

Ethics & Chapter 1

EDHE6530

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Overview

- Evaluation of Dissertation Literature Review
- Research Ethics
- A Quick Review
- Components of Chapter One
- From Interest to Research Questions
- Concept, Construct, and Variables
- Theory and Hypothesis

**DISSERTATION PROPOSAL
OBSERVATION REPORT**

Generativity

The ability to build on the scholarship and research of those who have come before us.

Without good literature review you will...

- Ask a question that has already been answered
- Misconfigure research design
- Choose an inappropriate research method

Standards and Criteria of a Literature Review

- Coverage
- Synthesis
- Methodology
- Significance
- Rhetoric

Coverage

- Justified criteria for inclusion and exclusion from review
 - Novice vs. expert
 - Topicality, comprehensiveness, breadth, exclusion, relevance, currency, availability, and authority

Synthesis

- Distinguished what has been done in the field and what needs to be done
- Placed the topic or problem in the broader scholarly literature
- Placed the research in the historical context of the field
- Acquired and enhanced the subject vocabulary

Synthesis

- Articulated important variables and phenomena relevant to the topic
- Synthesized and gained a new perspective on the literature

Methodology

- Identified the main methodologies and research techniques that have been used in the field, and their advantage and disadvantages
- Related ideas and theories in the field to research methodologies
 - Justified your methodology choice
 - Proposed new methods

Significance

- Rationalized the practical significance of the research problem
- Rationalized the scholarly significance of the research problem

Rhetoric

- Was written with a coherent, clear structure that supported the review

What is ethics about?

What is right and
wrong, and why?

Ethical codes and standards

- Ethical standards of the American Educational Research Association (AERA)
- Ethical principles of psychologists and code of conduct (APA)
- Association for Institutional Research code of ethics (AIR)
- Association for the Study of Higher Education (ASHE) Principles of Ethical Conduct

Is there ethical exception?

NO

NIH Ethical Principles

- Respect for persons
 - Autonomous agents
 - Informed consent
 - Diminished autonomy
- Beneficence
 - Risks and Benefits
 - Privacy and confidentiality
- Justice
 - Benefits and burdens for individuals and groups

