Due Dates

- Nov 6th – Final influence paper
  - Hand in 3 things (2 graded plus your rewrite)
- Project draft report is due (Nov 13, Mon)
- Project team presentations (Dec 6, 8)
- Final project report is due (Dec 15)

Final report due Dec 15 by 5pm

- 25 to 30 page report (7000-9000 words) excluding bibliography
  - Take it to the writing center for editing help
- Every group member must contribute to writing the report
- Don't have to divide the sections and identify section authors
- Don't free ride. It will be obvious to those watching your presentation and asking questions
- 30% of your final grade

Contents of your report

- Introduction (2 pages)
- Literature review (5 pages)
- Research Design and Method (4 pages)
- Results (8 pages)
- Discussion (5 pages)
- Conclusion (1 page)
- Bibliography

Draft report due Nov 6, Mon

- The draft report should be about 5-7 pages plus bibliography.
- Must include:
    - a review of relevant published material including studies similar to your own (if any are available)
    - a detailed description of your methods
- Should explain and justify in a clear and systematic way why and how you are pursuing your inquiry.
- Data analysis and results not included

Paper Sections

- Introduction   in draft
- Literature Review   in draft
- Methods
  - Data collection   in draft
  - Data analysis   discuss prospectively
- Results   not in draft
- Discussion   not in draft
- Conclusion   not in draft
- Bibliography   in draft

Reading

Before you write, you need to read first for two purposes:

    - learn how others write study report (read well-written papers regardless of topic)

    - learn what others have done on your topic (read relevant literature)

What to read?

What's "literature"? Papers published in academic journals

Want to read recent papers published in last 5 to 10 years

Want to read papers with large number of citations (google scholar gives citation #)

Distinguish between **empirical, theoretical, and review** articles
    Empirical papers report on a study or experiment
    Theoretical papers usually draw on limited data and try to advance theory
    Review papers sum up the state of the literature in an area of research (large lit reviews)

Focus on empirical and review papers, theory papers are good for making sure you understand your concepts fully

Reading - how to search

- Look in Greenberg bibliography for ideas

- Find a list of journals by general topic at http://www.socialpsychology.org/journals.htm
- Use VERA to locate the journals and search by author, subject, keywords etc.

- To find review articles look through Psychological Bulletin or Current Directions in Psychological Science (both on VERA)
  - use these review articles to gain a general understanding of the contours of literature related to your topic
  - Identify relevant papers to read and review

- Collect **10 to 15 relevant articles** to review (use about 30-40 abstracts to narrow list)

Reading - how to read

Reading for the big picture
- Read the easier articles first
- Skim the article and identify
- After you have a broad understanding of the 10 to 15 papers, you can start to see patterns
  - Some researchers think x causes y, others try to show that x is only a moderating variable (for example)
  - Groups of scientists argue or disagree with other groups

Reading for depth
- You can understand how the major debates are addressed through research design, additional theories, etc
- Evaluate the articles for design, validity, analysis, etc.

Reading - how to read

- Step 1: read the abstract
  - Decide whether to read it in detail

- Step 2: read introduction
  - It explains why the study is important
  - It provides review and evaluation of relevant literature

- Step 3: read Method with a fine-tooth comb
  - Focus on participants, measures, procedures

- Step 4: Evaluate results
  - Use internal/external/construct validity
  - Use your knowledge about research design
  - Use statistical knowledge (in future weeks)

- Step 5: Take discussion with a grain of salt
  - Edges are smoothed out
  - Pay attention to limitations

Writing your report

- Title should reveal finding (and be creative)
- Introduction - What problem were you investigating and why?
- Literature review - What have others said?
- Method - What procedures did you use?
- Results - What did you find?
- Discussion - What do your findings mean? where do we go from here?
- Conclusion - a summary of your report

