



Introduction

Introduction to Social Psychology

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Social Cognition



Identify the colours



Identify the colours

BLUE

GREEN

BLACK

RED

RED

BLACK

GREEN

BLUE

RED

BLUE

BLACK

GREEN

BLUE

RED

GREEN

BLACK

BLACK

BLUE

GREEN

RED

Identify the colours

RED	BLUE	GREEN	BLACK
BLACK	BLUE	RED	GREEN
BLUE	BLACK	GREEN	RED
GREEN	BLUE	BLACK	RED
BLUE	BLACK	RED	GREEN

Thinking



- ❖ Schema
- ❖ Priming
- ❖ Scripts
- ❖ Framing

- Knowledge structures that represent substantial information about a concept, its attributes, and its relationships to other concepts
- They help us to organise social information, guide our actions, and process information relevant to particular contexts.
- Once schemas are formed, they play a role in determining what we notice about the social world, what information we remember, and how we use and interpret such information.
- Schemas make the complex world much easier to understand.

❖ How do schemas influence social thought?

- Schemas influence three basic processes of social cognition: attention, encoding, and retrieval
- Attention
 - Schemas affect our attention - The information we notice
 - Schemas help us navigate cognitive load

❖ Encoding

- In general, the information that is consistent with our schemas is encoded.
- However, information that is sharply inconsistent with our schemas—information that does not agree with our expectations in a given situation—may be encoded into a separate memory location and marked with a unique “tag.”

❖ Retrieval

- What information is most readily remembered?
- Is it information that is consistent with our schemas, or is it information that is inconsistent with these mental frameworks?
- Overall, research suggests that people tend to report remembering information that is consistent with schemas more than information that is inconsistent.

Schema Persistence

❖ Schemas are often resistant to change.

- They show a strong perseverance effect
- Even Discredited Schemas Can Influence Thought and Behavior

❖ Self-fulfilling

- They influence our responses to the social world in ways that make our expectations come true, consistent with the schemas.
- Jacobson (1968)
 - Famous study of teachers
 - These researchers went to an elementary school and administered an IQ test to all students.
 - Then they told the teachers that some of the students had scored very high and were about to “bloom” academically. The teachers were not given such information about other students who constituted a control group.
 - Results were clear: Students who had been described as “bloomers” to their teachers showed significantly larger gains on the IQ test than those in the control group.
 - Teachers’ beliefs about the students had operated in a self-fulfilling manner:

Priming



- Activating particular associations in memory.
- Schemas can be temporarily activated by Priming

❖ Consider the following

- Do you hear noise/voice that is not their?
- Psychology students reading about psychological disorders primes how they interpret their own anxieties and gloomy moods.
- Reading about disease symptoms similarly primes medical
- Watching a scary movie – can cause us to interpret furnace noises as a possible intruder.
- Depressed moods trigger negative outlook – sometimes may lead to suicide
- Put people in a good mood and suddenly their past seems more wonderful, their future brighter.