Other Ethical Considerations

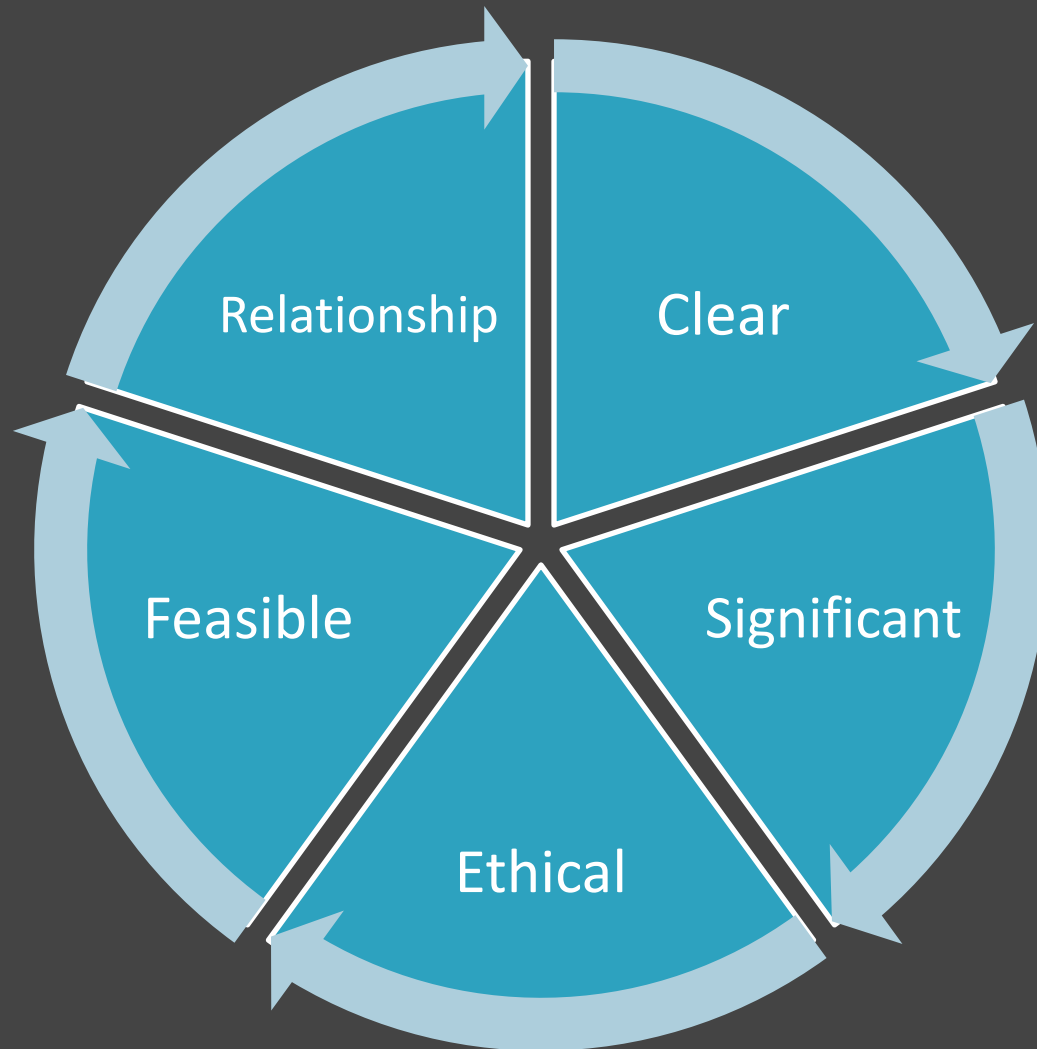
- Maintain confidentiality
- Report potential conflict of interest or biases
- Reporting funding support
- Provide enough details for replication
- Results must be accurately reported
- Proper citations and references

Ethics Exercise

How to choose a research topic?

- Your passion, interest, and expertise
- Related to a broader and more complex issue
- Availability of data
- Manageable (narrowly focused and carefully defined)
- The expertise of your advisor and committee
- Career aspiration
- Funding

Characters of good research questions?



What is “operational definition”?

- How do you plan to **MEASURE** it?
- How do you plan to conduct the **EXPERIMENT** to study it?

Dissertation

- Chapter One: Introduction
- Chapter Two: Literature Review
- Chapter Three: Methodology
- Chapter Four: Results
- Chapter Five: Discussion and Implications

