Introduction to social psychology

Definition (Social psychology): The study of how people's behaviors, thoughts, and actions are influenced by others and society.

Here are some key questions addressed in social psychology:

1. Why do people behave differently?
2. Why do we have moral beliefs?
3. How do we form stereotypes?
4. Why do cultures have different norms?
5. How do others influence our motivation?
6. How do parents and friends shape our identity?

Thus, we see that social psychology is focused on understanding human behavior in a social context. It examines individual and group behaviors and the psychological processes behind them.

The idea of "the self"

Definition (The self): The self is the core of an individual's identity, including personal beliefs, emotions, and social roles. It is influenced by internal and external factors, such as self-reflection, personal experiences, and social interactions. There are 4 key aspects of it:

1. **Self-concept:** how a person perceives and defines themselves based on experiences, personal beliefs, and social interactions.
2. **Self-knowledge:** a person's ability to understand their own behavior, emotions, and motivations.
3. **Self-Esteem:** how much value a person places on themselves (i.e., confidence, self-respect, and self-appreciation).
4. **Social-self:** how a person fits into society and the roles they play in different relationships (e.g., family, work, community).

Example (Social context and community influence): Consider the following two individuals:

1. **Iryna Dmytrivna Sydorenko**: Born in **Kyiv, Ukraine (1983)**, white, straight, cisgender woman. Parents divorced, two older brothers. Studied in London. Moved to **Toronto in 2022**. Works late, no hobbies.

2. **Brian Maxwell Fieldman**: Born in **Vancouver, Canada (1996)**, Black, gay, cisgender man. Married parents, one older sister, one younger brother. Studied in Vancouver. Moved to **Toronto in 2020**. Hobbies: **running and biking**.

Brian's experience as a Black, gay man from Vancouver likely differs from Iryna's experience as a white, straight woman from Ukraine due to **cultural norms, family structure, and personal experiences**.

Important remark (The role of community): Our community, upbringing, and family structure play a significant role in shaping our beliefs and behaviors.

Definition (Self-schema): Self-schemas are specific integrated set of memories, beliefs, and generalizations about yourself that shape your self-concept. They act as mental frameworks that help you process information about yourself. In the other word, self-schema organizes information about yourself.

Example (Self-schema): Personality traits, attitudes, and preferences.

Important remark (The impact of self-schema): **They affect memory and perception**. You tend to remember things or people that match your self-schemas and ignore or forget things that don't.

Definition (Self-handicapping): people create obstacles or excuses in the hopes of keeping potential failure from hurting self-esteem. There are two main types of self-handicapping:

- **Behavioral self-handicapping:** Doing something that actually hurts potential performance.
- **Self-reported self-handicapping:** makes excuses for a potential failure before they even attempt a task.

Example (Behavioral self-handicapping): A student doesn't study for an exam on purpose. If they fail, they can say, "I failed because I didn't study, not because I'm not smart."

Related study: Yildirim & Demir (2020) regression table:

Table 2. Summary of stepwise regression analysis predicting self-handicapping.

	Model 1			Model 2			Model 3			Model 4		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*	*B*	*SE*	*β*	*B*	*SE*	*β*
Procrastination	0.39	0.02	.63*	0.34	0.02	.55*	0.29	0.02	.48*	0.28	0.02	.45*
Test anxiety				0.24	0.02	.37*	0.18	0.02	.27*	0.16	0.02	.24
Self-esteem							−0.25	0.02	−.27*	−0.17	0.03	−.18*
Self-compassion										−0.14	0.02	−.17*
Adjusted R^2		.40			.52			.58			.59	
ΔR^2		.40			.13			.05			.02	
F		523.46*			438.75*			363.50*			292.04*	

*$p < .05$.

β (Standardized Coefficient) allows comparison between predictors. The larger the absolute β value, the stronger the effect.

- Procrastination is the strongest predictor of self-handicapping. People who procrastinate are more likely to self-handicap. Effect size decreases slightly as more variables are introduced, but it remains significant.
- Test anxiety is associated with higher self-handicapping. As additional variables are added, the effect size decreases but remains relevant.
- Self-esteem has negative relationship with self-handicapping. Lower self-esteem leads to higher self-handicapping.
- Self-compassion reduces self-handicapping. This means people who are kind to themselves and practice self-forgiveness are less likely to self-handicap.

Important remark (The importance of self-concept clarity): Understanding ourselves clearly **improves mental health and confidence**, while confusion about identity can lead to emotional distress.

- Higher self-concept clarity leads to higher life satisfaction, well-being, self-compassion.
- Lower self-concept clarity leads to lower self-esteem, higher depression, higher self-handicapping.

Gain self-knowledge

We develop self-knowledge through four main ways:

1. **Introspection or self-analysis:** Internal self-reflection and comparison with personal standards.
2. **Self-perception theory:** Observing our own behavior to infer our traits, emotions, or attitudes.
3. **Social interaction:** Others' feedback and interactions shape our self-knowledge.
4. **Social comparison theory:** Comparing ourselves to others.

Introspection---Self-awareness theory: Self-awareness theory explains how we evaluate ourselves when we focus on our thoughts and actions. It has the following process:

1. **Obtain self-focusing cue:** draws attention to yourself.
2. **Self-awareness obtained:** making you aware of your thoughts, feelings, and behaviors.
3. **Compare behavior/thoughts to internal standards:**
   a) If they match → We feel good.
   b) If they don't match → We either change behavior or avoid self-awareness.

Planning fallacy: People **underestimate** how long tasks will take, even if they have past experience with delays.

Example (Planning fallacy): A student thinks they can write an essay in three hours but it actually takes seven hours. Even if this has happened before, they keep making the same mistake.

Social comparison theory: We understand ourselves by comparing ourselves to others:

1. **Downward comparison:** Comparing to people worse off than us. This generally make us feel better. However, we can feel worse if we are vulnerable to the same negative outcome.
   The pro of downward comparison can lead to temporarily boosts in self-esteem.
   The con of downward comparison can lead to complacency and lack of motivation.
2. **Upward comparison:** Comparing to people better than us. This generally make us feel worse. However, if we are comparing our "best" self and our "usual" self. We can motivate us to be better.
   The pro of upward comparison is that it can help us improve ourselves, be more motivated to be a better version of ourselves.
   The con of upward comparison is that it temporarily makes us feel bad.

Self-serving bias: People attribute **successes to themselves** but blame **failures on external factors**. It protects self-esteem and helps maintain a positive self-image.

Better than average effect: Most people think they are **above average** in various traits (intelligence, kindness, driving ability).

Related study: Klein & Epley (2017) character inferences

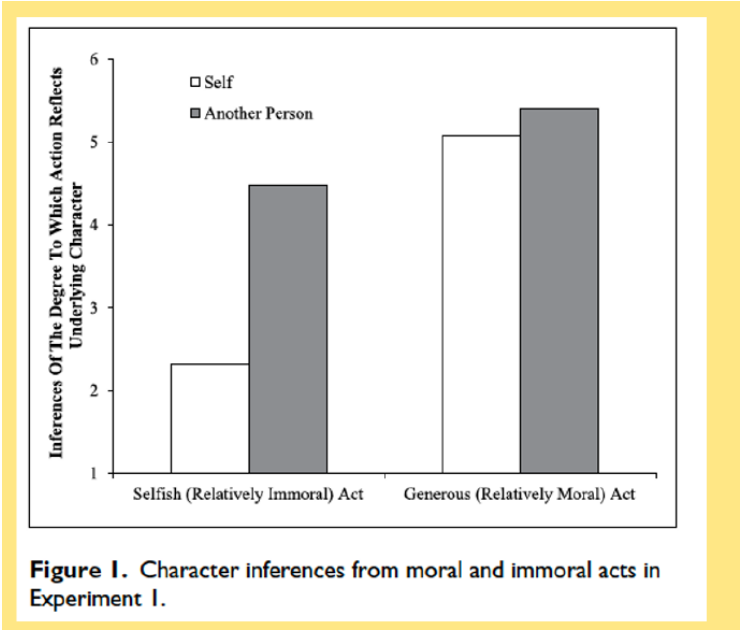


Figure 1. Character inferences from moral and immoral acts in Experiment 1.

For selfish (immoral) acts, people judge others more harshly than they judge themselves.

For generous (moral) acts, people rate both themselves and others highly, but slightly higher for others.

Social judgements, schemas and heuristics

We make social judgments every day, often without realizing it.

Example (Daily judgements): Judging someone's appearance, clothing, or height as indicators of their personality or social status. Making snap judgments about trustworthiness, intelligence, or competence based on facial expressions.

Even if we believe we are non-judgmental, our brains **subconsciously sort people into groups**. This is because this ability helps us make sense of the social world quickly. It is an evolutionary shortcut to assess friend vs. foe and make decisions faster.

Example (Categorize people into groups): When walking into a room, your brain might quickly identify groups based on age, gender, ethnicity, and clothing style before you even realize it.

Definition (System 1 and system 2 thinking): There are two types of thinking: automatic (system 1) and controlled (system 2). Specifically:

1. **System 1 (Fast, Intuitive, Unconscious) thinking**:
   - Happens **instantly and effortlessly**.
   - Based on **past experiences and stereotypes**.
   - **Example:** Assuming a person in a lab coat is a doctor.
2. **System 2 (Slow, Logical, Conscious) thinking**:
   - Requires **effort and reflection**.
   - Used when making **complex judgments** or **overriding biases**.
   - **Example:** Deliberately evaluating whether a person is competent beyond just their appearance.

Pros and cons of social judgements:

Positive aspects	• Helps in quick decision-making (e.g., recognizing danger). • Provides structure in our interactions with others.
Negative aspects	• Can lead to biases and stereotypes. • May cause misjudgments, affecting hiring, friendships, and social interactions.

Definition (General Schema): Mental structures that help us organize knowledge about the social world. They influence:

- **Perception**: How we see the world.
- **Memory**: What we remember.
- **Decisions**: How we act in situations.

There are four main types of schemas:

1. **Person-schemas:** Mental frameworks that help us understand and predict the behavior of individuals based on their appearance, personality, and preferences.
2. **Self-schemas:** Mental structures that help us define ourselves and shape our self-concept. (We defined this before)
3. **Social-schemas:** Mental frameworks that guide our expectations about social interactions and societal norms.
4. **Event-schemas:** Mental templates for expected behaviors in specific situations.

Example (Person-schemas): When you meet a professor, you might assume they are intelligent and serious based on past experiences.

Example (Self-schemas): If you see yourself as athletic, you might remember past sports achievements more vividly and behave in ways that reinforce this identity.

Example (Social-schemas): When attending a formal dinner, you expect to follow social etiquette, such as using the correct utensils and dressing appropriately.

Example (Event-schemas): At a job interview, you automatically follow an event schema—you introduce yourself, shake hands, and answer questions in a professional manner.

Functions of schemas are mainly:

- **Helps organize information:** Reduces cognitive load.
- **Fills in gaps in knowledge:** Assists in making assumptions about unfamiliar situations.
- **Interprets new/ambiguous information:** Shapes expectations about people and events.

Definition (Priming): Priming occurs when exposure to a stimulus influences the silents of a schema, even when we are not consciously aware of it. It works by activating related ideas or mental pathways in our brain, making them more accessible. There are different types of priming:

- **A thought:** Simply thinking about something can make related ideas more likely to come to mind.

- **Subliminal exposure:** Priming can happen when we are exposed to stimuli below our conscious awareness (e.g., very quick images or words).
- **Unnoticed events:** Things happening around us, even if we don't focus on them, can shape our perceptions and behaviors.
- **Emotions:** Emotions influence how we process information and interact with others.
- **Physical sensations:** The way we experience our environment through touch, temperature, or other sensations can unconsciously affect our thoughts and behaviors.

Schemas are activated based on:

1. **Past experiences** (If you've had a bad experience with a dog, you may assume all dogs are aggressive).
2. **Current goals** (If you are studying psychology, you may notice psychological concepts more frequently).
3. **Priming**

Misleading schemas --- Self-fulfilling prophecy: When an expectation leads to behaviors that make the expectation come true.

Example (Self-fulfilling prophecy): A student believes they are bad at math because they struggled in the past and their teacher once hinted they weren't "a math person." They put in less effort in math class. They feel anxious during tests, leading to poor performance. They avoid asking for help because they assume they won't understand. Because of their lack of effort and confidence, they actually perform poorly in math. This confirms their original belief that they are "bad at math." As a result, their **expectation shaped their actions, which then led to the expected outcome**, reinforcing their belief.

Important remark (Self-fulfilling prophecy): Self-fulfilling prophecy can be positive or negative.

Definition (Heuristics): mental shortcuts that help make decisions quickly.

Definition (Availability heuristic): mental shortcut where people estimate the likelihood or importance of an event based on how easily they can recall examples. If something is recent, emotional, or vivid, it feels more common or likely, even if statistics show otherwise.

Example (Availability heuristic): After watching multiple news reports about violent crimes, a person believes crime is increasing, even if overall crime rates are declining.

Impact on decision making by availability heuristic:

- **Focusing on extreme cases:** People give too much weight to rare but dramatic events instead of actual statistics.
  Example: A person avoids flying because of a recent highly publicized plane crash, even though flying is safer than driving.
- **Neglecting user research**: Decision-makers may rely on personal experiences or memorable cases rather than objective data.
  Example: A manager makes a policy change based on one negative customer review, ignoring overall customer feedback.
- **Over-reliance on recent trends:** People assume that recent patterns will continue indefinitely.
  Example: Investors assume a stock will keep rising just because it has performed well in the past month, ignoring fundamental financial analysis.

Minimize the availability heuristic bias:

- **Questioning our decisions more often:** Actively challenge your assumptions.
- **Conduct thorough user research:** Use surveys, data collection, and expert opinions instead of relying on isolated cases.
- **Use data:** Base decisions on facts and statistical evidence rather than just recent or vivid examples.

Differences between heuristic and schema:

Feature	Schema	Heuristic
Definition	Organized structure	Mental shortcut for decision-making
Function	Helps interpret and predict the world	Speeds up thinking and choices

Influence	Shapes expectations and behavior	Leads to quick but sometimes biased judgments
Example	"Rude person" schema (expectations about their behavior)	"Expensive means better" heuristic

Definition (Social perception): Social perception refers to the study of how we form impressions and make inferences about other people. And we judge people based on their appearance, expressions, and actions even before they speak.

Definition (Nonverbal communication): Nonverbal behavior is any form of communication without words, including:

- Facial expressions
- Tone of voice
- Gestures
- Body posture
- Eye contact

Functions of nonverbal communication:

1. **Expressing Emotions** – A sad face signals sadness; a wide smile suggests happiness.
2. **Eliciting Empathy** – Seeing someone cry may make us feel compassionate toward them.
3. **Substituting for Verbal Messages** – A thumbs-up can replace saying “good job!”.

Related study: Paul Ekman and Wallace Friesen

- Ekman & Friesen (1971)

TABLE 1

ADULT RESULTS

Emotion described in the story	Emotions shown in the two incorrect photographs	No. Ss	% choosing correct face
Happiness	Surprise, disgust	62	90**
	Surprise, sadness	57	93**
	Fear, anger	65	86**
	Disgust, anger	36	100**
Anger	Sadness, surprise	66	82**
	Disgust, surprise	31	87**
	Fear, sadness	31	87**
Sadness	Anger, fear	64	81**
	Anger, surprise	26	81**
	Anger, happiness	31	87**
	Anger, disgust	35	69*
	Disgust, surprise	35	77**
Disgust (smell story)	Sadness, surprise	65	77**
Disgust (dislike story)	Sadness, surprise	36	89**
Surprise	Fear, disgust	31	71*
	Happiness, anger	31	65*
Fear	Anger, disgust	92	64**
	Sadness, disgust	31	87**
	Anger, happiness	35	86**
	Disgust, happiness	26	85**
	Surprise, happiness	65	48
	Surprise, disgust	31	52
	Surprise, sadness	57	28[a]

* $p < .05$.
** $p < .01$.
[a] Subjects selected the surprise face (67%) at a significant level ($p < .01$, two-tailed test).

Paul Ekman and Wallace Friesen identified six basic facial expressions that are associated with specific emotions. These expressions are:

- Anger
- Disgust
- Fear
- Happiness
- Sadness
- Surprise

Ekman and Friesen's research suggests that these expressions are universal across all cultures, races, ages, genders, and ethnicities. However, they also noted that cultural differences in facial expressions can exist.

