

Why Stata Is Better (At Graphing) Than R

Andy Grogan-Kaylor

7 Apr 2022 15:43:09

Both R and Stata are programs with strong data visualization and analysis capabilities. However, Stata's capabilities as a data visualization program are sometimes under-rated. The intent of the post is to show that Stata can often perform the same graphing task as R, with much simpler, and much more intuitive, command syntax.

This post uses simulated social service agency data clients. In each program, I am going to graph mental health of clients (at Time 2) by program.

Stata

```
. import delimited "clients.csv", encoding(ISO-8859-2) clear // import data
(8 vars, 491 obs)

.
. graph bar mental_health_t2, over(program) scheme(michigan) asyvars // bar graph of m
> ental health over program
```

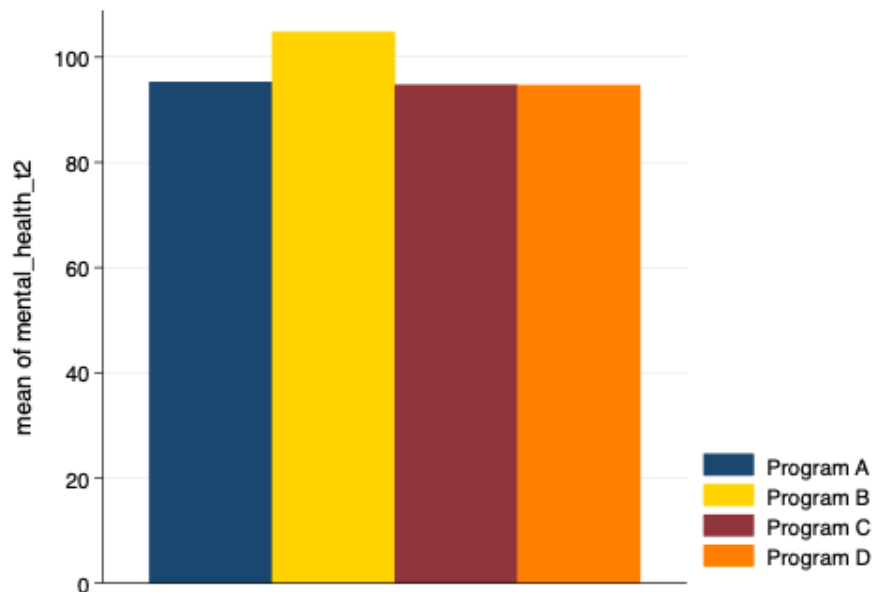


Figure 1: Bar Graph in Stata

R

```
> library(readr) # library to import data
>
> clients <- read_csv("clients.csv") # import data
>
> library(ggplot2)
>
> library(michigancolors)
>
> ggplot(clients, # the data that I am using
+   aes(x = program, # 'aesthetic' includes x
+     y = mental_health_T2, # and y
+     fill = program)) +
+   stat_summary(fun = mean, # summarizing y
+     geom = "bar") + # with bars
+   scale_fill_manual(values = michigancolors()) +
+   theme(axis.text.x = element_text(size = rel(.3)))
```

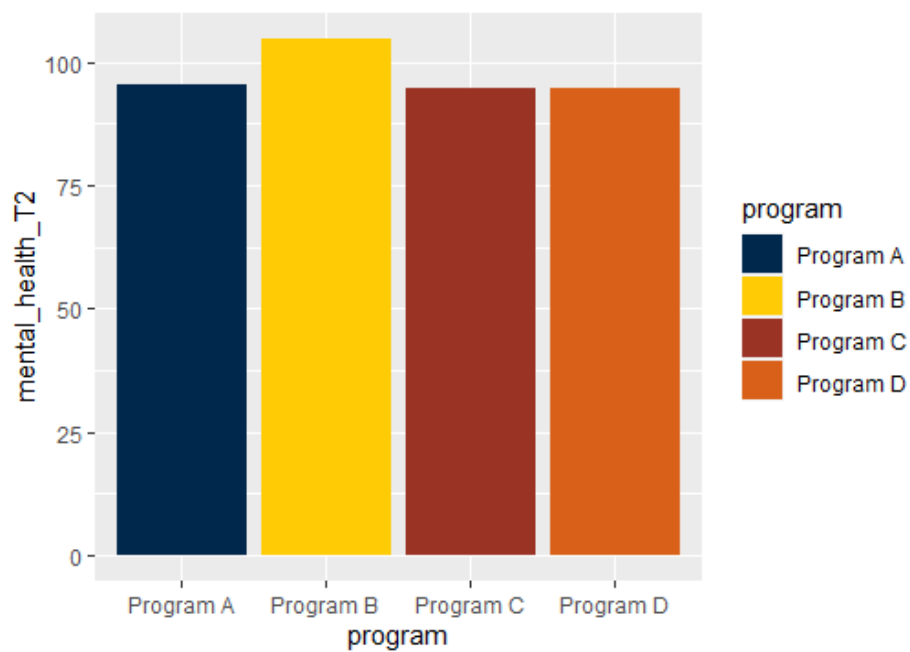


Figure 2: Bar Graph in R