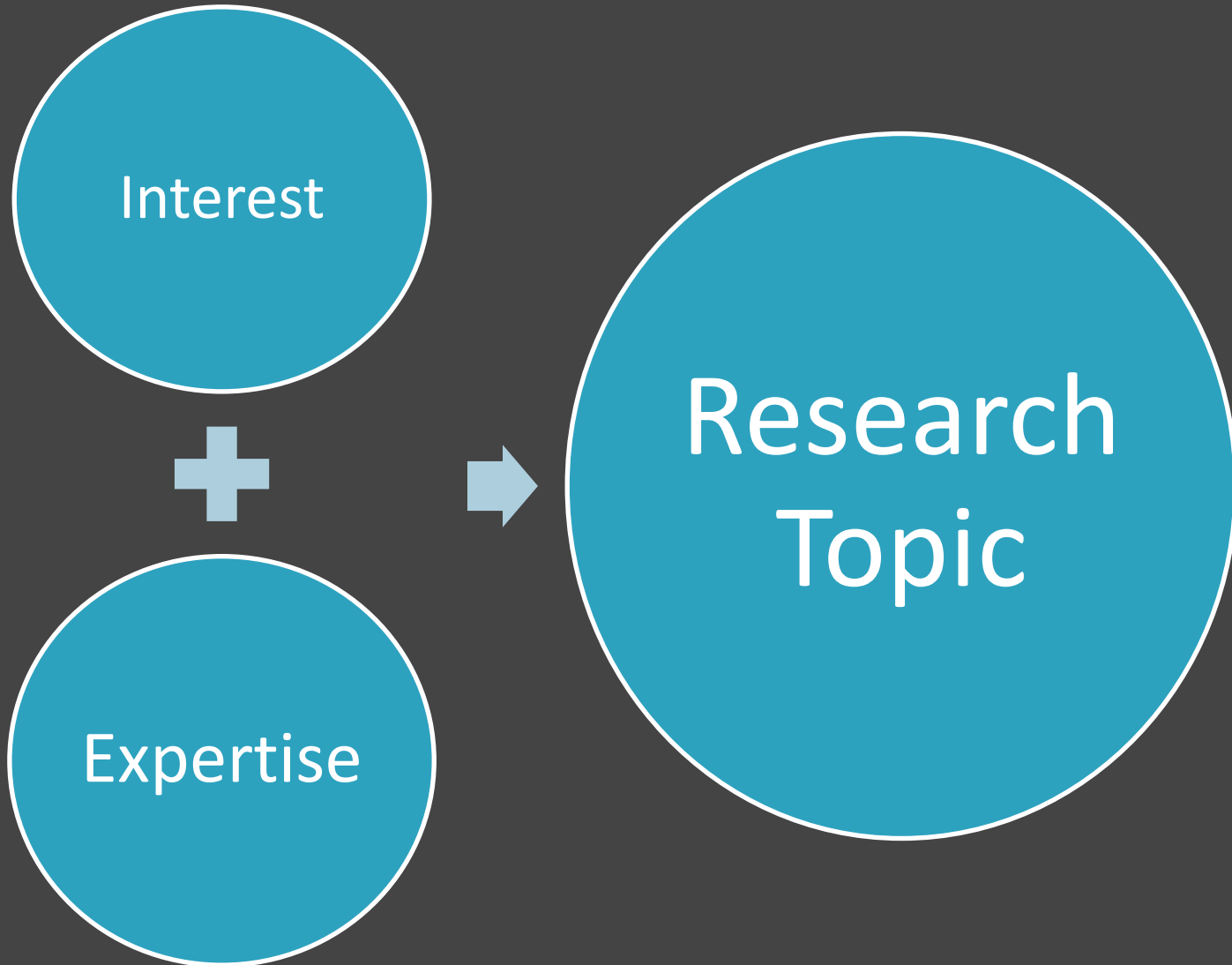
Dissertation Proposal

- Chapter One: Introduction
- Chapter Two: Literature Review
- Chapter Three: Methodology
- ~~Chapter Four: Results~~
- ~~Chapter Five: Discussion and Implications~~

Chapter One

- Introduction/problem statement
- Purpose of the study
- Conceptual framework or theoretical orientation
- Research questions and hypotheses
- Definition of terms
- Significance of the study
- Limitations, delimitations, and assumptions