Impression formation:

First impressions are formed quickly and tend to last even if we later receive contradictory information. We remember our first impression even if we forget the details of a conversation. Once we form an impression, it is difficult to change because we:

- **Filter information to confirm our beliefs.**
- **Ignore evidence that contradicts our initial impression.**

By study Carlston, D. E. (1980), People remembered their first impression of someone long after they forgot the specific behaviors that led to it. This suggests that impressions become independent of the actual evidence.

Related study: Willis & Todorov (2006) study on first impressions

TABLE 1

Correlations Between Time-Constrained Trait Judgments From Facial Appearance and Judgments Made in the Absence of Time Constraints

	Exposure time					
	100 ms		500 ms		1,000 ms	
Trait judgment	Zero-order correlation	Partial correlation	Zero-order correlation	Partial correlation	Zero-order correlation	Partial correlation
Trustworthiness	.73	.63	.66	.59	.74	.69
Competence	.52	.39	.67	.58	.59	.50
Likeability	.59	.40	.57	.46	.63	.50
Aggressiveness	.52	.52	.56	.58	.59	.61
Attractiveness	.69	—	.57	—	.66	—

Note. The partial correlations control for judgments of attractiveness made after the same exposure time. All correlations were significant, $p < .001$, $p_{rep} > .98$.

Willis & Todorov (2006)

The table is divided into three exposure times: 100 milliseconds (ms), 500 milliseconds (ms), and 1000 milliseconds (ms). For each time condition, there are two types of correlations:

- **Zero-order correlation** – The direct correlation between quick judgments and judgments made with unlimited time.
- **Partial correlation** – The correlation controlling for attractiveness (since people might be influenced by how attractive a person is when making other trait judgments).

Even after just 100 milliseconds (0.1 seconds), participants formed strong judgments about trustworthiness, competence, likeability, aggressiveness, and attractiveness.

- **Trustworthiness** has the **highest correlation across all time conditions**, meaning people make quick **trust judgments** that remain stable.
- **Competence & Likeability judgments increase with more time** (0.52 → 0.67 for competence).
- **Aggressiveness stays relatively stable**, meaning people quickly assess this trait and don't change their opinion much.
- **Attractiveness also remains consistently high**, suggesting **people immediately judge attractiveness with little change over time**.

Related study: Rule, Ambady, & Hallett (2009)

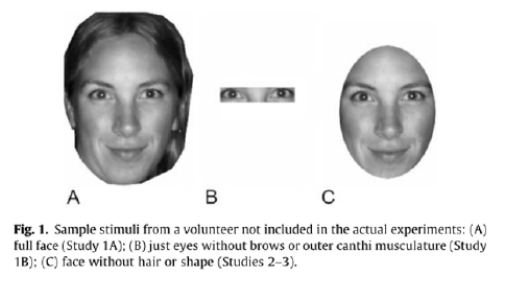


Fig. 1. Sample stimuli from a volunteer not included in the actual experiments: (A) full face (Study 1A); (B) just eyes without brows or outer canthi musculature (Study 1B); (C) face without hair or shape (Studies 2–3).

Mean accuracy:
A: 64%
B: 53%
C: 55% (Study 2, 40ms exposure)

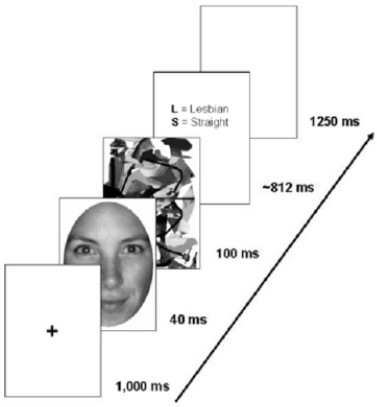


Fig. 2. Illustrated procedure for Study 2: Participants first saw a fixation cross for 1000 ms followed by the presentation of the face for 40 ms and a backward mask of high and low spatial frequencies for 100 ms. They then made judgments as to whether the face pictured a straight woman or lesbian woman; mean response time for these judgments was 812 ms. Finally, participants were given a 1250 ms rest between trials.

Rule, Ambady, & Hallett (2009)

Participants were shown faces of women and asked to judge whether the individual was lesbian or straight. Faces were manipulated to remove certain features (e.g., hair, shape). The goal was to see if people could accurately perceive sexual orientation based on facial cues alone.

- **A (Full face): 64% accuracy**

People performed **above chance** when the full face was visible.

- **B (Eyes only): 53% accuracy**

Accuracy dropped when only **eye features** were visible, but was still slightly above chance.

- **C (Face without hair/shape): 55% accuracy**

Removing **hair and facial shape** reduced accuracy further, but judgments were still better than random guessing.

We see that people can make snap judgments about sexual orientation, and accuracy increases with more facial information. This supports the idea that snap judgments about others are deeply ingrained in human perception.

Implicit personality theory: We often make assumptions we make about how different personality traits are related. We fill in missing information about people based on our existing beliefs. This process is often unconscious and automatic.

Example (Implicit personality theory): If someone is generous, we might also assume they are kind. If someone is dominant, we might assume they are aggressive.

Fundamental Attribution Error (FAE): the tendency to overestimate internal factors (personality) and underestimate external factors (situational influences) when explaining others' behavior. When someone else behaves a certain way, we assume it's because of their personality rather than their situation. However, when we behave a certain way, we blame the situation instead.

Example (FAE): My friend didn't respond to my text for five days. Fundamental Attribution Error thinking is she must hate me and doesn't care about me. However, she was just busy.

Attitudes and behaviors

Definition (Attitude): An attitude is an evaluation of a person, object, or idea. Attitudes can be:

- **Positive** (e.g., "I love chocolate")
- **Negative** (e.g., "I hate rainy days")
- **Ambivalent** (having mixed feelings, e.g., "I enjoy fast food but know it's unhealthy")
- **Neutral** (no strong opinion either way)

Important remarks: We form attitudes not only about objects but also about people and groups. These attitudes can be explicit (conscious) or implicit (unconscious). Social psychology studies how these attitudes develop and how they influence social interactions.

Three key sources of attitudes: Attitudes develop from three key sources

- **Affectively based attitudes (Emotion-driven):** Formed through values, emotions, or sensory reactions.
- **Cognitively based attitudes (Thought-driven):** Based on beliefs about properties of an object.
- **Behaviorally Based Attitudes (Action-Driven):** Based on observations of one's own behavior.

Definition (Implicit and explicit attitudes): **Explicit attitudes** are deliberate, controlled, and conscious. **Implicit attitudes** are automatic and subconscious.

Example (Implicit and explicit attitudes): Ambivalent sexism is two forms of sexism:

1. **Hostile Sexism**: Overtly negative attitudes toward women
2. **Benevolent Sexism**: Positive but **patronizing** attitudes

Hostile sexism is often explicit, whereas benevolent sexism can be implicit

Theory of planned behavior (Fishbein & Ajzen, 1975): This theory explains when attitudes predict behavior. Three factors determine whether attitudes lead to action:

1. **Intentions** – The stronger the intention, the more likely the action.

2. **Attitudes** – Positive or negative beliefs about a behavior.
3. **Subjective norms** – Social pressure to act a certain way.

Example (Theory of planned behavior): Stanford prison experiment is a famous role-playing experiment that showed how attitudes and behaviors can change due to social roles. People assigned as "guards" began behaving cruelly towards "prisoners," even though it was just an experiment. Attitudes are shaped by situations and roles, leading to unethical behavior.

Definition (Foot-in-the-Door (FITD) and Door-in-the-Face (DITF)): FITD is a persuasion technique when you start with a small request, then make a bigger request. DITF is a persuasion technique when you start with a huge request (expecting rejection), then ask for something smaller (which is what you really wanted). These techniques manipulate people into changing their attitudes and behavior.

Definition (Cognitive dissonance): A psychological state of discomfort that occurs when a person's beliefs, values, or actions conflict with each other.

Cognitive dissonance theory (Festinger, 1957): When attitudes and behaviors don't match, we have cognitive dissonance. We reduce discomfort by:

1. Changing attitude
2. Changing behavior

There are different types of changes:

- **Internal justification**: Changing your attitude and behavior for **yourself**.
  - **Counter-Attitudinal advocacy:** This occurs when a person publicly expresses an attitude or opinion that contradicts their private beliefs. The person may then change their private belief to match what they just advocated, reducing cognitive dissonance.
- **External justification**: Changing your attitude and behavior for **external reasons**.
  - **Insufficient justification**: If there is no strong external reason (reward, punishment) for behaving against one's attitude, the person must internally justify their behavior. This leads to genuine attitude change.

Important remark: Cognitive dissonance doesn't just affect personal beliefs—it also influences how we justify our actions toward others. When people mistreat someone, they often experience dissonance because their actions conflict with their self-perception as a "good person." To reduce this psychological discomfort, they change their attitudes rather than their behavior.

Definition (Rationalization trap): The rationalization trap occurs when people continuously justify one bad behavior with another, creating a self-reinforcing cycle. Over time, this escalates negative actions.

1. A person engages in a morally questionable action.
2. To reduce dissonance, they rationalize the action.
3. This makes it easier to repeat the action in the future.
4. Over time, the person adopts more extreme attitudes and behaviors.

Self-affirmation theory: People are motivated to protect their self-integrity—the idea that they are good, competent, and moral individuals. When an individual's self-integrity is threatened, they will act in ways to restore their sense of self-worth.

Related studies: Aronson & Mettee (1968) Study on Self-Esteem and Cheating

Participants were divided into three groups based on their **self-esteem levels**:

- **LSE (Low Self-Esteem)**
- **NSE (Neutral Self-Esteem)**
- **HSE (High Self-Esteem)**

Participants were given a gambling task where they had an opportunity to **cheat**.

Key findings:

- **LSE group**: **13 people cheated**, only **2 never cheated**.
- **HSE group**: **6 people cheated**, but **9 never cheated**.
- **NSE group**: **9 people cheated**, and **6 never cheated**.

People with low self-esteem are more likely to cheat because they have less self-integrity to protect. People with high self-esteem cheat less because they are more motivated to act in ways that align with their positive self-image. This supports Self-Affirmation Theory—when people feel secure in their self-worth, they behave more ethically.

Persuasion and related concepts

Definition (Persuasion): Persuasion is the process by which a message induces change in beliefs, attitudes, or behaviors.

The process of persuasion:

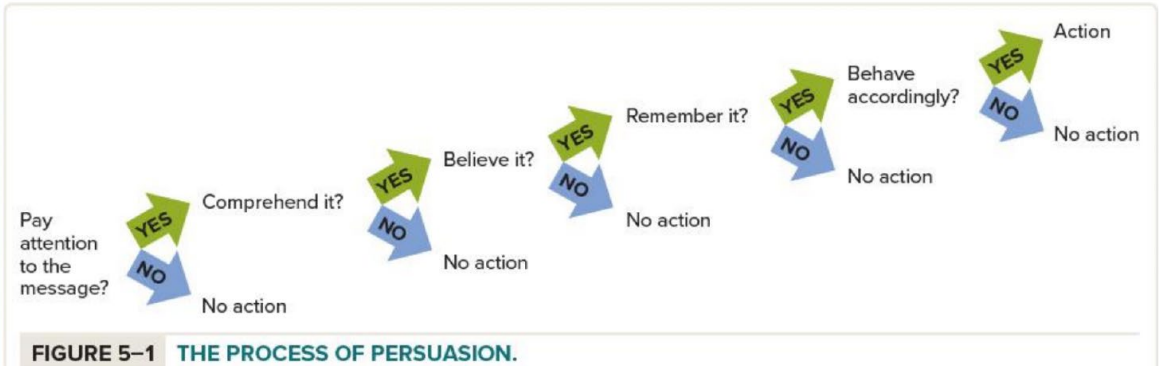


FIGURE 5–1 THE PROCESS OF PERSUASION.
To elicit action, a persuasive message must clear several hurdles. What is crucial is not so much remembering the message itself as remembering one's own thoughts in response.

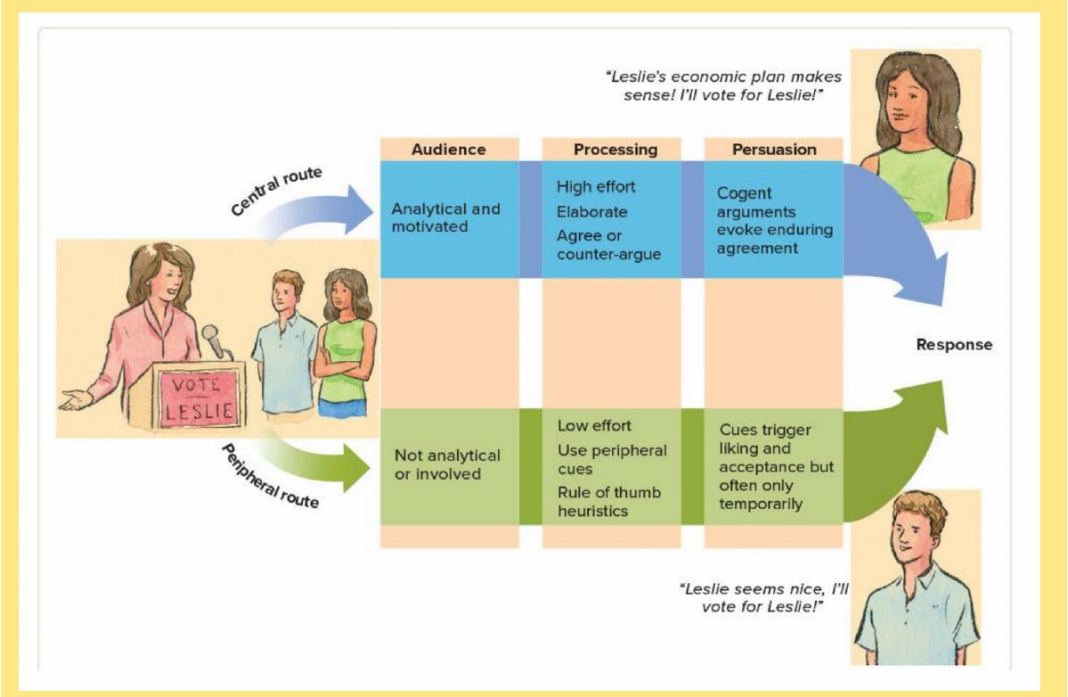
Persuasion is not just about receiving a message but also processing and acting on it. A failure at any step prevents action. Memory and belief play a crucial role in persuasion. Action is the final and ultimate goal of persuasion efforts.

Two routes of persuasions:

Central route persuasion leads to **long-lasting attitude change** because it is based on deep thinking.

Peripheral route persuasion results in **temporary change**, as it is based on heuristics (simple rules of thumb like likability).

Which route is used depends on audience motivation and ability to process the information.



Four elements of persuasion:

- **Who** – The source of communication (credibility, expertise, trustworthiness, likability).
- **What** – The message being communicated (reason vs. emotion, humor, fear appeals).
- **What method** – The channel used (personal interaction vs. media influence).
- **To whom** – The audience's characteristics (age, pre-existing beliefs, distractions, counterarguments).

Credibility in persuasion: There are three factors influences the credibility of persuasion

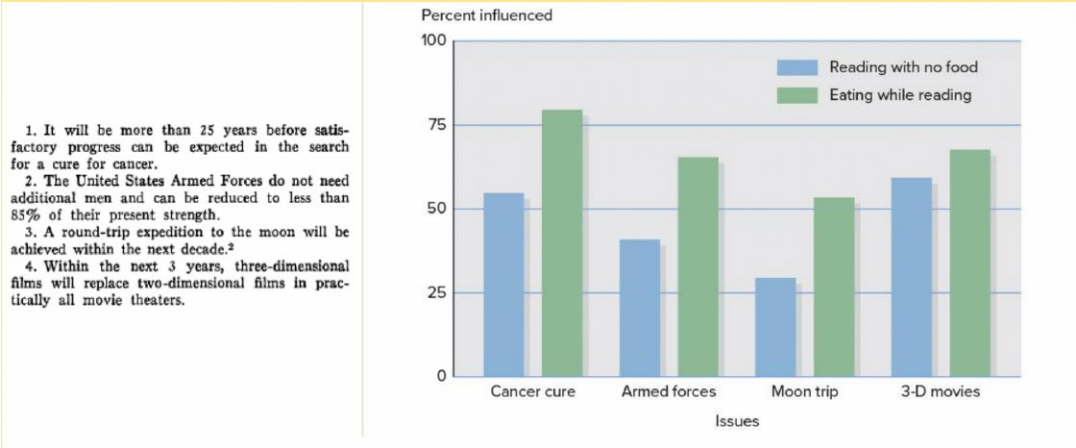
1. **Expertise**:
   - More persuasive if perceived as **knowledgeable**.
   - **Example**: A scientist speaking about climate change vs. a non-expert.
   - **Study**: **Erickson et al. (1978)** found that confidence boosts perceived credibility.
2. **Trustworthiness**:
   - **Eye contact** increases credibility.
   - **Arguing against self-interest** makes a speaker seem unbiased.
   - **Example**: A drug company admitting possible side effects of their medication may seem more trustworthy.

