

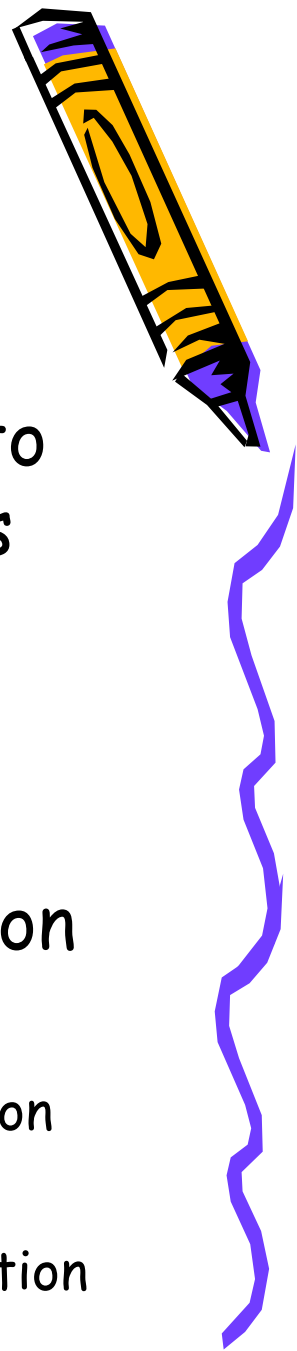


Writing a Research Report

If research was not "written up,"
did it really occur?



Writing a Research Report



- Academic scientists conduct research to discover facts, truths, and explanations about the social world.
- They write research reports to convey theirs and others' research findings.
- The point is to provide useful information to others.

Library research refers to gathering information that others have generated.

Primary research refers to generating information through data collection, analysis, and reporting findings.



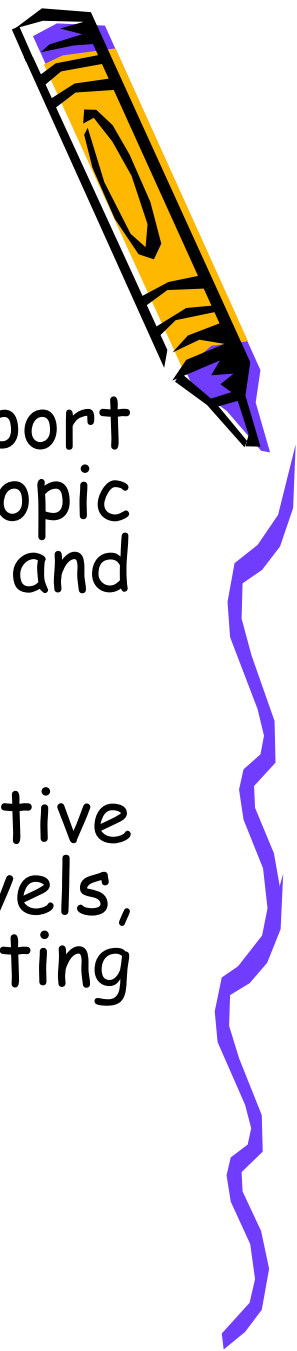
Writing a Research Report



- Scientific' articles, papers, or research reports convey:
 - Facts and/or theories others in the research community generated (research reviews)
 - Facts and/or theories the research community generated **and** one's own findings generated from a research project (research article or book)
 - And rarely, only one's findings generated from a research project (applied research)



Writing a Research Report



- A scientific article, paper, or report generally covers only one important topic of interest and conveys evidence and interpretations of evidence.
- Research reports are NOT creative writing, opinion pieces, poems, novels, letters, musings, memoirs, or interesting to read.



Quantitative vs. Qualitative



- Qualitative Research
 - Designed to capture social life as participants experience it
 - Emphasis on subjective, meanings
- Quantitative Research
 - Designed to measure social variables, numerically
 - Emphasis on numerical summaries and interrelationship of phenomena

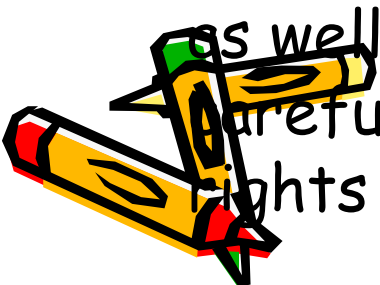


Types of Reports

- There are many different formats for reporting research; journal articles, technical research reports, monographs or books, graduate theses or dissertations.
- Research is also reported orally at professional meetings, seminars, symposia, and workshops.
- These oral reports, however, are usually based on previous written reports.



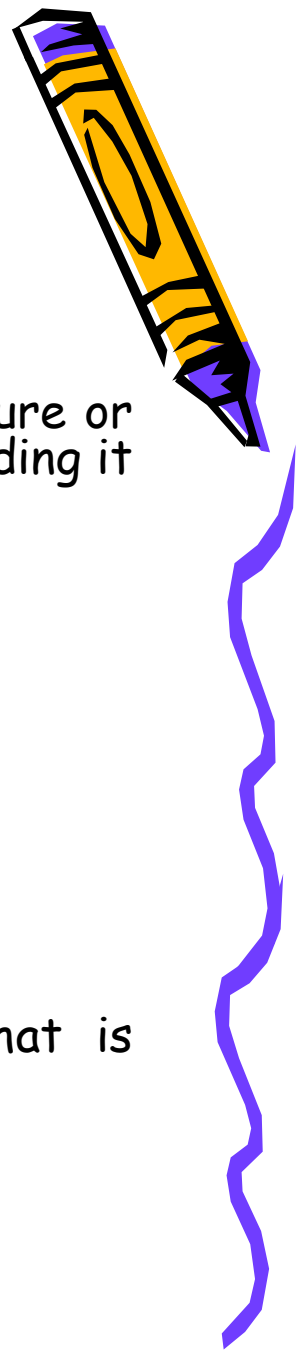
- **Journal articles** are the most condensed form of writing. Journals have severe space limitations and often all the details of a complex research project can't be presented in one article.
- They are the most "prestigious" format for reporting disciplinary work.
 - Involve a peer-review process which evaluates quality and importance of a paper
 - They receive wide distribution to disciplinary and subject-matter readers
- To reach other audiences, other publications must be used
- Sometimes, research can be written as journal articles as well as other formats to reach different users. Be careful, though, not to violate exclusive publication rights of journals - get permission!



