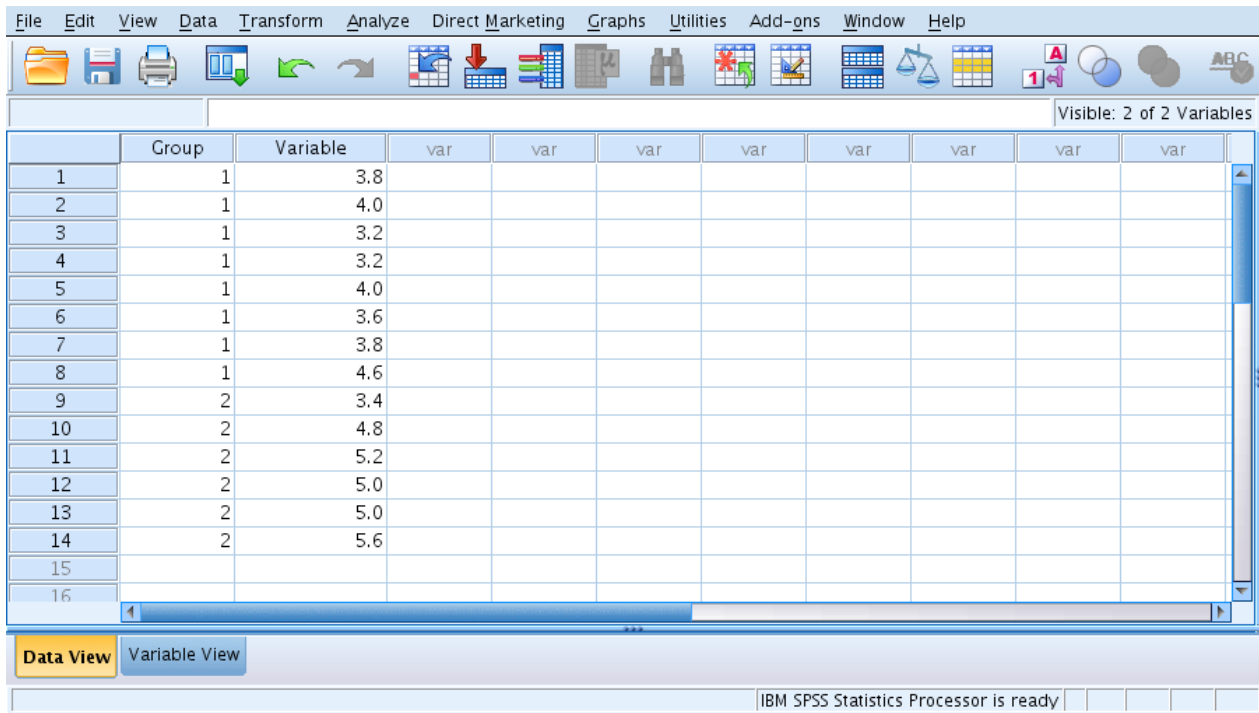
How to Create a Univariate Scatterplots for Independent Data (2 or more groups) in SPSS

These instructions will allow you to make graphs like this:

