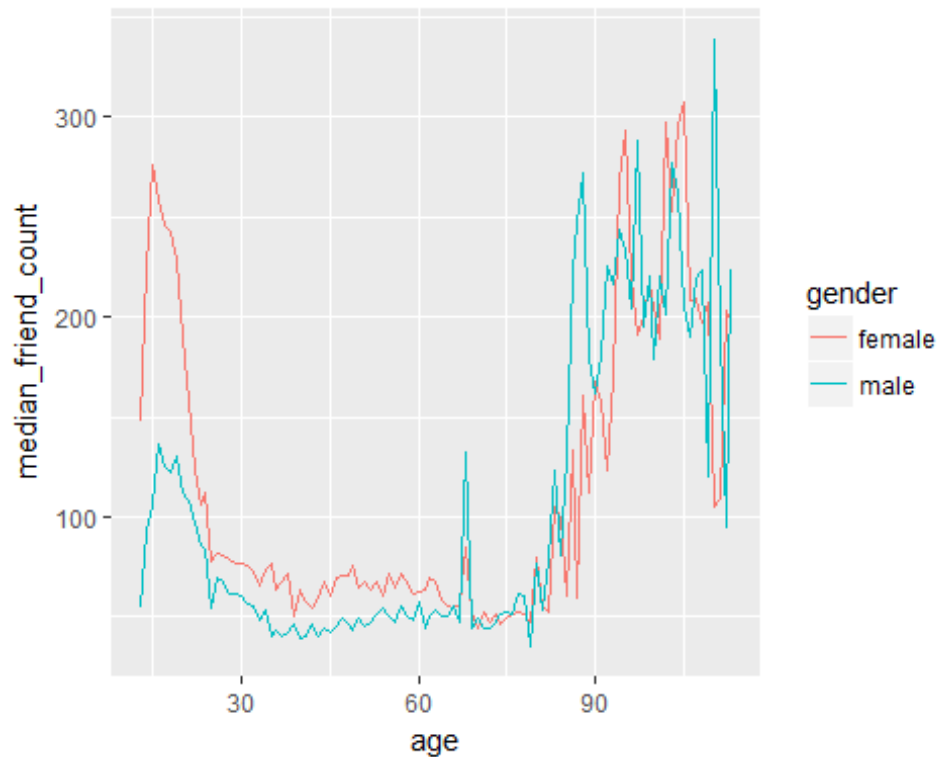# Facebook3Var

```r
#Grouping by age and gender
pf.fc_by_age_gender <- pf %>%
  filter(!is.na(gender)) %>%
  group_by(age, gender) %>%
  summarise(mean_friend_count = mean(friend_count),
            median_friend_count = median(friend_count),
            n = n()) %>%
  ungroup() %>%
  arrange(age)

#putting color in an aesthetic wrapper in the line
ggplot(pf.fc_by_age_gender, aes(x=age, y=median_friend_count))
+geom_line(aes(color=gender))
```

```r
#Creating a wide dataframe
library(reshape2)
pf.fc_by_age_gender.wide <- dcast(pf.fc_by_age_gender,
                                  age ~ gender,
                                  value.var = 'median_friend_count')

#Plotting the multiple of friends that females have compared to men
ggplot(pf.fc_by_age_gender.wide, aes(x=age, y=female/male))
+geom_line(color='lime green')+
  ylab('xMale Friends')
```