The "Hourglass" shape of a report

Introduction

- Motivate your question
  - Relate your question to a bigger social phenomenon
  - Explain the concepts you are studying:
    - Be wary of using jargon
    - Be consistent with terminology
    - 'Grandmother test'
  - Summarize your research question, design and findings in a succinct paragraph
  - Direct your reader through the sections of the paper
  - Motivation vs. significance
    - Motivation – your interest in the project
    - Significance – what it means to other people and the world as a whole

Literature Review

- What is it?
  - An account of what has been published on a topic by accredited scholars and researchers.
- What is the purpose of the LR?
  - To convey what knowledge and ideas have been established on a topic (understanding what is known)
  - The strengths and weaknesses of the established knowledge (critically appraising what is known)
- It is not just a descriptive list of the material available, or a set of summaries.
- It is organized around and related directly to your research question

Literature Review

Organize into sections that present themes or identify trends, including relevant theory.

You are not trying to list all the material published, but to synthesize and evaluate it according to the guiding concept of your research question.

Use the literature to frame the relevance of your hypothesis, lead the reader to your hypothesis

Introduce your study at the end of the section to provide smooth transition to methods section

Methods

This section should be detailed and done with care. Explain <u>in detail</u> how you designed your research.

Research Design

- How did you relate your concepts to your variables? (use a table to supplement your write up)

- How are you representing and measuring key variables (and why is it suitable to do it that way)

- If a survey, how did you construct the key indicators and scales?

- If an experiment, make sure you are explicit about the intervention being made (be sure that the manipulation is causing changes in the independent variable; i.e. test for statistical significance of differences)

- If an observation, how did you observe and make records?

Control for confounding variables? External or internal validity?

Methods

Data Collection (see example)
- Participants
- The process used to collect your data

Data Analysis

- Save the detailed statistical analysis to the results section
- Explain other things you did with your data, e.g. coding, combining different sources of data…

Results

- Layout what you found.
  - Start broadly – describing the trends in your data
  - Then test your main hypothesis
  - Address alternative hypothesis
  - Investigate further hypotheses that come up when analyzing your data
- Use a combination of numbers, diagrams/charts, and words to represent your results and interpret them
- Tables, graphs, diagrams:
  - should be located within the text
  - should be labeled
  - should be clear but do not expect it to self explanatory. Your job is to explain!

Results

- Graphs and descriptive statistics
  - Recall that graphs can be deceptive, so it is important to report descriptive statistics
  - Descriptive statistics should also tell you which control variables you should include in your statistical analysis
- Statistical analyses
  - A hypothesis can never be accepted; you can only reject the null
  - If you do not find differences statistically significant, you may need to collect more data to enlarge your sample
- Distinguish main effects from interaction effects

Discussion

Most difficult section to write! Take a step back from your detailed analysis

- Go back to your research question and hypothesis. Overall what do your findings indicate?
  - How does the causal process appear to work?
- Where do your findings diverge from original hypothesis
  - These are usually important clues to the underlying causal process
  - Why do you think this divergence occurred?
  - Are there alternative hypotheses that you couldn't test with your data?
- Relate your findings to the literature you reviewed.
  - Are your findings surprising relative to the established knowledge?
  - What does your study contribute to the literature?

Discussion (cont'd)

- What are the broader implications of your findings?
  - Go beyond your research and think about other settings or problems, this finding may shed light on

- Lastly, limitations of your study
  - Any problems with internal or external validity

Conclusion

- Recap what you set out to do and what your main learning was from this research

- How does this relate to previous knowledge on this topic? (discovered something new? Questioned conventional wisdom? Developed a new way to measure a social behavior?)

- If you had to do a follow on research project, what would you do? What are the next steps to explore this topic further?

Other things

- Use APA style for citation and reference
- Tense
  - Past tense
    - Previous research (e.g. "Bandura reported…")
    - How you conducted your study (e.g. "Observers were posted behind…")
    - Specific past behaviors of your participations (e.g. "Fifty commuters filled out…")
  - Present tense
    - Results (e.g. "Table 2 shows…")