Priming



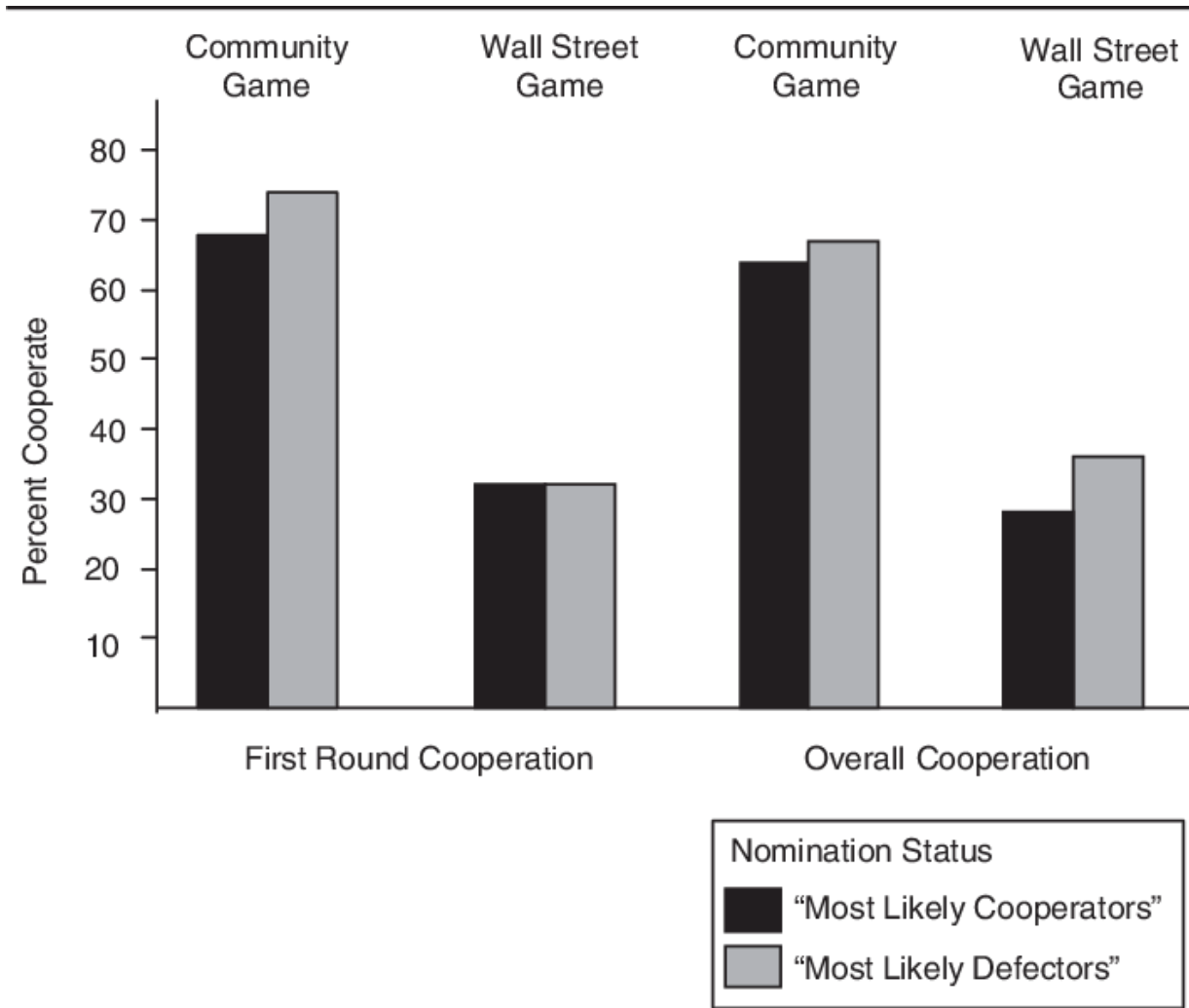
Peter \ Mary	Defect	Cooperate
	Defect	1,1
Cooperate	0,3	2,2

Prisoner's dilemma

❖ Ross and Samuels (1993) Experiment

- Dorm advisors nominated “cooperators” and “Defectors”
- Played “Wall street game” or “Community game”
- Same rules explained in each situation

Priming



❖ Bargh and colleagues (1996)

- Asked people to complete a written sentence containing words such as “old,” “wise,” and “retired.”
- Shortly afterward, they observed these people walking more slowly to the elevator than did those not primed with ageing-related words.
 - Slow walkers had no awareness of their walking speed or of having just viewed words that primed ageing.

❖ We stood by the bank

- ❖ Much of our social information processing is automatic. It is unintentional, out of sight, and happens without our conscious awareness
- ❖ Embodied cognition
 - The mutual influence of bodily sensations on cognitive preferences and social judgments.
 - After holding a warm drink, people become more likely to rate someone more warmly and behave more generously
 - After receiving a cold shoulder treatment, people judge the experimental room as colder than do those treated warmly
 - Physical warmth accentuates social warmth, and social exclusion literally feels cold.

Reasoning by Metaphor

❖ A metaphor is a linguistic device

- Compares a typically abstract concept to another unrelated concept, by suggesting a similarity between them.
- Can activate different kinds of social knowledge, they can influence how we interpret events

❖ Examples

- He raised the spirits of the audience; he received a warm reception.
- Where is our relationship heading? Are we on the right track?

