



Research Design & Standards

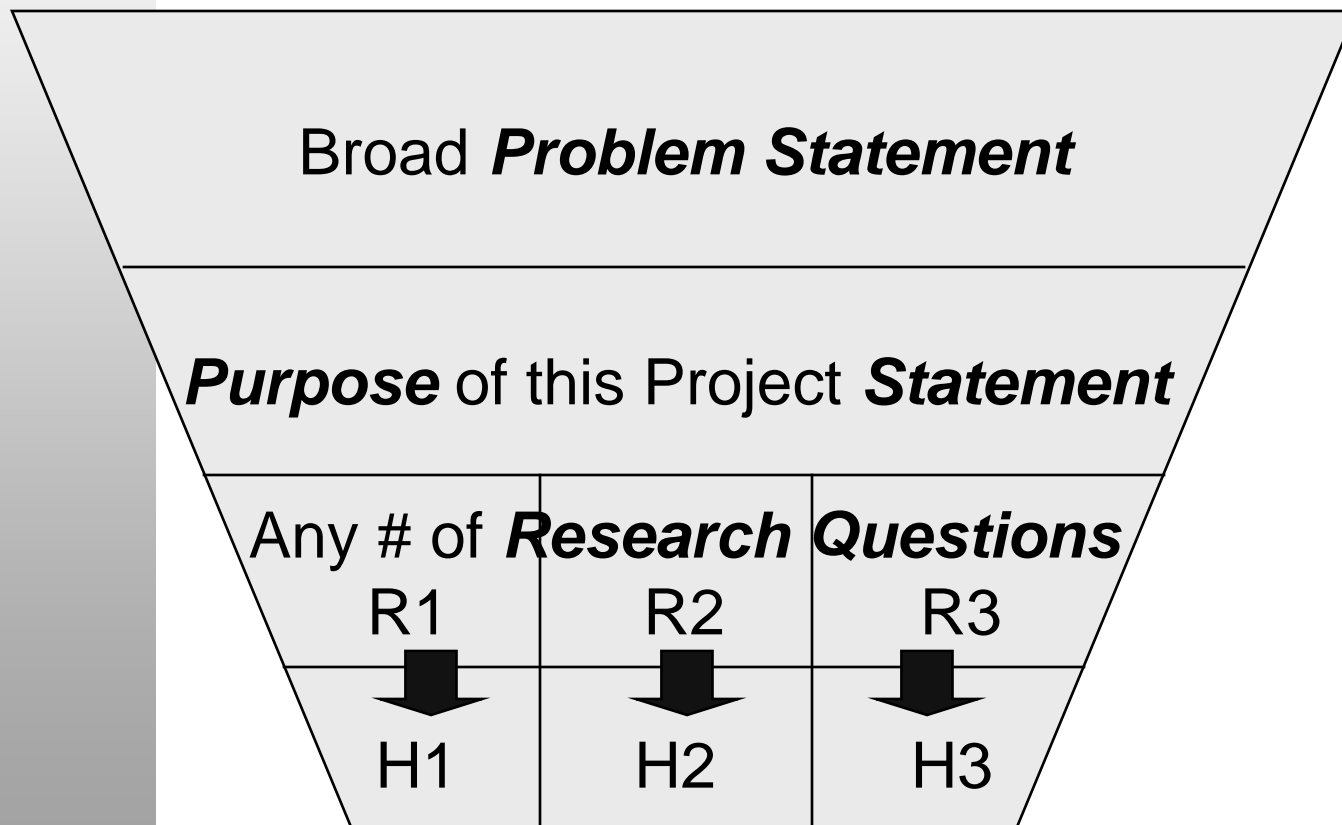


Lloyd Williams

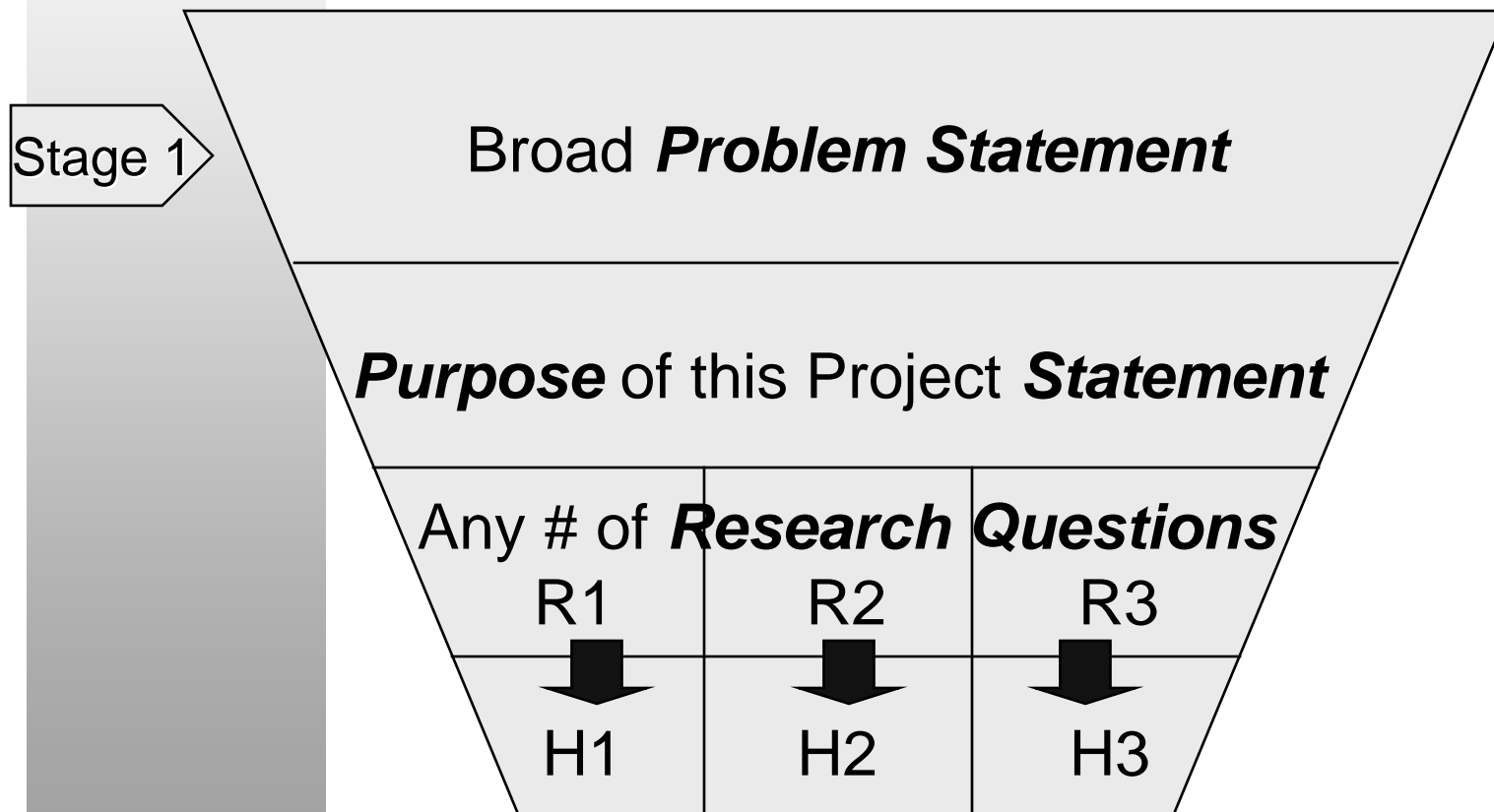
Research Design

- Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approaches*. Thousand Oaks, CA: Sage.

