

HLTH 230
Dr. Holt

Lecture 1 – January 27

Research Methods

1. Quantitative Methods
 - a. Between Groups Design
 - i. Cross-Sectional – one time; totally different groups; ‘snapshot’ (ex. census)
 - ii. Longitudinal – follow the same group over time
 - b. Within Groups Design
 - i. Pre-Post – tests to see if intervention works
 1. Pre – baseline; assesses starting knowledge of the dependent variable
 2. Intervention – independent variable
 - a. Intervention – Public campaign or program designed to impact an outcome
 3. Post – Dependent variable
 - ii. Crossover – Drug/Placebo tests
 1. One group receives the drug for x amount of time, then they receive the placebo for x amount of time and vice versa for placebo group
 2. Done so everyone gets the same treatment, just not all at once
 - c. Direct Observation
 - i. Casual
 - ii. Formal
 - iii. Participant Observation – become a member of a group in order to observe group
 - d. Interviews (Structured)
 - i. Pre-prepared set of questions
 - e. Meta Analysis (Statistical Technique)
 - i. Statistical analysis of previous studies and their findings
 1. Done to develop an effect size
 - ii. Make a mathematical assessment of data
 - f. Questionnaires and Surveys
 - i. Objectives
 - ii. Types of respondents
 - iii. Types of questions
 - iv. Content
 - v. Question format – closed-ended or open-ended; Likert type (scale of 1-5)
 - vi. Reliability and stability
 1. Stability over time
 2. Do the questions assess the intended construct?
 - vii. Sensitivity to change – Pre-Post test, e.g.
 - g. Randomized Controlled Trial (RCT)
 - i. Manipulation of independent variable
 - ii. Random assignment of participants to treatment and control groups
 - iii. Intended to demonstrate a cause-effect
 - h. Quasi-Experiment
 - i. Similar to RCT but when independent variable can not logically be manipulated
 1. Comparison group – alternative independent variable; control group gets some treatment as opposed to no treatment (placebo group in drug trials, e.g.)

2. Qualitative Methods
 - a. Narrative Approach – gathering of stories
 - b. Case Studies – detailed description of 1 person
 - c. Ethnography – description of values, beliefs, behaviors, culture, and the description of a group
 - d. Individual Interviews (In-Depth Interviews)
 - i. Semi-Structured – dependent on responses to (potentially) prepared questions
 - e. Focus Groups
 - i. Moderated group discussions about a topic (usually 6-10 people, but 8 is ‘best’)
 - f. Grounded Theory Analysis
 - i. A type of data analysis; inductive; aimed at developing theory
 - ii. Inductive – bottom-up process; let data ‘speak’ to you
3. Action Research
 - a. True partnerships with community
 - b. PAR (Participatory Action Research)
 - c. CBPR (Community Based Public Research)
 - i. Power-Sharing
 - ii. Research-Sharing

Lecture 2 – February 15 (Material from February 3 & 8)

Reading Scientific Literature

1. Scientific literature – peer-reviewed journal; not lay media; may or may not be available online as full-text
2. Abstract – summary, at the beginning; 50-200 words typically; gives the reader a snapshot of the article; helps you decide whether to use the article
3. Introduction – background information and context for the study; literature review; provides the rationale (why it’s important and unique contribution); statement of purpose (problem)
4. Method – broken into participants, measures, analysis, and procedure; sub-parts can differ according to the study
 - a. Should be able to follow and replicate the study/experiment
5. Results – narrative presentation of study findings; not an interpretation; not redundant with information from the tables
6. Discussion – summary of findings (interpretations and explanations of unexpected findings); comparison to previous research; study limitations; future research and implications
7. Tables – display more data than can reasonably be shown in text format; data from main analyses
8. Figures – show theoretical or conceptual models; other pictorial things not easily illustrated
9. References – all references/literature cited; usually alphabetical order, but may be numerical (depends on the style)
10. Appendices – rarely used; can show study measures or intervention materials; too lengthy to present in the main text, but important enough to show to the reader

Behavioral Determinants

1. Behavioral Determinants of Health
 - a. Behavioral conditions – lung cancer, cardiovascular disease, chronic illness, etc.
 - b. Risk factor – anything that elevates risk for disease (genetics, e.g.)