Penulisan Proposal
CII4A2

Research and the Research Problem

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Adopted from:

Walliman, Nicholas. Your Research Project: Designing, Planning, and Getting Started.
SAGE Publications Limited, 2019

Objective

- To explain what research is and what it is not, the criteria for research and the different types of research approach.
- To present some aspects of the debate about the nature of knowledge and the value of scientific method.
- To introduce the concept at the heart of any research project – the research problem – and to discuss what a researchable problem is.
- To warn of common mistakes.
- To describe how a research problem is found and stated.

What is Research?

- The Oxford Encyclopedic English
  - (a) the systematic investigation into the study of materials, sources etc. in order to establish facts and reach new conclusions
  - (b) an endeavour to discover new or collate old facts etc. by the scientific study of a subject or by a course of critical investigation.

- Research is a procedure by which we attempt to find systematically, and with the support of demonstrable fact, the answer to a question or the resolution of a problem. (Leedy ,1989, p. 5)

- Research is a fact-finding activity. (Dominowski ,1980, p. 2)

- The systematic, controlled, empirical and critical investigation of hypothetical propositions about presumed relations among natural phenomena. (Kerlinger 1970, p. 8)

Research vs experience vs reasoning

- Gaining experience is an uncontrolled and haphazard activity, while research is systematic and controlled.
- Reasoning can operate in an abstract world, divorced from reality, while research is empirical and turns to experience and the world around us for validation.
- Unlike experience and reason, research aims to be self-correcting. The process of research involves rigorously testing the results obtained, and methods and results are open to public scrutiny and criticism.

Stop…. Gentle Reminder!

- You will find that this technique of analytical reading is a valuable skill which is worth developing to a high degree.

- You will have to sift through an enormous quantity of written information in the course of your investigations, so the ability to identify quickly the crucial contents of a text will save you time in judging if it is relevant and of value to your research.

Starting your own research

- Need to start by identifying a question which demands an answer, or
- Need which requires a resolution, or
- A riddle which seeks a solution

Developed into a research problem: the heart of the research project

Starting point to detail a Research

- Finding a question
- Finding an unresolved controversy
- Finding a gap in knowledge
- Finding an unanswered need within the chosen subject

Could lead you to a suitable research problem

Features to lead you to a suitable research problem?

- It should be of great interest to you
- The problem should be significant
- It should be described precisely
- You should be able to obtain the information required
- You should be able to draw conclusions related to the problem
- You should be able to state the problem clearly and concisely

Check in for research problem?

- It is not easy to decide on and define a research problem, and you will not be expected to do so immediately.
- The important thing, at this stage, is to know what you are looking for, and to explore your subject for suitable possibilities.
- The problem can be generated either by an initiating idea, or by a perceived problem area.

Start discussing research problem areas with your candidate supervisors

Common mistakes with a chosen research problem

1

Making the choice of a problem an excuse to fill in gaps in **your own knowledge**

2

Formulating a problem which involves merely a comparison of two or more sets of data

3

Setting a problem in terms of finding the degree of correlation between two sets of data

4

Devising a problem to which the answer can be only yes or no

Aids to Locating and Analysing Problems

- Find an interest in a broad subject area (problem area)
- Narrow the interest to a plausible topic
  - a lot of background reading ➔ **LITERATURE REVIEW!**
    - To discover what has been written about the subject already
    - what research has been carried out
    - where further work needs to be done
    - where controversial issues still remain
- Question the topic from several points of view
  - what is your motivation for doing the research?
  - what relevant interest, experience or expertise do you bring to bear on the subject?
  - hat are you going to produce?
- Define a rationale for your project