- Graduate theses and dissertations tend to be on the other extreme of length and completeness
- This is the report of the student's work to his/her graduate committee
- These tend to be long and sometimes more wordy than necessary. But completeness is considered more important than efficiency in this writing. (In this respect, they are opposite to journal articles.)



Writing a Research Report



- A report article, paper, or report generally takes a structure or form that seems difficult but is intended to help make reading it or using it for research quick and efficient.
- A research report has seven components:
 1. Abstract or Summary
 2. Introduction
 3. Review of Literature
 4. Methods
 5. Results
 6. Conclusions and Discussion
 7. References
- Note: Qualitative research reports will vary from what is presented here.



Writing a Research Report



- A research report has seven components:

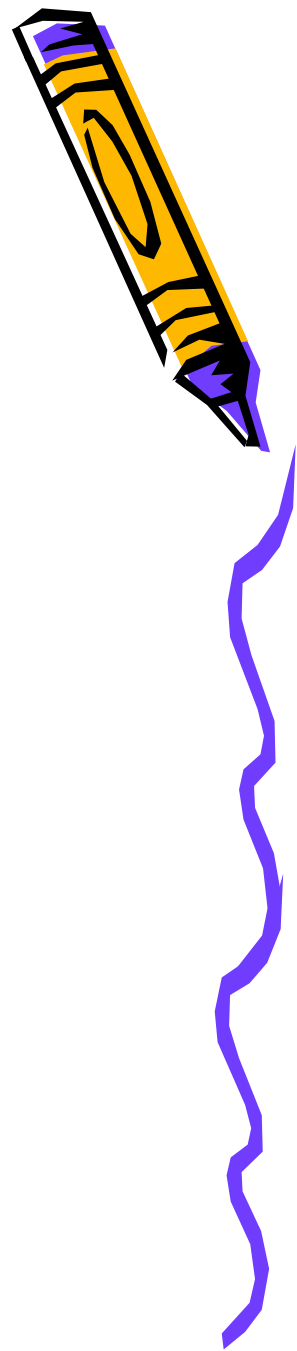
1. **Abstract or Summary**

The abstract or summary tells the reader very briefly what the main points and findings of the paper are.

- This allows the reader to decide whether the paper is useful to them.
- Get into the habit of reading only abstracts while searching for papers that are relevant to your research.
- Read the body of a paper only when you think it will be useful to you.



Writing a Research Report



A research report has seven components:
1. Abstract or Summary—an example

Social Psychology Quarterly
1998, Vol. 61, No. 3, 199–219

Which Kids Can “Become” Scientists? Effects of Gender, Self-Concepts, and Perceptions of Scientists*

JAMES DANIEL LEE
Indiana University

Science, mathematics, and engineering (SME) disciplines lose potential female professionals as women move to other educational and career paths at higher rates than men. Also, the remaining women tend to cluster into particular fields. I frame these trends as identity-acquisition issues. Using identity theory, I examine links between gender, self-concepts, and perceptions of scientific others, focusing on how these contribute to students' SME interests and the resulting educational trajectories. The sample of 433 talented high school students was drawn from 10 SME summer programs conducted in 1995 and 1996. The students' interests follow common patterns by gender; identity theory helps to explain why. Key findings are as follows: (1) On average, girls' self-concepts are more like their perceptions of same-sex others than those of boys, and more unlike their perceptions of other science students. (2) Discrepancies between self-concepts and perceptions of those in science-related disciplines are associated with lower interest in those disciplines. (3) Discrepancies explain some differences, by sex, in interests.



Writing a Research Report



- A research report has seven components:

2. Introduction

The introduction tells the reader what the topic of the paper is in general terms, why the topic is important, and what to expect in the paper.

- Introductions should funnel from general ideas to the specific topic of the paper
- Introductions are sometimes folded into literature reviews

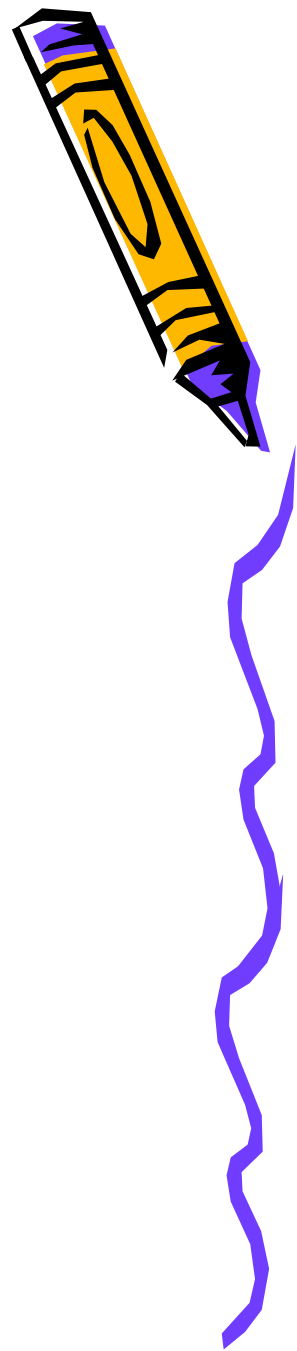


Writing a Research Report

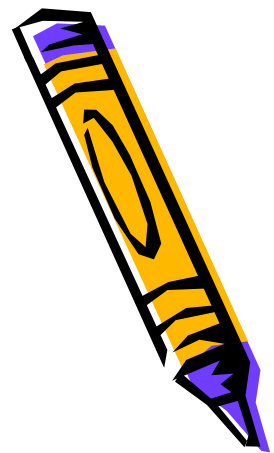
A research report has seven components:

