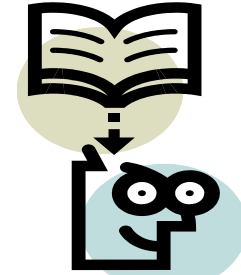
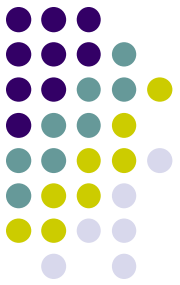
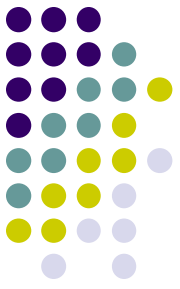


Research traditions in context: Ways of studying the world



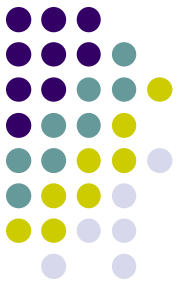
- Research methods can be divided into three general categories: *quantitative*, *observational* (or qualitative), and *textual* (or interpretive).
- **Quantitative methods** involve counting or measuring many repeatable phenomena and using statistics to make sense of the data.
- **Observational methods** involve in-depth study of a single or a few phenomena in order to create accurate and detailed descriptions.
- **Textual or interpretive methods** involve careful “reading” of the meaningful artifacts people create: books, poems, paintings, songs, sculptures, advertisements, etc. It relies on the idea that humans create their own meanings of the world around them, and those meanings hold the best way of understanding people and the world.

A human phenomenon: A man buys and eats a cookie



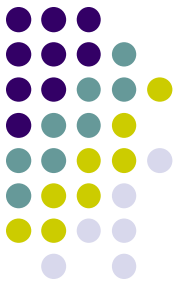
- What questions could we ask about this phenomenon?
How would we answer them?
 - How much would that man pay for that cookie? A quantitative approach: economics (classical models or behavioral experiments); an observational approach: marketing or sociology (focus groups, interviews); a textual approach: the history of the cookie in western civilization
 - Why does the man buy THAT cookie? What did he experience while eating it?
 - A quantitative approach: cognitive psychology (fMRI scans, experimental protocols);
 - an observational approach: cultural anthropology (participant observation in a bakery);
 - A textual approach: French literature (a reinterpretation under some contemporary theory of Proust's seven volume opus, *In search of lost time*, which is largely about involuntary memories brought on by eating a cookie).

Quantitative Research Methods and Disciplines (1)



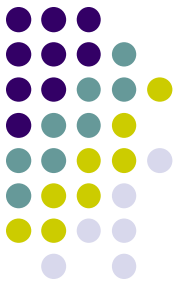
- All quantitative methods involve defining a **research question**, stating a **hypothesis**, and defining the **variables** that will be observed and manipulated.
- Research questions and hypotheses direct the inquiry, i.e., tell the researcher how to proceed with the study.
- Research questions are deduced from prior assumptions (“If this theory is true, then this hypothesis should be true or this question should be answered in a particular way”), and confirmation reflects back on the theory, providing support for it.
- Research questions are never answered in a completely definitive manner, and hypotheses are never “proved” or “disproved”; rather, the weight of evidence obtained either supports or fails to support the hypothesis.

Quantitative Research Methods and Disciplines (2)



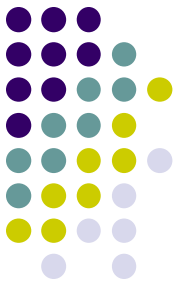
- Both research questions and hypotheses usually state relationships of interest among two or more variables.
- Variables are attributes, properties, or constructs on which people, objects, or events vary and can take on two or more “values” (e.g., gender, IQ scores, occupation, average salaries, hours of sleep).
- Anticipated relationships in questions and hypotheses can be stated as “nondirectional” (e.g., “Women differ from men in their average salaries in similar occupations”) or “directional” (e.g., “Women have lower average salaries than men in similar occupations”).

Quantitative Research Methods and Disciplines (3)



- Variables in the hypotheses are either *independent* and *dependent*. The hypothesis typically states a prediction for how changes in the independent variable will affect the dependent variable (e.g., “the students who sleep for more than six hours per night will earn higher grades than those who sleep less than six hours per night”).
- Independent variables are those that are manipulated or measured, and can be the presumed causes or antecedents.
- Dependent variables are only measured, and can be the presumed effects or consequents.