- **Study**: **Walster & Festinger (1962)** – People trust sources that do not seem overly persuasive.

3. **Likability**:
   - **Attractiveness** increases persuasion (physical or social).
   - **Similarity** to the audience matters.
   - **Example**: A relatable celebrity endorsing a product is more persuasive than an unknown spokesperson.

Constructing message in persuasion --- the "What":

- **Reason vs. Emotion**: Some arguments rely on logic, others on emotions.
- **Good feelings**: Positive emotions make people more receptive (**Janis et al., 1965**).



- **Humor**: Makes messages memorable and engaging.
- **Fear appeals**: Effective if accompanied by **solutions**.
  - **Example**: Anti-smoking ads showing lung damage.
- **One-sided argument:** Works if the audience already agrees.
- **Two-sided argument:** More effective if the audience will encounter opposing views (Hovland et al., 1949).

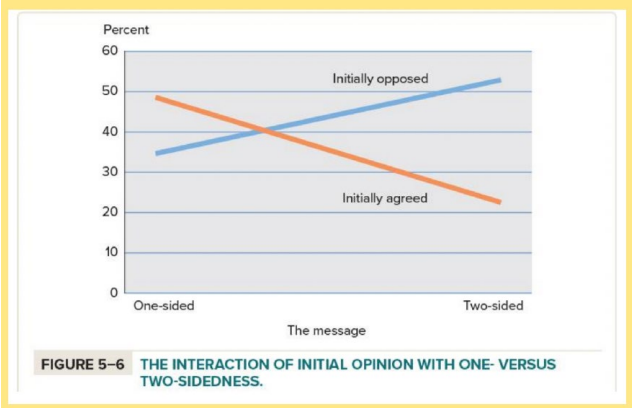


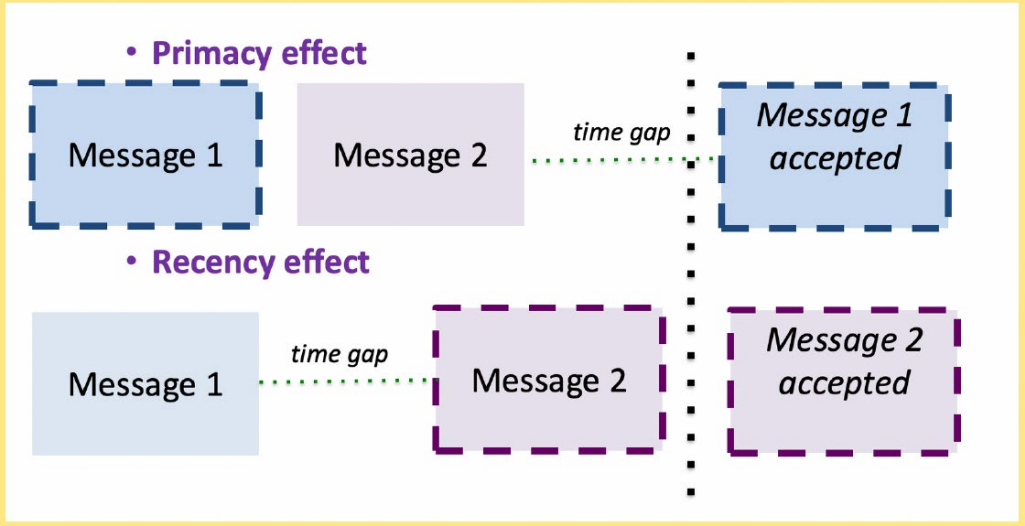
FIGURE 5–6 THE INTERACTION OF INITIAL OPINION WITH ONE- VERSUS TWO-SIDEDNESS.

- *Example:* A political campaign preparing voters for attacks from the opposition.

Primacy vs. recency effect in persuasion --- Delivering the message:

There are two effects:

- **Primacy effect** – When the first message is remembered and accepted.
- **Recency effect** – When the most recent message is remembered and accepted.



- Message 1 is presented first, followed by Message 2. There is no time gap between the messages. A time gap occurs after both messages before making a decision.
  Outcome: Message 1 is accepted because it was processed first and retained longer in memory.
- Message 1 is presented first, followed by a time gap before Message 2. Decision is made soon after Message 2.
  Outcome: Message 2 is accepted because it is fresher in memory.

Important remark (primacy vs. recency effect in persuasion):

- If the goal is long-term persuasion → Present first (primacy).
- If the goal is immediate persuasion → Present last (recency).

More methods of communications --- Active vs. passive reception:

Active (direct experience) is more effective than passive (reading/listening). Consider the following study:

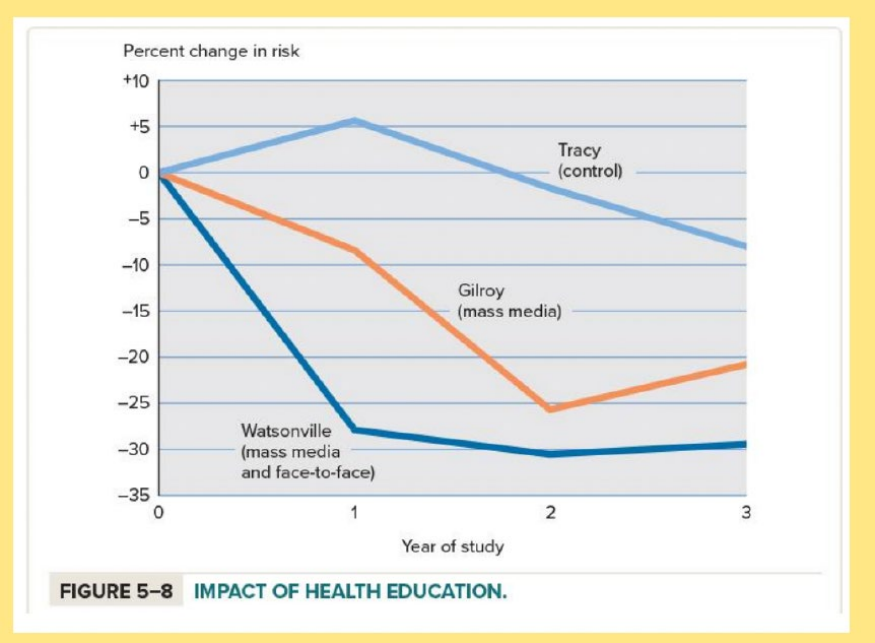


FIGURE 5–8 IMPACT OF HEALTH EDUCATION.

Tracy (Control Group - Light Blue Line):

- Shows little to no improvement over time.
- The risk levels remained roughly the same, confirming that **without intervention, behaviors do not change significantly**.

Gilroy (Mass Media Only - Orange Line):

- Risk levels **declined steadily** in the first two years, showing **a moderate effect of mass media on behavior change**.
- However, after year 2, risk levels **began to rise slightly**, suggesting that mass media **alone may not sustain long-term behavior change**.

Watsonville (Mass Media + Face-to-Face - Dark Blue Line):

- Had the **most dramatic reduction in risk**—dropping **over 30% in the first year**.
- The decrease in risk was **sustained over time**, indicating that **combining mass media with face-to-face interactions is the most effective method** for long-term behavioral change.

Important remark (Recency effect and two-sided arguments): If Message 1 presents one viewpoint, and after a delay, Message 2 (the opposing argument) is presented right before the

audience makes a decision, then the recency effect can make the second message more persuasive.

The audience in persuasion:

- **Age:** Younger people are more susceptible to persuasion.
- **Pre-existing beliefs:** Attitudes formed through emotion are harder to change with logic.

Thinking process:

- **Counter-arguments** reduce persuasion.
- **Forewarning** helps resist persuasion.
- **Distraction** weakens resistance.

Persuasion in cult:

Elements of persuasion in cults

- **Communicator**: Charismatic leader with perceived expertise.
- **Message**: Offers meaning, purpose, and identity.
- **Audience**: Vulnerable individuals seeking belonging.

Group indoctrination tactics

- **Behavior → Attitude change:** Instead of convincing recruits through logic, they get people to act in certain ways first (e.g., attending meetings, donating money). Over time, people adjust their beliefs to match their actions (explained by cognitive dissonance).
- **Compliance leads to acceptance:** When people are persuaded to comply with small requests, they gradually become more committed. Repeated compliance creates emotional investment, making it harder to leave.
- **Foot-in-the-Door phenomenon**: Small commitments ⟶ Bigger commitments ⟶ Full indoctrination
    - **Example**: Joining a meeting → Donating money → Moving into a commune.

Group effects in indoctrination of a cult:

- **Separation from their previous social support:** Members are physically or emotionally distanced from friends, family, and mainstream society. Without an external support system, they become fully dependent on the group for social and emotional needs.
- **No exposure to counterarguments**: Decline critical thinking and only the group's ideology is reinforced.
- **Group offers identity that defines reality:** The group replaces personal identity with a collective identity. Members begin to see the world only through the group's perspective, rejecting outside information.
- **Dissent is punished**: Anyone who questions the group is shamed, ostracized, or punished. Fear of punishment prevents members from expressing doubts.
- **Appears as though there is consensus**: When dissent is punished, it seems like everyone agrees with the group's beliefs, even if they don't. Members assume that because no one is speaking out, everyone must truly believe in the ideology.

Factors that help resist persuasion:

Attitude strength

- Strongly held beliefs are harder to change.
- People with deep convictions are less likely to be swayed by opposing views.

Information-processing biases

- **Selective exposure & attention:** People seek information that confirms their pre-existing beliefs and avoid contradictory messages.
- **Selective perception & judgment:** Individuals interpret ambiguous messages in a way that aligns with their existing attitudes.
- **Selective memory:** People are more likely to remember information that supports their viewpoint while forgetting contradictory details.

Reactance (psychological resistance)

- When people **feel their freedom is threatened**, they resist persuasion.
- **Example:** If someone is pressured to adopt a belief, they may reject it simply to assert their independence.

Strengthening personal commitment against persuasion:

Challenging beliefs

- When people actively **defend their beliefs**, they become more resistant to change.

Developing counterarguments

- By learning about opposing views and preparing rebuttals, individuals become better at resisting persuasion.

Attitude inoculation

- Exposing individuals to **mild attacks on their beliefs** strengthens their ability to resist stronger persuasion attempts later.
- **Example:** Teaching adolescents about weak pro-smoking arguments helps them resist peer pressure to smoke.

Inoculation theory and its effectiveness

Inoculation theory suggests that **just like vaccines protect against diseases, exposure to weak counterarguments protects against persuasion**.

Related study --- McAlister et al., 1980:

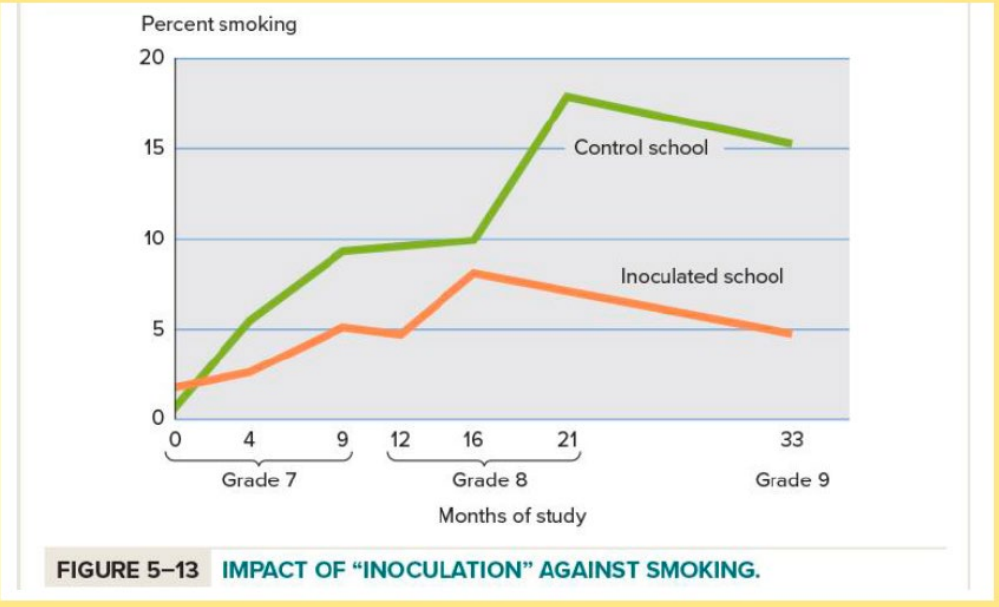


FIGURE 5–13 IMPACT OF "INOCULATION" AGAINST SMOKING.

The graph in the image shows how **students exposed to inoculation training were less likely to start smoking compared to those in a control group**.

Those in the **inoculated school** (orange line) had lower smoking rates over time compared to those in the **control school** (green line).

Conformity

Definition (Conformity): A change in behavior or belief to match the behavior or beliefs of others.

Important remark: Conformity is not inherently good or bad—whether it is beneficial or harmful depends on the context.

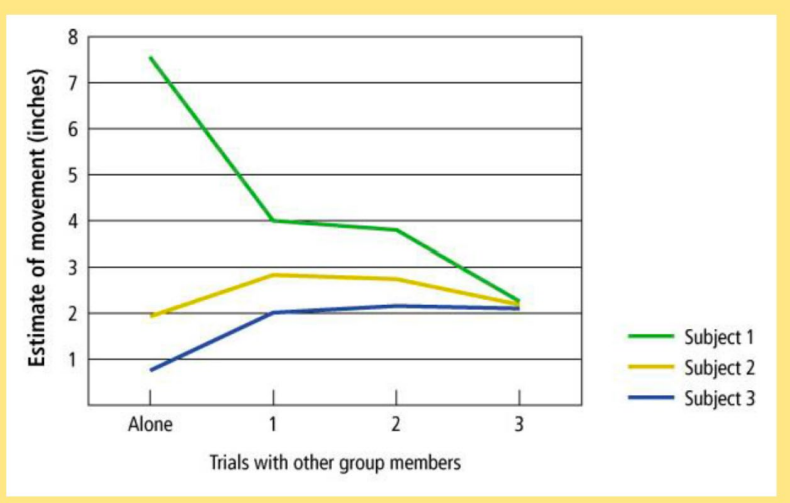
Different types of conformity:

1. **Compliance**: When a person **publicly** conforms to social pressure while **privately** disagreeing.
   Example: Laughing at a joke you don't find funny because everyone else is laughing.
2. **Obedience**: Acting in response to a **direct order or command** from an authority figure.
   Example: A soldier following a superior's orders.
3. **Acceptance**: When a person **genuinely** believes in and adopts the behavior or belief.
   Example: Starting to exercise because you believe it's healthy, after initially doing it due to peer influence.

Important remark (Compliance and obedience): Compliance and obedience may involve external pressure, while acceptance involves genuine internal change.

Sources of conformity:

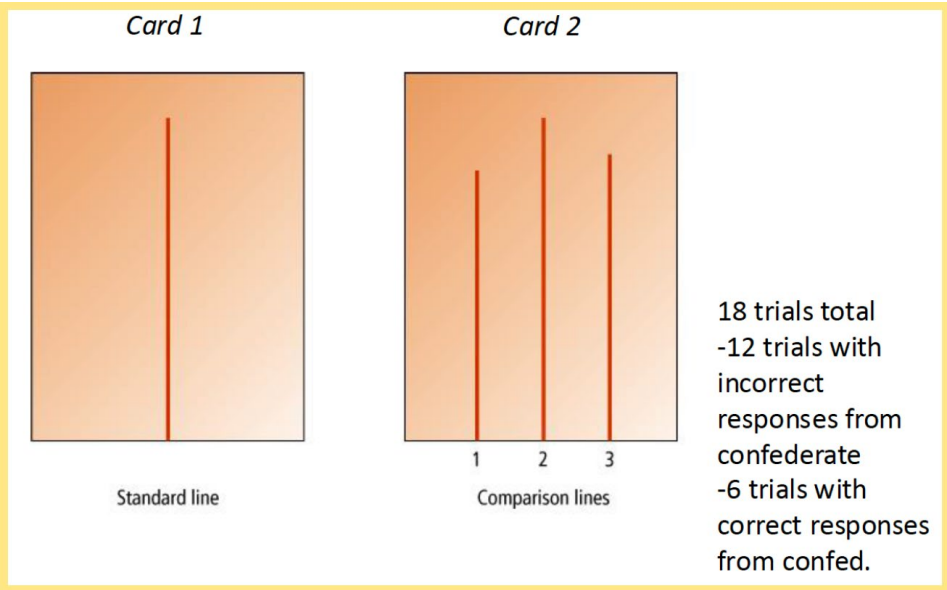
1. **Informational Influence** (Sherif, 1936)
   People conform because they believe others have **more accurate** information. This occurs in **ambiguous** situations where the correct action is unclear.