Design Model



Design Model



Problem Statement

- Start with a general issue to which a wide readership can identify
- Proceed to discuss a distinct problem
- The first sentence of this opening paragraph should pose a *narrative hook* to draw the reader into the study

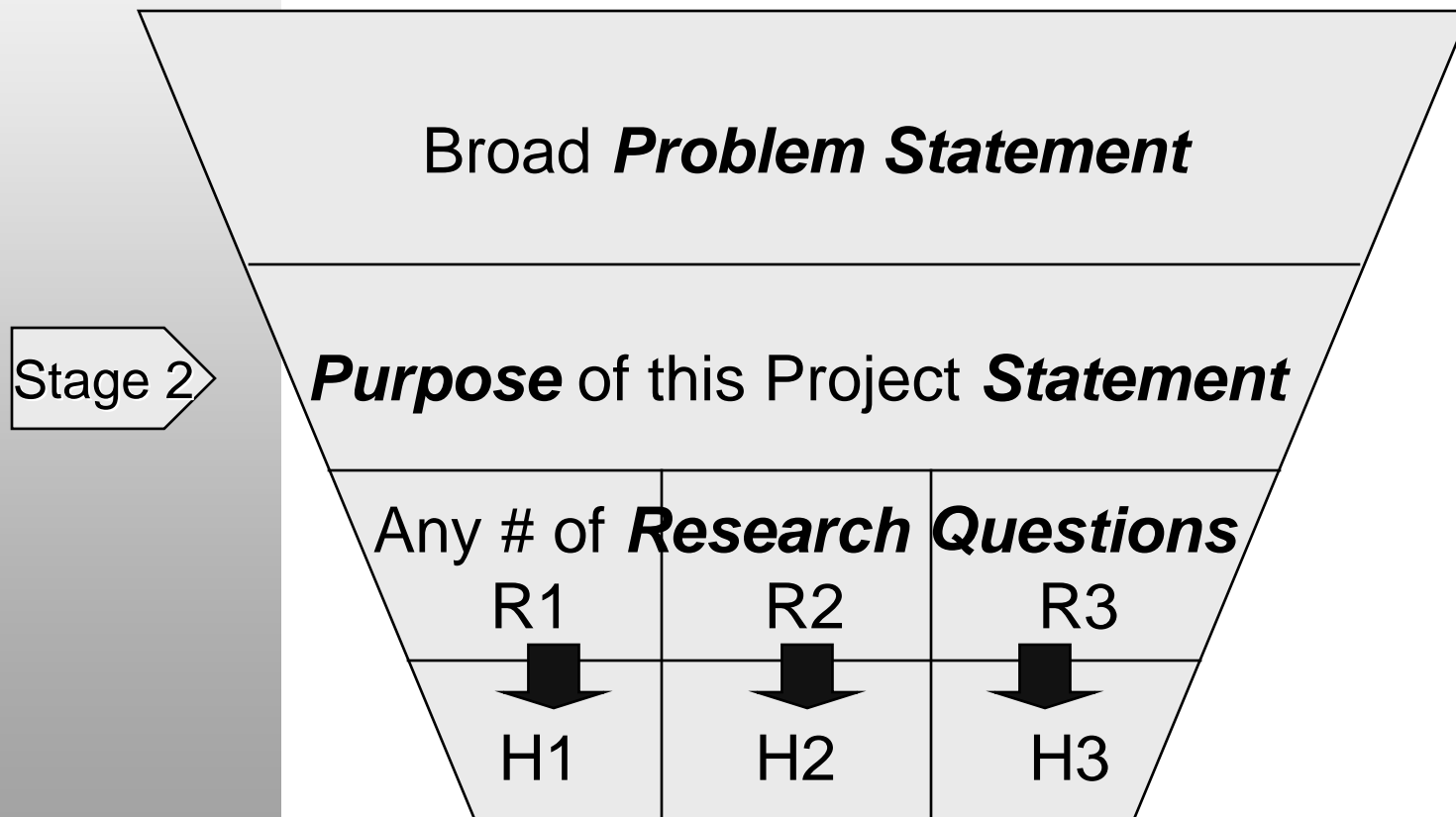
Problem Statement Essentials (1)

- Opening sentence that stimulates interest & conveys an issue to which many can relate
- Specify the problem leading to the study
- Indicate why the problem is important
- Focus on the key concept being tested quantitatively (dependent variable) or explored qualitatively (central phenomenon)

Problem Statement Essentials (2)

