Intro to Social Science Data Analysis

Seminar 9: Overview of Statistical Inference (II)

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October 19, 2012

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```r
library(openintro)
data(satGPA)


# To see a variable descriptions type:
?satGPA
```

Pick 3 continuous variables and formulate null and alternative hypotheses for testing whether the sample is representative of the population.

Test these hypotheses with 95% and 99% confidence intervals.

Test these hypotheses using p-values at the 95% and 99% significance levels.

How do the results from the p-value tests correspond to the confidence interval tests?

Subset one of your variables by the variable sex.

It has the values 1 and 2.

Is there a significant difference in the mean value of the variable for SATV and SATM in the two groups of sex?