❖ Abstract concepts are being used to give a particular meaning to a concrete event.

Reasoning by Metaphor

❖ Landau, Sullivan, and Greenberg (2009) Experiment

➤ Stage I

- Asked participants to read about the many airborne bacteria in the environment.
 - The bacteria were described as either harmful to humans or not.
- (This stage prime the concept of body contamination for study participants)

➤ Stage II

- Statements related to the United States were presented either with a body metaphor
 - “After the Civil War, the United States experienced an unprecedented growth spurt”
- or without it
 - “After the Civil War, the United States experienced an unprecedented period of innovation”

❖ Stage III

- Participants were asked to indicate their attitudes toward immigration.

Reasoning by Metaphor

- ❖ Landau, Sullivan, and Greenberg (2009) Experiment
 - Those with a concern about “body contamination”—because they’d been told how bacteria can harm humans—expressed more negative attitudes toward immigration when the metaphor of the United States as a body had been primed,
 - Compared to when the United States had been described without this metaphor.

- ❖ So, how we talk—metaphorically, the pictures we paint with our words—can affect how we interpret and respond to the social world.

Scripts



- Knowledge structures that contain information about how people (or other objects) behave under varying circumstances
- Normative, context-sensitive, nested knowledge structures that describe behavior in terms of corresponding events, situations, social roles, individuals, or mental state types in a way that guides action.
- Scripts are schemas about certain kinds of events

Framing

❖ Framing refers to how information is presented



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❖ Tversky and Kahneman (1981)

- Imagine that the US is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people.
 - Two alternative programs to combat the disease have been proposed.

➤ Group 1

Program A: 200 people will be saved.

Program B: There is a $1/3$ chance that 600 people will be saved.

Otherwise no one will be saved.

The majority select program A

➤ Group 2

Program A: 400 people will die

Program B : There is a $1/3$ chance that no one will die.

Otherwise 600 people will die.

The majority select program B.

❖ Verbal framing

- **Gain-framed:** When choosing among prospects perceived as gains
- **Loss-framed:** When choosing among prospects perceived as gains
- Preferences are risk averse in the gain domain (gain-framed) and risk seeking in the loss domain.

❖ Framing in the social world

- Ideologies
- Politics

Social Cognition

- ❖ How we interpret, analyse, remember, and use information when thinking about the social world.

System 1

- ❖ Intuitive
- ❖ Automatic
- ❖ Quick
- ❖ Effortless
- ❖ Without careful reasoning
- ❖ Everyday decisions
- ❖ Unconscious

System 2

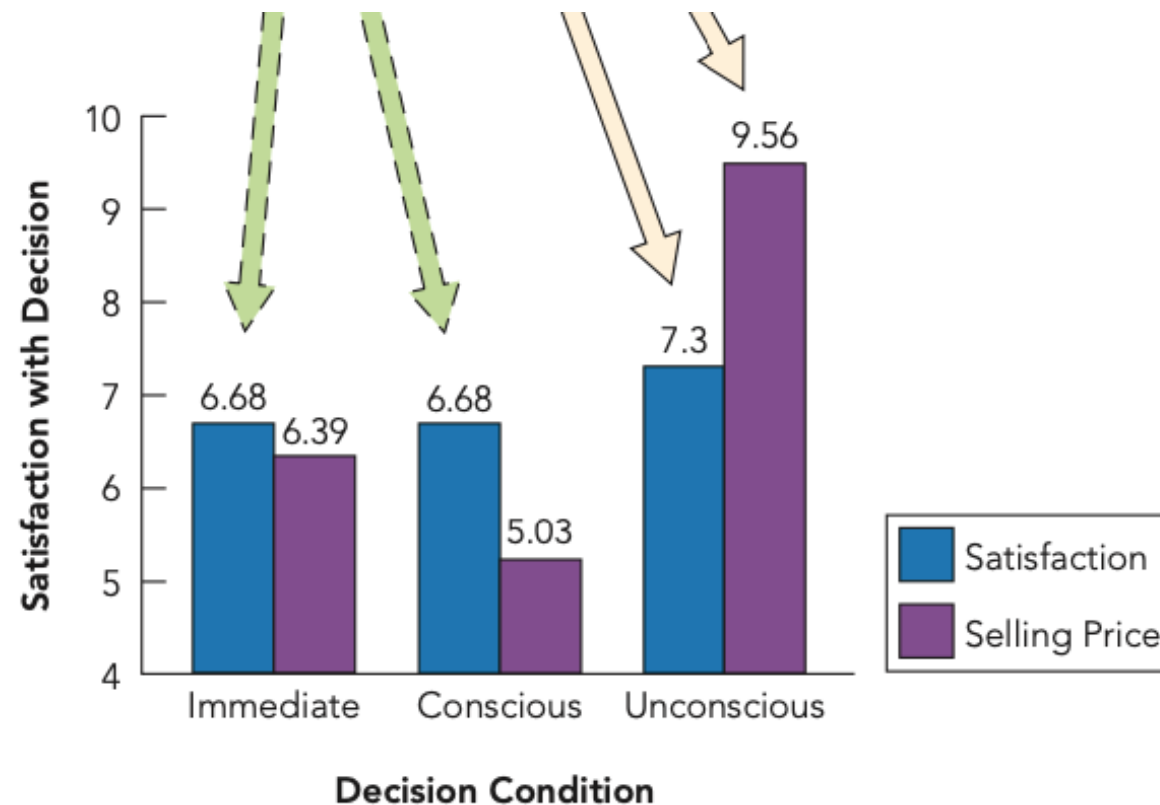
- ❖ Deliberate
- ❖ Systematic
- ❖ Slow
- ❖ Effortful
- ❖ Reasoning
- ❖ Complex decisions
- ❖ Conscious