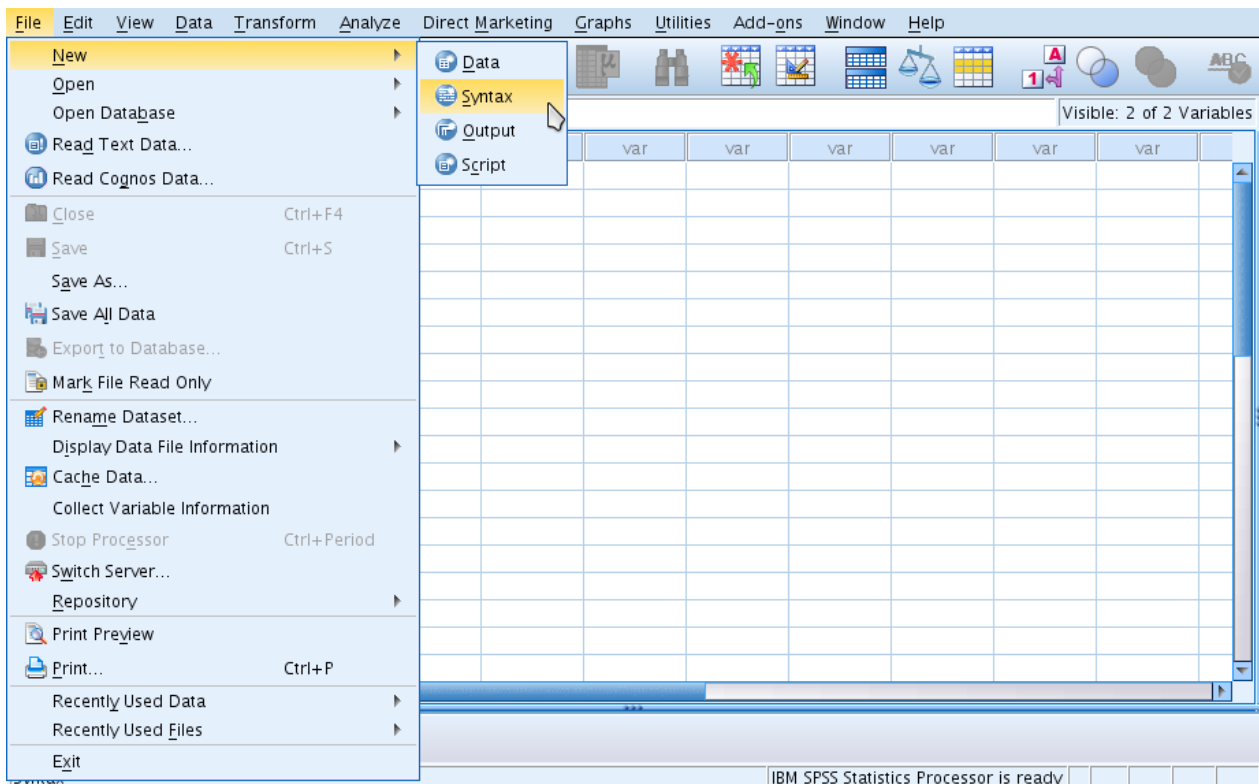


Use these instructions to create univariate scatterplots for independent data in two or more groups of subjects. Independent data means that the variable of interest is measured one time in each participant or specimen and participants or specimens are not related to each other.