2. Introduction—an example

This research focuses on sex differences in identity change processes. The identity theory perspective in sociology asserts that interaction may prompt change in inherently stable self-concepts. While research supports the general specifications of identity theory, the perspective makes no statement about whether identity processes are the same for each sex; researchers typically assume similarity. This issue remains to be systematically explored. Indeed, recent research on gender differences among science and technology students (Lee, 2002) calls for scrutiny of the assumption that females' and males' identities and behaviors respond to social relationships in the same way. The present research addresses this gap in the identity theory literature.



Writing a Research Report



- A research report has seven components:

3. Review of Literature

The literature review tells the reader what other researchers have discovered about the paper's topic or tells the reader about other research that is relevant to the topic.

- A literature review should shape the way readers think about a topic—it educates readers about what the community of scholars says about a topic and its surrounding issues.
- Often what students call a "research paper" is merely a review of literature.
- Along the way it states facts and ideas about the social world and supports those facts and ideas with credit for where they came from.



Writing a Research Report



- A research report has seven components:

3. Review of Literature

- If an idea cannot be substantiated by the community of scholars, the literature review makes clear that the author is speculating, and the logic of the speculation is detailed.
- Irrelevant information is not discussed.
- The literature review has its own voice. The sources of information are not extensively quoted or "copied and pasted." Instead, the author puts facts and ideas into his or her own words while pointing out where the information came from.

Think about how you tell family members about the exciting things you learned in classes...or think about how you discuss sociology at cocktail parties. You make claims in you own words...you don't quote word for word or cut and paste what you learned.



Writing a Research Report



- A research report has seven components:

3. Review of Literature

- Literature reviews have parenthetical citations running throughout. These are part of a systematic way to document where facts and ideas came from, allowing the skeptical reader to look up anything that is questionable.

*Remember as a kid: "My Momma said...?"
Parenthetical citation is our way of substantiating claims we made in our own words, without breaking our flow.*

- Each citation directs the reader to the references where complete details on sources can be found.
- Citations consist of authors' last names and the year of publication. One finds complete information on sources by looking up last names and dates in alphabetized references—so there's no need to put all that information in the text.



Writing a Research Report



- A research report has seven components:

3. Review of Literature

- We have conventions that allow the reader to figure out where information is coming from.

In text, just pointing out where info came from:

- blah blah (Author Year) or (Lee 2004).

In text, where you quoted someone:

- "Quote quote" (Author Year: Pages) or (Lee 2004: 340).

In text, more than one source:

- (Author Year; Author Year) or (Lee 2004; Seymour & Hewitt 1997)

In text, if you want to use the author's name in a sentence:

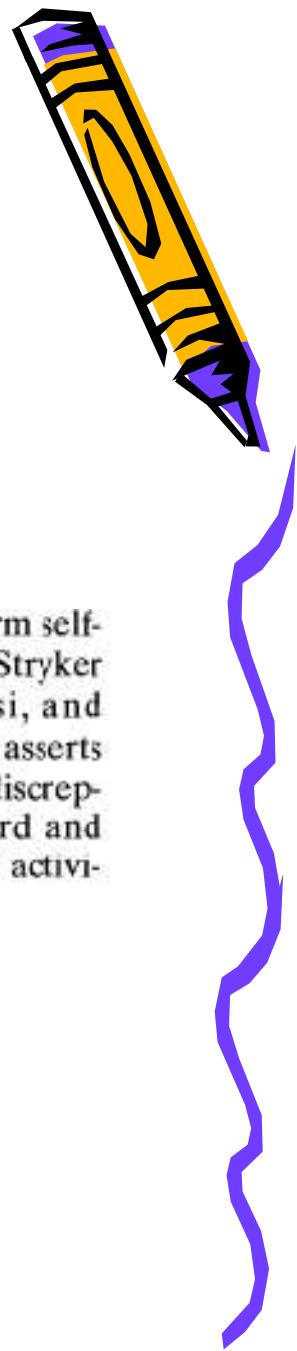
- Author (Year) says that... or Lee (2004) claims that girls...

Quoting a person and using their name:

- Author (Year: Pages) says, "Quote quote..." or Lee (2004: 341) says, "Girls are more likely to..."



Writing a Research Report



A research report has seven components:

3. Review of Literature—examples of citing

various identities. Consequently, she may change her career plans like the college women discussed by Rayman and Brett (1993:61) who “appeared to have discovered new sides to themselves. They participated in extracurricular activities, studied somewhat less than others and found they were attractive to others.” Similarly, Serpe and Stryker (1987) found that, upon entering college, women are more likely than men to construct new selves. One may expect a similar

Actors behave in ways that confirm self-meanings (Banaji and Prentice 1994; Stryker 1968, 1980; Swann, Stein-Seroussi, and Giesler 1992). In fact, Burke (1991b) asserts that stress is created by a meanings discrepancy between one’s internal standard and the feedback one receives from social activi-



