

What is a research question?

Fundamentals of Academic Writing

Research

- Systematic investigation to establish facts and reach conclusions

The diagram consists of three callout boxes pointing to the text 'Systematic investigation to establish facts and reach conclusions'. The 'Methods' box is red, the 'Data' box is blue, and the 'Conclusion' box is green. Each box is a rounded rectangle with a pointed tail pointing towards the text.

Methods

Data

Conclusion

Research question

- Helps determine appropriate methods
- Helps define valuable data
- Gives a goal to work toward, and makes the conclusion sensible and worthwhile

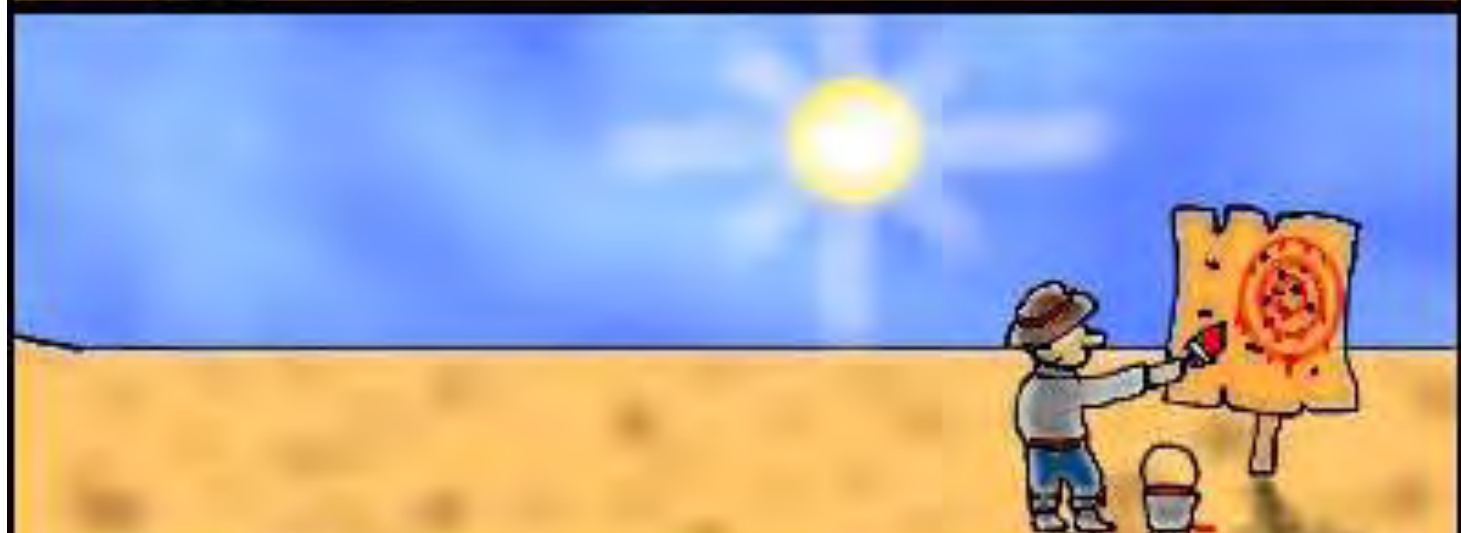
Life, the Universe, and Everything

- The ultimate answer to life, the universe, and everything is: 42.

Without a question, it is difficult to make sense of what you find.



