

Average Spending Per Order in a Fast Food Restaurant

Objective: to understand the average customer spending per order in a fast food restaurant.

Preparation:

- Determine **which** store to visit
- Determine **when** to visit the store. Pick a proper time so that more data can be collected in a short period of time.
- **Make a hypothesis** on the average spending per order in a fast food restaurant before you actually collect the data. You only need one for research/alternative hypothesis.

Example of possible hypotheses:

- The average spending per order is more than \$5.
- The average spending per order is less than \$10.
- The average spending per order is not \$6.

You will make a hypothesis statement yourself based on the restaurant that you plan to visit for data collection. When you make such a hypothesis you should consider the time factor and the location factor. The location and time of the day should also be considered as part of your hypothesis statement.

- Determine the **sample size**. (How large a sample to be collected?) Try to collect a sample of 30 or more orders.
- Write a section in your paper, call it “Introduction”, to describe your research hypothesis and how you reached your research hypothesis.

Data Collection:

- Although this is just a class activity. when collecting data, please do not interfere with any person or customers during data collection. Do not collect data from a restaurant that does not allow you to do such an activity. It is preferred that you sit at a table near cashier to listen to the total amount charged to avoid possible bias.
- Again, do not collect the data before you reach a decision on your hypothesis.
- Write a section in your paper to describe data collection process.

Data Processing and Descriptive Statistics:

- Create a data file and use your name as part of the file name to store it and you will need to turn in your data file along with your report.
- Generate statistical graphs to describe your data. This could be a histogram or any other graphs.
- Compute descriptive measures such as mean and standard deviation, etc.
- Write a section in your paper to report these descriptive statistics.

Inferential Statistics:

- Do a t-test to see if the data support your hypothesis, report the p-value of the test, including the normality test, and conclusion your analysis.
- Produce a 95% confidence interval for estimating the average spending per order.
- Write a section in your paper to describe these two inferential statistics and the results of your analysis. Also include the SPSS output on the test and confidence interval and normality test.

Write a summary for your report as the last section of your term project report paper that summarizes your analysis and reports any limitations in your research project.