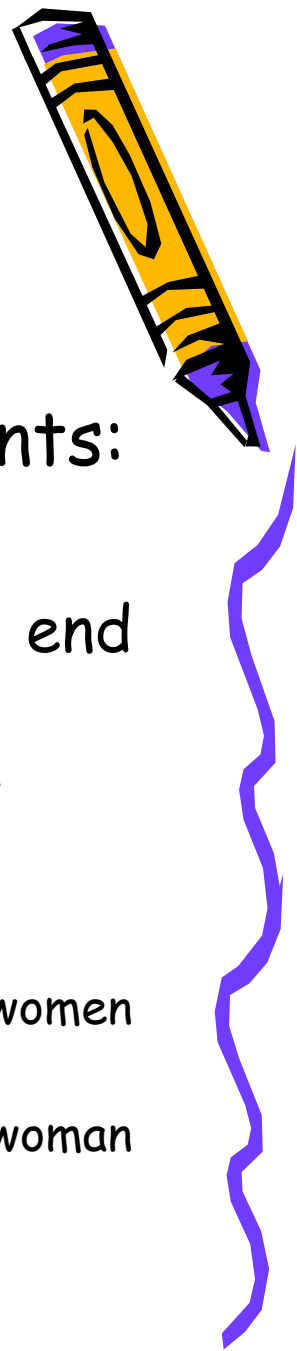
Writing a Research Report



- A research report has seven components:
 - 3. Review of Literature
 - Note that if you want to explain why social events occur as they do, you will use (and test) explanations that have worked before. THESE EXPLANATIONS ARE CALLED THEORIES.
 - Most academic literature reviews have a guiding theory that is used to:
 - Frame (or help us understand) facts in the literature.
 - Establish expectations (or hypotheses) for the research.
 - Justify speculation when no evidence to justify an idea exists in the literature.
 - Sometimes the whole point of a research project is to:
 - Determine whether a theory works
 - Pit two or more theories against each other to see which works better



Writing a Research Report



- A research report has seven components:

3. Review of Literature

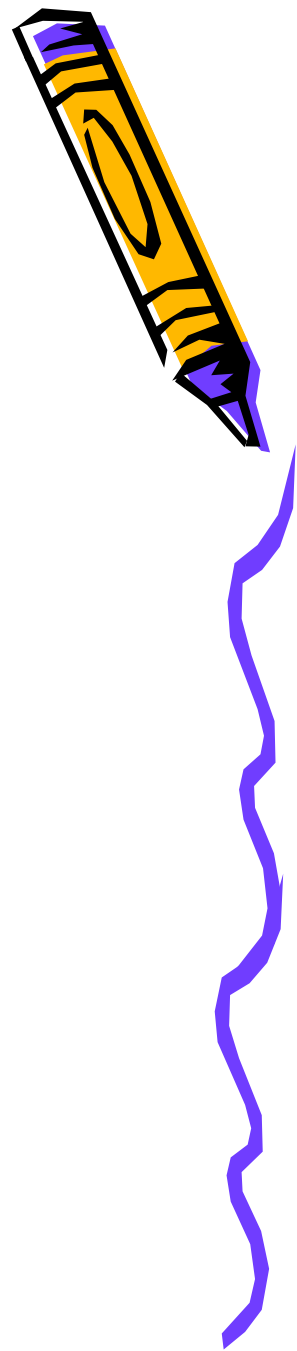
- Quantitative literature reviews typically end with statements of:
 - Exactly what the researcher's specific topic is
 - Research hypotheses
 - For example:

"Men will have higher investment income than women even when controlling for education."

"Older Americans will oppose abortion for a woman who doesn't want her baby because she is poor."



Writing a Research Report



A research report has seven components:

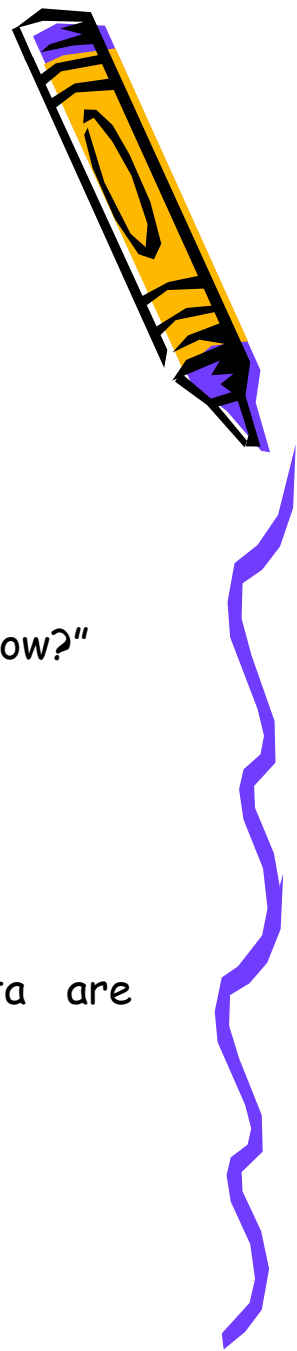
3. Review of Literature—examples of hypotheses

Research Expectations. Our analysis centers on testing the expectations established by conflict theory and the empirical literature. These suggest the following:

- Belonging to less powerful demographic groups will lead to lesser approval of police violence as measured by our five dependent variables. Women and minorities will show less approval of police violence. We also expect younger persons, the less educated, lower class persons, and unmarried individuals to be less likely to approve of police use of force.
- Social attitudes will affect support for police use of force. Conflict theory suggests that those who demonstrate more concern for the less powerful will display less support for police use of force. Persons with liberal political views will have less support for police violence. Those believing that government should provide assistance for poor and minority persons will show less support for police violence. Those living in neighborhoods with more crime, and those with less confidence in institutions, will do the same.



