

CPS85 Lab

Group 1

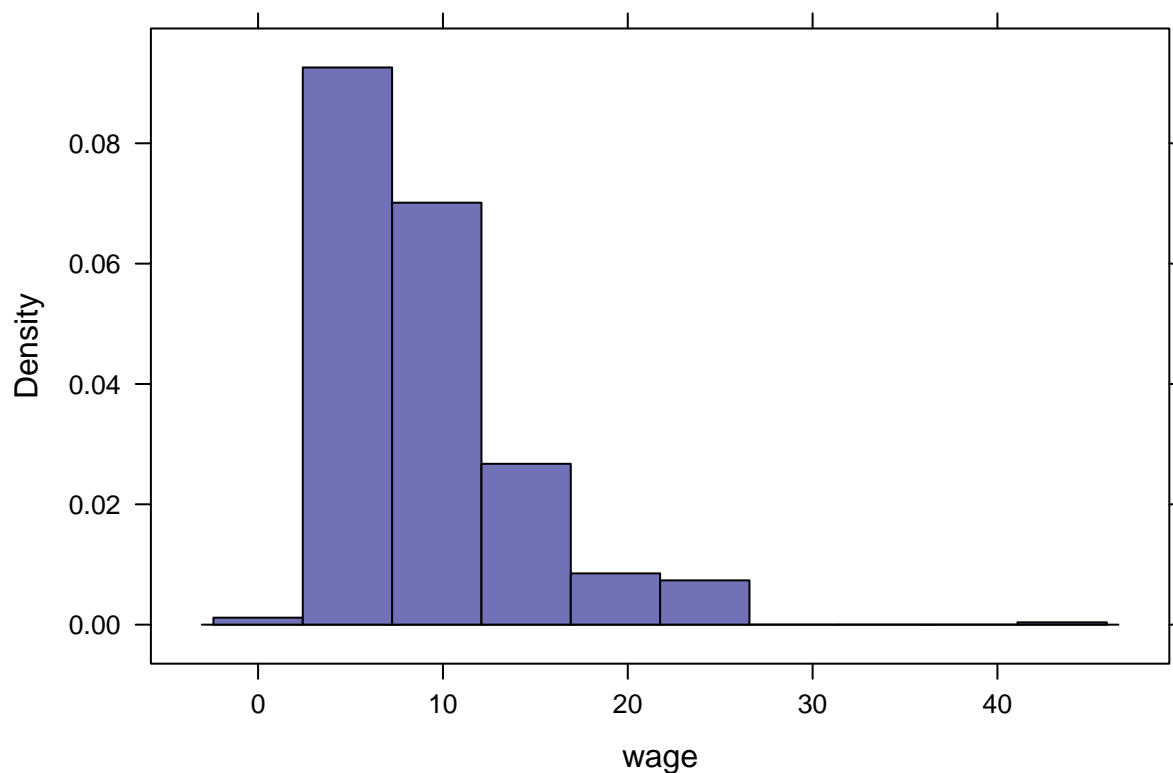
February 4, 2015

Instructions

Important: Make sure you delete this entire section before you submit your file to Moodle!