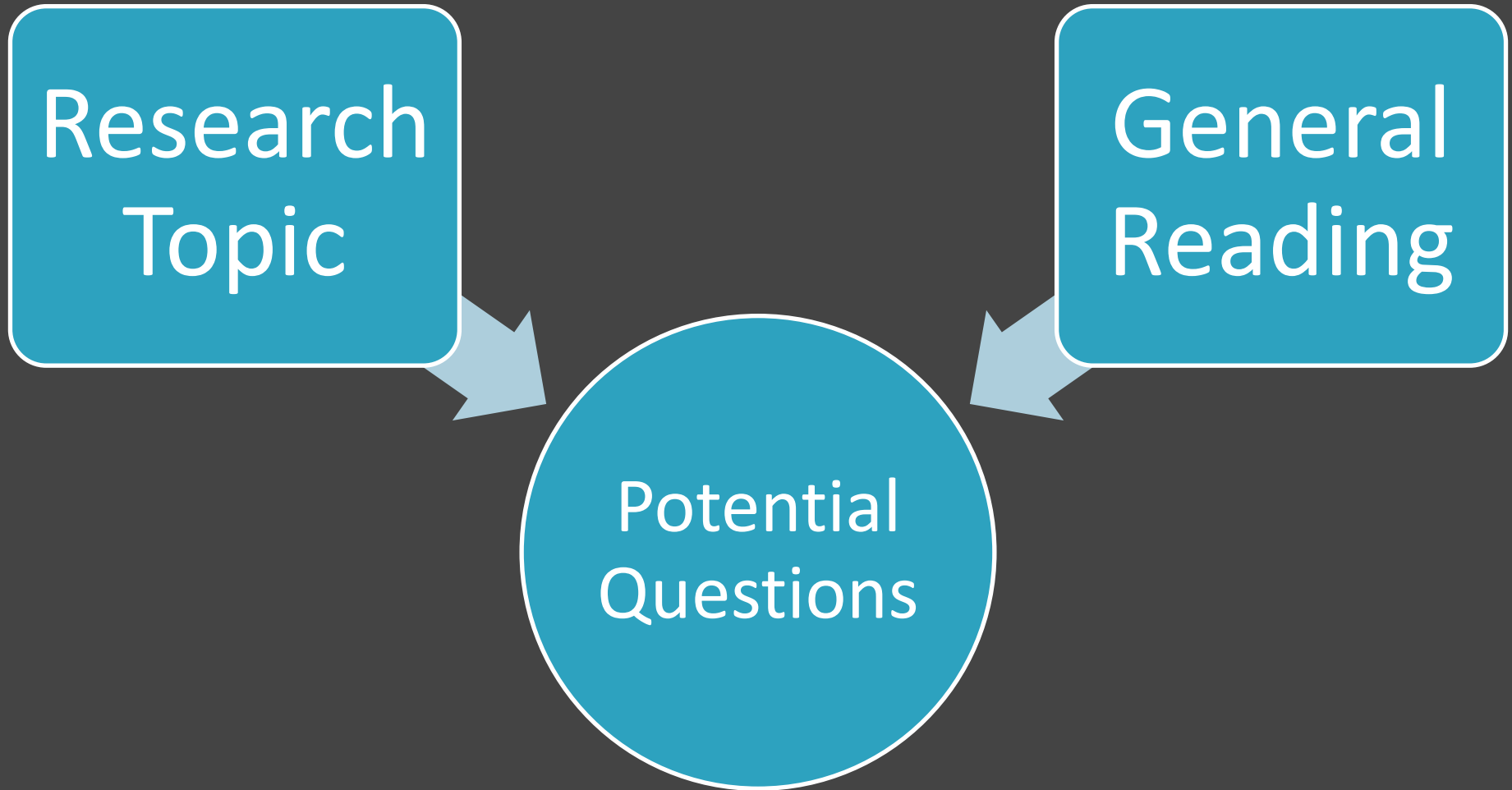
Dissertation Process



Research Topics

Last name	Research Topic(s)
De La Pena	
Felipe	First generation college students, Hispanic students' enroll & success
Ford	Parental influence on career aspiration, religious involvement & s. success
Gonzales	Academic success & motivation, college access issues
Hoffman	Library leadership training and hiring decisions
McGuire	Timing of orientation on student retention, parental expectation
McNulty	Student government, minority involvement in student campus leadership
Park	Student affairs, transfer student engagement and success, FYE, finance
Perez	Undocumented college students' experiences and outcomes
Ratz-Thomas	Legal issues related to the 4 th Amendment and higher ed. Institutions
Roberts	Spiritual development of college students, religion vs. spirituality
Shirley	Ph.D. and Ed.D differentiation, Greek organizations
Simpson	Online learning for nursing & STEM education enrollment

From Topics to Questions



Example

- Research Topic: Presidential leadership
- Potential Questions:
 - How many college presidents do we have in the U.S.?
 - How many female and minority college presidents do we have in the U.S.?
 - What make a college president successful or unsuccessful?
 - What take for a person to become a college president?
 - What makes college presidents different from corporate CEOs?
 - What makes college presidents different from political leaders?