Writing a Research Report



- A research report has seven components:

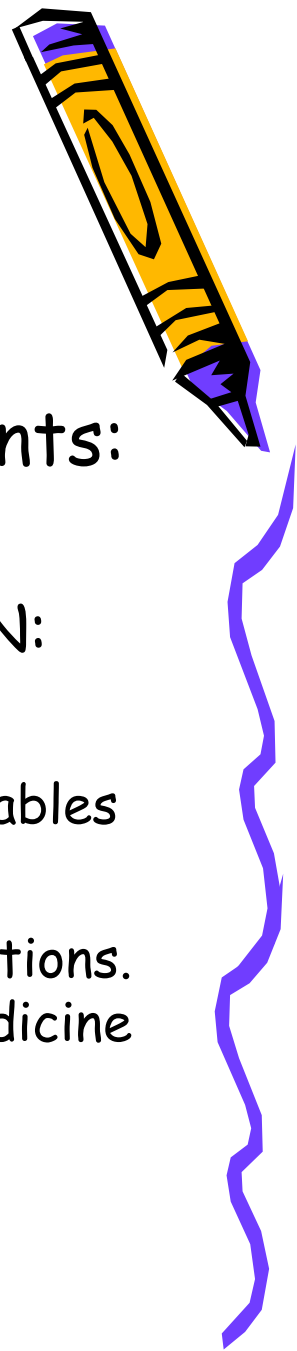
4. Methods

A METHODS SECTION MUST CONTAIN:

- Descriptions of Data
 - Think in terms of: "Who, What, When, Where, Why and How?"
 - Target Population
 - The Ways Data were Collected:
 - Sampling
 - Delivery Methods
 - Response Rates
 - Limitations of Data (Who is omitted, biases)
 - Any analyses necessary to bolster claims the data are appropriate
 - Sample sizes through various decisions
 - Such as:
 - » eliminating non-Christians from the sample
 - » using only white respondents



Writing a Research Report



- A research report has seven components:

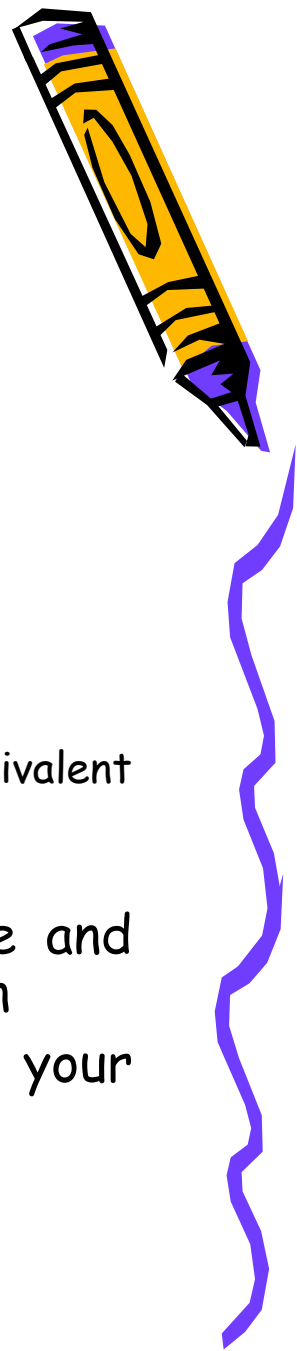
4. Methods

A METHODS SECTION MUST CONTAIN:

- Descriptions of Variables
 - Statement of dependent and independent variables
 - Names for the variables—make them intuitive!
 - Word for word description of the questions. (sociology differs from psychology and medicine here)
 - The ways variables are coded



Writing a Research Report



- A research report has seven components:

4. Methods

A METHODS SECTION MUST CONTAIN:

- Manipulations of the variables or data
 - For example:
 - recoding income from 23 uneven intervals to five equivalent categories
 - removing non-citizens if studying voting patterns
- Reflection on Adequacy and strength of sample and variables for generalizing to the target population
- The techniques that will be used to test your hypotheses or research questions



Writing a Research Report

4. Methods

Sample

We use a nationally representative sample survey of U.S. households, the 1998 General Social Survey (GSS) (Davis and Smith 1999). The GSS is conducted by the National Opinion Research Center at the University of Chicago on a biennial basis in face-to-face interviews with English-speaking adults. The GSS employs a full-probability sample, which means that all noninstitutionalized

Measures

In order to measure support for the use of force by police personnel, we use five questions from the 1998 GSS that asked respondents about their approval of police striking citizens. (For a list of variables used, with individual coding

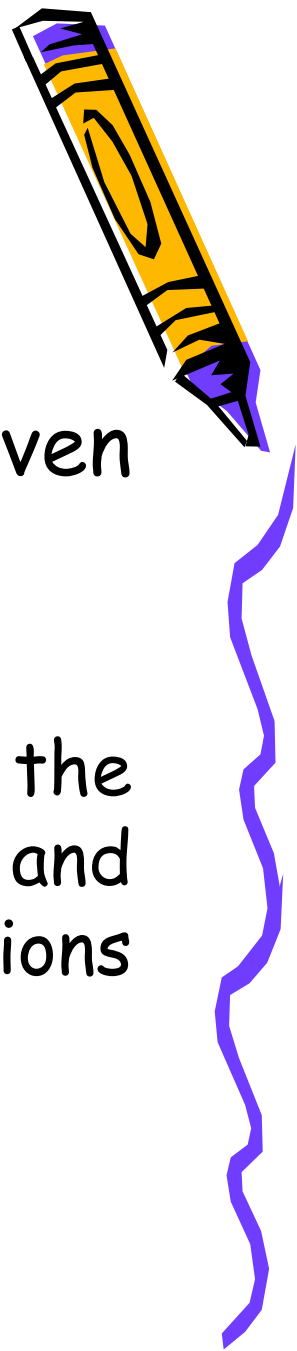
Social Attitudes. We measure *Political Views* with respondents' ratings of their political views on a seven-point scale, ranging from extremely liberal to extremely conservative. We also measure respondents' attitudes concerning the government's role in providing help for the poor and minorities with a scale

