

NURSING RESEARCH 2

NCMB315

Review on Research

RESEARCH TOPICS

SOURCES OF RESEARCH TOPICS

- OWN EXPERIENCE AND INTEREST
 - Identify your own interests and formulate a problem that reflects them; familiarity in your territory and terminology
- OWN PROFESSIONAL PRACTICE
 - Even a simple analysis of a conversation in the nurse station can lead to research problems
- COLLEAGUES
 - Brainstorming with friends about problems they have encountered may help clarify research ideas
- CRITICAL FRIENDS
 - Experts are good sources of research problems

CRITERIA FOR SELECTION OF RESEARCH TOPICS

- Feasible
- Interesting
- Novice
- Ethical
- Researchable
- Significant

INTRODUCTION

- It is the part of the paper that provides readers with the background information for the research reported in the paper.
- Its purpose is to establish a framework for the research, so the readers can understand how it is related to other research.
- It establishes the issue or concern leading to the research by conveying information about a problem.

HYPOTHESIZING

VARIABLE

- Is anything that varies.
- It refers to a characteristics or attributes of an individual or organization that can be measured or observed.
- Any quality of a person, group or situation that varies or takes on different values, typically numerical values.
 - E.g. weight, age, body temperature, anxiety level, SES, attitude

INDEPENDENT VARIABLE

- Affects the value of the dependent condition that produces the outcome
- "Assumed cause", influence or affect outcomes of a problem
- Symbol X, representing an arbitrary element in the domain
- What the researcher manipulates or varies
- Also called the treatment, manipulated or predictor variables.

DEPENDENT VARIABLE

- Factor whose value is affected by the independent variable
 - Variable that being measured

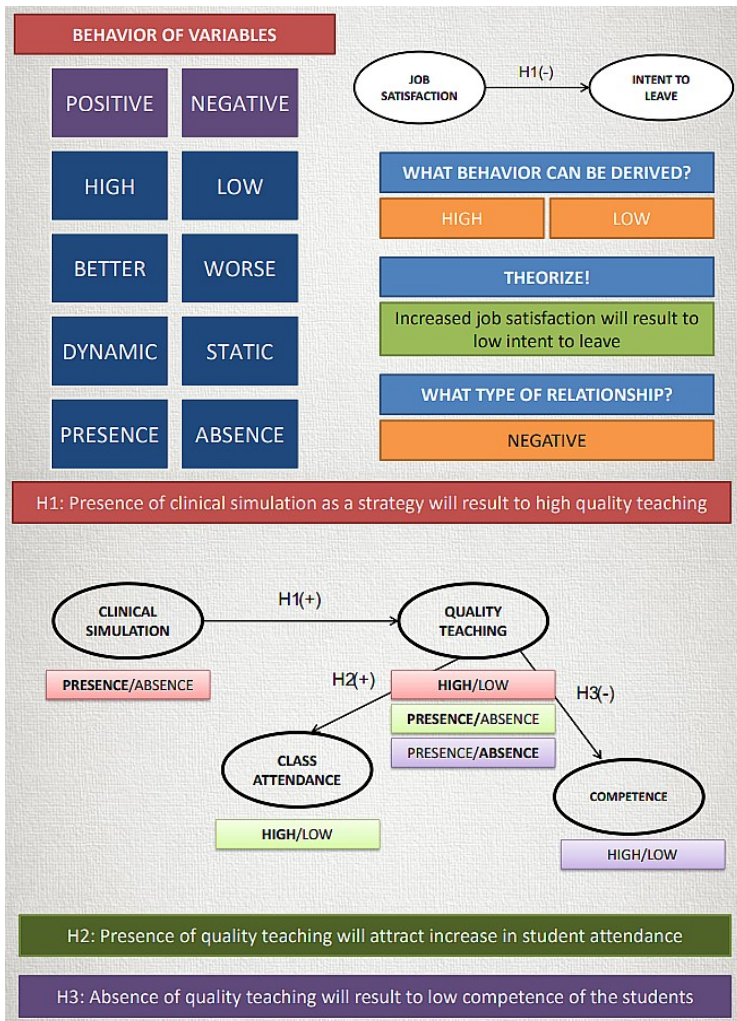
- Outcome of the process or "assume Effect" or the result of influence of the independent variable.
- Symbol Y, representing an element in the domain
- Change that occurs in the study population
- Also called the criterion, outcome, effect and response variables.