Sherif asked participants to estimate how far the light moved in multiple trials. Initially, participants gave individual estimates when alone. Later, they made estimates in groups, hearing each other's responses.

2. **Normative Influence** (Asch, 1951)

People conform to **fit in** and be accepted by a group. Even when they know the group is wrong, they may still conform to avoid social rejection.



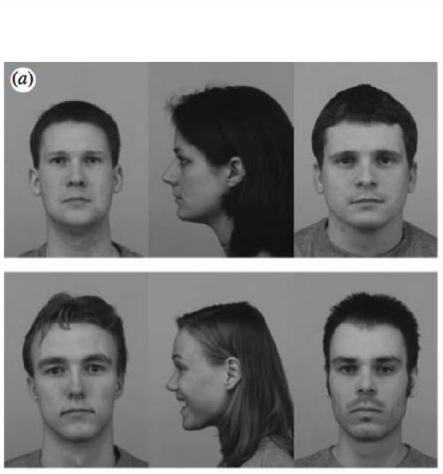
Participants were shown **two cards**:

- **Card 1**: A single **standard line**.
- **Card 2**: Three **comparison lines** (one of which clearly matched the standard line).

Participants were asked to **identify which comparison line matched the standard line**. The participant was placed in a group with **several confederates (fake participants)** who had been instructed to give **incorrect answers** in some trials. **12 trials** where **confederates intentionally gave the wrong answer**. **6 trials** where **confederates gave the correct**

answer. The real participant **always answered after most confederates**, making them susceptible to group influence.
75% of participants conformed at least once, agreeing with the incorrect majority.
Overall, participants conformed in 32% of the trials where confederates gave the wrong answer.
When asked **privately**, participants gave the correct answer almost every time.

More related studies: Jones et al. (2007)



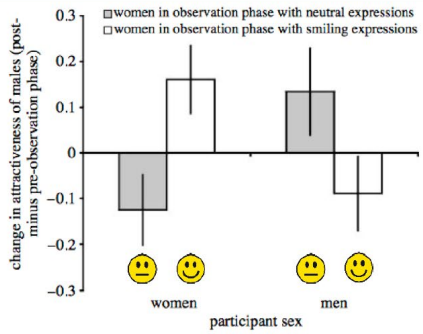


Figure 3. The significant interaction between sex of the participant and facial expression of the observed women. While observing other women smiling at male faces increased women's preferences for those male faces more than did observing other women with a neutral expression looking at male faces, the reverse was true for male participants. The *Y*-axis shows the change in attractiveness of the target male faces from pre- to post-observation phase test. Bars show means and SEMs.

Female participants were shown pairs of male faces and asked to rate their attractiveness. Later, they were shown the same pairs of faces again and asked to rate their attractiveness, but this time the face was presented with a female face staring at the man's face. The female face was shown staring at the man's face with either a smile or a neutral expression. Participants were then asked to rate the attractiveness of the faces again.

Women who saw other women smiling at male faces later rated those men as more attractive (white bars, positive change). Women who saw other women with neutral expressions rated the same men as slightly less attractive (gray bars, negative change).

When observing women smiling at male faces, man ratings of those men slightly decreased. When observing women with neutral expressions, men maintained or slightly increased their ratings.

when forming an attraction, people use social clues and mimic the attitudes of other people. In this case, the women mimicked a positive response to the men. As a result, attraction can be influenced by social factors.

Milgram's (1963) obedience experiment

There are three roles in this experiment:

- **Experimenter** (Authority figure): Directed participants to continue the study.
- **Teacher** (Real participant): Administered electric shocks.
- **Learner** (Confederate/fake participant): Pretended to receive shocks.

The **"teacher" (real participant)** was instructed to administer increasingly severe shocks to the **"learner" (confederate)** each time the learner answered incorrectly. The **"shock generator"** (seen in the leftmost image) displayed voltage levels ranging from 15V to 450V. The **learner was not actually shocked**, but he **acted as if he was in pain**.

The learner began protesting around 150V, complaining about a heart condition. At 300V, he refused to answer further. At 330V and beyond, he stopped responding entirely.

The experimenter pressured the teacher to continue using four prods:

- *"Please continue."*
- *"The experiment requires that you continue."*
- *"It is absolutely essential that you continue."*
- *"You have no other choice; you must go on."*

Many participants obeyed despite their discomfort.

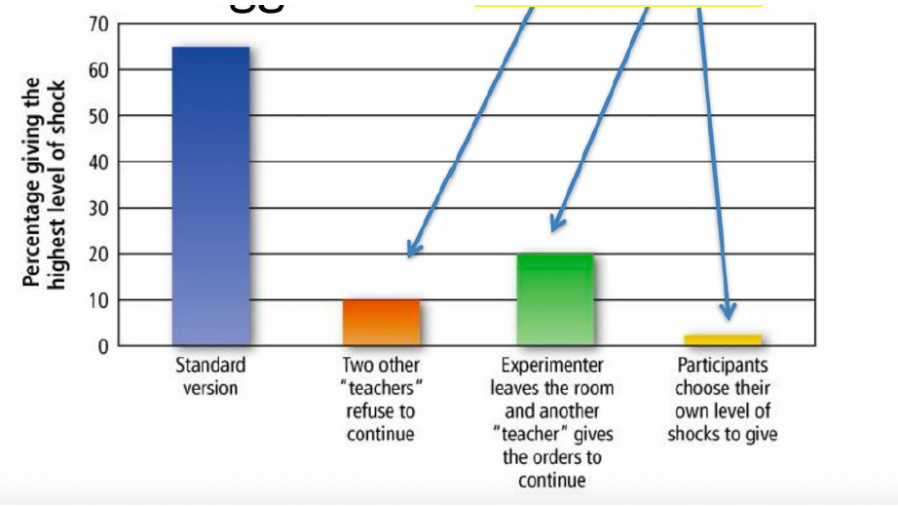
Psychologists predicted only 1% of people would go to the maximum shock level with expected average max shock of 360V.

Actual results show that 62.5% of participants delivered the maximum 450V shock, and 82.5% went beyond 150V, even after the learner's strong protests.

Normative influence: People obey authority figures because they feel social pressure to conform.

Informational influence: When uncertain, people rely on authority figures for guidance.

Not about aggression: Most participants were not naturally aggressive—obedience was due to situational pressures, not personality traits, i.e.



We see that:

- When peers rebelled, participants felt more empowered to disobey.
- When the authority figure was not physically present, participants were less likely to obey.
- Almost no participants administered high shocks when given complete freedom.

From this, Milgram identified four key variables that influenced participants' likelihood of obeying:

1. **Victim's distance from the participant:** When the learner was in another room, obedience increased. When the participant had to physically place the learner's hand on the shock plate, obedience dropped significantly.
2. **Authority's closeness & legitimacy:** When the experimenter was physically present, obedience was high. When the experimenter gave instructions over the phone, obedience dropped. If the authority figure seemed illegitimate (e.g., a random person in regular clothes), obedience was lower.
3. **The authority's institution (Academic, Medical, etc.):** Conducting the experiment at Yale University increased obedience. When the study was moved to a low-status location, obedience dropped.
4. **Group influence – presence of an ally:** If another "teacher" refused to continue, obedience dropped sharply. If others continued shocking, participants were more likely to also continue.

Milgram's study helps explain how ordinary people can commit harmful acts under authority. Many Nazi soldiers claimed they were "just following orders", similar to Milgram's participants. Shows how blind obedience can lead to atrocities.

Predicting conformity:

Social Impact Theory (Latane, 1981) suggests that conformity depends on three factors:

1. **Strength**: The importance of the influencing group (status, credibility).
   Example: You're more likely to conform to experts.
2. **Immediacy**: How physically or emotionally close the group is.
   Example: Conformity is higher in face-to-face interactions than online.
3. **Number**: Larger groups exert more pressure to conform.
   Example: A person is more likely to conform in a group of 10 rather than a group of 2.

There are also other factors influencing conformity:

- **Cohesion**: More likely to conform in a close-knit group (e.g., family, friends).
- **Public response**: People conform more when their response is seen by others.
- **No prior commitment**: If someone hasn't taken a stance yet, they are more likely to conform.
- **Personality**: Some individuals are naturally more conformist.
- **Gender**: Studies suggest slight differences in conformity between genders, depending on context.
- **Culture**: **collectivist cultures** (e.g., Japan, China) emphasize group harmony and show higher conformity, whereas **individualist cultures** (e.g., U.S., Canada) prioritize independence.

Group Influence

Definition (Group): A group is made up of two or more people who interact and influence each other. Group members see each other as part of a collective "us" rather than separate individuals.

Social identity theory: people derive part of their identity from the social groups they belong to, and this social identity influences their behavior and perceptions. Consider the previous cult example, or social conformity.

Why join a group?

- **Basic human needs:** People need to feel connected.
- **Self-esteem (Social identity theory):** Being in a group boosts self-worth since because it provides a sense of belonging, identity, success (positive group association), and positive comparisons to others (ingroup favoritism).
- **Motivation for social change:** People join groups to make an impact in society.

Definition (Social facilitation): The presence of others increases physiological arousal. (Zajonc, 1965). And it has effects:

- Strengthens dominant responses (most likely or automatic behavior a person will exhibit in a given situation).
- Enhances performance on easy tasks.
- Impairs performance on difficult tasks.

Three factors explain why being around others causes arousal:

1. **Mere Presence:** Being around others makes us more alert.
2. **Evaluation apprehension:** Worrying about being judged.
3. **Distraction:** Others can take attention away from the task.

Definition (Social loafing): People put in less effort when working in a group than when working alone. This is because they feel less accountable (less pressure to perform). (Ingham et al., 1974)

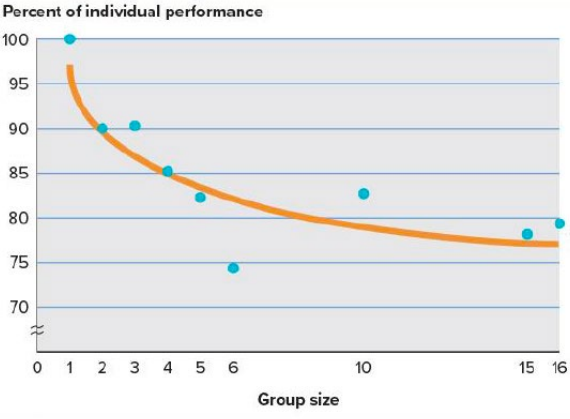


FIGURE 7–3 EFFORT DECREASES AS GROUP SIZE INCREASES.

As the number of people in the group increases, individual effort decreases. This pattern supports the idea of social loafing.

Social Loafing Experiment (Latané, Williams, & Harkins, 1979)

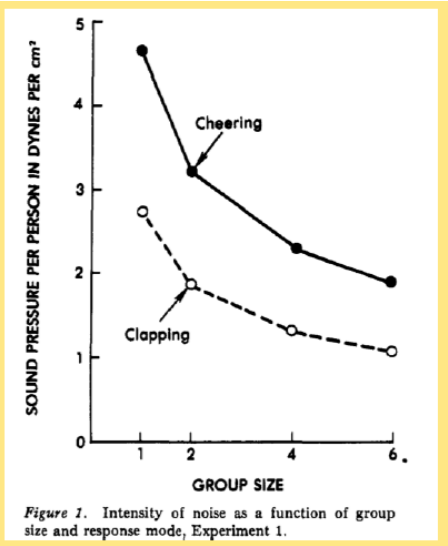


Figure 1. Intensity of noise as a function of group size and response mode, Experiment 1.

The study measured how loud people cheered/clapped in groups vs. alone. And we see that the larger the group, the less effort each person put in.

Exceptions to social loafing

Social loafing does not always occur. Certain factors reduce or eliminate it:

1. **Task difficulty**: When the task is challenging, individuals put in more effort.
2. **Personal responsibility**: If people feel personally accountable to the group (e.g., team sports, military tasks), they don't loaf.
3. **Social bonds**: When people work with friends or valued team members, they exert more effort.
4. **Shared goals**: If the group's goal requires collective effort, individuals are more likely to be fully engaged.

Definition (Deindividuation): Deindividuation occurs when individuals lose their sense of identity and self-awareness. As a consequence, people become less concerned about how they are evaluated and may engage in behavior they normally wouldn't.

Factors impacting deindividuation

Deindividuation is more likely in situations that reduce personal accountability. Key factors that promote deindividuation:

1. **Large group size:** The bigger the group, the lower the personal accountability.
2. **Physical anonymity:** If people can't be identified (e.g., wearing a mask or uniform), they are more likely to act out of character.
3. **Arousing and distracting activities:** When people are engaged in an exciting or emotionally charged event, they become more immersed in the group, making them act impulsively.

Related study: Buckels, Trapnell, & Paulhus (2014)

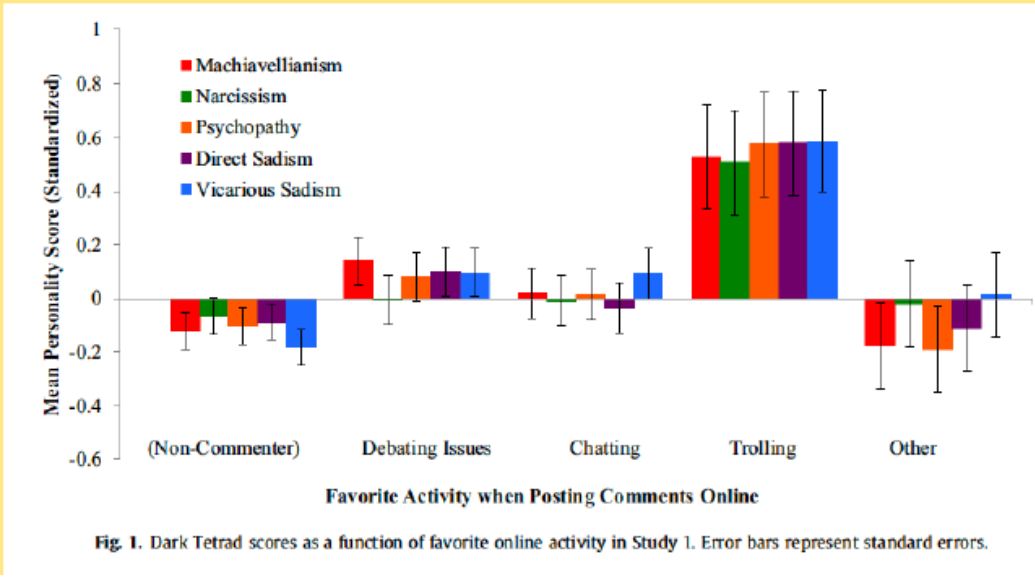


Fig. 1. Dark Tetrad scores as a function of favorite online activity in Study 1. Error bars represent standard errors.

They examined the relationship between online anonymity and antisocial behavior. People who engage in trolling (harassing others online) scored higher on all the measures. Anonymity on the internet leads to deindividuation, which increases antisocial behaviors like cyberbullying and trolling.

Related study: Hardaker & McGlashan (2016)

User	Date/Time	Tweet
Lord0Lulz	2013-07-27 17:52:02	@kingtytan @SultanOfPing @CCriadoPerez Some women just need a good raping every now and again I guess:-/

Table 4
Top 20 most frequent lexical words.

Rank	Word	Freq	Rank	Word	Freq
1	Twitter	4616	11	know	2386
2	abuse	4465	12	support	1921
3	women	4309	13	woman	1661
4	people	3712	14	right	1655
5	threats	3435	15	hope	1614
6	think	3374	16	thanks	1586
7	rape	3248	17	trolls	1491
8	good	2785	18	sorry	1377
9	men	2536	19	time	1377
10	thank	2389	20	love	1360

Table 5
Most frequent topics/discursive strategies.