Evaluate your questions

- Eliminating questions that you can find answers in a reference work
- Combining small questions into larger, more significant ones
- Ask yourself, “So what?”

Step-by-Step Guide

1. Name your topic:

- I am trying *to learn about* (working on, studying) _____

2. Add a question:

- I am studying X *because I want to find out* who/what/when/where/whether/why/how

3. Motivate your readers:

- I am studying X because Y *in order to*

Example

1. *I am working on* Lincoln's beliefs about predestination in his early speeches
2. *because I want to find out* how his belief in destiny and God's will influenced his understanding of the causes of the Civil War,
3. *in order to* help my reader understand how his religious beliefs have influenced his military decisions

Example (2)

1. *I am studying* the differences in leadership style between male and female college presidents
2. *because I want to find out* what makes a successful female college president
3. *in order to* help more qualified female academic leaders become college presidents

In Class Activity

1. Name your topic:

- I am trying *to learn about* (working on, studying) _____

2. Add a question:

- I am studying X *because I want to find out* who/what/when/where/whether/why/how

3. Motivate your readers:

- I am studying X because Y *in order to*

Concept

- Abstraction from observed events
- General heading to simplify events
- Distillation of common characteristics
- Directly **OBSERVABLE**

Concept Examples

- Tree
- Dog
- Chair
- GPA
- Quiz grade
- Human
- Room
- temperature in degree of Fahrenheit
- IQ score
- GRE test score
- # of words spoken

Construct

- Used to summarize observations
- Provide explanations
- Higher level of abstractions
- Combines concepts
- Accounts for observed regularities and relationships

Construct Examples

- Motivation
- Intelligence
- Extroversion
- Justice
- Leadership
- Love your country
- Reading readiness
- Scholastic aptitude
- Student success
- Anxiety

Which are Which?

- Score on the Texas Assessment of Knowledge and Skills (TAKS)

Concept

- Depression

Construct

- Golf ball

Concept

Which are Which?

- # of correct answers on a quiz

Concept

- Student success

Construct

- Diversity

Construct

Variables

- Defined as a factor – things that varies
- Characteristic or condition that changes or has different values for different individuals
- Types of variables
 - Categorical
 - Dichotomous
 - Continuous

Categorical Variable

- Attribute used when participants are classified by sorting them into groups
- Consists of separate indivisible categories
- No value can exist between two neighboring categories

Examples of Categorical Variables

- **Native language:** English, Spanish, French, Italian, Russian, Mandarin
- **Ethnicity:** Caucasian, African-American, Asian-American, Native-American
- **School district:** Denton ISD, Argyle ISD, Aubrey IDS, Lewisville ISD
- Student ID, Phone number, SSN#

Dichotomous Variable

- A categorical variable when **ONLY** two groups are used
- Examples:
 - Gender: Male – Female
 - Awake: Yes – No
 - Course grade: Pass – Fail
 - Residence: Citizen – Alien
 - First generation college student: Yes – No

Continuous Variable

- Infinite number of values within a range
- Meaning can be attached to the different values
- Examples:
 - IQ scores
 - Age
 - Height
 - Weight
 - Anxiety level
 - GRE scores

Which are Which?

- Age broken down into groups of 11-20, 21-30, 31-40, 41-50, 51-60, and 61-70

Categorical

- TAKS scores

Continuous

- Democrat or Republican

Dichotomous

Which are Which?

- Income

Continuous

- Income: Below \$5,000, between \$6,000 - \$10,000, between \$10,001 - \$20,000 annually

Categorical

- Income: Yes – No

Dichotomous

Dependent Variable

- Object of study
- Depends on/varies with independent variable
- Observed for changes to assess the effect of the treatment
- What is being **MEASURED**
- Abbreviated as DV
- Usually the last variable cited in the research question

DV Examples

- What is the effect of parental status on self-concept among teenagers?

