

ECO 307: Econometrics

Instructor: James Murray

Homework Assignment: Introductory Statistics

Due Monday, October 5, 2015 to the appropriate D2L drobox rolder

Fall 2015

The dataset posted on the class website, `maletimeuse.csv`, includes data from the 2014 American Time Use Survey on employed adult males with partners who are also employed. Variables include weekly earnings (`EARNWEEK`), partner's weekly earnings (`SPEARNWEEK`), usual number of hours worked per week (`UHRSWORKT`), partner's usual number of hours per week (`SPUSUALHRS`), years of education (`EDUCYRS`), and a binary variable equal to 1.0 if the person is White/Caucasian and 0.0 otherwise (`WHITE`).

1. Do men on average work a different number hours per week than their partner? Test the appropriate hypothesis. Compute and interpret a 95% confidence interval for the difference between male's usual weekly hours and their partners'.
2. Do White/Caucasian people have a different average weekly total earnings than non-whites? Test the appropriate hypothesis. Compute and interpret a 95% confidence interval for the difference between average weekly earnings for whites versus non-whites.
3. Is there a relationship between educational attainment and weekly earnings? Test the appropriate hypothesis. Construct and interpret a 95% confidence interval for the appropriate statistic. Comment on the nature of the relationship.
4. Test the hypothesis that employed men work on average more than 40 hours per week. Construct and interpret a 95% confidence interval for the average number of hours that men usually work per week.