Benefits of Automatic Processing

❖ Dijksterhuis and van Olden (2006).

- Asked students to look at various posters and indicate the one they liked most.
 - Immediate decision
 - The posters were all shown on a computer screen simultaneously, and students made their decision immediately.
 - Conscious thought
 - The posters were shown one at a time for 90 seconds. After looking at the posters, the students were given paper and asked to list their thoughts and evaluations
 - unconscious thought
 - Participants worked on another task (solving anagrams) after seeing the posters, preventing them from consciously thinking about their preferences.
- Participants were given their favorite poster to take home
- Then, 3–5 weeks later they were telephoned and asked
 - How satisfied they were with the poster they had received.
 - How much money they would want (in Euros) if they sold their poster?

Benefits of Automatic Processing



Benefits of Automatic Processing

❖ Unconscious thinking

➤ Dijksterhuis and co-workers studies

- A dozen pieces of information about each of the four potential apartments.
 - Compared with people who made instant decisions
 - Were given time to analyze the information
 - Distracted and unable to focus consciously on the problem
- The most satisfying decisions were made by those who were distracted and unable to focus consciously on the problem.

❖ Why does system 1 work so well in many situations?

Heuristics

- ❖ Mental shortcuts or thumb rules that provide quick estimates about the likelihood of uncertain events
- ❖ Provide quick estimates (though sometimes inaccurate ones) for decisions about uncertain events
- ❖ Greatly simplify our lives and usually lead to correct decisions, although sometimes they lead to errors
 - Representativeness
 - Availability
 - Anchoring and Adjustment

Answer these questions

(1) THTTHHTH

(2) HHHHHHHHHH

Which series is a result of a random coin toss ?



What is her profession ?

Representativeness

❖ Judging by Resemblance

- A strategy for making judgments based on the extent to which current stimuli or events resemble other stimuli or categories.
- More an individual seems to resemble or match a given group, the more likely she or he is to belong to that group.
- **Prototype**—a list of attributes commonly possessed by members of each of these occupations.

❖ Are such judgments accurate?

- *Base rates*—the frequency with which given events or categories occur in the total population
 - There are many more housewives with sober dressing and spectacles

❖ Judgements related to the medical field

- Healthy-looking individuals are not diagnosed with serious problems

Availability Heuristic

Are you safer driving in a huge SUV or in a smaller, lighter car?

Which one is safer – airplane or bus ?

