

Developing an Analysis Plan



Main Points for Developing An Analysis Plan

1. Use your research questions to identify specific survey questions you need to ask your respondents.
2. Develop a plan for how you will analyze your data, including whether where you intend to use quantitative and qualitative approaches.

What survey questions do I need to ask in order to answer my research questions?

Using your research questions, you can begin to develop an analysis plan for how you intend to answer your research questions using your data. This can help identify specific questions that are necessary to ask in your survey. When developing your analytic plan, it is important to look to your research questions to get a sense of what data you need to make sure to collect.

Sample Research Question	Data needed to Answer
1) How do Clark students feel about the University shuttle?	Can use an open-ended question like “How has your experience been using the Clark University shuttle?” or closed questions like “How satisfied are you with the Clark University dining hall?” (1=Very dissatisfied, 5=Very satisfied)
2) Are first year Clark University students satisfied with the shuttle?	When asking “How satisfied are you with the shuttle?” one also needs to ask what class year students are to look specifically at the population for whom the issue is relevant (i.e., we specifically want to know if first years are satisfied with the shuttle, we need to be able to sort those students out).
3) Have student feelings and satisfaction about the shuttle changed from 2016 to present?	Consider whether you have past data to draw on. Was a version of this project done in 2016?

	If so, use the same question previously used to be able to directly compare the responses.
4) Do international and domestic students differ in their level of satisfaction with the hours?	You will need to have information about student citizenship to compare international and domestic students. You will also need to specifically ask about hours used (“How satisfied are you with the shuttle’s hours?”)
5) Did students who used the shuttle late at night have a more favorable impression?	You will need to know which students used the shuttle late at night. “In the past semester, have you taken or attempted to take the shuttle in the evening?” You also need a question asking about student impressions of the shuttle (“What is your overall impression of the shuttle at Clark?”)

From this assessment, we can get a sense at an early structure of our survey. While our survey will likely include additional questions, these are some of the most important questions for answering our top-priority research questions. You can see the some questions will help us address multiple research questions, which is a great way to use your survey space strategically.



Sample survey based on our research questions

1. How has your experience been using the Clark University shuttle? (Open-ended)
- Helps address Research Question #1
2. How satisfied are you with the Clark University shuttle overall? (Options: very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied)
- Helps address Research Questions #1, #3, and #4
3. How satisfied are you with the shuttle's hours? (Options: very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied)
- Helps address Research Questions #1 and #4
4. What is your class year? (Options: First year, Sophomore, Junior, Senior, Graduate Student)
- Helps address Research Question #2
5. What is your overall impression of the shuttle at Clark? (Options: Very favorable, favorable, neutral, not favorable, very unfavorable)
- Helps address Research Questions #3 and #5
6. In the past year, have you taken or attempted to take the shuttle after 7pm? (Options: Yes, No)
- Helps address Research Question #5
7. Are you a domestic or international student? (Options: Domestic, International)
- Helps address Research Question #4

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It can also be helpful to think about what types of analyses you will be conducting. You will likely be doing different analyses for different research questions. A good starting

point is determining whether a research question required a Quantitative or Qualitative approach. Below is an overview of the two approaches, with further information linked.

Approach	Quantitative Approach	Qualitative Approach
Definition	Uses numerical data to answer the research question	Uses observational or word-based data to answer the research question.
Purpose	Using the responses to the sample to describe the population. Can summarize the sample and their experiences or look for differences, relationships, and predictors.	To identify themes, patterns, or insights to get a deeper understanding of a phenomenon or experience.
Common types of analyses	Percentages, frequencies, means, standard deviations, T-Tests, ANOVAs, Chi Squares, Correlations, Regressions	Thematic analysis, content analysis

[More about quantitative analyses!](#)

[More about qualitative analyses!](#)