Topic/discursive strategy	Lexical items
(Sexual) aggression	abuse, rape, threats, trolls
Gender	men, women, woman
Mental processes	hope, know, love, think
Politeness markers	sorry, thank, thanks

We can see an actual tweet with extreme violent and misogynistic language. The text analysis table shows that words related to abuse, threats, rape, and trolling were commonly used in anonymous online interactions. When people feel anonymous, they are more likely to engage in harmful and aggressive behavior that they would not normally express in real life.

Definition (Groupthink): Groupthink is a decision-making process in which group cohesion and unity become more important than making rational, well-informed decisions. Members prioritize agreement and conformity over critical evaluation of alternatives. This often leads to flawed decisions because dissenting opinions are suppressed.

The Process of Groupthink

1. **Antecedents (Causes) of groupthink:**
   a) *High group cohesion:* Members value being part of the group and don't want to disrupt unity.
   b) *Group isolation:* The group is cut off from outside perspectives.
   c) *Directive leadership:* A strong leader discourages debate and enforces conformity.
   d) *High stress:* When under pressure, groups tend to seek quick consensus rather than thorough analysis.
   e) *Poor decision-making procedures:* Lack of formal rules for considering alternative viewpoints.
2. **Once groupthink begins, the following warning signs appear:**
   a) *Illusion of invulnerability:* Members believe they are too strong to fail.
   b) *Belief in group morality:* The group assumes its decisions are morally right.

c) *Stereotyping out-groups:* Opponents are seen as weak or inferior.
d) *Self-censorship:* Members keep doubts to themselves to avoid conflict.
e) *Pressure on dissenters:* Anyone who questions the group faces pressure to conform.
f) *Illusion of unanimity:* Silence is interpreted as agreement.
g) *Mindguards:* Some members act as "gatekeepers," shielding the group from contradictory information.

3. **When groupthink is in effect, decision-making is compromised:**
   a) Limited consideration of alternatives
   b) Failure to evaluate risks
   c) Inadequate information gathering
   d) Lack of contingency plans

Strategies to avoid groupthink

1. **Remain impartial**: Leaders should avoid pushing their opinions.
2. **Encourage critical evaluation**: Members should be encouraged to question assumptions.
3. **Seek outside opinions**: External perspectives can provide new insights.
4. **Create subgroups**: Smaller teams within the group can explore different angles.
5. **"Second-chance" meetings**: Groups should reconsider decisions before finalizing them.

Definition (Group polarization): Group discussions tend to strengthen pre-existing attitudes. If group members already share an opinion, discussing it will push them to even more extreme versions of that opinion. There are two main causes:

1. **Informational Influence:** Exposure to more arguments that support the group's initial stance reinforces it.
2. **Normative Influence:** Members conform to group norms to be accepted.

Related study Myers & Bishop (1970)

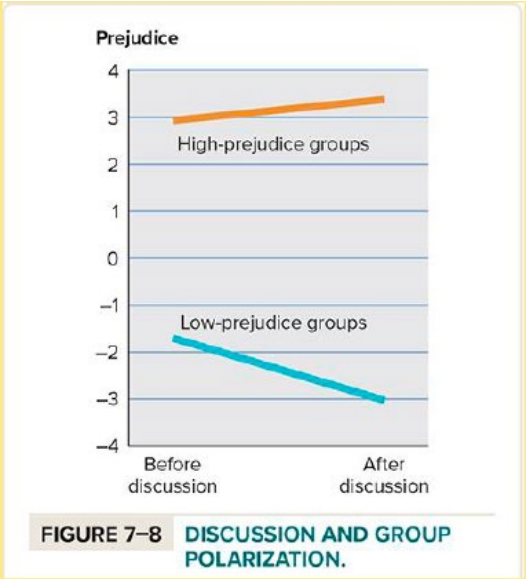


FIGURE 7–8 DISCUSSION AND GROUP POLARIZATION.

The study measured the effect of group discussion on prejudice. We see that groups that initially had high prejudice became even more prejudiced after discussion. Groups with low prejudice became even less prejudiced.

Altruism and helping people

Definition (Altruism): Altruism is a form of prosocial behavior (actions that benefit others). It is the motive to increase the welfare of others without regard for one's own self-interest.

Evolutionary theory of helping

Why do people help each other? One explanation is evolutionary theory, which suggests that helping behavior has evolved because it increases survival and reproduction.

Kin selection tells us that we are more likely to help those who share our genes (i.e., relatives). Helping genetic relatives increases the likelihood that shared genes will be passed on to future generations. And closer relatives (e.g., parents, siblings) share more genetic material than distant relatives (e.g., cousins), meaning we are more likely to help them.

Hamilton's Rule (1964)

Hamilton's Rule explains when altruism is evolutionarily beneficial:

$$rb > c$$

- c is the cost to the person helping (actor).
- r is the genetic relatedness between the helper and the person being helped.
- b is the benefit received by the recipient.

From this equation, we see that we are more likely to help when the genetic relatedness is high (r is large) and/or the benefit to the recipient b is high, as long as the cost to the helper c is not too great.

Related study Smith, Kish, & Crawford (1987):

Study by Smith, Kish, & Crawford (1987) explored who people are most likely to help. They found that closer relatives (e.g., children, siblings) receive more assistance than distant relatives or unrelated individuals.

Table 1. Proportion of Estate Bequeathed to Beneficiary Categories

Beneficiary Category	Percentage Bequeathed ($\bar{x}$)		
Spouse	36.9		
Kin (excluding spouse)	55.3		
r = 0.50 kin		46.5	
Offspring		38.6	
Sons			19.2
Daughters			19.4
Siblings		7.9	
Brothers			3.2
Sisters			4.8
r = 0.25 kin		8.3	
Nephews and Nieces		5.1	
Nephews			2.3
Nieces			2.8
Grandchildren		3.2	
Grandsons			1.8
Granddaughters			1.4
r = 0.125 kin			
Cousins		0.6	
Male Cousins			0.3
Female Cousins			0.3
Nonkin	7.7		
Total	100[a]		

[a] Rounding error accounts for the discrepancy between tabled values and total.

The table shows how people distribute their inheritances:

- **Spouses** (not directly related genetically) receive the largest share.
- **Children and siblings ($r = 0.50$)** receive the second-largest share.
- **Nephews/nieces and grandchildren ($r = 0.25$)** receive less.
- **Cousins ($r = 0.125$)** receive even less.
- **Non-family members receive the least.**

Definition (Reciprocity Norm): The expectation that people will help those who have helped them. This is based on mutual benefit—helping someone today increases the chance they will help you in the future.

Definition (Social-Responsibility norm): The expectation that people will help those dependent on them (e.g., children, elderly, disabled individuals). Unlike reciprocity (which expects a return), this does not expect a reward—it is a moral duty.

Social exchange theory: Helping behavior is motivated by a cost-benefit analysis. People help when the rewards outweigh the costs.

Mood and helping: Helping behavior enhance mood. People who help others often feel happier and have higher self-esteem.

Definition (Empathy): Empathy is the ability to understand and share the feelings of another person.

Empathy-Altruism Hypothesis (Batson, 1991): The Empathy-Altruism Hypothesis proposes that people help others based on their level of empathy. When empathy is high, individuals are more likely to help regardless of personal costs or rewards. There are two possible paths:

- **No empathy (Self-Interest Motivation):** The person will only help if there is a benefit to them (e.g., social reward, self-image improvement).
- **High empathy (Altruistic Motivation):** The person helps regardless of personal costs.

Definition (Diffusion of responsibility): Diffusion of responsibility occurs when people assume someone else will take action, leading to inaction. This is particularly common in large groups or public settings. Diffusion of responsibility manifests into groupthink and bystander effect.

Steps to helping behavior

1. **Notice the event:** If distracted, they might not notice the emergency.

2. **Interpret as an emergency:** If others act calmly, people assume it's not an emergency (pluralistic ignorance).
3. **Assume responsibility:** If many are present, individuals may believe others will take responsibility (diffusion of responsibility).
4. **Know the appropriate response:** Lack of knowledge may prevent action.
5. **Decide to help:** Fear of legal trouble, physical danger, or embarrassment can prevent action.

If any of these steps fail, no help is given.

Definition (Bystander effect): individuals are less likely to offer help to a victim in the presence of other people.

Example of bystander effect: The Kitty Genovese case (1964) is one of the most famous examples of bystander effect and diffusion of responsibility. Genovese was murdered outside her apartment, and although 38 people witnessed the crime, none intervened. This event led to major research in social psychology on why people fail to help in emergencies.

Related study: Bystander Intervention (Latané & Darley, 1968)

Independent Variable	Dependent Variable
The variable that is hypothesized to influence the dependent variable. Participants are treated identically except for this variable.	The response that is hypothesized to depend on the independent variable. All participants are measured on this variable.
Example: Latané and Darley (1968)	
The number of bystanders	**How many participants helped?**
Participant + Victim	85%
Participant + Victim + Two others	62%
Participant + Victim + Four others	31%

Latané & Darley (1968) researched the bystander effect, which suggests that people are less likely to help in an emergency when others are present. As group size increases, individual responsibility decreases.

Key factors that increase helping behavior

1. **Seeing others help:** If one person helps, it encourages others.
2. **Time pressure:** Busy people are less likely to help.
3. **Similarity to the victim:** People are more likely to help those who share similarities with them (e.g., same nationality, culture).

Increasing helping behavior

Helping can be increased by reducing psychological barriers. There are two main strategies:

- **Undoing restraints on helping** e.g., reducing ambiguity, increasing responsibility
- **Socializing altruism** e.g., modeling altruistic behavior, moral education

Aggression

Definition (Aggression): Physical or verbal behavior intended to hurt someone. This intention is crucial in defining aggression. There are two forms of aggression:

- **Physical aggression:** Acts of physical violence, such as hitting, kicking, or physically harming another person.
- **Social aggression:** This is more indirect and focuses on emotional harm. It includes behaviors like:
  - Spreading rumors
  - Social exclusion
  - Threatening relationships

Types of aggression:

- **Hostile aggression:**
  - Driven by anger.
  - Goal: To inflict harm for its own sake.
  - Example: A person punches someone in a fight out of rage.

- **Instrumental aggression:**
  - A means to an end (planned or premeditated aggression).
  - Example: A robber uses force to steal money.

Theories of aggression--- Biological theories

There are two main categories of the theories:

- **Evolutionary theory**: Aggression evolved as an adaptive mechanism for survival.
- **Biochemistry**:
  - *Testosterone:* Linked to increased aggression.
  - *Alcohol:* Reduces inhibitions, making aggression more likely.
  - *Diet:* Poor nutrition may influence aggression.

Biological perspective on aggression in men

Evolutionary approach suggests two types of aggression in men:

- **Intrasexual aggression:** Competing with other men for mates.
- **Intersexual aggression:** Driven by jealousy to prevent a partner from leaving.

Related study Wilson & Daly (1985)

Wilson & Daly's study on aggression in men analyzed homicide rates by age and sex.

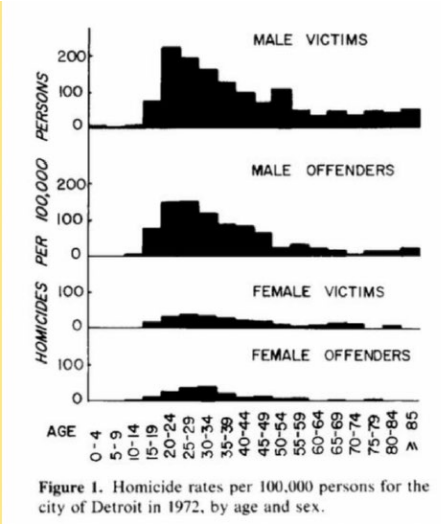


Figure 1. Homicide rates per 100,000 persons for the city of Detroit in 1972, by age and sex.

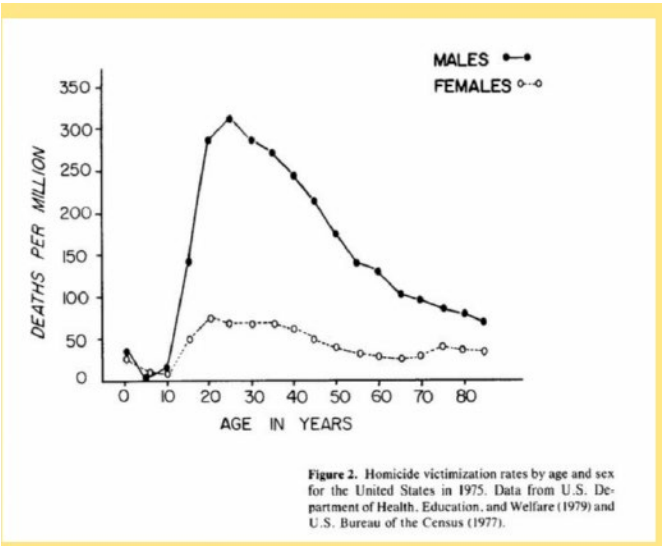


Figure 2. Homicide victimization rates by age and sex for the United States in 1975. Data from U.S. Department of Health, Education, and Welfare (1979) and U.S. Bureau of the Census (1977).

Males commit more violent crimes than females. Homicide rates peak during early adulthood (competition for mates). Men are more likely to be both offenders and victims.

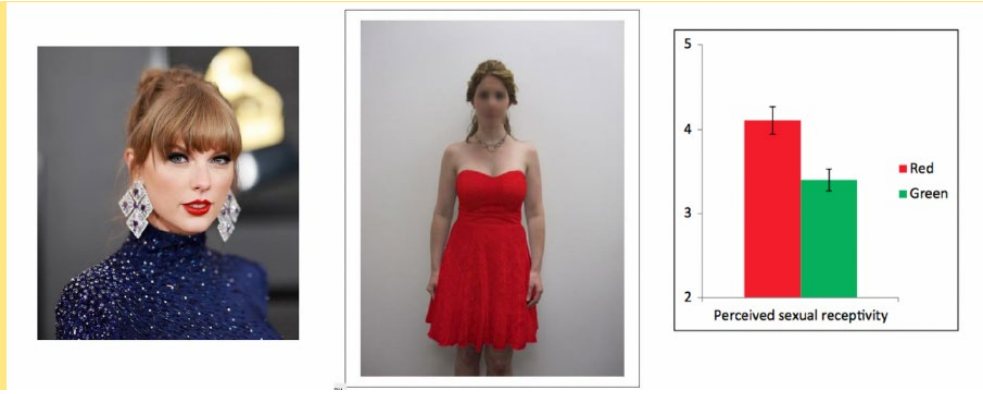
Biological perspective on aggression in women

Similar to men, women's aggression follows evolutionary patterns.

Two types of aggression:

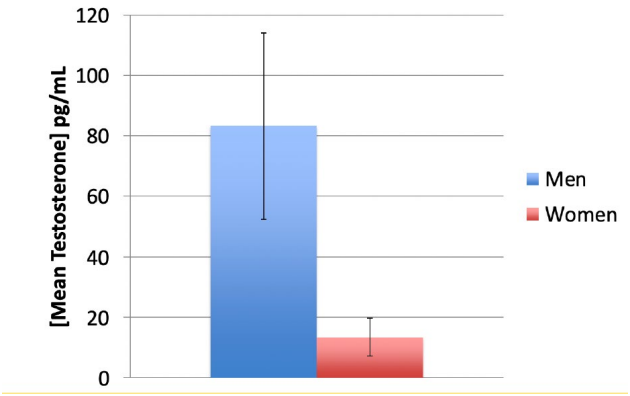
- **Intrasexual aggression:** Competition with other women for mates.
- **Intersexual aggression:** Motivated by jealousy, particularly in relationships

Related study Pazda et al., 2014



The study investigated how women perceive other women in relation to sexual receptivity. Women wearing red were perceived as more sexually receptive. Other women responded with higher aggression toward them.

Testosterone and aggression



The bar chart shows men have significantly higher testosterone levels than women.