Analysis

Although others have used Ordinary Least Squares (OLS) regression on questions like ours in previous analyses (Arthur 1993; Arthur and Case 1994), we use logistic regression. This technique is more appropriate because the dependent variables are binary. If OLS regression were used, several important assumptions would be violated (Long 1997). For example, using OLS regression on a binary variable may cause inefficient coefficients, leading to incorrect test statistics. Also, OLS often predicts values of binary dependent variables beyond the limits of zero and one. Another important consideration is that OLS regression



Writing a Research Report



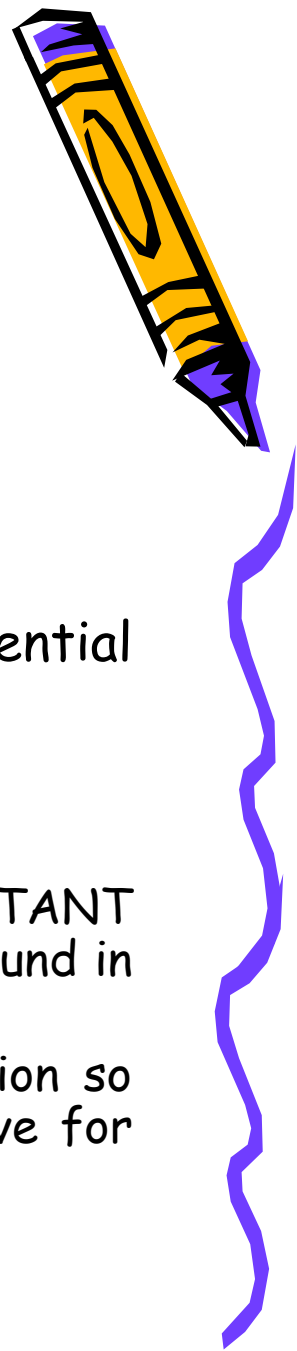
- A research report has seven components:

5. Results

The results section chronicles the findings of the statistical analyses and assesses whether your expectations (hypotheses) were correct.



Writing a Research Report



- A research report has seven components:

5. Results

The results section includes:

- Professional tables showing descriptive and inferential statistics
- Narrative describing most relevant findings
- The narrative and tables are complementary.
 - The narrative discusses ONLY VERY IMPORTANT findings and refers to where information can be found in the tables as different facts are discussed.
 - The tables contain almost all statistical information so that the author does not have to write a narrative for every detail in the analysis.



Writing a Research Report



- A research report has seven components:

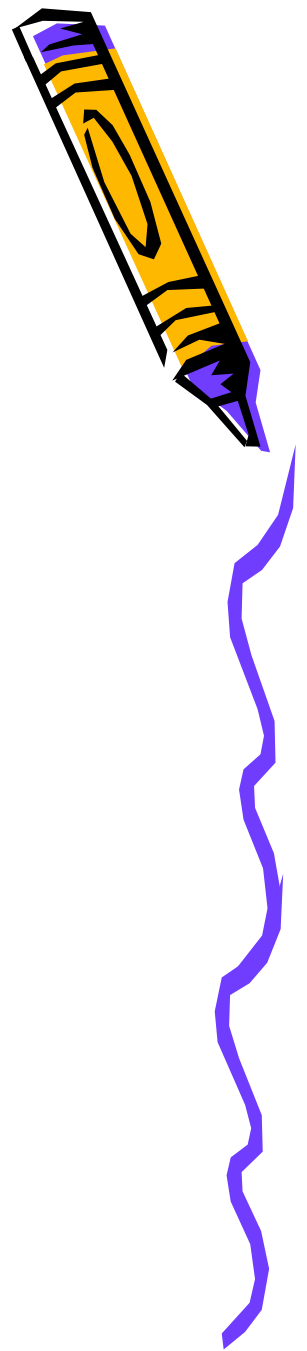
5. Results

The results section includes:

- Evaluations of the hypotheses. Were the research hypotheses supported?
- Statements about new discoveries or surprises encountered in the analyses



Writing a Research Report



5. Results

Girls Are More Likely to Change

Beyond showing that girls get more attached and involved in new relationships than boys, it is important to determine whether the second hypothesis is correct to predict greater change in girls' identities and behaviors. Table 2 displays the ways in which boys' and girls' levels of activities and identity prominence in each activity domain compare with each other both before programs and during program involvement. While change is not always observed, the patterns indicate that girls are more likely to change. In addition, likelihood of change differs between activity domains.

TABLE 2 Means of Level of Activities and Corresponding Identity Prominence (Centrality and Salience) in Five Activity Domains by Sex at Home and at Programs

<i>Variable</i>	<i>Home</i>		<i>Program</i>	
	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>
Level of activities (scale: 0 – 7):				
<i>Science & technology</i>	5.87 ^a	5.98 ^a	6.17 ^a	6.21 ^a
<i>Computers</i>	3.97 ^a ***	4.84	4.59 ^a **	5.17
<i>Athletics & recreation</i>	5.52 ^a +	5.20	5.22 ^a	4.99
<i>Beliefs & interests</i>	5.18 ^a *	4.81	4.70 ^a	4.66
<i>Arts & literature</i>	5.71 ^a ***	4.99 ^a	4.47 ^a **	3.98 ^a
Identity Prominence, Centrality (scale: 0 – 7):				
<i>Science & technology</i>	5.90 ***	6.27 ^a	5.74	5.82 ^a
<i>Computers</i>	4.05 ***	4.97	4.07 ***	4.80
<i>Athletics & recreation</i>	5.54	5.39	5.41	5.32
<i>Beliefs & interests</i>	5.94	5.69	5.75	5.69
<i>Arts & literature</i>	5.75 ^a ***	5.00	5.42 ^a **	4.84
Identity Prominence, Salience (scale: 0 – 7):				
<i>Science & technology</i>	3.94	3.85	4.03	4.04
<i>Computers</i>	2.47 ^a **	2.95 ^a	2.74 ^a *	3.20 ^a
<i>Athletics & recreation</i>	5.07 ^a	4.97	4.90 ^a	4.81
<i>Beliefs & interests</i>	4.34	4.23	4.45	4.41
<i>Arts & literature</i>	4.41 ^a **	3.99	4.24 ^a	3.96