- ❖ A strategy for making judgments on the basis of how easily specific kinds of information can be brought to mind.
 - Availability can lead us to overestimate the likelihood of events that are dramatic but rare because they are easy to bring to mind.
 - If I Can Recall Many Instances, They Must Be Frequent
 - Overestimate murder as a cause of death
 - Over expenditure on medical tests

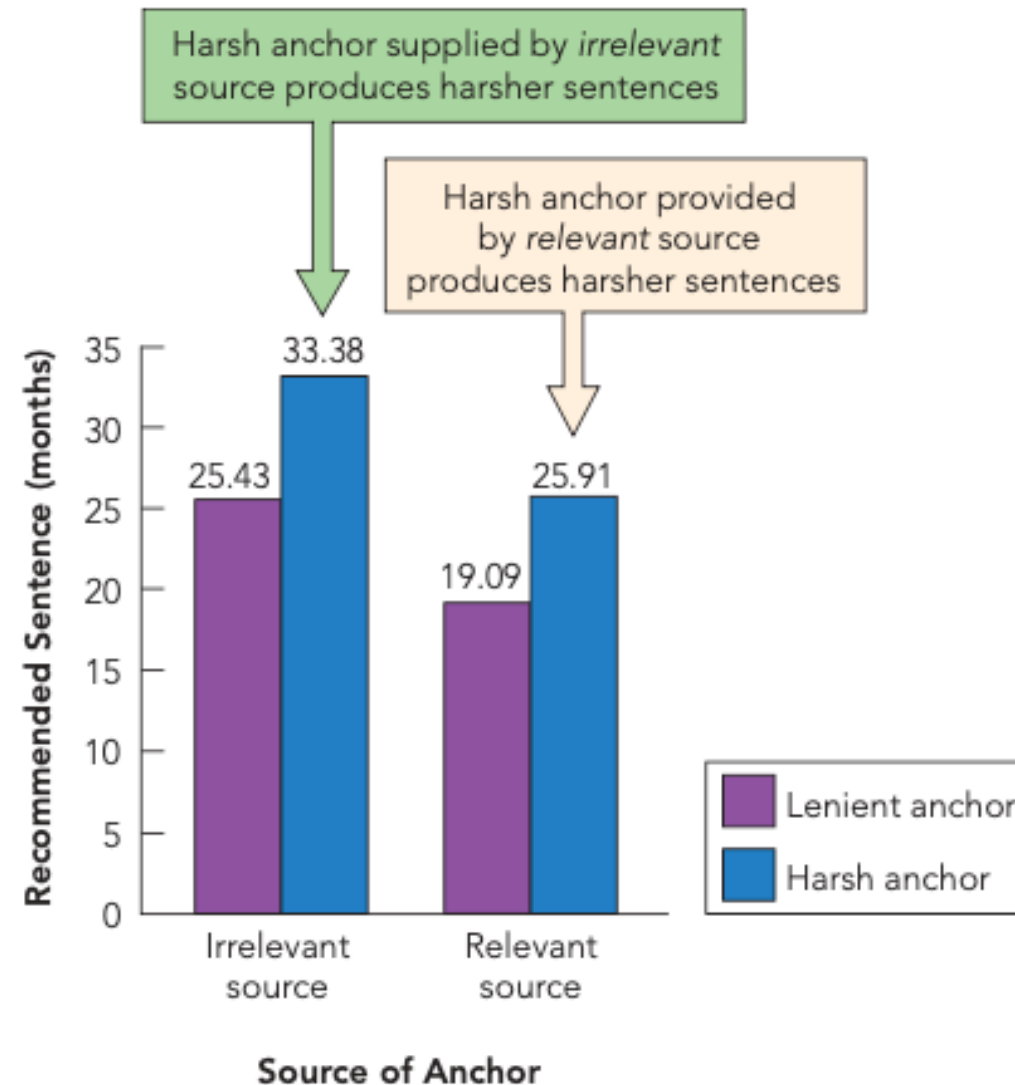
Anchoring and Adjustment Heuristic



Have you ever done purchasing at Connaught Place ?

- ❖ Tendency to deal with uncertainty in many situations by using something we do know as a starting point, and then making adjustments to it.