HYPOTHESES

- A hypothesis is a prediction about the relationship between two or more variables. A good hypothesis is worded in clear in concise language.
- Hypotheses are tentative statements about a given population.
- They serve as a tentative answer to one or more of the research questions, and are subjected to a statistical test.
 - SIMPLE HYPOTHESIS
 - Expresses an expected relationship between one independent and one dependent variable
 - Example: the effect of poverty on child development at Calvario, Meycauayan, Bulacan
 - COMPLEX HYPOTHESIS
 - Expresses prediction of a relationship between two or more independent variables to two or more dependent variables
 - Example: Among women with multiple sclerosis, functional limitations are influenced by external sources such as education, marital status, social support and employment status

Qualitative research does not test hypothesis

- RESEARCH HYPOTHESIS/AFFIRMATIVE HYPOTHESIS
 - Positive form of hypothesis proposition that there is association or significant relationship between the independent and dependent variables
 - Cannot be tested directly
 - Example: There is a significant difference between the mean age of male nursing students and mean age of female nursing students in terms of emotional quotient
- NULL HYPOTHESIS
 - Negative statement which indicates that there is no association between the predictor and outcome variables in the population
 - Example: There is no significant difference between the mean age of Male nursing students and mean age of female nursing students



RESEARCH SIMULACRUM

- Construct the research title (tentative)
- Identify the central question
- Identify the themes for literature review
- Identify the number of research tools

CONCEPTUALIZING A RESEARCH DESIGN

RESEARCH DESIGN

- A detail blue print/structural framework used to guide research towards its objectives
- Strategy or approach in solving the problem
- Maybe experimental or nonexperimental, qualitative or quantitative

TYPES OF RESEARCH DESIGN

- HISTORICAL RESEARCH
 - Is a qualitative research that aim is to examine the reasons and true state of past events. It attempts to examine events of the past to relate “what existed” or “what was” and to sum up such events into simplifications
- ETHNOGRAPHY/ANTHROPOLOGY RESEARCH
 - Is a scientific study of description of people and races, their activity, cultural context and of various meanings derived and attached to such cultural acts.
- FEASIBILITY RESEARCH
 - Is a study that presents the viability, profitability, sustainability, stability of a business proposal if it will be established.
 - It forecasts the capitalization, maintenance, and operation costs that cover materials, men, management and marketing expenses.

PHENOMENOLOGICAL RESEARCH

- A type of research that attempts to explore human perception and understanding to an event of phenomenon in a single context and in multiple comprehension.
- It is an interview based study because the researcher himself serves as the instrument in eliciting data or responses from the participants.
- The unstructured interview process is mainly used as it maximizes the use of time even beyond two hours to disclose fully his experiences.
- The researcher shall be alert in documenting the commonalities and differences of meanings attached to a similar situation or phenomenon

SURVEY RESEARCH

- It is used to study a representative characteristic of a population.
- It aims to capture a situation that occurs in a moment. It is conducted in various ways like personal interview, telephone interview, through a paper-pen questionnaire, fax, mail and electronic mail.

QUANTITATIVE ANALYSIS

DESCRIPTIVE RESEARCH

- Seek answer to who, what, where and how questions
- Describes a given situation or a given state of affairs in terms of specified factors.
- To describe what is prevalent regarding:
 - A group of people, a community, a phenomenon
 - A situation, a program and outcome
- **DESCRIPTIVE-NORMATIVE SURVEY**
 - “The term normative is sometimes used because surveys are frequently made to ascertain the normal or typical condition or practice or compare local test results with a state or national norm”.(Good and Scates, 1972). 2.
- **DESCRIPTIVE-COMPARATIVE**
 - “Comparative survey where the researcher considers at least two entities and establishes a formal procedure for obtaining criterion data on the basis of which he can compare and conclude which of the two is better”. (De Jesus et al., 1984).
- **DESCRIPTIVE-EVALUATIVE**
 - The purpose of this type is to appraise carefully the merit of the current study.