- Refrain from using quotes (may be relaxed for qualitative studies written from a literary style)
- Stay away from idiomatic or trite phrases
- Consider numeric information for impact
- Use short sentences for impact & clarity

Design Model



Purpose Statement

- Establishes the direction for the research
- Captures *in a single sentence* the essence of the study
- Grounded firmly in the paradigm assumptions presented

Qualitative Purpose Statement

- Implies or expresses the assumptions of the qualitative paradigm
- Use such words as *purpose*, *intent* and *objective* to call attention to this statement as the central controlling idea
 - Future tense for proposal
 - Past tense for completed dissertation

Qualitative Statement Features

- Convey an emerging design because of the inductive mode of the research
- Eliminate words that suggest a directional orientation
 - successful, informing, useful, etc.
- Eliminate words that convey a quantitative cause and effect situation
 - relationship, comparison, etc.

Qualitative Statement Features

- Clearly mention the central concept
 - Methodologically, an idea is being understood, discovered or developed
- Provide a general definition of the central concept or idea
 - Not rigid or set, but tentative and evolving
- Denote the method of inquiry
 - case study, ethnographic, grounded-theory, etc.
- Mention the unit of analysis (individual, group, culture) or research site (firm, program, event)

Qualitative Statement Features

- Sample *Script*

“The purpose of this study is to (understand? describe? discover?) the (central concept) for (the unit of analysis) using a (method of inquiry) resulting in a (outcome format). At this stage of the research the (central concept) will be defined broadly as (provide a general, working definition).”

Quantitative Purpose Statement

- Identify the proposed variables
 - Independent
 - Cause, influence or affect outcomes
 - Dependent
 - Dependent upon independent variables
 - Are outcomes of independent variable influence
 - Intervening (mediating or nuisance)
 - Intervene between independent and dependent
 - Often are demographic: gender, age, income, etc.

Quantitative Purpose Statement

- Draw visual model to show sequence
- Specify measurement for all variables
- Intent is to relate variables or compare samples

Quantitative Statement Features

- Use a word such as *purpose*, *intent* or *objective* to begin
- Identify the theory, model or conceptual framework to be tested
- Mention the specific type of method of inquiry
 - survey or experiment