Research problem definition

- The next step is to define the specific research problem
- Identifying a specific problem to pose a simple question
  - ‘Does the presence of indoor plants affect people’s frame of mind?’ or ‘How can prevention measures reduce vandalism?’
- Simple questions are riddled with ambiguities, which must be cleared up by careful definition
  - what does ‘frame of mind’ mean, what sort of ‘prevention measures’ are envisaged
- If the problem is too broad if you can state it in less than half a dozen words
  - A few additional questions posed against each word can help to delineate the problem – where, who, what, which, when?
- Break the problem down into short sentences
  - not worrying at this stage about the overall length of the problem statement
  - When the best logical progression from sentence to sentence is achieved, the statement can be edited into a more elegant form

The sub-Research Problems

Asking four perspectives:

- What are the parts of your topic and what larger whole is it a part of?
- What is its history and what larger history is it a part of?
- What kind of categories can you find in it, and to what larger categories of things does it belong?
- What good is it? What can you use it for?

Review of literature for formulating of the research problem

- Summarize the results of previous research to form a foundation on which to build your own research
- Collect ideas on how to gather data
- Investigate methods of data analysis
- Study instrumentation which has been used
- Assess the success of the various research designs of the studies already undertaken.

Checklist for Finding Research Problem Area

- Examine your field of interest and identify three or four problem areas which might be researchable.
- Problem areas might be found by detecting systems or organizations which do not seem to perform satisfactorily, either theoretically or practically
- Have you read of any widely held beliefs in your subject which you think are misleading or quite wrong, or is there a significant lack of information about a topic you consider to be of importance?
- When you have selected the problem areas, explore the issues involved by devising a number of questions which highlight the nature of the problem or reveal different aspects of it.
- Consider what further information you might need to obtain to clarify and delineate the problems.
- Do not try to be too specific at first. It is a good idea to make a list of your key interests in your subject, so that you can look at problems which contain some or all of your interests.
- Remember you will be spending months or years researching the chosen problem, so you may as well make it fascinating for yourself.