Related study Geniole et al. (2020)

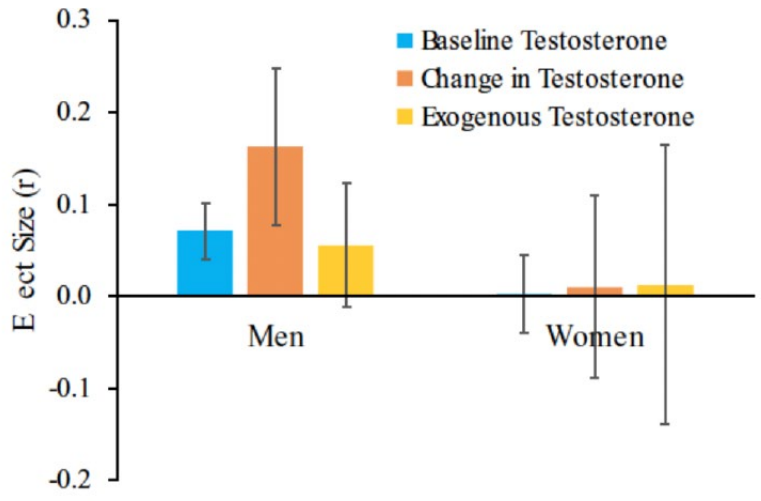


Fig. 1. Bar graph showing the effect size (*r*) for the relationship between baseline testosterone and aggression, change in testosterone and aggression, and the effect of exogenous testosterone (vs placebo) on aggression, as a function of sex. Error bars represent 95% confidence intervals.

The study explores the effect of testosterone on aggression. It analyzes baseline levels, testosterone changes, and exogenous testosterone administration.

Men show a stronger link between testosterone and aggression than women. Baseline testosterone (blue) and changes in testosterone (orange) correlate with aggression in men. Exogenous testosterone (yellow) appears to increase aggression slightly in men but not significantly in women.

The testosterone-aggression link is stronger in men but not deterministic. Externally increasing testosterone does not always increase aggression. And testosterone may enhance aggression only in certain social situations.

Related study Carre et al. (2010)

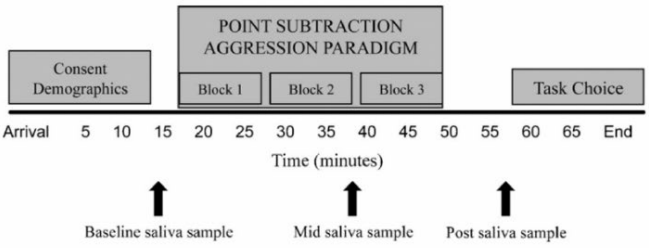


Table 1
Breakdown of the four experimental conditions.

	Provoked	Not Provoked
Rewarded for aggression	Reactive/Proactive condition ($n = 34$)	Proactive condition ($n = 34$)
Not Rewarded for aggression	Reactive condition ($n = 36$)	Control condition ($n = 35$)

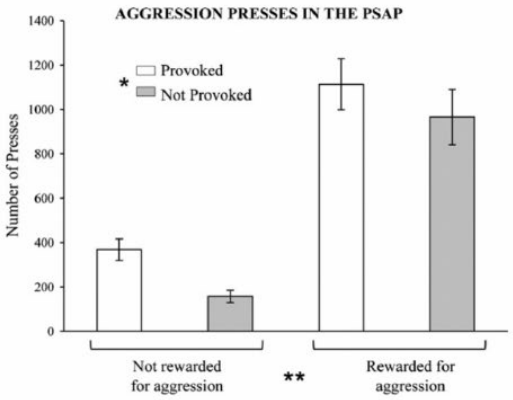


Fig. 2. Mean (SEM) aggression presses as a function of Reward and of Provocation. *Main effect of Provocation ($p = 0.04$). **Main effect of Reward ($p < 0.001$).

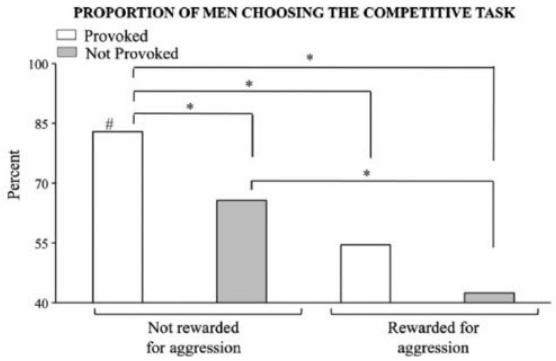


Fig. 3. Percentage of men who chose the competitive versus non-competitive task in each experimental condition. *Significant group differences in percent choosing the competitive task $p < 0.04$. #Significant preference for the competitive task within a condition ($p < 0.001$).

The study examined the role of testosterone in provoked vs. unprovoked aggression. It used the Point Subtraction Aggression Paradigm (PSAP) to measure aggression.

Participants provide a baseline saliva sample (to measure testosterone). Engage in three blocks of PSAP tasks, where they are either provoked or not provoked. Provide mid-experiment and post-experiment saliva samples to assess testosterone changes.

Provoked participants displayed significantly more aggression presses than unprovoked participants. Rewarding aggression led to an increase in aggressive behavior. Provoked participants were more likely to choose a competitive task.

We can see that aggression is not purely biological but also influenced by social learning and reinforcement.

Alcohol and aggression

Related study Taylor & Gammon (1975)

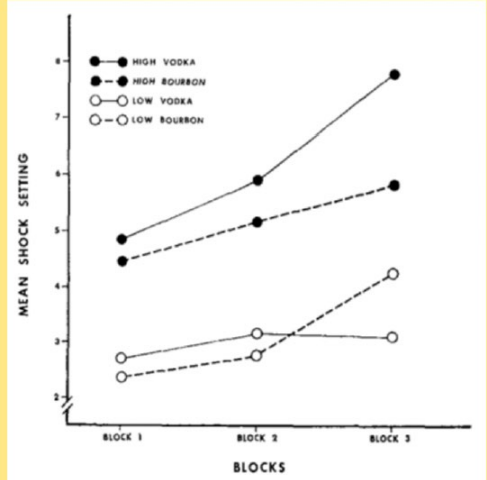


FIGURE 1. Mean shock settings as a function of type of alcohol, dose, and blocks.

Study focuses on how alcohol consumption influences aggression.

Participants competed in a reaction-time game where they: Faced either a threatening opponent or a non-threatening opponent. Some were intoxicated, while others were sober.

Intoxicated participants were more aggressive, but only when provoked. Alcohol did not increase aggression when no threat was present. Different alcohol types and doses had varying effects.

Alcohol doesn't directly cause aggression, but lowers inhibitions. It increases the likelihood of reactive aggression, especially in threatening situations. Situational context + alcohol = aggression (not alcohol alone).

Diet and aggression

Biochemical factors beyond testosterone and alcohol can influence aggression. Poor diet is linked to higher aggression, specifically: low omega-3 fatty acids, high trans fats, excessive sugary drink.

Theories of Aggression – Critical Thinking

The strengths of aggression studies include their reliance on controlled experiments, replicable findings, and integration of biological, psychological, and social perspectives. However,

limitations arise from ethical concerns, overemphasis on male aggression, and the difficulty of proving causation—testosterone, for example, correlates with aggression but may not directly cause it.

Key gaps in knowledge include how genetic and environmental factors interact in shaping aggression, the role of female aggression, and cultural differences in aggressive behavior. Despite these uncertainties, we can confidently conclude that aggression is influenced by both biological and social factors, with provocation and reinforcement playing crucial roles. Future research should explore the nuances of female aggression, genetic predispositions, and the impact of digital media on aggressive behaviors.

Theories of Aggression – Frustration

Definition (Frustration): Frustration is defined as the perception of being prevented from achieving a goal.

Frustration-Aggression Theory: States that frustration increases the likelihood of aggressive behavior.

Factors influencing frustration-aggression

- **Greater likelihood of aggression:**
  - **Proximity to the goal** – If someone is closer to achieving a goal, frustration becomes more intense, making aggression more likely.
  - **Unexpected frustration** – If someone does not anticipate frustration, it causes more anger.
  - **Relative deprivation** – Feeling worse off compared to others can trigger aggression.
  - **Aggressive cues** – Weapons, violent media, or aggressive social norms can trigger aggression in a frustrated person.
- **Less likelihood of aggression:**
  - **Understanding the frustration** – If the cause is justified, aggression is less likely.
  - **Apologies and amends** – People who accept responsibility for their actions reduce aggression.
  - **Social norms** – If aggression is seen as unacceptable, people regulate their behavior.

Related study Harris (1974)

This study tested how frustration leads to aggression based on proximity to the goal. Here, confederates cut in line at different positions. We compared third-in-line vs. twelfth-in-line responses. And we tested whether gender and social status affected aggression.

- People in third place reacted more aggressively than those in twelfth place.
- Men reacted more aggressively when another man cut in line.
- Women reacted aggressively toward both genders.
- A high-status individual (dressed formally) received less aggression than a casually dressed person.
- Saying "Excuse me" before cutting reduced aggressive reactions.

Definition (Relative deprivation): The feeling of being worse off than others. It is not about absolute poverty but comparisons with others. Creates resentment and hostility. Often linked to social unrest (e.g., economic inequality leading to protests).

Related study Berkowitz & LePage (1967)

This study examined how aggressive stimuli (like weapons) increase aggression. People in a room with a gun reacted more aggressively than those in a room without a weapon. Even if the weapon was not used, its mere presence increased aggression.

Environmental cues shape behavior—aggressive objects prime people for aggression.

Theory of aggression – Social learning

Aggression is socially learned through:

- Family (e.g., domestic violence exposure).
- Culture & Media (e.g., violent video games, movies).
- Community & Society (e.g., norms that promote aggression).

Related study Bandura (1963)

In Bandura's Bobo Doll experiment, children watched an adult act aggressively toward a Bobo doll. Children imitated the aggressive behavior, especially if the adult was rewarded.

We see that children exposed to aggression were more likely to act aggressively.

In terms of media and aggression, seeing aggression in movies, TV, and video games can influence behavior.

Reinforcement matters, meaning if aggression is rewarded, it is more likely to be repeated.

Influences on aggression

1. **Aversive Incidents**
    - **Pain**: Experiencing physical pain can lead to increased aggression.
    - **Heat**: High temperatures are linked to increased aggression.
    - **Attacks**: If a person is physically or verbally attacked, they are more likely to retaliate with aggression.
2. **Arousal:** High levels of physiological arousal (e.g., after exercising or during stress) can intensify emotions, including aggression.
3. **Aggression cues:** Environmental triggers like weapons, violent images, or hostile facial expressions can increase aggression.
4. **Media influences:** video games, TV, movies, internet, pornography
5. **Group Influences:** Being in a group can intensify aggressive behavior due to deindividuation, groupthink, and diffusion of responsibility.

Do video games increase aggression?

The debate is ongoing (Inconclusive research, personal differences, different contexts), with research providing mixed results. Personal traits, family environment, and context determine whether gaming increases or decreases aggression.

Catharsis Hypothesis

The Catharsis Hypothesis suggests that venting anger (e.g., punching a pillow, yelling) reduces aggression by releasing pent-up emotions. Research contradicts the catharsis hypothesis. Instead of reducing aggression, venting often increases aggression by reinforcing angry thoughts.

Reducing aggression

1. **Controlling Anger and Frustration:** Learning to identify triggers and practicing self-regulation can prevent impulsive aggression.
2. **Communication and Problem-Solving:** Expressing frustrations constructively through open discussions can prevent aggressive outbursts.
3. **Modeling Nonaggressive Behavior:** Children learn aggression from adults, so parents and teachers must model calm responses.
4. **Reinforcement of Nonaggressive Behavior:** Rewarding positive behaviors makes aggression less likely.
5. **Building Empathy:** Understanding other people's emotions helps reduce hostile responses.

Prejudice, Conflict, & Peacemaking

Definition (Attitudes): An evaluation of a person, object, or idea. They can be positive (favorable judgment), negative (unfavorable judgment), ambivalent (mixed feelings), neutral (lack of strong opinion).

Definition (Prejudice): A negative attitude toward a social group and its members.

Groups affected by prejudice

Prejudice impacts **many social groups**, including:

- **Race**
- **Gender**
- **Sexual orientation**
- **Religion**
- **Weight**
- **Age**
- **Immigration status**
- **Mental health conditions**
- **Political orientation**
- **Social class**
- **Disability**

Individuals may face multiple layers of prejudice.

Components of prejudice

Prejudice consists of three key attitudes:

1. **Affective (Emotional) component:** Emotional reactions to a group (e.g., fear, hatred, resentment).
2. **Behavioral component:**
   a) ***Definition (Discrimination):*** Unjustified negative behavior toward a group (e.g., denying jobs, unequal treatment).
3. **Cognitive component:**
   a) ***Definition (Stereotypes):*** Overgeneralized beliefs about group characteristics (e.g., "All immigrants take jobs from locals").

Each of these plays a role in how prejudice develops and is maintained in society.

Racism & Sexism

Definition (Racism): Prejudicial attitudes and discriminatory behavior toward people based on race.

Definition (Sexism): Prejudicial attitudes and discriminatory behavior based on gender.

Definition (Institutional discrimination): Prejudice can be embedded in systems, even when individuals are not personally prejudiced.

How prejudice has evolved?

Traditional overt prejudice: Prejudice in the past was explicit and openly expressed. These statements reflect old-fashioned racism and sexism, where certain groups were viewed as inherently inferior.

Modern-day prejudice: While explicit prejudice is less common today, it has transformed into subtle, coded language. These statements shift from blatant discrimination to questioning the legitimacy of equality efforts.

Prejudice has not disappeared; it has simply become more socially acceptable and less direct. This is known as modern racism/sexism, where bias is expressed in more subtle, indirect ways.

Measuring prejudice – Implicit Association Test (IAT)

Implicit biases are unconscious associations that people may not even be aware of. The Implicit Association Test (IAT) measures how quickly individuals associate certain racial groups with positive or negative traits.

Implicit bias can exist even if a person consciously believes in equality.

Related study Payne (2001)

Participants were shown faces of Black or White individuals, followed by an image of either: A gun or a hand tool. The task was to quickly identify the object.

Under time pressure, participants were more likely to misidentify a tool as a gun when primed with a Black face. And be more accurate when associating a gun with a Black face.

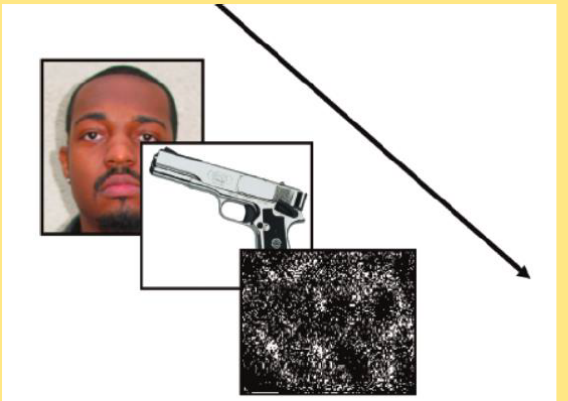


Fig. 1. Schematic illustration of weapons-priming procedure. On each trial, a white or black face appears first, followed by a gun or hand tool, followed by a visual mask. Participants' task is to indicate, as quickly as possible, whether they saw a gun or a tool.

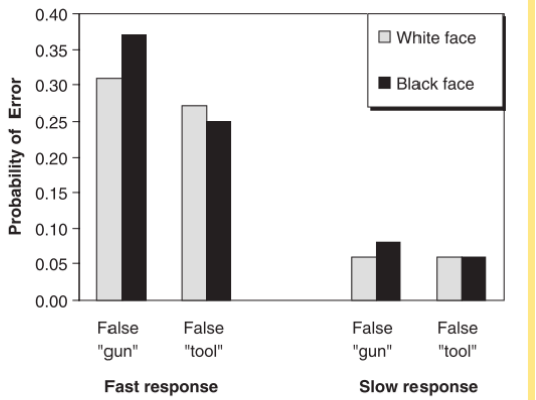


Fig. 2. Probability of falsely identifying a "gun" or "tool" depending on the race of the person shown prior to the object and whether participants were under time pressure to respond. Data adapted from Payne (2001).