Quantitative Research Methods and Disciplines (4)

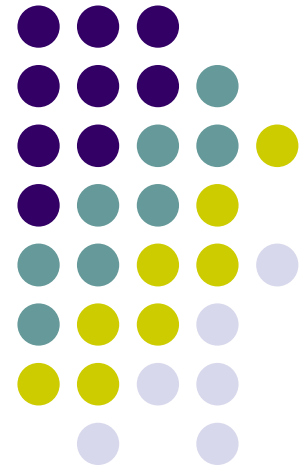


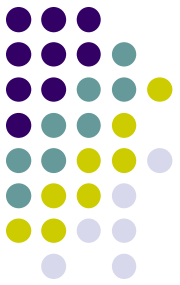
- Quantitative research can be *experimental*, *quasi-experimental*, or *correlative*.
- Experiments require researcher control over the independent variables and randomized samples. Only true experiments can establish causality (e.g., that number of hours of sleep causes a change in GPA).
- Quantitative research dominates the natural sciences and engineering (e.g., physics, chemistry, robotics, genetics, pharmaceuticals) and some areas of social sciences (e.g., economics, geography, social psychology).
- Some types of quantitative methods common in the studies of persons include cognitive experimental research, medical testing, demography, and surveys. What are some specific examples of quantitative methods applied to studying humans?

Observational or Qualitative Research

Definitions, Types, and Examples

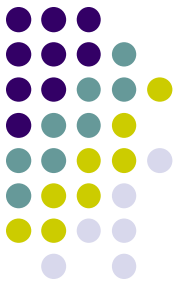
Special thanks to Doug Hesse,
Writing Program Director





Definitions

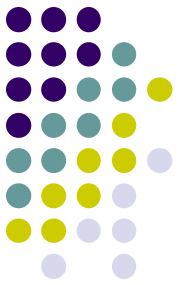
- Observational Research is a form of empirical research that involves in-depth study of one or a few instances of a phenomenon so as to generate descriptions of characteristics of that phenomenon for later analysis.
- Observational Research is about the quality of the data rather than the quantity. The specificity of description and the suggestiveness of the patterns one presents provides it with credibility.
- Example research approaches that are usually qualitative in nature:
 - Case Study
 - Ethnography
 - Interview
 - Participant Observer



Common Examples

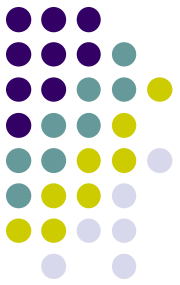
- Case Study: one “case” or instance of a phenomenon in a specific setting that is described and analyzed.
 - *Musicophilia* by Oliver Sacks; *How we decide* by Jonah Lehrer
- Ethnography: a comprehensive and long-term description and analysis of a cultural group in a real-world setting.
 - *Coming of Age in Samoa* by Margaret Mead
- Interview: conversation, question and answer data attained from one or more people.
 - Most any profile or Q&A in newspapers and magazines, or on TV or radio.
- Participant Observation: Description of a group by a researcher-member of that group who participates in the studied activity. Ethnography often involves participant observation.
 - *Nickel and Dimed* by Barbara Ehrenreich

What is Important in Observational Research



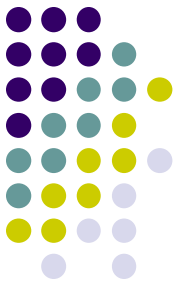
- “Thick Description” (Clifford Geertz) – describe not only the phenomenon that you are observing but the context as well.
 - For example, imagine a classroom: the researcher would describe not only the phenomenon she set out to observe (her hunch about, say, gender and teacher interaction) but the classroom layout, time of day, temperature, clothing, week in the quarter, observable actions (whispering, talking, passing notes, internet surfing), teacher movement, student movement, etc. The context may be more influential than your hunch.
- At the analysis stage, researchers are looking for patterns, occurrences that suggest possible underlying causal structures, discursive aims, rhetorical purposes, subconscious intentions, etc. Phrases such as QDA (for *qualitative data analysis*), *Coding*, *Themes*, *Grounded Theory*, *Discourse Analysis*, and *Narrative Analysis* are some indicators of observational data analysis.

