



Do you think that you have and use rational decision making strategies?

Numerous social psychological research shows the opposite; people make lots of cognitive biases and errors in their judgment and decision making processes. Most of the time if not always we use some short-cut strategies so called *heuristics* instead of rational, step by step decision making procedures. In addition, environmental constraints, our past experiences and future expectations mediate daily and expert judgments and decision making. Even experts do fail to make *rational* decisions.



Rationality is an important concept that will be discussed in the course. There is no single definition of rationality. Economists, engineers, medical doctors, military personnel, and social psychologists define it differently.

The purpose of SB 5715 Risk and Crisis Management course is to inform students about the mechanisms underlying judgment and decision making. Students are going to be asked to perform short projects about this topic and show *their reasoning abilities*. Although this course is not based on mathematical theories, simple and intermediate level of statistical knowledge is necessary (especially theories of probability, correlation and regression). Furthermore, decision making under special uncertainties, such as risky situations and so called crises, is the major topic that we are going to discuss in class sessions.

Students:

- ◆ want to make both correct and fast decisions (because rational decision making strategies are very slow to compare with other individuals)
- ◆ want to make better decisions because they are graduating from the university (better DM strategies are needed for the "real life")
- ◆ do not want to feel regret after their decisions
- ◆ want to reach decisions that they wish them to (without considering the consequences)
- ◆ do not want to be indifferent when confronting by the alternatives (Is reaching a decision better than no decision?)
- ◆ prefer to make decisions in groups rather than as themselves
- ◆ prefer to make decisions for others to themselves (because the former is much easier).

There is no guarantee that you would cope well with uncertainties above. ☹

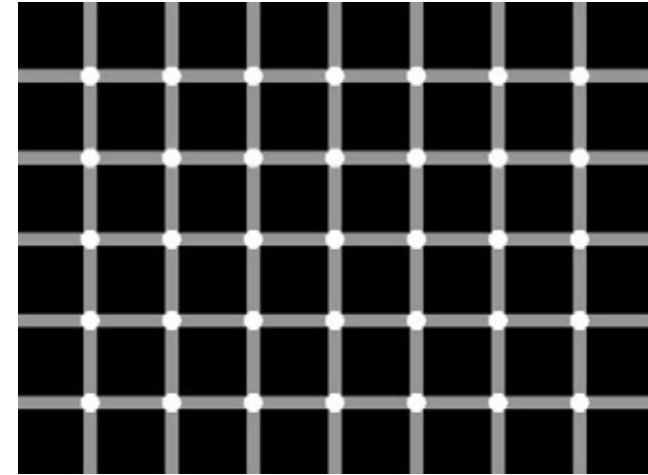
SECTION I PERCEPTION, MEMORY, AND CONTEXT

Chapter 1: Selective Perception

Chapter 2: Cognitive Dissonance

Chapter 3: Memory and Insight Biases

Chapter 4: Context Dependence



Count the black holes!

***"We do not first see, then define,
we define first and then see."***

William (1978)

From the Text book:

"There is no such thing as context-free decision making. All judgments and decisions rest on the way we see and interpret the world. According to this first section discusses the way that judgments and decisions are influenced by selective perception, pressures toward cognitive consistency, biases in memory, and changes in context." (p. 13)

SECTION II

HOW QUESTIONS AFFECT ANSWERS

Chapter 5: Elasticity

Chapter 6: The Effects of Question Wording and Framing

If you were faced with the following choice, which alternative would you choose?

- a) A sure gain of \$240
- b) A 25 percent chance to gain \$1000, and 75 percent chance to gain nothing

If you were faced with the following choice, which alternative would you choose?

- a) A sure loss of \$240
- b) A 75 percent chance to lose \$1000, and 25 percent chance to gain nothing

From the Text book:

When people learn the results of a decision problem, they rarely think about whether the questions were filtered, whether a middle category was included among the response alternatives, whether the problem was framed in terms of gains or losses, and so forth. The natural tendency most people have is to assume that the survey respondents simply answered in keeping with their beliefs. A great deal of research suggests, however, that framing and question wording can significantly affect how people respond." (p. 76)

SECTION III

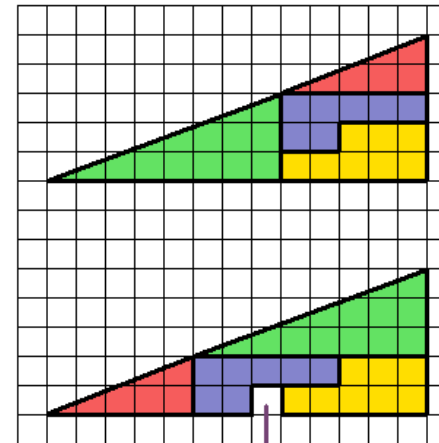
MODELS OF DECISION MAKING

Chapter 7: Expected Utility Theory

Chapter 8: Paradoxes in Rationality

Chapter 9: Descriptive Models of Decision Making

How can this be true?



