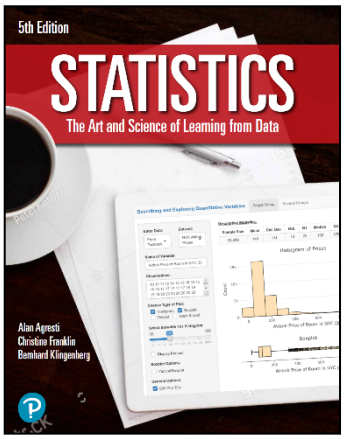


R Code for Examples in the book
"Statistics: The Art and Science of Learning from Data"
by Agresti, Franklin and Klingenberg, 5th edition

Chapter 2

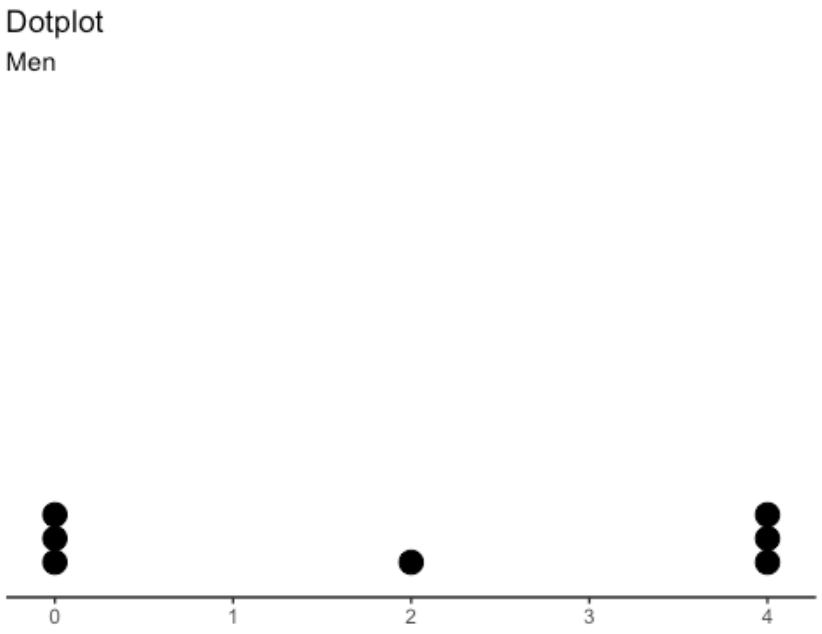
Example 12: Ideal Number of Children – Standard Deviation

Read in values:

```
men <- c(0, 0, 0, 2, 4, 4, 4)
women <- c(0, 2, 2, 2, 2, 2, 4)
```

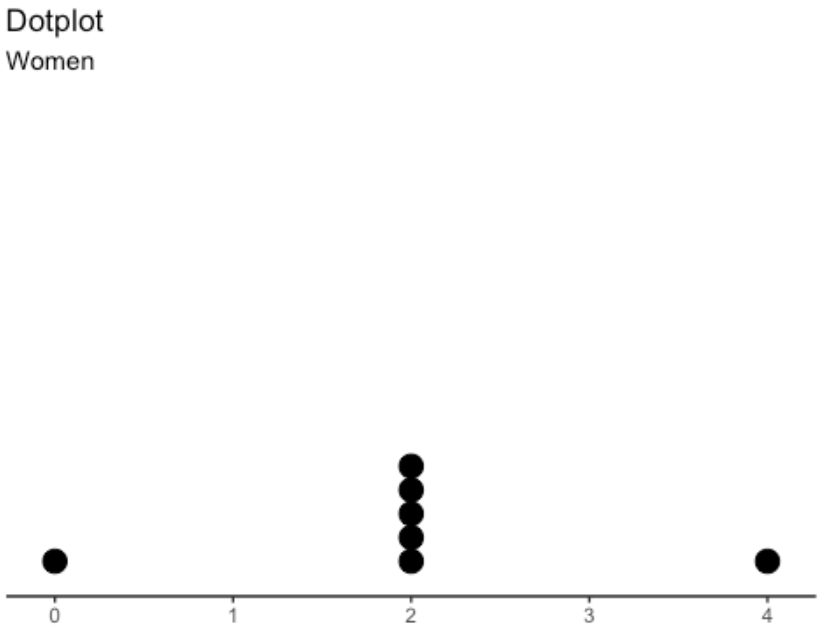
Dotplot for values for men

```
library(ggplot2)
ggplot(data.frame(men), aes(x = men)) +
  geom_dotplot() +
  labs(x = '',
       title = 'Dotplot', subtitle = 'Men') +
  theme_classic() +
  theme(axis.line.y=element_blank(),
        axis.text.y=element_blank(),
        axis.ticks.y=element_blank(),
        axis.title.y=element_blank()
        )
```



Dotplot for values for women

```
ggplot(data.frame(women), aes(x = women)) +
  geom_dotplot() +
  labs(x = '',
       title = 'Dotplot', subtitle = 'Women') +
  theme_classic() +
  theme(axis.line.y=element_blank(),
        axis.text.y=element_blank(),
        axis.ticks.y=element_blank(),
        axis.title.y=element_blank()
  )
```



To find the Standard Deviation

```
sd(men)

## [1] 2

sd(women)

## [1] 1.154701
```