Texas Sharp-shooter Fallacy

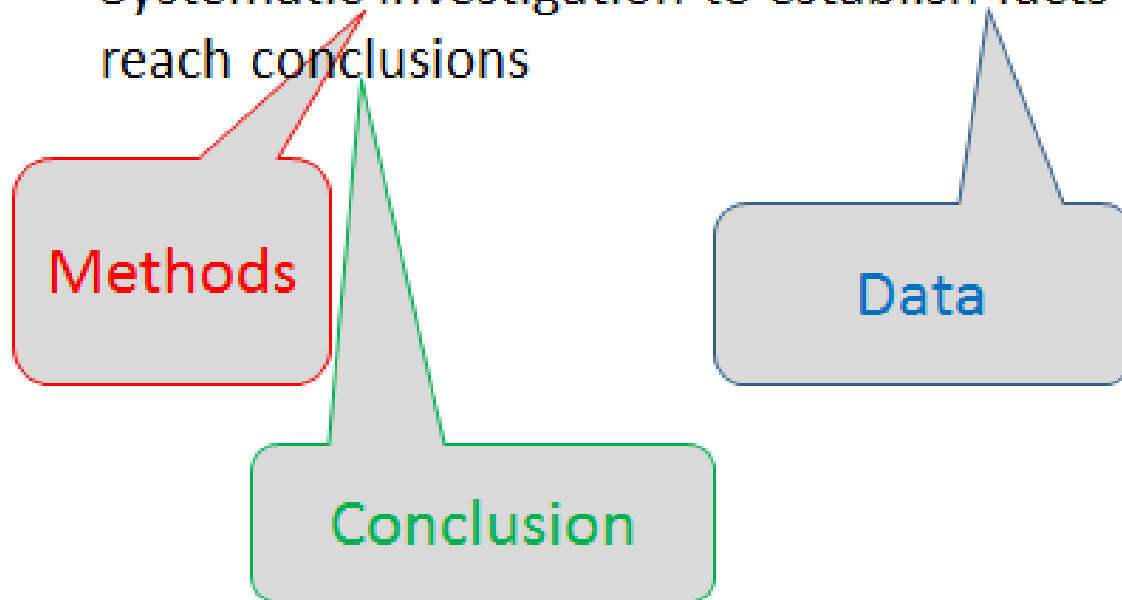


Texas Sharp-shooter Fallacy

- Unless you define the question *from the beginning*, you may not be doing research.

Research

- Systematic investigation to establish facts and reach conclusions



Research question

- Identify some phenomena, event, or area that interests you.
- Ask one or more specific questions:
 - What
 - Why
 - etc.
 - How
 - When
- (Yes/no questions tend to be less interesting, but they are also possible.)

Research question

- A topic (without a specific question) leaves you with too much to study or write about.
 - “Juvenile crime”
- Asking a question provides focus.
 - How does skipping school relate to juvenile crime?
 - What factors in the home predict juvenile crime?
 - How do rates of juvenile crime differ in cities versus rural areas?

Research question

- Questions can be too broad.
 - Why do some teenagers commit crimes?
- Questions can be too narrow.
 - How many crimes were committed in Nagoya in 2013?
- A good question should be *specific* but not *trivial* to answer.
 - How do school attendance rates correlate with rates of juvenile crime?

Two uses (at least)

- While researching
 - A well-defined question can guide data collection, theory selection, methods of analysis, etc.
- While writing
 - A well-defined question helps create the thesis statement and structure the paper.

Research question

- **Literature review** can help focus the question.
 - Survey what is already known
 - Identify key theories, methods, or findings
 - Look for gaps in current research
- (Literature review can also help you find theories to test, or methods that have been successful in the past.)

Research question

- Identify some phenomena, event, or area that interests you.
- Ask a specific question that you can answer.
- Make sure the question is not too simple (trivial) or too difficult (impractical, non-factual) to answer.
 - Some questions cannot be answered factually.
"Is AKB48 as good as Morning Musume?"

Research question

- There is no one right way to turn an interest into a research question.
- But here are some things to keep in mind.
 - Relevance
 - Interest
 - Manageability
 - Clarity
 - Originality
 - Position in your field

Relevance

- Make your research question relevant to people in your field.
 - Your professor
 - Your colleagues
 - Other researchers
 - Other fields?
 - Future employers?
 - Industry/Government?
- Will an answer to your question fill a gap in knowledge? Will it change understanding? Will it affect practices?

Interest

- Make your research question interesting to other people *and to you*.
- It can take several weeks to several years to research, write, and publish. Stay interested.
- Avoid common traps:
 - Fads. A question many people are doing now. Those trends change; will you stay interested?
 - Convenience. A project to fit a grant application or professor's request might not keep your interest.

Manageability

- The question should be one you can answer.
 - Limits on time. When will you graduate/publish?
 - Limits on access. Can you access the equipment, field sites, documents, etc. you need to study?
 - Limits on resources. Do you need money, lab, etc.?
 - Ethical limitations. What potential negative effects will the research have on people or the world?
 - Limits on ability. Do you have (or can you learn) the skills necessary to answer the question?

Clarity

- A complicated question might hide unclear thinking or gaps in your own understanding.
- A vague question can lead to muddled data and unclear or improper analysis.
- State your research question in one sentence (or one main question plus several specific sub-components).

Originality

- Your research should be a (reasonably) original contribution to your field.
- Research that simply replicates previous findings is unlikely to be published.
- Your question should show your imagination and/or particular interests.
- (A question *based* on previous research is fine, but it should *differ* in at least one dimension.)

Position in the field

- Originality is important, but so is fitting with other research.
- How is your question similar to other research? How is it different?
- (Your paper should cite and respond to other work in your field. Writing the literature review is a major focus of my Developing Academic Writing course.)

Research question

- Identify some phenomena, event, or area that interests you.
- Ask a specific question that you can answer.
- Make sure the question is
 - Relevant
 - Manageable
 - Original
 - Interesting
 - Clear
 - Positioned in your field

Group work

- With your group, discuss your interest and suggest possible research questions.
- Try to fill in the following information

Research question (clarity & originality)	Justification (relevance, interest & position)	Practical issues (manageable)	Ethical issues (manageable)	Data sources and methods