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**Cozby & Bates:  
Methods in Behavioral Research (11<sup>th</sup>)**

**Chapter 2: Where to Start**

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# Where to Start?

- Hypotheses and Predictions
  - Hypothesis: type of idea or question; it makes a statement about something that **MAY** be true.
    - Must be ***falsifiable***
      - Tested via data collection (see ***empiricism*** from Chapter 1)
      - Hypotheses can be SUPPORTED or REFUTED
      - Hypotheses can **never** be PROVEN
  - Source
    - common sense, world observation/experience, other theories (past research), practical problems

## Sources of Hypotheses

- Library Research: (preview for Lab #2)
- Internet searches (*Google vs. PsycINFO*)
  - Quality control; Biases in content; Trojan sites
    - Is the site associated with an unbiased known institution?
    - Is the information provided by responsible parties?
      - Credentials?
    - Is the information current?
    - Do the links lead to legitimate organizations?
    - PsycINFO: AND, OR, & NOT (***Boolean Operators***)
- PsycINFO vs. Medline
- Professional Meeting Programs (searchable)

<http://www.ala.org/acrl/standards/informationliteracycompetency>

- is a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."
- is increasingly important in the contemporary environment of rapid technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices--in their academic studies, in the workplace, and in their personal lives. Information is available through libraries, community resources, special interest organizations, media, and the Internet--and increasingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability.
- Information is available through multiple media, including graphical, aural, and textual, and these pose new challenges for individuals in evaluating and understanding it. The uncertain quality and expanding quantity of information pose large challenges for society. The sheer abundance of information will not in itself create a more informed citizenry without a complementary cluster of abilities necessary to use information effectively.

Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. An information literate individual is able to:

- Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one's knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally

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## **Abstract**

- Overview, includes methodology information

## **Introduction**

- Contextualizes question, rationale for experiment

## **Method**

- Operational definitions & fine-grained description
  - It is OK to say: *participants, subjects, respondents, informants*

## **Results**

- Atheoretical

## **Discussion**

- Return to issues from the Introduction

- Revisit the description in your APA manual

**abstracts are short, present clear hypotheses, demonstrate sound methodology, and meaningfully interpret results.**

- The main point is what *you* did, so the bulk of your abstract needs to reflect *your* work.
- focus on core highlights at the expense of breadth.
  - Present only the most central information
  - leave aside details about previous studies, excessive citations, and extended discussions of theory.
- only include citations if they are central to the project.
- results
  - keep statistics minimal
    - e.g., n + statistic w/ effect size for most important hypothesis tested
  - clear, plain explanation of results.

## Chapter 2 Terminology

- Abstract
- Citation
- Discussion Section
- Empirical
- Falsifiable
- Hypothesis
- Introduction Section
- Law
- Literature Review
- Meta-Analysis
- Method Section
- Prediction
- Proof (vs. Support)
- PsycINFO
- Reference
- Results Section
- Theory

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[www.sjsu.edu/psych](http://www.sjsu.edu/psych)