CORRELATION RESEARCH

- To ascertain if there is a relationship
- To establish or explore:
 - A relationship
 - An association
 - An interdependence

EXPLANATORY RESEARCH

- Answer the questions why and how?
- To explain why the relationship is formed
- To explain:
 - Why a relationship, association or interdependence exists
 - Why a particular event occurs

INTERVENTION OR EXPERIMENTAL RESEARCH

- Evaluates the effect or outcome of a particular Intervention or treatment
- Studies the “cause and Effect” relationship between certain factors or phenomenon under controlled condition/s.

SELECTING A SAMPLE

- Sampling is the process of choosing a representative
- Portion of a population or some elements in a population that will represent the entire population

BASIC TYPES OF SAMPLING

- NON PROBABILITY SAMPLING
 - Is arbitrary and is generally subjective. Data gatherers choose sample cases, as they wish or whatever they find them.
- PROBABILITY SAMPLING.
 - Based on concept of random selection, procedure that assures that all elements in the population are given an equal chance of being selected as a sample unit.

NON PROBABILITY SAMPLING

ACCIDENTAL SAMPLING

- A sampling opportunity in which the researcher takes the respondents from those he meets unexpectedly

PURPOSIVE SAMPLING

- This is also called judgmental sampling. A deliberate selection of individuals by the researcher based on predefined criteria.

CONVENIENCE SAMPLING

- A process of selecting respondents in the easiest and most expeditious way.

QUOTA SAMPLING

- It is a non randomized selection of respondents from the cross selection of the population.

NETWORK SAMPLING

- This is a referral sampling that stems from one or few identified samples who after being involved in the study will lead the researcher to other samples who possess the same attributes.

PROBABILITY SAMPLING

SIMPLE RANDOM SAMPLING

- This is similar to the lottery method that provides everyone in the population the equal chance to be picked as sample.
 - Drawing of lots
 - Using table of random digits

SYSTEMATIC SAMPLING

- This is used if a high density of a population is at stake.
 - Arranged alphabetical or chronological (age, experience, academic rank)
 - Nth name may be selected in the construction of sample

STRATIFIED RANDOM SAMPLING

- A technique in which the expansive population is divided into manageable smaller subgroups or strata from which samples are taken.
 - Subgroup or strata

CLUSTER SAMPLING

- Identification of some references of limiting population to smaller units like phases, blocks, areas or rows.

MULTISTAGE SAMPLING

- A refinement of the cluster sampling procedure making it more scientific is the multi-stage sampling. The researcher, using the multi-stage sampling, can effect savings of time, money, and effort. In addition, precision can be achieved with the sample thereby reducing the sampling error. Be sure that your sample will be composed of members with heterogeneous characteristics

DETERMINING THE SAMPLE

- There is no general rule regarding the sample size. However, the higher the percentage of the sample, the higher the validity of the study. The bigger the population, the lesser percentage of the sample is taken.
- For a specific calculation of the sample for the purpose of adequate sampling, the use of the **Slovin's Formula** presented below is advised as given by Pagoso

$$n = \frac{N}{1 + N(e)^2}$$

where:

- n- sample
- N- population
- 1- constant
- e- sampling error

- Therefore, the sample may be calculated when the population of the study is already known. Using **.05** or **.01** as the sampling error/margin of error, the Slovin's Formula may easily be applied
- Study the table given below. It illustrates the sample that must be obtained out of the stated population. The Slovin's Formula was used

	A	B	C
N = Population	500 factory workers	300 nurses	100 HRM students
n = sample	222 or 250	171 or 200	80 or 100
% = percentage	50%	75%	80% or 100%

LOCALE & POPULATION OF THE STUDY

SETTING POPULATION/PLACE

- The researcher using the descriptive-survey method can choose a subject firm or institution whose facilities he could use for data gathering purposes.
- This subject firm or institution is otherwise known as the research setting or venue.

DESCRIPTION OF THE RESPONDENTS/SAMPLE OF THE STUDY

- The researcher now knows exactly who his respondents shall be – the people who will provide him with the needed primary data.
- The classification-information part of the questionnaire or the bio-data questions can help the researcher describe his respondents. Hence, the respondents may be described by certain physical, social, economic, or educational characteristics as age, gender, civil status, profession or occupation, educational attainment, or length of employment.