Quantitative Statement Features

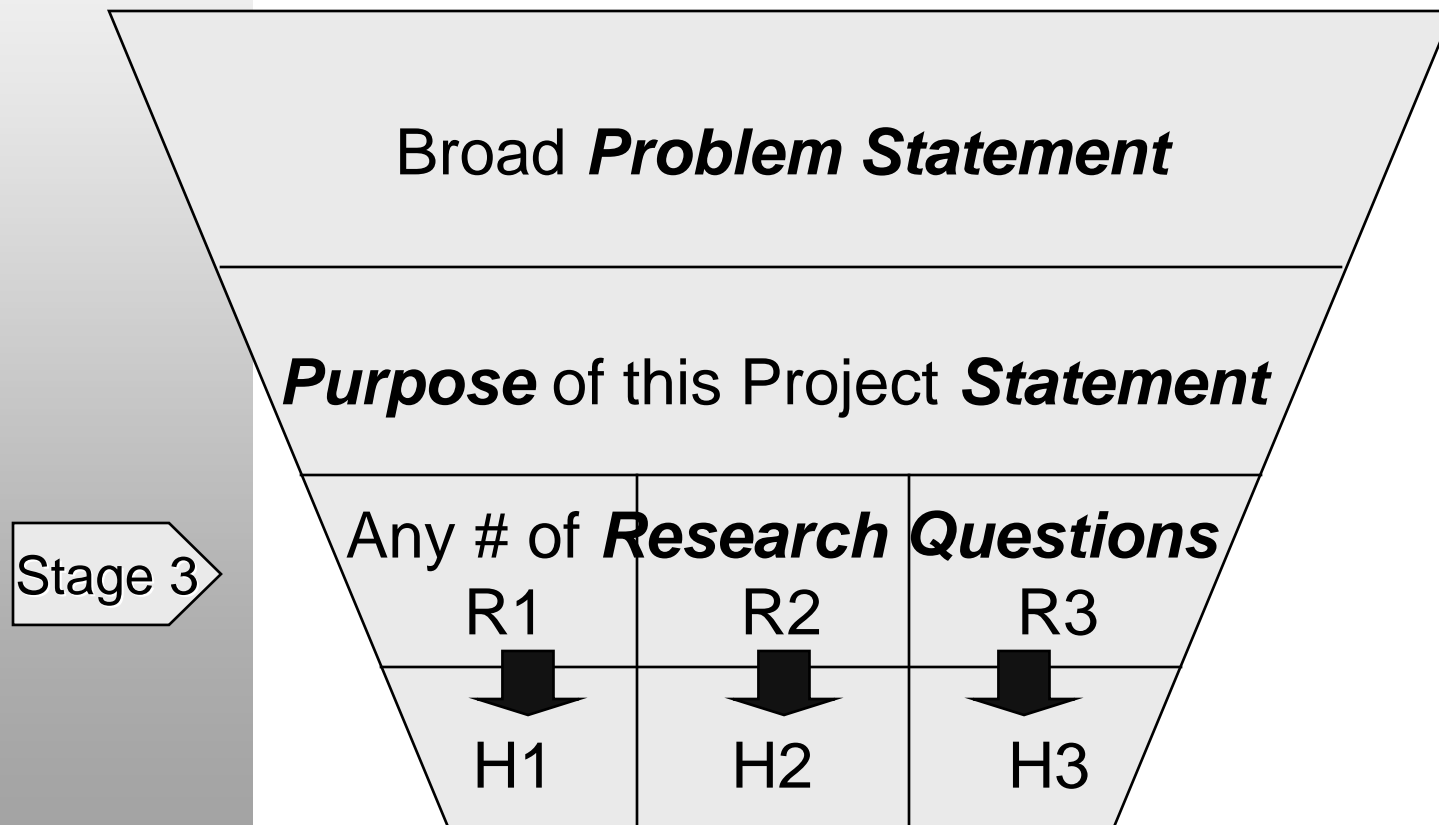
- State the expected relationship or comparison to be made
 - Look for causation (cause and effect)
- Order from independent to dependent
- Refer to the unit of analysis
 - Subjects, population, sample, etc.
- Generally define each key variable
 - Use established definitions

Quantitative Statement Features

- *Sample Script*

“The purpose of this (experiment, survey) is to test the theory (state it) that (compares, relates) the (independent variable) to (dependent variable) for (subjects, sample) at (research site). The independent variable(s) (name each) will be defined generally as (provide definition). The dependent variable(s) (name each) will be defined generally as (provide definition), and the intervening variables (list them) will be statistically controlled in the study.”

Design Model



Research Questions

- Restatement and clarification of the purpose statement
- Qualitative studies typically only have research questions
 - Grand tour (1 or 2)
 - Question in its most general form
 - Sub-questions (no more than 5-7 usually)
 - Narrow the focus but do not constrain
 - Topics specifically explored

Qualitative Research Questions

- Begin with the words *what* or *how*
- Tell the reader the study will do either
 - Discover (grounded theory)
 - Explain or seek to understand (ethnography)
 - Explore a process (case study)
 - Describe the experiences (phenomenology)

Qualitative Research Questions

- Pose questions that use nondirectional wording
- Expect the questions to evolve and change during the study
- Use open-ended questions
- Use a single focus and specify the research site in the questions

Qualitative Research Questions

- A grounded theory study example (two grand tour questions)
 - “What are the major sources of organizational change in research medical centers? What are the major processes through which organization change occurs there?”

