Seminar – Psychology of Risk

Book for Purchase at University Bookstore:
Understanding Risk: Informing Decisions in a Democratic Society, National Research Council. (you can also read this online at http://www.nap.edu/openbook/030905396X/html/index.html
Recommended: Moore (2003), Silent Scourge: Children, pollution, and why scientists disagree. We will read Ch. 2, part of Ch. 6 and Ch. 7 from Moore (2003).

This is a seminar, not a lecture course. The goal is to think about psychological issues in risk analysis, risk assessment, risk perception, risk communication, and almost anything else related to risk that is of interest to the students in the class. Each student will be required to complete a term paper with an oral presentation. Along the way students will occasionally work in teams on class presentations. The term paper will be the major determinant of the course grade. I expect attendance in class and active participation.

Week 1: Do numerical risk perceptions tell the whole story?

Week 2: Beyond crunching the numbers.
Understanding Risk, Executive Summary, Ch 1, The idea of risk characterization, Ch. 2, Judgment in the risk decision process.

Week 3: Thinking about the numbers that were crunched.
Moore, 2003, Ch. 2, Mercury, esp. pp. 64-77.
NAS, Toxicological effects of methylmercury (2000), Ch. 7, Dose-response assessment, and Ch. 8, Risk characterization. (can read on-line at http://books.nap.edu/books/0309071402/html/index.html)

Weeks 4-5: Oral reports (we will do these in teams of 2-3 people).
Find a numerical risk analysis, read it, and critique it. What assumptions are embedded in it? What other outcomes could have been used? What judgment calls were made that are not mentioned?

Week 6-7: Ethics, trust, and risk (we will select from these resources)
Moore (2003), Ch 6, It isn’t fair: Environmental pollution disasters and community relocations, esp. the section on Love Canal, pp. 228 ff., and Ch. 7, The best science, values, and the precautionary principle to protect children.
At this point in the course we will hold a group discussion of the topics and directions we will consider in the following 4-5 weeks. The list below provides examples of various areas we could examine. The last 3 weeks of class will be devoted to term paper presentations by students.

Overviews of and Theoretical Issues


Accuracy of Judgments and Measurement Issues


Risky Choice and Framing

Levin, I. P. et al. (1998). All frames are not created equal: A typology and critical analysis of framing effects. *Organizational Behavior and Human Decision Processes, 76,* 149-188.

**Communication, Information, Risk Perception, and Protection/Prevention**

See the special issue on risk communication, Risk Analysis, 2003, 23(2).


**Ethnicity, Culture, Gender, SES**


**Expert vs non-expert**


Medical and health risk
(I also have a list of references on clinical judgment of risk in mental health problems)

Time and risk

Precautionary Principle

Applications to environmental risks and wildlife
