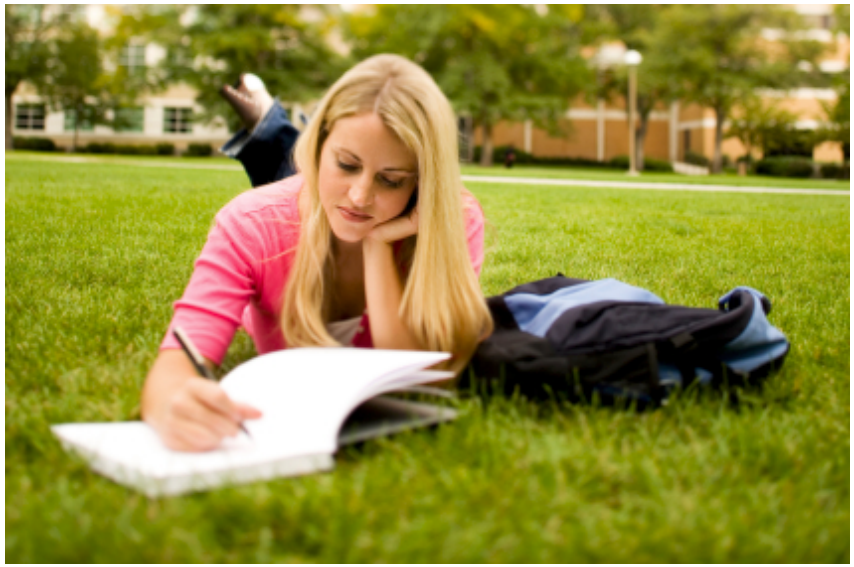
Lab 9: Post Student-Survey Data



Students at The University of Texas at Austin answered a set of questions for us at the beginning of the semester and then again at the end. We'll use this data to compare different groups, and to explore what has (or has not) changed over time for

these students.

(2 points possible)

Review of Two-Sample t-Tests

Help

In this lab, you will use **two-sample t-tests** to answer a question of interest. Let's start by remembering why we use these hypothesis tests.

Two samples are considered **dependent** when:

- each score in one sample is paired with a specific score in the other sample. ✔
- the variables of interest are both measures of time.
- we expect the difference to be statistically significant.
- the subjects have not been randomly assigned.

Two samples are considered **independent** when:

- there is no statistically significant difference between the means of both samples.
- the scores are recorded without measurement error.
- the scores of one sample do not affect the scores of the other sample. ✔
- the subjects are being measured on variables that are time-dependent.

Help

YES YES YES

Hide Answer *You have used 0 of 2 submissions*

(2 points possible)

Lab Preparation

In this lab you will be working with data from the UT Post Student Survey.

1. Open RStudio. Make sure you've installed the SDSFoundations package.
2. Type **`library(SDSFoundations)`** This will automatically load the data for the labs.
3.Type **`post <- PostSurvey`** This will assign the data to your Workspace.

Alternatively, you can use follow the steps in the "Importing a Data Frame" R tutorial video, and use the PostSurvey.csv file. (Right-click and "Save As.") Make sure to **name** the dataframe "post" when importing.

1. Open RStudio.
2. Click on "Import Dataset" button at the top of the workspace window. Choose *"from text file."*

3. Click on the location of the PostSurvey.csv file you just downloaded.
4. Click on the PostSurvey.csv file. Then, click Upload.

Feel free to use the script from the week's PreLab, which you can modify for use in this Lab.

Help

We will be answering **each** of the following questions in lab. Match each question to the type of t-test needed to run the analysis.

Question 1: Do students at UT spend more time on homework per week in college than they did in highschool?

[ ] dependent t-test

Question 2: Do students in fraternities and sororities get less sleep on the weekends than other college students?

[ ] independent t-test

EXPLANATION

Hide Answer *You have used 0 of 2 submissions*

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