Final Project Assignment

Presentations (all students): Wednesday, June 2 in class Final paper (for 4-unit students) due: Tuesday, June 8, 3:15 pm in 460-040C (hard copy) or by email (pdf) to davies at csli dot stanford dot edu

Overview:

For your final project, pick a topic from among those discussed in the course and explore it via analysis of the prior literature and/or experimental design. Your paper may be one of two types:

- *Topic review:* Your topic should be manageable enough so that you can read all of the major papers pertaining to it. Your task will be to characterize both the normative principles being investigated and the descriptive evidence concerning human performance relative to those normative principles. Here are some example topics:
 - "Do people really neglect base rates?"
 - "How robust is the framing effect?"
 - "What is the current status of support theory?"
 - "Behavioral social choice"
 - "The projection bias"
 - "What's up with Linda?"
 - "Probability versus frequency judgments"
 - "IQ and judgment errors"
 - "Behavioral game theory"
 - "Preference reversals"
 - "Regret theory versus prospect theory"
 - "Confirmation bias"

For example papers, see articles in the journals *Psychological Bulletin* and *Perspectives on Psychological Science*.

• Experimental design: Design an experiment to test a question/hypothesis related to decision behavior. You should review enough of the literature pertaining to your question/hypothesis to determine which other articles/studies have been done that are relevant, i.e. that support your hypothesis. Your experimental writeup should include a detailed description of the question and hypothesis, with supporting arguments, your proposed method, and the results you would expect if your hypothesis is correct. For example papers, see the journals Risk and Uncertainty, Judgment and Decision Making, and the Journal of Behavioral Decision Making.

You may work in groups of 2 for this assignment, or else work alone. You are strongly encouraged to talk to me about your paper before embarking on it.

Presentation:

For your presentation, you should prepare Powerpoint and give an informal talk outlining the points

Todd Davies, **Decision Behavior: Theory and Evidence** (Spring 2010)

you plan to make in your final paper. You need to summarize both the normative and empirical findings related to your topic (for a topic review), or the background underlying your hypothesis and your experimental design (for an experimental design paper), and should pose some questions for the class to ponder. For four-unit students, these questions should be ones you want to address in your final paper, and should be chosen to help you finish it.

Final paper:

The paper is required for a fourth unit. The final paper should be, for individuals, 10-12 pages, double spaced in 11 pt type. For pairs, the final paper should be 16-18 pages.