

VARIABLES

- A variable is defined as a quantity susceptible of fluctuation or change in value or magnitude under different conditions. Numerical values or categories represent these quantities.

INDEPENDENT VARIABLE

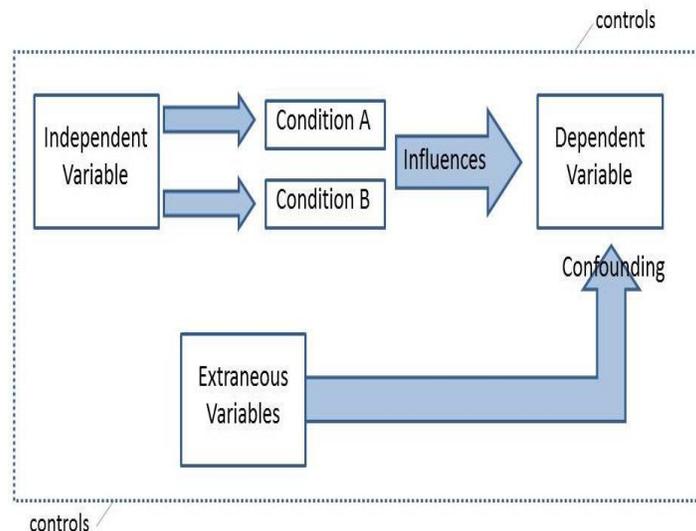
- are **manipulated** that causes change in another variable (dependent variable)
- are **treatments or condition** that produce a varied response or effect
- chosen by the researcher to determine its relationship to an observed phenomenon

DEPENDENT VARIABLE

- ✓ are those affected by independent variables
- ✓ response variable which is observed and measured to determine the effect of the independent variable

CONFOUNDING OR EXTRANEOUS VARIABLES

- ✓ are those variables usually indicated in an experimental research. They are not included in the study but in one way or another causes effect (usually minimal) on the dependent variable. e.g. Age, gender, race, etc.



THESIS TITLE

Guidelines in writing a research title (Calderon and Gonzales, 2015)

1. Generally, the title is formulated before the start of the research work. It may be revised and refined later if there is a need.
2. The title must contain the subject matter of the study, the locale of the study, the population involved, and the period when the data were gathered or will be gathered.
3. It must be broad enough to include all the aspects of the subject matter studied or to be studied. Hence, the title indicates what is expected to be found inside the thesis report.
4. It must be brief and concise as possible.
5. Avoid using the terms "An analysis of," "A study of," "An investigation of," and the like. All these things are understood to have been done or to be done when a research is conducted.
6. If the title contains more than one line, it must be written like an inverted pyramid, ALL words in Capital letters

Constituent Parts of a Research Title (Banaria, 2017)

- Subject Matter
 - Locale
 - Population
 - Period
 - Purpose
- (adapted from Calderon and Gonzales)

Example

**THE IMPACT OF HABITUAL ABSENTEEISM TO THE ACADEMIC PERFORMANCE OF GRADE 12 STUDENTS
OF PASIG CATHOLIC COLLEGE IN THE SCHOOL YEAR 2016-2017:
A PROPOSAL FOR A STRATEGIC TIMETABLE**

American Psychological Association (APA) formatting... (in writing your chapters 1-5...)

Note:

- Font style – Times New Roman
- Font size – 12
- Margin Left – 1.5 inch
- Margin Right – 1 inch
- Top Margin – 1 inch
- Bottom Margin – 1 inch
- Spacing - 2
- Justified

For references ... (Note: This part should be by category)

Campbell, William G. *Form and Style in Thesis Writing*. Boston: Houghton Mifflin Company, 1969.

WHAT IS A RESEARCH PROBLEM?

- ✓ A good research problem is exactly that a problem that someone would like to research.- *Fraenkel and Wallen (1994)*

CHARACTERISTICS OF A GOOD RESEARCH PROBLEM

Specific
Measurable
Achievable
Realistic
Time-Bound

OTHER CHARACTERISTICS OF A GOOD RESEARCH PROBLEM

- ✓ A good research problem must be **timely and or up-to-date** in today's modern world.
- ✓ It must be **researchable** through a scientific methodology.
- ✓ It must be **innovative** or is a probable step to produce novel solutions.
- ✓ It should be **interesting and challenging** to solve especially to the researcher and to the area of specialization to which he/she belongs.
- ✓ Its solution must be **relevant and beneficial** to a good number of people.

- ✓ It has **enough related readings** to help the researcher in making a comprehensive exploration.
- ✓ Its solution is **significant** to community or local and national development.

**WHAT ARE THE PROBLEMS THAT SHOULD BE AVOIDED?
(Cortes, 1986)**

- Those that deal with ethical (or moral) questions
e.g. Is there a relationship between premarital sex and performance in class?
e.g. Do parents' marital relationship affect students' performance in class?
- Questions that do not require a mental struggle
e.g. How many male students are enrolled?
e.g. How many faculty members wear eyeglasses?
- When a machine can take the place of a researcher to provide answers to questions.
- Questions whose answers are already known or available, or can be answered by "yes" or "no."
e.g. Are you offering medical courses?
e.g. Do you accept handicapped students?
- Metaphysical questions where it is impossible to collect publicly verifiable data and information in order to answer the question.
e.g. Is there a God?
e.g. Do you believe in ghosts?
- "Comparison problems" (Leedy, 1974)
e.g. What are the directions of the Philippine economy during the past administration and the present administration?
e.g. What are the achievements of Philippine presidents?

POSSIBLE SOURCES OF RESEARCH PROBLEMS

- ✓ Personal experiences in life
- ✓ Existing programs that need to be improved
- ✓ Further inquiry of a conducted study
- ✓ Through extensive readings in the libraries
- ✓ Through consultation with experts