Writing a Research Report



- A research report has seven components:

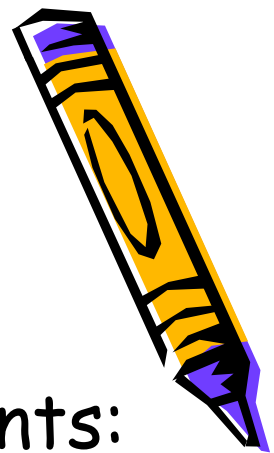
6. Conclusions and Discussion

This section assesses how one's research findings relate to what the community of scholars knew already.

- You should summarize the most salient points of your research (tell the reader what you found out about your topic).
- Discuss the general significance of your topic and findings.



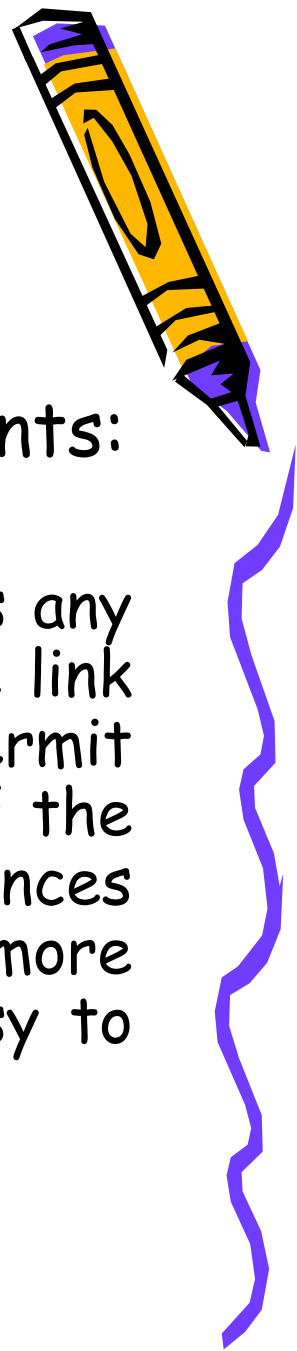
Writing a Research Report



- A research report has seven components:
 - 6. **Conclusions and Discussion**
 - You should discuss the shortcomings of your study and what implications these have for your findings.
 - Discuss things future researchers should investigate about your topic.
 - Leave the reader with the understanding he or she ought to have about the topic you spent so much time exploring.



Writing a Research Report



- A research report has seven components:

7. References

The references are just as important as any other part of your paper. They are the link to the community of scholars that will permit your reader to assess the worthiness of the claims you make in your paper. References also make the research process much more efficient because they make it very easy to look up sources of facts and ideas.



Writing a Research Report



- A research report has seven components:

7. References

Should be hanging indented, alphabetical on author's last name (by increasing year within same author) with information in order determined by type of source:

Article

Last Name, first name. Year. "Article title." *Journal Name* Volume: 1st Page- Last Page.

Lee, James Daniel. 2005. "Do Girls Change More than Boys? Gender Differences and Similarities in the Impact of New Relationships on Identities and Behaviors." *Self and Identity* 4:131-47.

Chapter

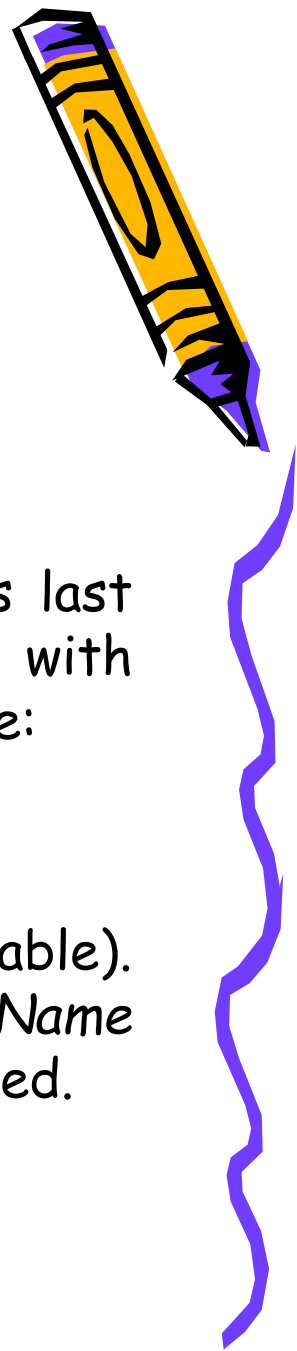
Last Name, first name. Year. "Chapter Name." Pages in the book in *Book Name*, edited by first name last name. City of Publisher: Publisher.

Book:

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Writing a Research Report



- A research report has seven components:

7. References

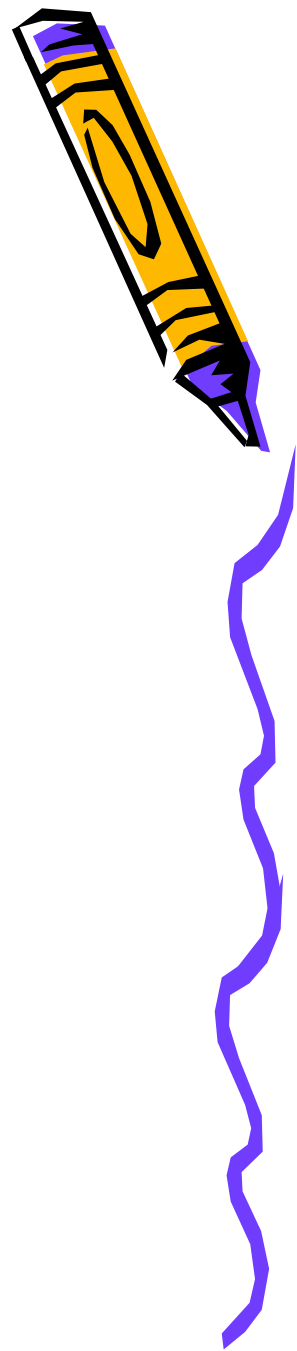
Should be hanging indented, alphabetical on author's last name (by increasing year within same author) with information in order determined by type of source:

A website:

Last Name (if available), first name. Year (if available).
"Article or web page title." *Journal or Report Name*
Volume (if available). <http://address>. Date accessed.



