

## 11.1 PROJECT

### MODIFYING THE FOCUS OF A STUDY

When presented with the results of a study, it's important to consider the study as a whole before deciding what to do with the information presented. Determining the population and variables of a study will help you understand what was being analyzed. Understanding the results that are presented will help you know whether the type of information used was selected for a reason and whether it might skew the perceived outcome. In this project, you will explore adjusting the study to create more useful results.

1. A study performed by the Refuel Agency<sup>1</sup> determined that college students spent \$39.6 billion on food in 2020. Identify the population and the variable in this study.
2. Consider the population and variable from the study found in part 1. Can this information be used to say anything specific about the population at the college you attend? Explain why or why not.
3. Let's create a more focused population. List three characteristics or restrictions that can be used to define a smaller population that is a subset of the original population. Then, use one or two of these characteristics to create a more specific population description.
4. Now, let's create a more manageable variable. List three characteristics or restrictions that can be used to more clearly define a narrower variable that is a subset of the original variable. Then, use one or two of these characteristics to create a more specific variable description.
5. Write a new research question using the population from part 3 and the variable from part 4.

Now that we have a new research question, it's time to decide which sampling method to use. We will assume that the population chosen is too large to get data from every single student in it. (If the population is small enough to get data from every person in it, expand it before continuing to the next steps.)

6. Create a short survey that could be used to collect the data that you need to answer your research question.
7. Select one of the sampling methods and explain why you chose it.
8. Explain why the remaining sampling methods were not chosen.
9. Identify two possible types of bias that your choice of sampling may have.

<sup>1</sup> "Is Your Brand Effectively Marketing to College Undergrads?" Refuel Agency, Last Accessed November 9, 2021, <https://www.refuelagency.com/blog/market-to-college-students/>