Comparing Program Outcomes with ggplot2

Andy Grogan-Kaylor

September 26, 2018

Contents

1   Load the Data

```
load("social_service_agency.RData")
```

2   Load the Libraries

```
library(ggplot2)  # beautiful graphs

library(ggthemes)  # beautiful themes
```
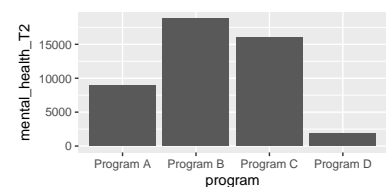
3   Basic Graph (x is program; y is mental health)

```
myplot1 <- ggplot(clients, # the data I am using
              aes(x = program, y = mental_health_T2)) # my variables
```

4   Add Geometries

4.1   Column Chart

```
myplot1 + geom_col()
```

4.2   Boxplot

```
myplot1 + geom_boxplot()
```

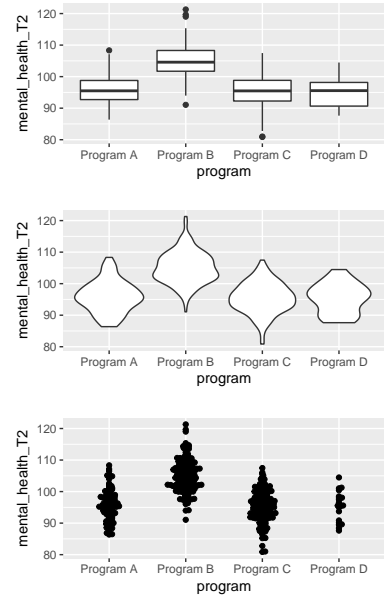## 4.3   Violin Plot

```
myplot1 + geom_violin()
```

4.4   Beeswarm Plot

```
library(ggbeeswarm)  # beeswarm geometry

myplot1 + geom_beeswarm()
```

5   Alternate Approach (x is mental health; facet wrap on program)

```
myplot2 <- ggplot(clients, # the data I am using
              aes(x = mental_health_T2)) + # my variable
  facet_wrap(~program) # facet on this variable
```

6   Add Geometries

6.1   Histogram

```
myplot2 + geom_histogram()
```

6.2   Density

```
myplot2 + geom_density()
```