Anchoring and Adjustment Heuristic



Sources of Error in Social Cognition



Confirmation Bias

- ❖ The tendency to notice and search for information that confirms one's beliefs and to ignore information that disconfirms one's beliefs
 - Astrology
 - Stereotypes
 - Paranormal phenomena such as telepathy

Base rate Fallacy

- ❖ The tendency to ignore or underuse base rate information and instead to be influenced by the distinctive features of the case being judged
 - A town has two hospitals. In the larger hospital, about 45 babies are born every day; in the smaller hospital, about 15 babies are born every day. In one year, each hospital recorded the number of days on which more than 60% of the babies born were boys. Which hospital recorded more such days?
 - a. The large hospital
 - b. The small hospital
 - c. About the same number of days (within 5% of each other)

Gambler's Fallacy and the hot hand



❖ Suppose you flip a coin 10 times. You flip 9 heads in a row. What is your next flip more likely to be?

- a. Heads
- b. Tails
- c. Heads and tails are equally likely.

❖ Hot Hands

- The tendency for gamblers who get lucky to think they have a “hot” hand and their luck will continue

❖ Gambler's fallacy

- The tendency to believe that a particular chance event is affected by previous events and that chance events will “even out” in the short run



False Consensus effect

- ❖ The tendency to overestimate the number of other people who share one's opinions, attitudes, values, and beliefs

Overconfidence bias

- ❖ Greater confidence in our beliefs or judgments than is justified
 - Tversky (1979) gave people factual statements and asked them to fill in the blanks

“I feel 98 percent certain that the air distance between New Delhi and Beijing is more than _____ miles but less than _____ miles.”
 - Approximately 30 percent of the time, the correct answers lay outside the range

Overconfidence bias

❖ Overconfidence bias

- Dunning and associates (1990) created a game show
 - They asked Stanford University students to guess a stranger's answers to a series of questions, such as
 - “Would you prepare for a difficult exam alone or with others?”
 - “Would you rate your lecture notes as neat or messy?”
 - Participants first interviewed their target person about background, hobbies, academic interests, aspirations, astrological sign etc.
 - Targets privately answered 20 of the two-choice questions,
 - The interviewers predicted their target's answers and rated their own confidence in the predictions.
- The interviewers guessed right 63 percent of the time, beating chance by 13 percent. But, on average, they felt 75 percent sure of their predictions.
- When guessing their own roommates' responses, they were 68 percent correct and 78 percent confident.

Overconfidence bias

❖ Overconfidence bias

- Incompetence feeds overconfidence
 - Students who score at the bottom on tests of grammar, humor, and logic are most prone to over- estimating their abilities.

- Overconfidence often stems from errors of omission

- The Rocky Past Vs Golden future
 - Think back over your life.
 - Did it have good times and some bad?
 - Now, try to imagine your future.
 - When we think about the past, we can recall failures, unpleasant events, and other disappointments,
 - Instead, when we think about the future, we tend to concentrate on desirable goals, personal happiness, and doing things we have always wanted to do

Optimistic bias

- ❖ A powerful predisposition to overlook risks and expect things to turn out well.
 - Most people believe they are more likely than others to experience positive events – get a good job, have a happy marriage, and live to a ripe old age
 - Less likely to experience negative events - being fired, getting seriously ill, or getting divorced



Planning fallacy

- ❖ Our tendency to believe that we can get more done in a given period of time than we actually can, or that a given job will take less time than it really will.

Counterfactual Thinking

- When you appear for some prestigious exam and do not get admission

❖ counterfactual thinking

- Thoughts about “what might have been”
- Example – accident
 - Counterfactual thoughts about what might have happened, instead of what did happen can influence your sympathy as well as your recommendations concerning compensation
- Believing that people have the power to act differently (i.e., believing in free will) facilitates this counterfactual thinking.
- Upward counterfactuals—comparing their current outcomes with more favorable ones—the result may be strong feelings of dissatisfaction.

Magical Thinking

- ❖ *If someone offered you a piece of chocolate shaped like a cockroach or a snake, would you eat it?*
- ❖ Such thinking makes assumptions that don't hold up to rational scrutiny but that feel compelling nonetheless
- ❖ Terror management
 - Efforts to come to terms with the certainty of death and its unsettling implications
 - Supernatural powers outside our understanding and control can influence our lives.





Thank you