

What Makes a Good Research Question?



What is a Research Question?

A research question guides and centers your research. It should be clear and focused, as well as synthesize multiple sources to present *your unique* argument. Even if your instructor has given you a specific assignment, the research question should ideally be something that you are interested in or care about. Be careful to avoid the "all-about" paper and questions that can be answered in a few factual statements.

Examples:

1. For instance, the following question is too broad and does not define the segments of the analysis:

Why did the chicken cross the road? (The question does not address which chicken or which road.)

2. Similarly, the following question could be answered by a hypothetical Internet search:

How many chickens crossed Broad Street in Durham, NC, on February 6, 2014? (Ostensibly, this question could be answered in one sentence and does not leave room for analysis. It could, however, become data for a larger argument.)

3. A more precise question might be the following:

What are some of the environmental factors that occurred in Durham, NC between January and February 2014 that would cause chickens to cross Broad Street?

(This question can lead to the author taking a stand on which factors are significant, and allows the writer to argue to what degree the results are beneficial or detrimental.)



How Do You Formulate A Good Research Question?

Choose a general topic of interest, and conduct preliminary research on this topic in current periodicals and journals to see what research has already been done. This will help determine what kinds of questions the topic generates.

Once you have conducted preliminary research, consider: Who is the audience? Is it an academic essay, or will it be read by a more general public? Once you have conducted preliminary research, start asking openended "How?" "What?" and Why?" questions. Then evaluate possible responses to those questions.

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Examples:

Say, for instance, you want to focus on social networking sites. After reading current research, you want to examine to what degree social networking sites are harmful. The Writing Center at George Mason University provides the following examples and explanations:

Possible Question: Why are social networking sites harmful?

An evaluation of this question reveals that the question is unclear: it does not specify which social networking sites or state what harm is being caused. Moreover, this question takes as a given that this "harm" exists. A clearer question would be the following:

Revised Question: How are online users experiencing or addressing privacy issues on such social networking sites as Facebook and Twitter?

This version not only specifies the sites (Facebook and Twitter), but also the type of harm (privacy issues) and who is harmed (online users).

While a good research question allows the writer to take an *arguable* position, it DOES NOT leave room for ambiguity.

Checklist of Potential Research Questions in the Humanities (from the Vanderbilt University Writing Center):

- 1) Is the research question something I/others care about? Is it arguable?
- 2) Is the research question a new spin on an old idea, or does it solve a problem?
- 3) Is it too broad or too narrow?
- 4) Is the research question researchable within the given time frame and location?
- 5) What information is needed?

Research Question in the Sciences and Social Sciences

While all research questions need to take a stand, there are additional requirements for research questions in the sciences and social sciences. That is, they need to have **repeatable** data. Unreliable data in the original research does not allow for a strong or arguable research question.

In addition, you need to consider what kind of problem you want to address. Is your research trying to accomplish one of these four goals?¹

- 1) Define or measure a specific fact or gather facts about a specific phenomenon.
- 2) Match facts and theory.
- 3) Evaluate and compare two theories, models, or hypotheses.
- 4) Prove that a certain method is more effective than other methods.

Moreover, the research question should address what the variables of the experiment are, their relationship, and state something about the testing of those relationships. The Psychology department at California State University, Fresno, provides the following examples and explanations:

¹ David Porush, A Short Guide to Writing About Science. (New York: Harper Collins, 1995), 92-93.

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Examples:

Possible research question: Are females smarter than males?

This question delineates the variables to be measured: gender and intelligence. Yet, it is unclear how they will be evaluated: What method will be used to define and measure intelligence?

Revised question: *Do females age 18-35 score higher than adult males age 18-35 on the WAIS-III?* (The WAIS-III is a standardized intelligence test.)

This research question produces data that can be replicated. From there, the author can devise a question that takes a stand.

In essence, the research question that guides the sciences and social sciences should do the following three things:²

- 1) Post a problem.
- 2) Shape the problem into a testable hypothesis.
- 3) Report the results of the tested hypothesis.

There are two types of data that can help shape research questions in the sciences and social sciences: quantitative and qualitative data. While quantitative data focuses on the numerical measurement and analysis between variables, qualitative data examines the social processes that give rise to the relationships, interactions, and constraints of the inquiry.



Writing After the Research Question

The answer to your research question should be your thesis statement. Keep in mind that you will most likely continue to refine your thesis statement as you conduct and write about your research. A good research question, however, puts you well on your way to writing a strong research paper.

Helpful Links

- http://writingcenter.gmu.edu/?p=307
- http://vanderbilt.edu/writing/manage/wp-content/uploads/2013/06/Formulating%20Your%20Research%20Question.pdf
- http://www.esc.edu/online-writing-center/resources/research/research-paper-steps/developing-questions/
- http://psych.csufresno.edu/psy144/Content/Science/researchquestion.html

² Lee Cuba, *A Short Guide to Writing About Social Science*, third edition. (New York: Addison-Wesley Educational Publishers, Inc., 1997), 70-71.