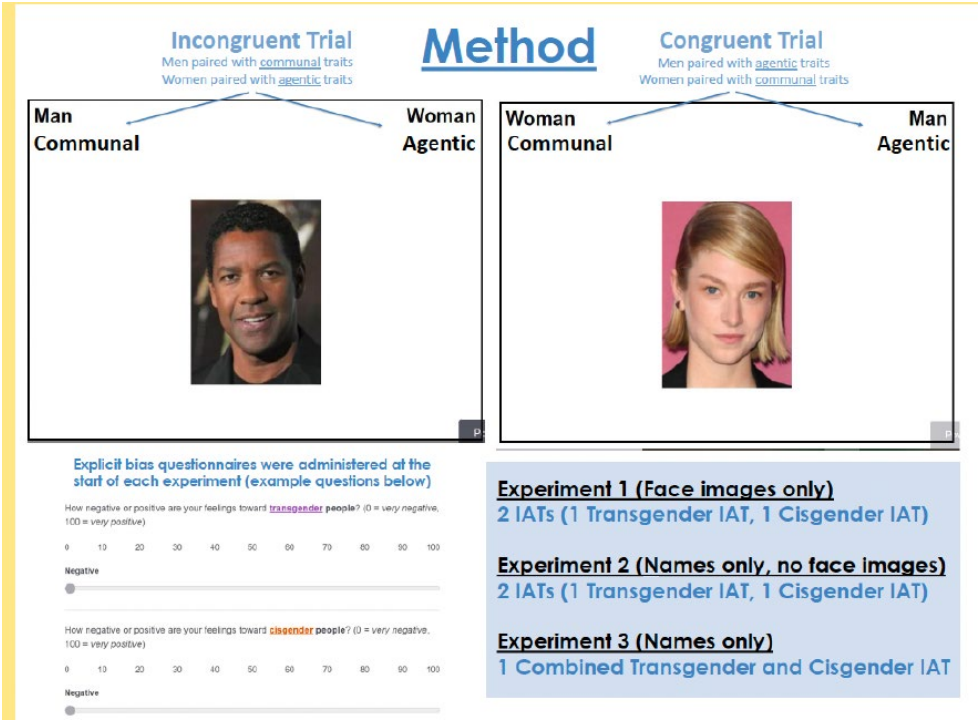
The error rate was higher when people had to make fast decisions. This suggests that unconscious racial biases influence split-second decisions.

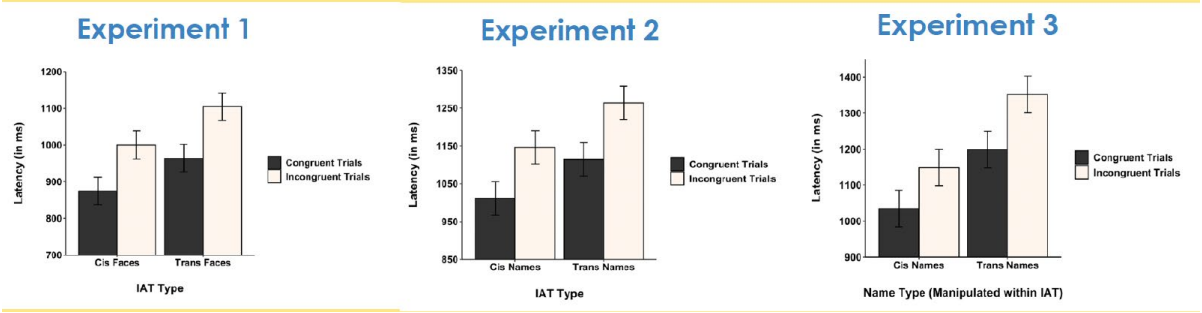
Related study Liebenow et al. (2025)

Similar to racial bias studies, this research examines automatic bias against transgender individuals.

Participants were shown faces or names and asked to classify them based on stereotypical gender traits:

- **Congruent trials:** Men paired with agentic (assertive) traits, women with communal (nurturing) traits.
- **Incongruent trials:** Men paired with communal traits, women with agentic traits.





- **Experiment 1:** Reaction time was slower when processing incongruent transgender faces.
- **Experiment 2:** Reaction time was slower when associating trans names with traits opposite of gender expectations.
- **Experiment 3:** Combining names and faces confirmed the pattern.

People show automatic prejudice against transgender individuals, even when they don't explicitly endorse anti-trans views. This supports the idea that gender expectations shape bias.

Sources of prejudice

Prejudice originates from multiple sources, grouped into three categories:

- **Social factors**
  - Individual differences in prejudice (some people are naturally more biased than others).
- **Motivational factors**
  - *Frustration & aggression:* People blame others when they feel stressed or disadvantaged.
  - *Social identity theory:* People favor their own group (ingroup bias) and discriminate against outsiders (outgroup bias).
- **Cognitive factors**
  - *Categorization:* People automatically group others based on race, gender, etc.
  - *Attributional processes:* We explain others' behavior based on stereotypes rather than individual traits.
  - *Just-World Bias:* The tendency to believe the world is fair (e.g., assuming victims deserve misfortune).

Social sources of prejudice

1. **Social Dominance Orientation (SDO)**
   - Some individuals believe hierarchies are natural and that some groups should dominate others.
2. **Right-Wing Authoritarianism (RWA)**
   - People who value obedience, tradition, and aggression against outsiders are more likely to be prejudiced.
3. **Religious Fundamentalism**
   - Some religious beliefs reinforce prejudice by promoting rigid moral frameworks.

Role congruity theory: People expect certain groups to behave in specific ways. When they don't, they are viewed negatively. This is because when someone violates expectations, it creates mental discomfort (dissonance). To resolve this discomfort, people may rationalize their prejudice.

Motivational sources of prejudice

Scapegoat theory: When people face struggles, they blame others rather than taking responsibility. This is a psychological defense mechanism.

Realistic group conflict theory: When two or more groups compete for limited resources, prejudice increases. This leads to conflict, stereotyping, and discrimination.

Social identity theory in prejudice: Humans naturally categorize people into groups. Our self-concept is partially derived from our group memberships. People form a strong bond with those who share a sense of identity (in-group) and see those outside as distinct or different (out-group). And this In-group bias is the tendency to favor one's own group over others. This is a fuel to prejudice.

Cognitive sources of prejudice

Automatic stereotype activation: Stereotypes can be activated automatically, especially when people are:

- Pressed for time (rushed decisions)
- Preoccupied (not paying full attention)
- Tired (mental fatigue lowers cognitive control)
- Emotionally aroused (strong emotions enhance bias)

Out-group homogeneity effect: People perceive out-group members as more similar to each other than in-group members.

Own race bias: People better recognize and distinguish faces of their own race.

Out-group homogeneity effect and own race bias contributes to stereotyping because people overgeneralize characteristics of other groups.

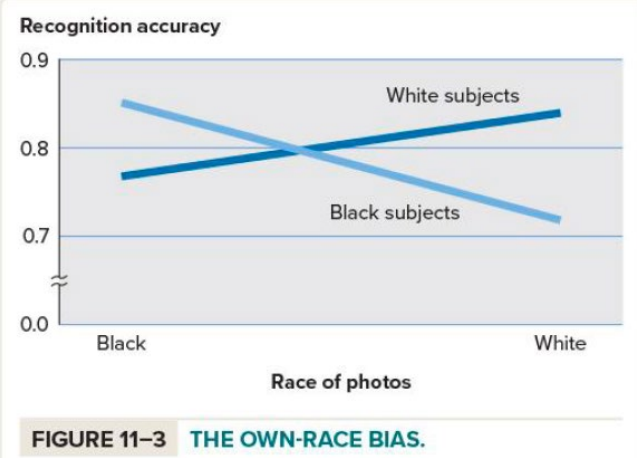


FIGURE 11–3 THE OWN-RACE BIAS.

We can see experimental evidence where White subjects are better at recognizing White faces and Black subjects are better at recognizing Black faces, confirming the own-race bias.

Fundamental Attribution Error (FAE): Overestimating dispositional factors (e.g., personality) and underestimating situational influences when judging others.

Ultimate Attribution Error: Applying FAE to entire groups:

- Positive behavior of out-group members is seen as an exception.
- Negative behavior is attributed to their inherent traits.

Group Level	Dispositional Causes	Situational Causes
	Successful outcomes	Poor outcomes
	Poor outcomes	Successful outcomes

People make dispositional (internal) attributions for in-group successes (e.g., "we succeeded because we are talented") but blame out-groups (Situational) for their failures (e.g., "they failed because they are incompetent"). This reinforces negative stereotypes and justifies discrimination.

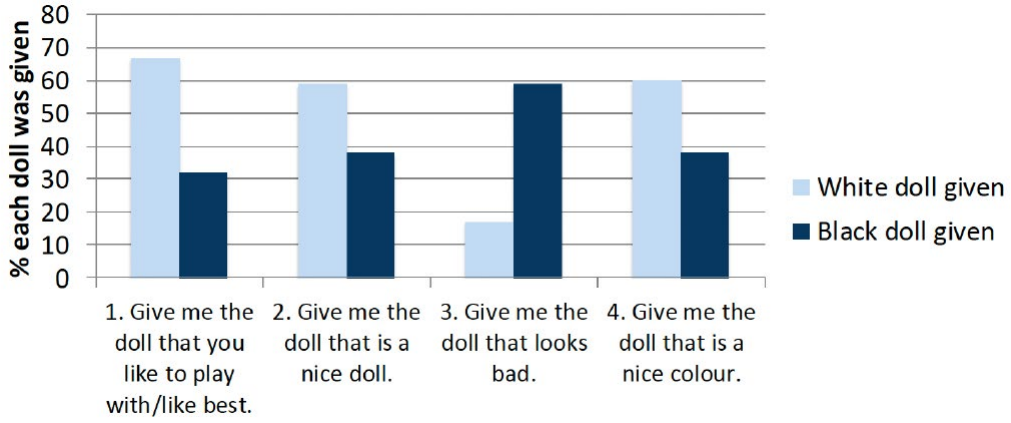
Just-world phenomenon: The tendency to believe that people get what they deserve.

Consequences of prejudice

- **Internalization of stereotypes:** People absorb and accept negative stereotypes about their own group.
- **Self-fulfilling prophecies:** Expectations about a group cause people to behave in ways that reinforce stereotypes.
- **Stereotype threat:** Anxiety about confirming a stereotype can reduce performance.
- **Mental health consequences:** Prejudice leads to stress, depression, and anxiety.

Related study Clark & Clark (1947)

A landmark study showing how children internalize racial bias. Black children preferred White dolls when asked which was "nicer" or "looked better."



The bar graph quantifies the percentage of children who preferred the White or Black dolls. White doll preference was much higher, confirming internalized racism. Many children associated negative attributes with the Black doll.

Related study Lick et al. (2014)

Study 1: People perceived gender-atypical movements as an attempt to signal sexual identity, leading to prejudice.

Study 2: Static facial images replicated the same prejudice effect.

The study suggests that perceptions of communicative intent influence bias against LGBTQ+ individuals. People assume gender-nonconforming behaviors are intentional, leading to prejudice.

This research is critical in understanding how automatic perceptions drive discrimination.

Definition (Conflict): Perceived incompatibility of actions or goals.

Definition (Peace): A condition marked by low hostility and mutually beneficial relationships.

What Creates Conflict?

- **Social dilemmas:** A conflict where individual self-interest leads to collective harm.
- **Social traps:** Situations where individuals acting in self-interest create negative outcomes.
  - *Prisoner's dilemma:* Two individuals face a choice: cooperate or betray. If both betray, both suffer. If both cooperate, both benefits.
  - *Tragedy of the commons:* When individuals overuse shared resources, leading to depletion.

Achieving peace: The Four Cs

1. **Contact:** Direct interaction reduces prejudice.
2. **Cooperation:** Working toward shared goals increases unity.
3. **Communication:** Open dialogue resolves conflicts.
4. **Conciliation:** Gradual steps toward peace build trust.

Contact hypothesis: Intergroup contact reduces prejudice. The best conditions for contact hypothesis are:

- Groups have equal status.
- Friendships form in casual settings.
- Group identity remains visible.

However, it does have some limitations:

- Stereotypes can persist.

- Some individuals resist interacting with out-groups.
- Self-segregation may continue.

The effect of contact include:

- Reduces anxiety.
- Increases empathy.
- Humanizes others.
- Decreases perceived threats.

Cooperation and superordinate goals

Common external threats unite people.

Definition (Superordinate goals): Shared goals requiring joint effort. It encourages people to overcome differences.

Communication in Peacemaking

Benefits:

- Speeds up conflict resolution.
- Reduces stress.
- Helps find solutions.

Limitations: If both parties are unwilling, communication can increase conflict.

Conciliation

Definition (Conciliation): It is a conflict resolution process that helps disputing parties reach an agreement, often with the assistance of a neutral third party. It focuses on de-escalating tensions and finding mutually acceptable solutions.

- **Conciliatory intent:** A willingness or desire to resolve the conflict peacefully.
- **Conciliatory acts:** Actions taken to demonstrate goodwill and cooperation.

Gender Prejudice

Quote from Bem (1993): Gender is one of the earliest learned and most influential identities. That means it's deeply ingrained and shapes how we see ourselves and others over our whole life.

Definition (Sexism): Sexism = Prejudice attitude + discrimination behavior based on gender.

Remark: Sexism can be personal (individual attitudes) or institutional (practices that uphold inequality even if not intentionally prejudiced). Social structures (laws, job expectations, etc.) can reinforce sexism without overt hatred.

Definition (Descriptive and prescriptive gender stereotypes): There are two types of gender stereotypes based on (Koenig, 2018) and (Prentice & Carranza, 2002):

- **Descriptive stereotypes:** Beliefs about what men and women are like.
- **Prescriptive stereotypes:** Beliefs about what men and women should be like.

Consequences of stereotypes: By (Eagly & Wood, 2012), gender stereotypes reinforce traditional social roles. For example:

- Women = more **prosocial** behavior expected
- Men = more **aggression** accepted

Definition (The Big Two traits): Social perception often boils down to two major dimensions:

- **Communal traits:** nurturing, cooperative, warm (linked with women)
- **Agentic traits:** assertive, competitive, dominant (linked with men)

Women are expected to be communal, and men are expected to be agentic. Agentic traits associated with leadership and men contrast with the communal traits associated with women and relationships (Abele, 2003)

Application with role congruity theory: The theory states that people are judged negatively when they don't match expected social roles. When someone breaks the expectation of

communal or agentic, this results in cognitive dissonance, and it causes discomfort and often leads to biased evaluation.

Double-Bind for women: Women in power are penalized for not conforming to traditional female traits (Sutherland et al., 2015), but also undervalued if they do conform. It creates a lose-lose situation for women in leadership.

Women & leadership: women remain underrepresented in leadership roles, despite increasing education and workforce participation. This is due to several reasons:

- **Trait inferences:** people often assume women lack traits seen as “leader-like” (e.g., assertiveness).
- **Stereotypes about women leaders:** there’s a persistent stereotype that leadership is a masculine trait.
- **The Double Bind:** A woman who is commanding may be labeled as "bossy," while a man doing the same might be praised as a "strong leader."
- **Nonverbal cues:** subtle body language can influence how women leaders are perceived (less confident, less dominant).

Gender and political attitudes: Men and women tend to have different political attitudes.

To identify with different political parties, and to vote for different candidates and policies has been noted by both journalists (Page, 2003) and social scientists (Whitaker, 2008).

- Women are more likely to support liberal policies (e.g., helping disadvantaged groups).
- Men are more likely to support conservative policies (e.g., strong military, tough on crime).

The Gender/Sex binary: The gender/sex binary (Morgenroth & Ryan, 2021) in modern western cultures describes a system of gender being largely viewed as binary and stemming from binary biological sex (i.e.,female or male). The system enforces the idea that genders are:

- **Oppositional** (man $\neq$ woman)
- **Complementary** (man + woman complete each other)
- **Heteronormative** (straight by default)

Definition (Transgender): transgender are people whose gender identity doesn't match their sex assigned at birth (Howanksy et al., 2021).

The transgender umbrella includes:

- Trans men (assigned female at birth)
- Trans women (assigned male at birth)
- Nonbinary
- Gender non-conforming
- Genderfluid
- Agender (no gender identity)

Gender categorization: When people categorize others by gender, we often use superficial cues like appearance and behavior (Howansky et al., 2020; Morgenroth & Ryan, 2021).

But these cues are not inherently tied to gender — anyone of any gender identity may share these traits. And relying on stereotypical cues can lead to **misclassification**.

Definition (Misgendering): Calling someone by the wrong gender identity.

Research by Albuja et al. (2019) and McLemore (2018) links misgendering to:

- Worse mental health (Albuja et al, 2019).
- Psychological stress (Albuja et al, 2019).
- Increased minority stress (McLemore, 2018).

Definition (Degendering): Refers to when people avoid using any gendered language for trans individuals (e.g., using no pronouns, avoiding gender traits).

