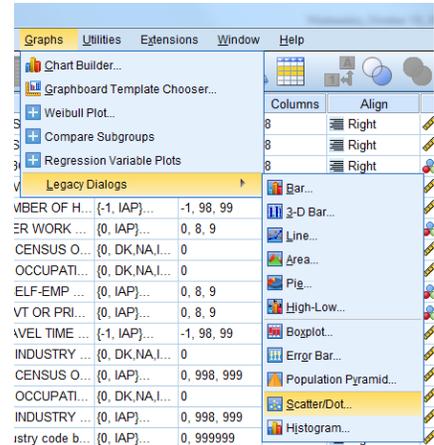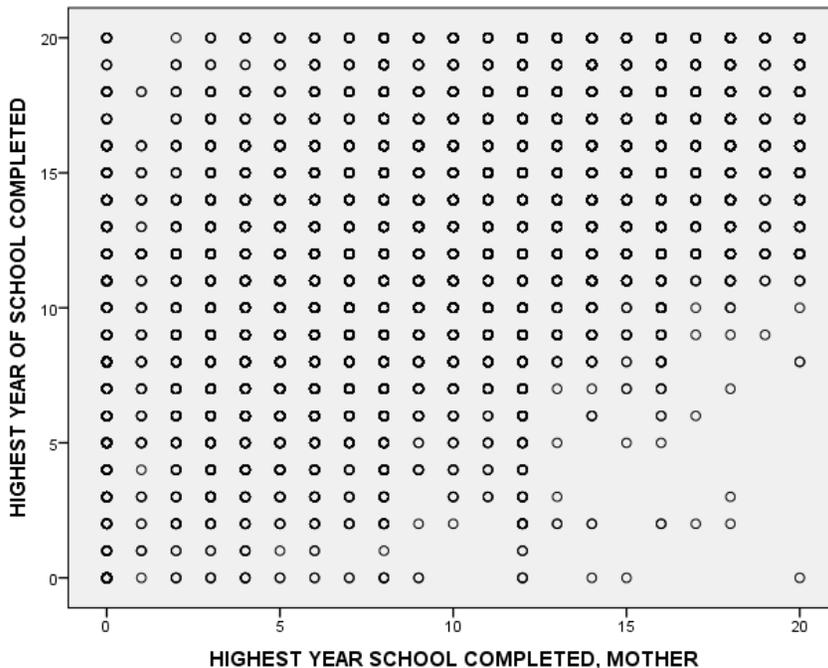# Adding "Jitter" to Scatterplots in SPSS.

Here is a scatterplot made using the **General Social Survey**. The scatterplot is made using the dialog boxes.

Graph

The graph ends up looking odd, because there are only a limited number of values for "Highest Year of School Completed," and a limited number of values for "Mother's Highest Year of School Completed."

Essentially, dots are **over-printed**, making it difficult to get any sense of the trends in the graph.

We could have also used the syntax below to make a scatter plot, but that would have led to the exact same graph with the exact same problem.

```
GRAPH
  /SCATTERPLOT(BIVAR)=maeduc WITH educ
  /MISSING=LISTWISE.
```

In order to solve this problem, we are going to need to create "jitter", or a small amount of random motion, for each dot, so that we can see the overall pattern of dots more clearly.   SPSS code using the `IGRAPH` command will let us do this. We enter this code in a syntax window using the particular variables in which we are interested.

```
IGRAPH / Y = educ / X1 = maeduc / SCATTER COINCIDENT = JITTER.
```

Interactive Graph

This SPSS code produces the graph below.

I have double clicked on the graph, and further tweaked the graph slightly by making the dots smaller, with a red center, and black border, to improve the visual presentation.

In this graph with "jitter", it is much easier to see the overall trend.