Quantitative Research Questions

- Restatement and clarification of the purpose statement
 - Questions, objectives and hypotheses
 - A comparison between two or more groups in terms of a dependent variable, or
 - A relationship between two or more independent and dependent variables
 - Also, descriptive questions to describe responses to independent or dependent variables

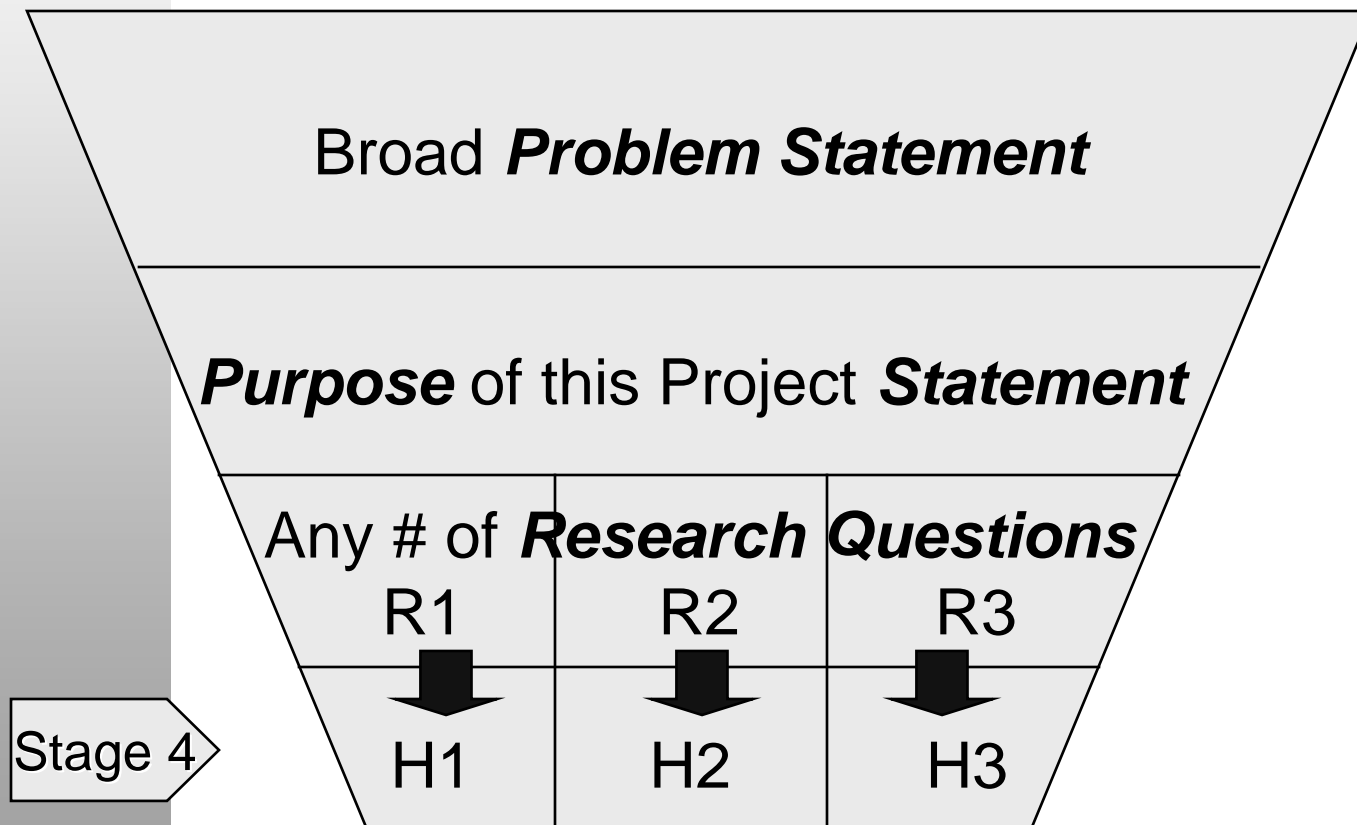
Quantitative Research Questions

- Develop questions from theory
- Keep the independent and dependent variables separate, and measure separately
- Do not combine questions, objectives and hypotheses in same passage

Quantitative Research Questions

- A research question poses a relationship, but phrases the relationship as a question
 - Most popular for surveys
- An objective is the same relationship statement in a declarative form
- A hypothesis represents a declarative statement of the relations between two or more variables.
 - Most common for experimental studies but may be used in any quantitative study
 - include null hypothesis