Practical and Conceptual Concerns



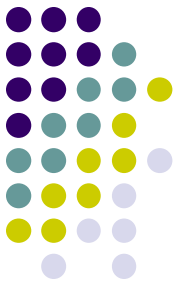
- Researchers should not expect to use all of their data in the analysis, but because they cannot anticipate what they will find (beyond an initial hunch), they should record everything (as should you if you conduct an interview!).
- A good researcher acknowledges the limitations on his or her conclusions. Sources of alternative interpretations of qualitative data include:
 - Researcher or participant (self-reporting) bias: Does the researcher “cook the books” by preferring data that support his or her expected conclusions and ignoring disconfirming data? Does an interviewee stretch the truth?
 - Reactivity between researcher and participants: Does the researcher’s presence effect the outcomes he or she observes, such as what an interviewee is willing to say? Do participants speak or act differently merely because they have been singled out?

Interviews

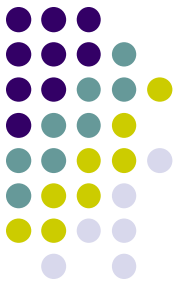


- Don't conduct impromptu interviews. People are busy and just showing up to conduct an interview is rude and may lead to a rushed set of responses. Conduct an interview as a professional. Show up early with a prepared set of questions.
- Don't interview family members or friends. Interviewing your friend about being a business student isn't useful. However, you might interview a close friend or relative if he or she is in a unique position to respond to the interview. Interviewing a friend who works at the library about the ways people use the databases is okay.
- Don't record an interview unless the interviewee has agreed to this. While most people might be receptive to being taped, some people do not approve. Always treat an interviewee with respect and do not pressure him or her.
- If you are recording, do not rely on the recording device. You should take notes and lots of them. Practice note taking with a friend before you conduct the actual interview.
- Always remember The Deal – people are giving up their time to help you out, so help them out by treating them and their responses fairly in your written work. You might even tell them that you will send the person a finished copy of your paper before submission.

Interview Questions



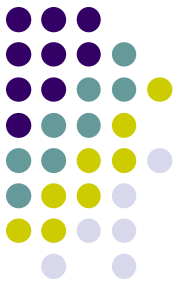
- Try to avoid questions that force the interviewee into one answer. Leading questions or limiting questions don't allow the interviewee to answer really how he or she would normally answer.
- Construct questions that allow the interviewee to say a lot. Think of a reporter's questions--who, how, what, why, where, when—as guides to constructing questions. What does this all mean? Well, instead of starting with "How does your discipline study individual people?" Try to build up to such a question by asking a series of questions such as, "What do you study in your research? How do you study that phenomenon? What kind of educational or professional background prepared you for this research methodology?"
- Your lead question is important. Ideally, it should establish why you are asking the questions and why you are asking the questions of that particular person; most importantly, it should be answerable.
 - "I'm currently working on this assignment in my writing class where I have to determine how people in my major discipline conceive of the person, and I thought you would have an interesting perspective on this. What are some ways in which people in [insert discipline here] think about or study other people?"
- Don't be limited by the questions you wrote out beforehand. It's more important to follow the conversation. Two questions you should always have prepared are, "Can you give an example?" and "Could you tell more about what you just said?"
- Have an "ender" question so that the interviewee can sense when the interview is over and he/she can share any last tidbit that he/she was thinking.
 - Columbo approach: "I think that is about it. However, I did want to ask you one more thing?"
 - Elise Hancock: "One last question. Is there anything that I should have asked you but didn't?"
 - "As a final question, what is the most important part about X that you think people should know?"
- Always thank your interviewee for his/her time and make sure he or she has your contact information in case they think of anything else



Example Interviews

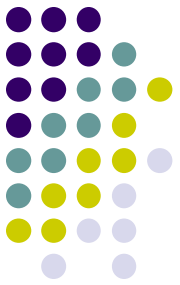
- Interview a professor about their current research or past projects (whose published versions you've read).
- Interview somebody in the profession you are interested in going into about the research component of their work.