Prepare for 5 types of Research skills

Research design

Instrument development

Data collection

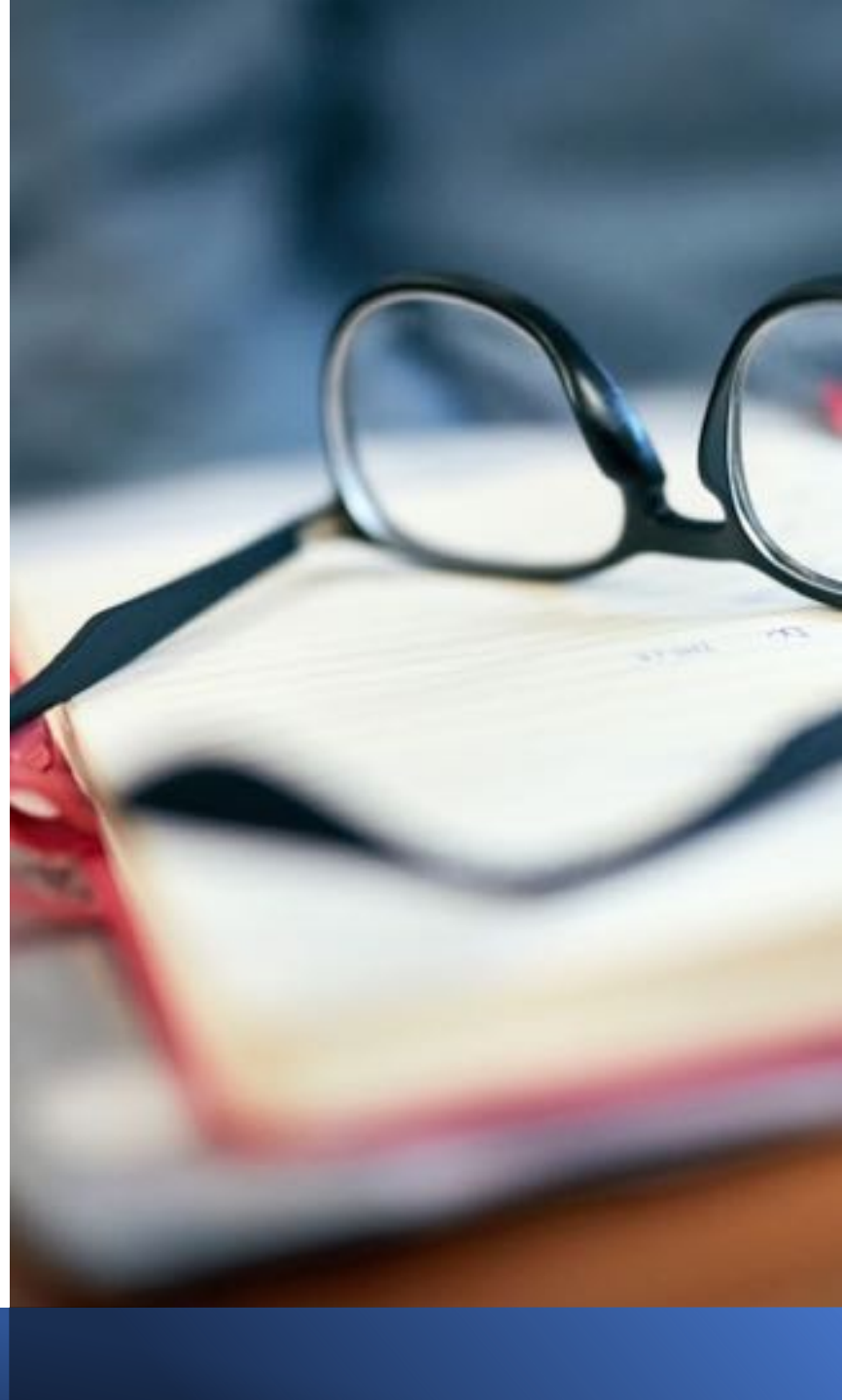
Data analysis

Research writing

Practices

Consider the following short sentences claiming to be research problems and decide whether they are researchable, and are a feasible proposition for an individual student, like yourself, to undertake for a research degree or as a research project.

Respond first with the answers ‘yes’, ‘no’ or ‘possibly’. Then, if you think that the research problem is not viable or will present difficulties, briefly give your reasons.



Practices

Respond first with the answers ‘yes’, ‘no’ or ‘possibly’. Then, if you think that the research problem is not viable or will present difficulties, briefly give your reasons.

1. An enquiry into the history of the building of the Channel Tunnel.
2. A study to compare the results in school history exams for 16-year-olds throughout Europe between 1970 and 1980.
3. The effects of parent unemployment on their children’s attitude to schoolwork.
4. The relationship between temperature, humidity and air movement in the cooling effect of sweating on the human skin.
5. The effects of using glass of different thickness and qualities in single, double and triple glazing.
6. What factors must be evaluated and what is their relative importance in constructing a formula for allotting grants to university students in Scotland.
7. An analysis of the influence of Palladio’s villa designs on large country houses built in Britain in the eighteenth century.
8. Whether the advantages of foreign borrowing by Third World countries outweigh the disadvantages.

Practices

Respond first with the answers ‘yes’, ‘no’ or ‘possibly’. Then, if you think that the research problem is not viable or will present difficulties, briefly give your reasons.

9. The composition of prefabricated elements of buildings in the construction of multi-storey car parks in tight urban situations in large conurbations of the United States of America during the 1970s.
10. A study of how hospital patients’ recovery is affected by the colour of their surroundings and of how they react to the effects of different light levels after major operations.
11. An enquiry to identify and evaluate the causes of ‘sick building syndrome’ in order to indicate possible methods of avoiding the occurrence of this ‘syndrome’ in new buildings.
12. The impact of local tax and exaction policies on the London commercial office sector.
13. Economic implications of the programme of rental increases and housing sales in China.
14. How the career plans of school leavers compare with their subsequent careers in terms of self-satisfaction and self-adjustment, and what information the analysis of the difference between planned and realized careers provides to assist in career planning

Thank you!