

### Analysis of the American Time of Use Study

We use the data from the American Time of Use Study to investigate changes in the average amount of TV watched over years for each sex or age in the US. In addition, all statistics are computed using the sampling weights because the ATUS is a complex survey.

From the figure 1 below, we can see that the mean time spent on watching TV of population over time for each sex. The mean time spent on watching TV tended to increase during that 10 years. And we guess that the change in mean TV viewing over time is same. Male spent more time on watching TV than female.

Then we do the GLM test to verify it. P-value for year and sex combination in type3 is 0.5078. Therefore, there is NO evidence that the change in mean TV viewing over time is different between males and females. And then, P-value for year and age combination in type3 is 0.0002. Thence, there is evidence that the change in mean TV viewing over time is different between age groups.

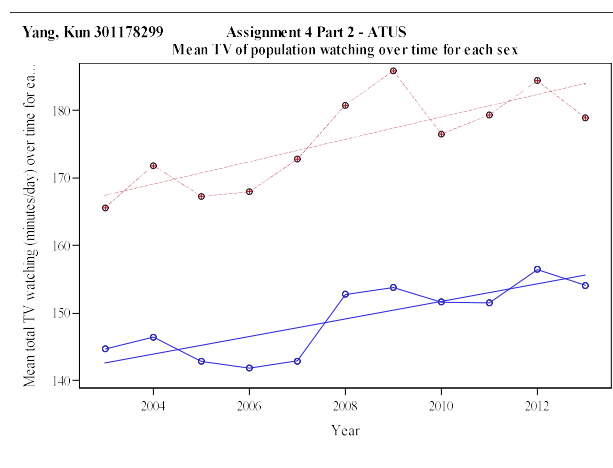


Figure 1: The mean time spent on watching TV over years for each sex.