Writing the Interview into your Assignment



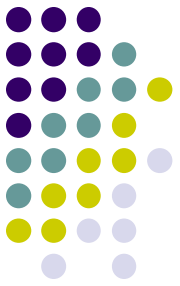
- How you do it depends on the rhetorical situation.
- Interviewer questions are sometimes as important as the interviewee's responses. Use your best judgment and imagine yourself as a reader: Would I know what the person is talking about if I hadn't heard the question?
- The length of the interview is not related to the length of the assignment. Sometimes a 30 minute interview will result in one usable quote. That's fine. You are using this as evidence for your argument. If you were writing a biographical profile, you would ask different things and focus on different responses.
- Make sure you provide background, credentials, and context for your audience in your interview. You should write schema such as, "in an interview with [blah], a [blah] at [blah]."

Textual or Interpretive Methods and Disciplines (1)



- Textual research focuses on “texts,” that is to say, human expression via artifacts (the written word, the visual arts, music, dance, etc.).
- Textual research gains its authority from the idea that the primary human faculty—what we’re best at—is *interpretation* of our world and of each other. That is to say, the research is inherently subjective (or intersubjective, meaning social) because human beings are inherently subjective.
- Interpretive methodologies involve a more explicit commitment to prior theory: textual scholars will never hide the fact that they hold a particular perspective (these are often “-isms,” such as Freudianism, structuralism, deconstructivism, New Historicism). The theories often prescribe the methods.
- Textual methods broadly are often simply called “criticism,” as in literary criticism, art criticism, film criticism, architecture criticism.

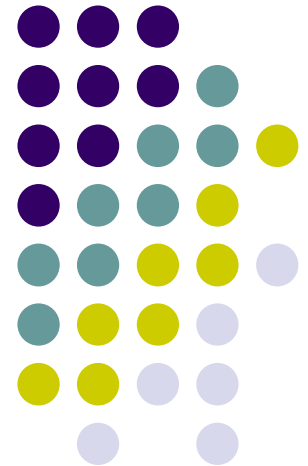
Textual or Interpretive Methods and Disciplines (2)



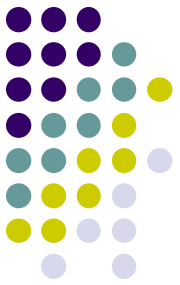
- The arts and humanities are largely (but not entirely) dominated by textual methodologies. Some fields include English and other language studies, art history, rhetoric, philosophy, and mass communication and history (which are also social sciences).
- Textual methods are inherently focused on people. What are some specific examples of textual studies?

Research and Writing

Ways of Knowing,
Ways of Writing



Style Differences



APA (CSE)

Hard Evidence

paraphrase and
command of
information

Credentials are assumed
or are embedded,
because...

Credibility is in the
evidence not the
source

MLA

Textual Evidence

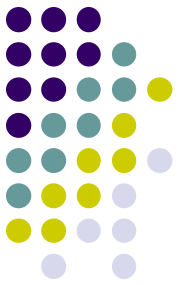
Quotes hold the meaning,
and are to be “interpreted”

Credentials are foregrounded

Variety of sources requires
that author provide context
for sources, so...

Source credentials provide
credibility

Example



APA Style in Practice

Whether selecting friends or lovers, people exhibit clear preferences for particular characteristics in their relationship partners. For example, people report greater interpersonal attraction toward highly physically attractive others than toward less physically attractive others (e.g., Berscheid & Walster, 1974; Eagly, Ashmore, Makhijani, & Longo, 1991) and toward those who are similar to them in personality (Barry, 1970; Neimeyer & Mitchell, 1988; Tharp, 1963), attitudes (Byrne, 1971; Newcomb, 1961), and physical appearance (Berscheid, Dion, Walster, & Walster, 1971; Feingold, 1988).

MLA Style in Practice

Researchers have found that people tend to prefer particular characteristics in their relationship partners. For example, Andrew Eagly et al. in an meta-analysis from 1991 Psychological Bulletin collected a number of studies to compare physical attractiveness and found that people tend to prefer more attractive people to less attractive people.

Another characteristic that researchers found to be instrumental in was similarity in personality. This finding was originally argued in 1963 by Roy Tharp, but was later confirmed in an article from the 1988 Journal of Social and Personal Relationships by Richard Neimeyer and Kay Mitchell.