Below, the four parts are moved around.

The parts are exactly the same size as those used above.

From where does this hole come?

From the Text book:

Despite the context-dependent nature of judgment and decision making, early models of decision making assumed that people had a fixed set of attitudes and preferences that did not change as a function of how they were elicited. Decision makers were treated as "rational actors" who sought to maximize their utility, or self-benefit, and who obeyed various principles of rational behavior. The chapters in this section review these models, their shortcomings, and alternative theories of decision making." (p. 77)

SECTION IV HEURISTICS AND BIASES

- Chapter 10: The Representativeness Heuristic
- Chapter 11: The Availability Heuristic
- Chapter 12: Probability and Risk
- Chapter 13: Anchoring and Adjustment
- Chapter 14: The Perception of Randomness
- Chapter 15: Correlation, Causation, and Control
- Chapter 16: Attribution Theory



Do we take a risk of being crushed?

From the Text book:

When people are faced with a complicated judgment or decision, they often simplify the task by relying on heuristics, or general rules of thumb. In many cases, these shortcuts yield very close approximations to the optimum answers suggested by normative theories. In certain situations, though, heuristics lead to predictable biases and inconsistencies." (p. 107)

SECTION V & VI THE SOCIAL SIDE OF JUDGMENT AND DECISION MAKING & COMMON TRAPS

- Chapter 17: Social Influences
- Chapter 18: Group Judgments and Decisions
- Chapter 19: Overconfidence
- Chapter 20: Self-Fulfilling Prophecies
- Chapter 21: Behavioral Traps



United Nations Security Council
Are several heads better than one?

From the Text book:

Group judgments tend to be somewhat more accurate than individual judgments, though this not always the case. Group accuracy depends on a variety of factors, including the nature and difficulty of the task, the competence of group members, whether group members are allowed to interact, and so forth." (p. 211)

Evaluation of Student Performance and Grading

Reading List

Main Text books:

1. Pious, S. (1993). *The psychology of judgment and decision making*. New York: McGraw Hill.¹
2. Lawson, T. J. (2002). *Everyday statistical reasoning*. Toronto: Wolters Kluwer.

Suggested Text books:

1. Slovic, P. (2000). *The perception of risk*. London: Earthscan.
2. Tüz, M. V. (2004). *Kriz yönetimi: İşletmelerde uygulama için temel adımlar*. İstanbul: Afa.
3. Kadıbeşoğlu, S. (2001). *Kriz geliyorum der: Kriz iletişimi ve yönetimi*. İstanbul: Mediacat.
4. Fıkrkoca, M. (2003). *Bütünsel risk yönetimi*. İstanbul: KalDer.
5. DeBono, E. (1991). *Ayakkabılı düşünme tekniği*. İstanbul: Renk Kitabevi.
6. DeBono, E. (1991). *Ayakkabılı uygulama tekniği*. İstanbul: Renk Kitabevi.
7. Allison, G. T., & Zelikow, P. (1999). *Essence of decision making: Explaining the Cuban missile crisis*. New Jersey: Pearson.

Articles:

Updated weekly. Check out the website.

Assignments, Projects, and Exams

1. Weekly assignments, reaction papers for readings, quizzes, in-class studies, and group projects: 25% of your total grade.
2. Comprehensive, take-home exam: 25% of your total grade.
3. Comprehensive, open book final exam: 50% of your total grade.

¹ **IMPORTANT:** You should bring your the main textbook in **each** class session.

Tentative Lecture Plan²

Week	Topic	Chapters
1	Introduction to SB 5715	--
2	Perception and Selective Perception	1
3	Cognitive Dissonance	2
4	Main and Related Errors	3, 4
5	Plasticity and Framing	5, 6
6	Expected Utility Theory & Paradoxes	7, 8
7	Descriptive Models of Decision Making	9
8	The Representativeness Heuristics	10
9	The Availability Heuristics, Anchoring & Adjustment	11, 13
10	Probability, Risk, and Randomness	12, 14
11	Correlation, Causation, and Attribution	15, 16
12 - 13	Group Decision Making and Social Influence	17, 18
14 - 15	Common Traps	19, 20, 21
16	Conclusion	--



It ain't so much the things we don't know that get us into trouble. It's the things we know that just ain't so.
Artemus Ward

² Please check out course's web site prior to lecture for the updated schedule.