1. Start SPSS and open your data file.



2. Under "File" menu select "New", and then "Syntax".



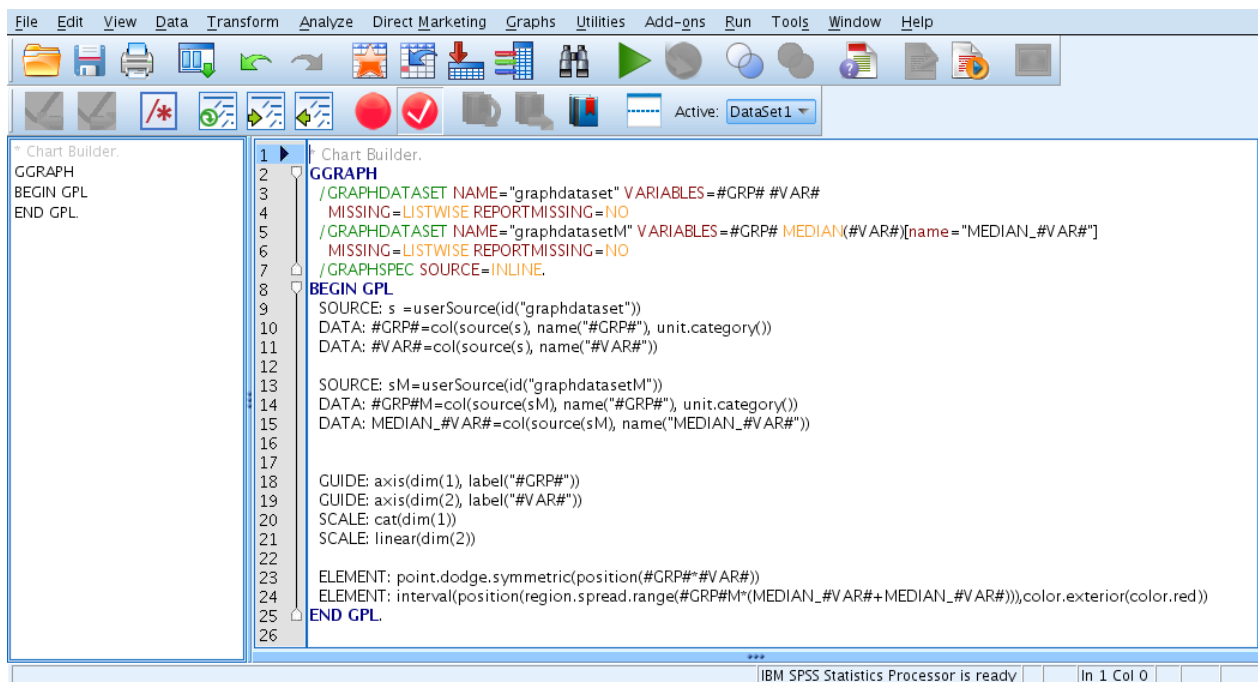
3. Copy the following code and paste it in the Syntax Editor window:

```
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=#GRP# #VAR#
  MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHDATASET NAME="graphdatasetM" VARIABLES=#GRP# MEDIAN(#VAR#)[name="MEDIAN_#VAR#"]
  MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
SOURCE: s =userSource(id("graphdataset"))
DATA: #GRP#=col(source(s), name("#GRP#"), unit.category())
DATA: #VAR#=col(source(s), name("#VAR#"))

SOURCE: sM=userSource(id("graphdatasetM"))
DATA: #GRP#M=col(source(sM), name("#GRP#"), unit.category())
DATA: MEDIAN_#VAR#=col(source(sM), name("MEDIAN_#VAR#"))

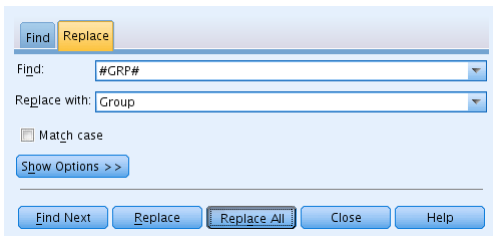
GUIDE: axis(dim(1), label("#GRP#"))
GUIDE: axis(dim(2), label("#VAR#"))
SCALE: cat(dim(1))
SCALE: linear(dim(2))
```

Pasted code should look like this:

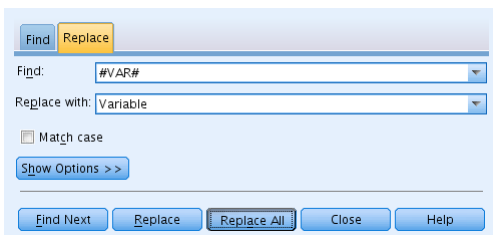


```
1 Chart Builder.
2 GGRAPH
3   /GRAPHDATASET NAME="graphdataset" VARIABLES=#GRP# #VAR#
4   MISSING=LISTWISE REPORTMISSING=NO
5   /GRAPHDATASET NAME="graphdatasetM" VARIABLES=#GRP# MEDIAN(#VAR#)[name="MEDIAN_#VAR#"]
6   MISSING=LISTWISE REPORTMISSING=NO
7   /GRAPHSPEC SOURCE=INLINE.
8 BEGIN GPL
9 SOURCE: s =userSource(id("graphdataset"))
10 DATA: #GRP#=col(source(s), name("#GRP#"), unit.category())
11 DATA: #VAR#=col(source(s), name("#VAR#"))
12
13 SOURCE: sM=userSource(id("graphdatasetM"))
14 DATA: #GRP#M=col(source(sM), name("#GRP#"), unit.category())
15 DATA: MEDIAN_#VAR#=col(source(sM), name("MEDIAN_#VAR#"))
16
17
18 GUIDE: axis(dim(1), label("#GRP#"))
19 GUIDE: axis(dim(2), label("#VAR#"))
20 SCALE: cat(dim(1))
21 SCALE: linear(dim(2))
22
23 ELEMENT: point.dodge.symmetric(position(#GRP#*#VAR#))
24 ELEMENT: interval(position(region.spread.range(#GRP#M*(MEDIAN_#VAR#+MEDIAN_#VAR#))),color.exterior(color.red))
25 END GPL.
26
```