Writing a Research Report



A research report has seven components:

7. References—an example

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Writing a Research Report

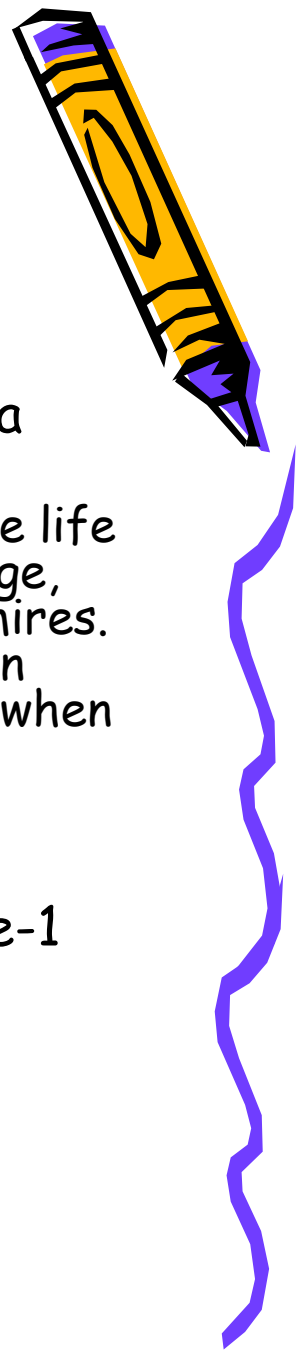


Finally...Avoiding Plagiarism

- What is it?
 - All knowledge in your head has either been copied from some place or originally discovered by you.
 - Most knowledge was copied.
 - This is true in most settings. General knowledge is copied. Most teachers' lectures are copied knowledge.
 - Humans are naturally copiers, but this is not what we would typically call "plagiarism."



Writing a Research Report

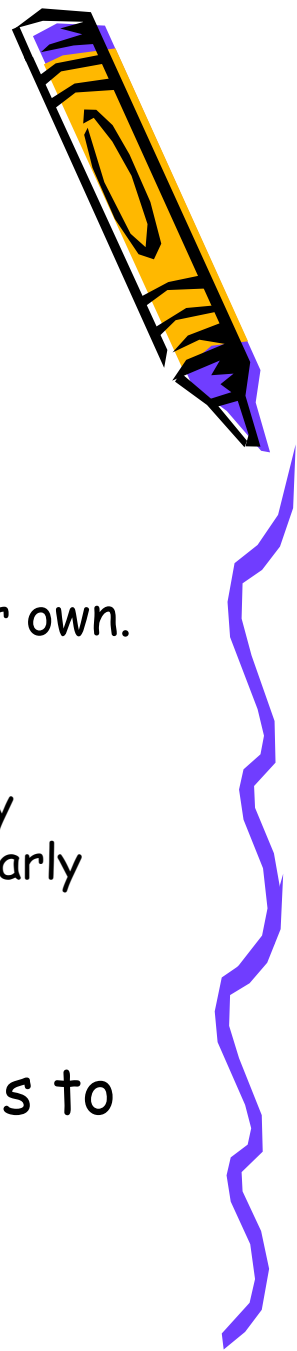


- The Elements of Style endorses imitation as a way for a writer to achieve his own style:
 - The use of language begins with imitation . . . The imitative life continues long after the writer is on his own in the language, for it is almost impossible to avoid imitating what one admires. Never imitate consciously, but do not worry about being an imitator; take pains instead to admire what is good. Then when you write in a way that comes naturally, you will echo the halloos that bear repeating.

Copied from: <http://www.answers.com/topic/writing-style-1>



Writing a Research Report



Finally...Avoiding Plagiarism

- What is it?
 - Among other things, plagiarism refers to taking others' work and representing it as if it were your own.
 - In academics this is bad because with plagiarism:
 - One cannot assess students' development accurately
 - The person who makes his or her livelihood by scholarly pursuit is being robbed of credit
 - It masks the lineage of ideas and facts.

"Plagiarism is to academics as Enron-accounting is to corporate America."



Writing a Research Report



Finally...Avoiding Plagiarism

Lineage of Ideas:

- Original sources of research are all the proof we have for some facts. Without the "paper trail" of academic thought:
 - People could pass incorrect ideas off as facts
 - We would have to keep "re-proving" things.
 - The contexts that generated facts and ideas get lost.
 - Research becomes highly inefficient as it becomes incredibly difficult to find "full information" on a topic.



Writing a Research Report



Finally...Avoiding Plagiarism

- To avoid plagiarism:
 1. Document every source for information that is not "general knowledge"—this includes facts and ideas.
 2. Cite every time a fact or idea is used unless it is clear that one citation is referring to a group of facts or ideas.
 3. If you quote material, put quotation marks around the quoted stuff and include a page number within the citation.
 4. It is alright to paraphrase material, but you still have to cite from where the paraphrased material came.
 5. When in doubt, cite the source.



Improper citing is grounds for failure on the course paper.