PLOT 1

```
histogram(~wage, data=CPS85)
```

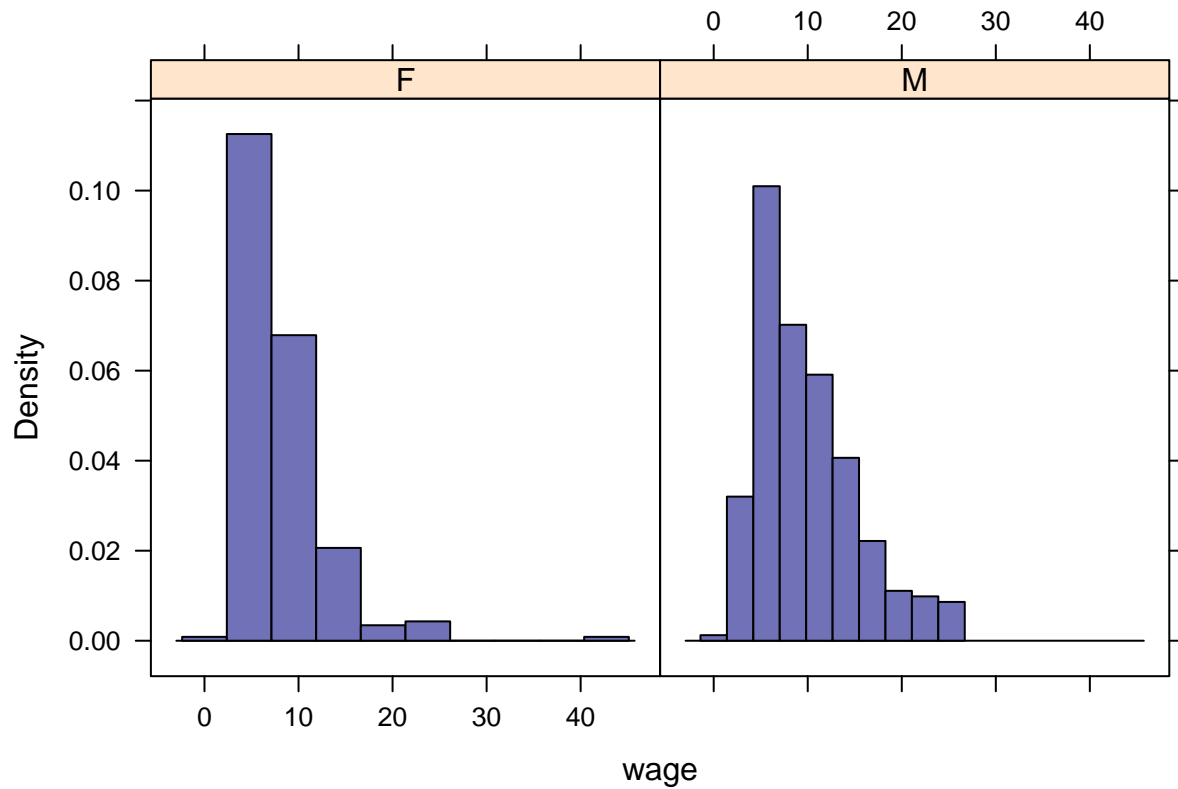


This is a histogram based on a relative amount of people making a certain wage. The histogram is skew right. There is an outlier at 44.5. The median is 7.78. There is a gap from around 27 to 44.5. The IQR is 6 and overall range is 44.5

Story: The wages are fairly low so it's mostly working class.

PLOT 2

```
histogram(~wage|sex, data=CPS85)
```

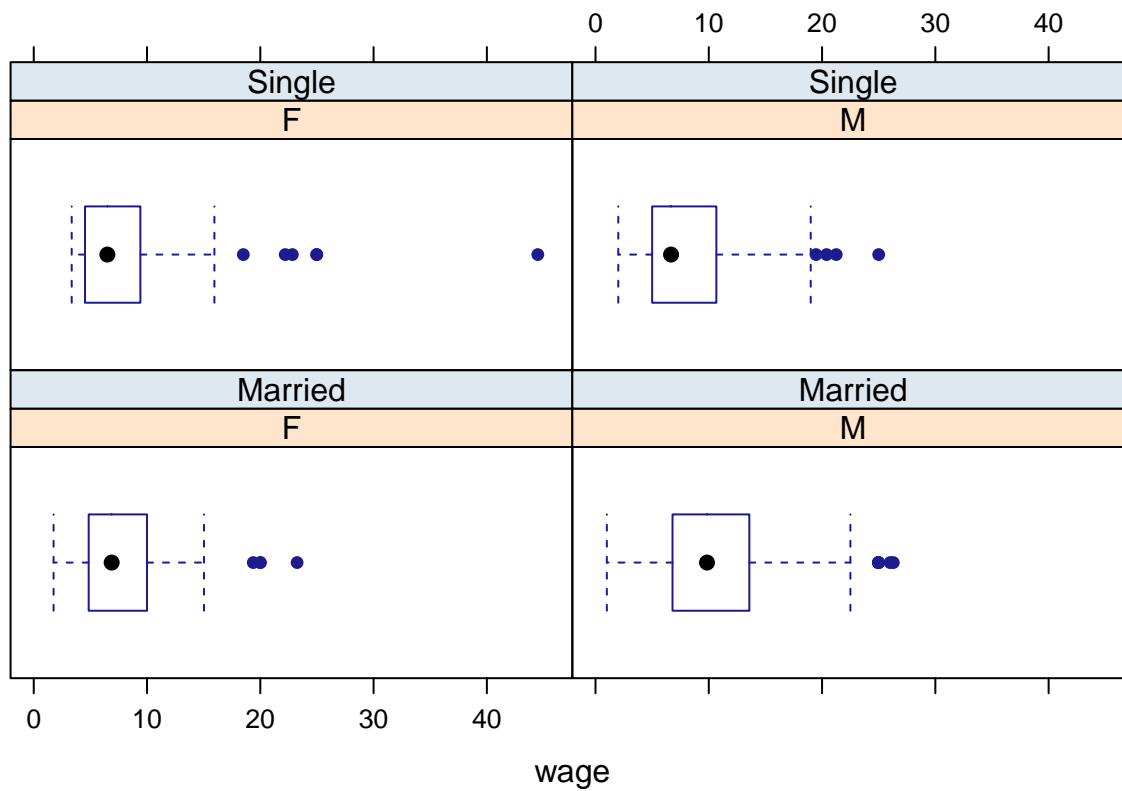


This shows a histogram of wage based on sex. The two histograms both have similar skews to the right. The female graph may be more skewed to the right than the male graph. The female graph has an obvious outlier at 44.5 and a gap from around 27 to 44.5. There is no gap or outlier for males. The males have a larger median at 8.93 while females have a median of 6.80. The females have larger overall range but the males have a larger IQR.

Story: In real terms, it seems that although females have the maximum wage, they are in fact discriminated upon as the median, in this case, normally tells the what a typical worker makes, and the male median is significantly larger than the female median.

PLOT 3

```
bwplot(~wage|sex+married, data=CPS85)
```



This shows side-by-side boxplots of wage conditional on sex and married status. All the distributions are skewed to the right, indicating lower wage. Single females experience the greatest number of outliers compared to married females or single/married males. As such, they experience the greatest wage range of 41.15.

Story: Single females experience a slightly lower median wage when compared to married females (6.5 compared to 6.88. Males). Males, however, experience a significantly higher median wage when they are married (9.85 compared to 6.67).