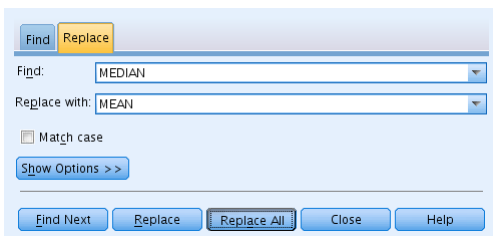
4. Under “Edit” menu select “Replace”. In the field “Find” write #GRP#, and in the field “Replace with” write the exact name of your grouping variable, and press the button “Replace all”.



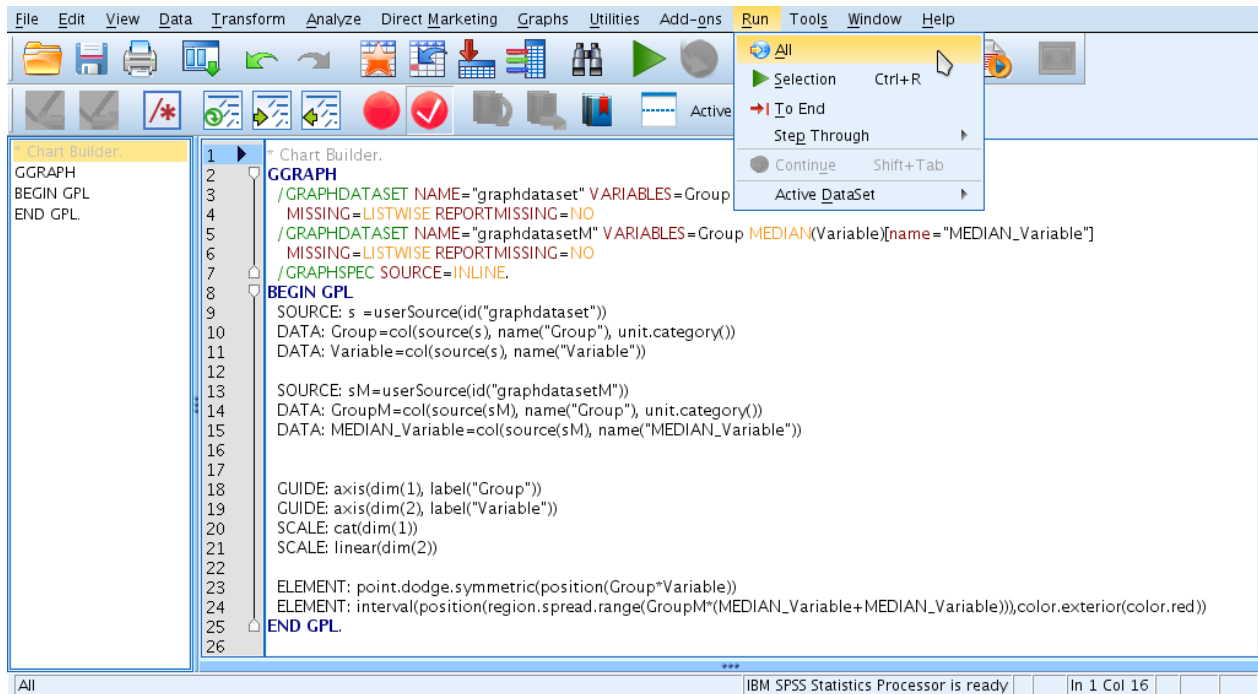
5. Repeat the same procedure for variable: in the field “Find” write #VAR#, and in the field “Replace with” write the exact name of your variable, and press the button “Replace all”.



6. Median is default option for presenting data on your dotplot. This can be changed by replacing all “MEDIAN” with “MEAN” as following:



7. Under the "Run" menu click "All" to run the script:



8. Your graph should look something like this. You can always double click on it to access formatting options that are available in SPSS software.