DV Examples

- What is the effect of parental status on **SELF-CONCEPT** among teenagers?
- What is the effect of exercise on weight loss among senior citizens?

DV Examples

- What is the effect of parental status on **SELF-CONCEPT** among teenagers?
- What is the effect of exercise on **WEIGHT LOSS** among senior citizens?
- Is there a significant difference between boys and girls in math achievement at the middle school level?

DV Examples

- What is the effect of parental status on **SELF-CONCEPT** among teenagers?
- What is the effect of exercise on **WEIGHT LOSS** among senior citizens?
- Is there a significant difference between boys and girls in **MATH ACHIEVEMENT** at the middle school level?

Independent Variable

- Manipulated/change by the experimenter
- We study its effects
- Causative agent
- Occurs antecedent to the DV
- Experimental treatment
- Abbreviated as IV
- Predictions made FROM IV TO DV
- Usually the first variable cited

IV Examples

- What is the effect of parental status on self-concept among teenagers?

IV Examples

- What is the effect of **PARENTAL STATUS** on Self-concept among teenagers?
- What is the effect of exercise on weight loss among senior citizens?

IV Examples

- What is the effect of **PARENTAL STATUS** on Self-concept among teenagers?
- What is the effect of **EXERCISE** on Weight loss among senior citizens?
- Is there a significant difference between boys and girls in math achievement at the middle school level?

IV Examples

- What is the effect of **PARENTAL STATUS** on Self-concept among teenagers?
- What is the effect of **EXERCISE** on Weight loss among senior citizens?
- Is there a significant difference between **BOYS** and **GIRLS** in math achievement at the middle school level?

Types of IVs

- Attribute
 - An IV that cannot be manipulated
 - Characteristics that cannot be changed at will
 - People can be placed in only one level – the one they are already in
 - An IV used as a descriptor of study (i.e., all in the study are the same on that IV)

Examples of Attribute IV

- Age
- Ethnicity
- Sex
- Social class
- Marital status
- Geographic location
- First generation college student

Types of IVs

- Active
 - Directly manipulated by researcher prior to data collection
 - Look for its effects on the DV
 - It acts on and cause changes in DV
 - People can be placed in any of its levels

Examples of Active IV

- Method of instruction (i.e., computer-based instruction, face-to-face instruction, cooperative groups)
- Method of grouping (homogeneous, heterogeneous, mixed-age, mixed-grade, same-grade)
- Exercise method (none, aerobic, abs)

Which are Which?

- Amount of alcohol consumed

Active

- Socioeconomic status

Attribute – researcher cannot make someone
low SES one day and high SES next day

- Institutional retention rate

Attribute

Which are Which?

- Eye color

Attribute

- Time spending on study per week

Active/Attribute

- Computer vs. traditional instruction

Active

Te be Remembered

- Whether an IV that is normally active depends on use in particular study
- If all persons in study are same in regard to an active IV (e.g., same method of instruction for all students), then that active IV is an attribute variable in that study

Which are Which

- What is the effect of anger on aggressiveness?

IV is _____

DV is _____

Which are Which

- What is the effect of anger on aggressiveness?

IV is anger

DV is aggressiveness

- Is anger an active or Attribute IV?

Active

Which are Which?

- What is the effect of membership in Greek organizations on student engagement?

IV is _____

DV is _____

Which are Which?

- What is the effect of membership in Greek organizations on student engagement?

IV is membership in Greek organizations

DV is student engagement

- Membership in Greek organizations is active or attribute IV?

Attribute

Which are Which

- What is the effect of service learning class on college student's understanding of social justice issues?

IV is _____

DV is _____

Which are Which

- What is the effect of service learning class on college student's understanding of social justice issues?

IV is service learning class

DV is understanding of social justice issues

- IV is active or attribute?

Active if you can assign students to classes

Attribute if you collect data from existing classes