Design Model



Qualitative Research Design

- Assumptions
 - Concerned with process
 - Interested in meaning
 - Researcher is primary data collection and analysis instrument
 - Involves fieldwork
 - Descriptive in nature
 - Inductive
 - Builds abstractions, concepts, hypotheses and theories from details

Qualitative Research Design

- Typical characteristics
 - Explains the discipline field where the design originated
 - E.g., grounded theory (sociology), ethnographic (anthropology)
 - Presents a good definition of the design
 - Identifies the typical unit of analysis used
 - Types of problems often studied by using the design
 - Various data collection processes
 - Different data analysis processes
 - Typical formats for reporting the information
 - Other special characteristics of the design

Qualitative Research Design

- Researcher's role
 - Past experience with the topic, setting, etc.
 - Steps taken to gain entry
 - Why site was chosen
 - What will be done on site
 - Will it be disruptive
 - How will the results be reported
 - What will be gained from the study
 - Approval steps taken for the IRB
 - Comment on any ethical issues

Quantitative Research Design

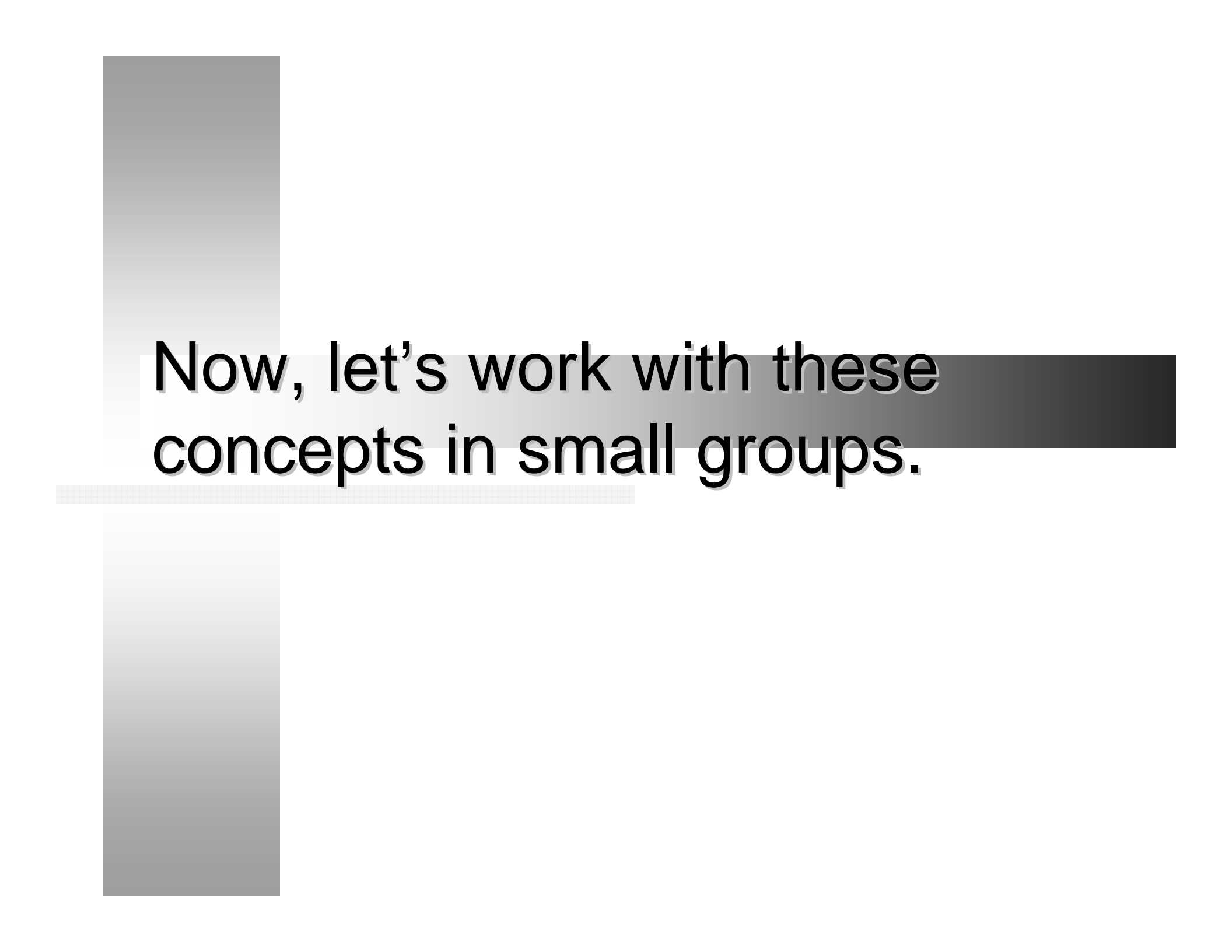
- Assumptions
 - Positivist framework
 - Instruments will collect data
 - Reality can be measured, and
 - It exists apart from the researcher
 - Validity and reliability are important
 - Attempt to eliminate bias
 - Select a representative sample

Quantitative Research Design

- Survey
 - Provides a quantitative or numeric description of some fraction of the population through the data collection process of asking questions of people
 - Enables the generalization of findings to a population

Quantitative Research Design

- Experiment
 - Tests cause-and-effect relationships
 - Randomly assigns subjects to groups
 - Manipulates one or more independent variables
 - Determines if manipulation causes an outcome
 - Theoretically, all variables are controlled



**Now, let's work with these
concepts in small groups.**

A SIMULATION

- **Joe comes to you and says, “I don’t like numbers so I want to conduct a phenomenological inquiry. My topic will be the exploration of decision making styles of African American males in nonprofit agencies.”**
- **In groups of four – discuss this statement and develop FIVE primary responses as faculty mentors that you sense are important to your mentees. Thoughts for consideration –**
 - **1. What is wrong with the statement?**
 - **2. What is right about the statement?**
 - **3. What needs to occur with this learner?**
 - **4. What is critical for this learner’s learning?**

A SIMULATION

- **A student states that the purpose of their research is to add to the body of knowledge on emotional intelligence through a correlation of Goleman's definition to Asante's definition of intuition.**
- **In groups of four, develop FIVE responses to the learner regarding your concerns with the purpose statement.**
 - **1. What is right about the statement?**
 - **2. What needs to be altered about the statement?**
 - **3. What factors will make this statement succeed for the IRB?**

CREATING CAPACITY

- **Earlier today, a discussion occurred regarding the dissertation and the IRB process. How will we each develop consistency in our work with learners that honors their work, our mentoring and the university's desire for standard performance?**

STANDARDS DEVELOPMENT

- **ABOUT THE DOCUMENT**

- **Integrity to the Research Standard**

- Quantitative methods that match research question
- Qualitative methods that match the research question

- **Accountability to the Problem Statement and Research Question – ensuring that the statement guides the question at hand**

- **Clarity of purpose and conformance with research standard**

- **ABOUT THE LEARNER**

- **Congruity of thinking styles and learning styles to the work being performed.**

- **Consistency in writing that matches doctoral performance**

- **Thoroughness in application of method to the research question**

- **Clear about selection of research consistent with the problem to be explored.**

RESEARCH APPROACHES

- Descriptive
 - Correlational
 - Causal-Comparative
 - Developmental-Time Series
 - True Experimental
 - Quasi-Experimental
 - Phenomenological
 - Hermeneutic
 - Heuristic
 - Evaluative
 - Action
 - Survey
 - Case Study
 - Feasibility Study
 - Directive-Correlational
 - Comparative Historical
 - Grounded Theory
 - Ethnographic
- There are problems with the list on the opposite side of this page....
 - In groups of four, identify what is wrong with the list and develop a cogent description that you would give to a learner about the issues embedded in the list.
 - Hints....what is a research design versus a research method versus...?

CONCLUDING WITH PUNCH

As you think about your learners

Consider what might guide them most.

Consider framing their work as a picture of the whole.

What is the context for your dissertation?

What content represents 100% of scope regarding that context?

What processes will inform and answer the context perspective and frame the content factors essential to getting to the end?