Ironically, this is often done out of caution to avoid misgendering but ends up creating exclusion (Ansara & Hegarty, 2014)

Measuring gender prejudice: A common online tool to measure implicit bias is Implicit Association Test (IAT). These tests uncover automatic associations people have with social groups, even if they don't openly endorse prejudice. One application study is Liebenow et al. (2025), which is talked in the content above.

Sexuality Prejudice

Definition (Homophobia): prejudicial attitudes and discriminatory behavior toward people with non-heterosexual sexualities.

As with sexism, this prejudice can be:

- **Individual** (personal attitudes or behaviors)
- **Institutional** (practices and policies that discriminate, even unintentionally)

Even without conscious hatred, systems can disadvantage people of certain sexualities.

Identifying sexual orientation from appearance: Ding & Rule (2012) found that sexual orientation can sometimes be identified just from photos of faces or physical appearance. This ability, although not perfectly accurate, reflects real-world social judgments.

Definition (Perceptual disfluency): the difficulty in categorizing social stimuli (e.g., not being sure of someone's gender or sexuality).

Related study Lick & Johnson (2013): People thought to be lesbian/gay are harder to categorize based on nonverbal cues (perceptual disfluency). This difficulty causes discomfort, which can lead to prejudiced evaluations.

Cues to sexual orientation: There are nonverbal cues that people use (often unconsciously) to guess sexuality:

- Gait (how someone walks) from (Johnson et al., 2007)
- Speech patterns from (Levon, 2007; Smyth et al., 2003)
- Clothing choices from (Rudd,1996)
- Eye gaze from (Nicholas, 2004)
- Syllable pronunciation from (Smith et al., 2008)

There are pros and cons for these cues:

- **Pros:** Helps gay individuals identify other ingroup members without needing to explicitly come out (Nicholas, 2004). Helps straight individuals find compatible partners (Rule et al., 2011).

- **Cons:** Individuals who are categorized as lesbian or gay are subjected to high rates of victimization across the life span (Balsam et al., 2005; Herek et al., 2002). In fact, the mere perception that someone perhaps is lesbian or gay can compel prejudice, even if that perception remains unconfirmed.
  Instances of antigay victimization often escalate beyond verbal harassment, with lifetime rates of self-reported physical violence nearing 30% among sexual minorities (Katz-Wise & Hyde, 2012).

There's still much to learn about how prejudice against LGBTQ+ people forms and continues. More research is needed to:

- Understand the roots of these attitudes
- Find effective interventions
- Support marginalized communities

Attraction & Intimacy

Definition (Self=determination): Self-determination refers to the ability to make choices and manage one's own life, feeling in control as opposed to feeling controlled by others.

Self-determination theory: SDT suggests that all humans have three basic psychological needs that underlie growth and development:

- **Autonomy** refers to feeling one has choice and is willingly endorsing one's behavior. The opposite experience is feeling compelled or controlled in one's behavior.
- **Competence** refers to the experience of mastery and being effective in one's activity.
- **Relatedness** refers to the need to feel connected and a sense of belongingness with others.

Why Do People Join Groups and Relationships?

- **Self-determination theory:** We have a relatedness need (groups).
- **Need to Belong:** A powerful motivation to form lasting, positive interpersonal bonds (relationships).

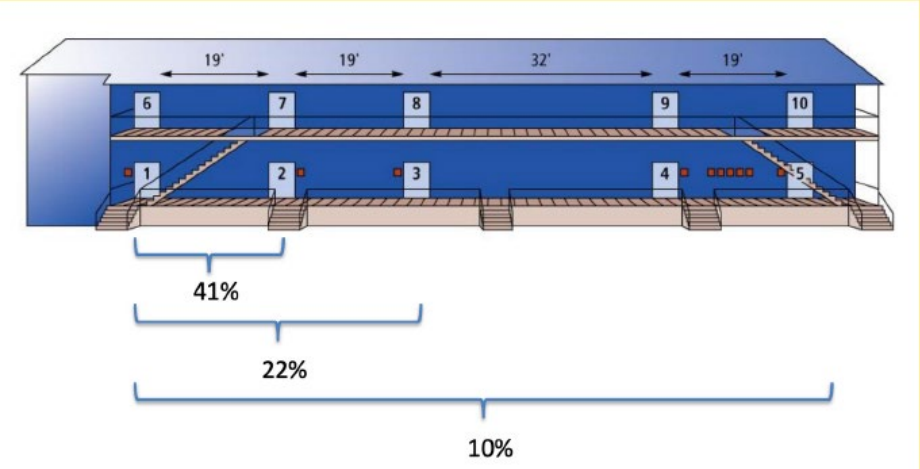
What Leads to Friendship & Attraction? – Proximity

Definition (Functional distance): the closeness between two places or individuals based on the opportunities for interaction.

Definition (Proximity): physical closeness or functional distance.

We are more likely to become friends or romantic partners with people we see and interact with frequently. Functional distance also matters — how often our paths cross. This sets the foundation for how environmental factors can influence attraction.

Related proximity study – Festinger, Schachter, & Back (1950)



Proximity increases the chance for interaction, and thus for friendship/romantic connections.

What Leads to Friendship & Attraction? – Mere exposure effect

The more we're exposed to someone or something, the more we like it. Repetition → Familiarity → Liking This explains why we often feel drawn to people we see often (even passively).

What Leads to Friendship & Attraction? – Similarity vs. Complementarity

We're attracted to people who share our attitudes, beliefs, values, activities, and personality traits.

Complementarity (opposites attract)? Not generally supported by research.

What Leads to Friendship & Attraction? – Personality model (The Big Five and HEXACO)

Personality traits shape who we are attracted to and who we connect with in friendships and relationships.

Definition (The Big Five model): Each letter in **OCEAN** stands for a different trait:

1. **O – Openness to Experience**
   - Creative, curious, open to new ideas and experiences
   - High openness may lead to attraction through shared love of novelty, arts, or intellectual pursuits
2. **C – Conscientiousness**
   - Organized, reliable, responsible
   - Important for relationship stability and long-term compatibility
3. **E – Extraversion**
   - Outgoing, energetic, enjoys social interaction
   - Extraverts may be drawn to fellow extraverts (or complementary introverts)
4. **A – Agreeableness**
   - Kind, empathetic, cooperative
   - Often linked to warmth and positive interpersonal behavior — critical in both friendship and romance
5. **N – Neuroticism**
   - Emotional instability, moodiness, anxiety
   - High neuroticism can sometimes strain relationships, but low neuroticism tends to support smoother interpersonal functioning

Definition (HEXACO model): The HEXACO model was developed by Lee, Ashton, Pozzebon, Visser, Bourdage, & Ogunfowora (2009) to provide a more nuanced view of personality—especially in how people relate to one another. The Six HEXACO traits:

1. **Honesty-Humility**
    - Traits: sincerity, fairness, lack of greed, modesty
    - High scorers: avoid manipulating others, are less materialistic
2. **Emotionality**
    - Traits: fearfulness, anxiety, dependence, sentimentality
    - High scorers: emotionally aware, empathetic, or just more emotional
    - may connect better in emotionally deep relationships
3. **eXtraversion**
    - Traits: sociability, social self-esteem, liveliness
    - High scorers: outgoing, enjoy social events, energized by others
    - higher likelihood to initiate connections
4. **Agreeableness**
    - Traits: forgiveness, gentleness, flexibility, patience
    - High scorers: less confrontational, more cooperative
    - easier to get along with, resolve conflicts constructively
5. **Conscientiousness**
    - Traits: organization, diligence, prudence
    - High scorers: reliable, hardworking, focused
    - responsible partners and friends
6. **Openness to Experience**
    - Traits: creativity, inquisitiveness, appreciation of beauty
    - High scorers: curious, open-minded, imaginative
    - shared curiosity can fuel deep conversations

Remark: If you and someone else score similarly on personality tests, does that mean you'd be a good match? Similar personality traits often enhance connection. However, it can result in cognitive dissonance when there are similar traits between you and the people you do not like.

What leads to friendship and attraction? --- The Physical-Attractiveness Stereotype

Halo Effect i.e. Physical-Attractiveness Stereotype: We assume that physically attractive people have other desirable qualities (smart, kind, capable). We're more generous to attractive people (help them more, compliment them, etc.).

Remark: We like people who find us attractive too — boosts our self-esteem.

Common markers for "Attractive"

Common cultural markers i.e. conventional attractiveness:

1. Large eyes
2. High cheekbones
3. Big smile
4. Small nose/chin for women, larger chin for men

Symmetry & Averageness for attractiveness

Symmetry (Thornhill & Gangestad, 1993): Facial symmetry = perceived health and attractiveness.

Averageness (Langlois & Roggman, 1990): Composite (averaged) faces are rated more attractive. "Averageness" here doesn't mean "plain"—it refers to facial proportions and features that are most statistically typical. This is because average faces are often symmetrical and statistically have a lot of attractive markers.

Remark: Those studies use celebrities' photos. This is because they already reflect cultural beauty standards of a particular time and society. So, we can study how those subtle facial features affect the attractiveness.

Definition (Love): By Berscheid & Walster (1974; 1978), there are two kinds of love:

- **Companionate Love**
  Defined by deep affection, emotional intimacy, and mutual care.
  Usually in long-term friendship, life partnerships, familial love.
  Stable and enduring.
- **Passionate Love**
  Defined by intense longing and desire.
  Includes physiological arousal.
  Often occurs early in relationships and can fade over time.

Remark: love is multidimensional and perhaps too complex for a single theory to capture completely.

Two-Factor Theory of Emotion: According to Schachter & Singer, emotion arises from:

- **Physiological arousal**
- **Cognitive interpretation of that arousal**

Application to Love – Misattribution of Arousal

Dutton & Aron (1974) famously tested this idea:

- Participants (men) walked across either a high, scary bridge or a low, stable one.
- On the bridge, a female experimenter gave them a questionnaire and her number.
- Men on the scary bridge were more likely to call her later.

They misattributed their physiological arousal (from fear) as romantic attraction. In heightened emotional states, people may mislabel what they're feeling—interpreting fear, excitement, or adrenaline as love.

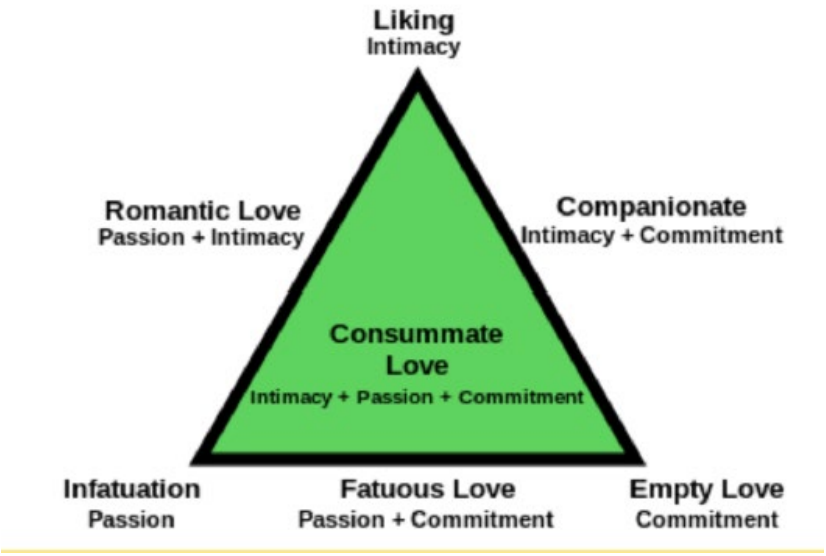
Sternberg's Triangular Theory of Love (1997)

This theory has three components:

1. **Intimacy:** Emotional closeness, bonding
2. **Passion:** Physical and emotional arousal, attraction
3. **Commitment:** The decision to stay with someone

Combinations form different types of love:

- Liking = Intimacy only
- Infatuation = Passion only
- Empty Love = Commitment only
- Romantic Love = Intimacy + Passion
- Companionate Love = Intimacy + Commitment
- Fatuous Love = Passion + Commitment
- Consummate Love = All three (ideal form!)



Evolutionary theory enables Love and Relationships

According to evolutionary psychology, love and close relationships evolved to increase **reproductive success**.

Emotional bonding helps ensure parental investment and offspring survival. Romantic love may have adaptive value by promoting long-term commitment needed for raising children.

Humans have **evolved preferences** for traits that signal good genes or reproductive potential.

Preferences may vary across cultures, but some patterns are widespread.

Women typically value:

- Ambition
- Industriousness
- Good financial prospects

→ All linked to resource acquisition for offspring care

Men often value:

- Physical attractiveness → A potential cue for fertility and health

Top traits for both genders: warmth, honesty, trustworthiness, and good personality — these are universal.

Attachment Theory & Styles

The theory states that the way we bond as children can influence how we connect romantically as adults. Your early experiences with caregivers help you develop an internal working model — a mental roadmap for how relationships work:

- Can I trust others?
- Will they respond to my needs?
- Am I lovable?

These models influence how you relate to romantic partners, friends, and even your own children.

Three common adult attachment styles:

1. **Secure**
   Comfortable with closeness and independence
   High trust, low anxiety
2. **Avoidant**
   Struggles with intimacy, values independence too strongly
   May push others away emotionally
3. **Anxious**
   Craves closeness, fears abandonment or rejection
   Often overly preoccupied with partner's availability

Remark: Common issue with attachment theory is that it assumes you are stuck with your attachment style and does not change forever. This is not true.

Remark: you can have different attachment styles in different relationships. And attachment style is not necessarily universal in all forms of relationships.

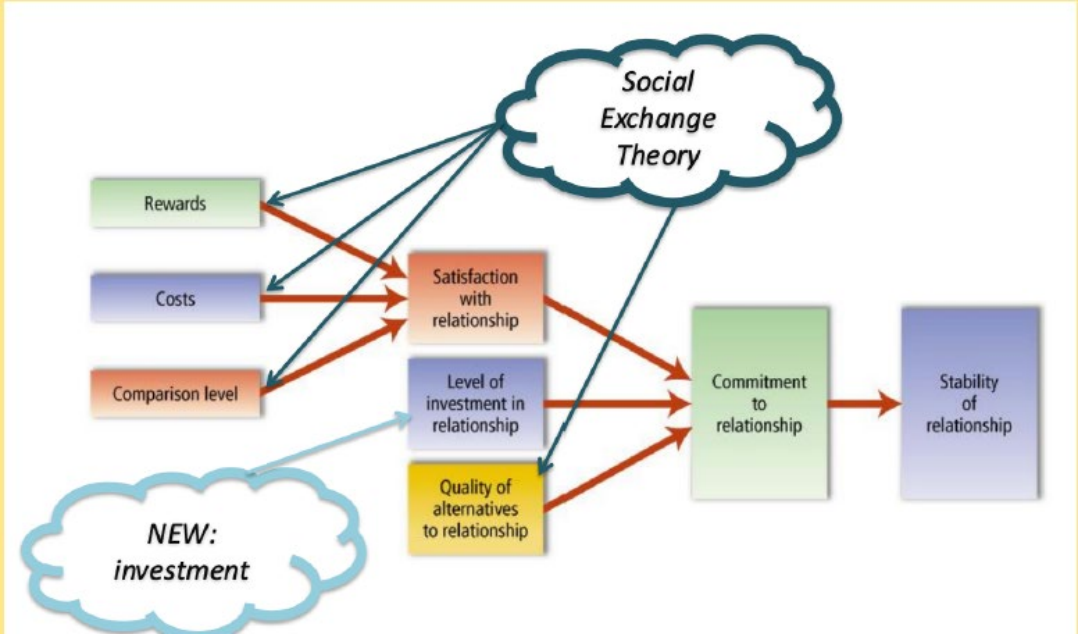
Remark: Attachment isn't fixed — it's relational. We learn how to love through how we're loved. A partner's patterns (especially if they echo past experiences) can "activate" or induce an attachment style.

Remark: A modern take on the attachment theory is that not necessarily caretakers but people who were in your relationship can impact your attachment style.

Social exchange theory and Rusbult's Investment Model (1983) enables Love and Relationships

We talked about social exchange theory as helping behavior is motivated by a cost-benefit analysis. People help when the rewards outweigh the costs. And Rusbult's investment model is an extension of Social Exchange Theory that includes a crucial new factor: investment.

The more you've invested, the harder it is to leave, even if you're not totally satisfied. Someone in a relationship may feel moderately unhappy, but if they've spent years building a life with their partner, they may stay — because they don't want to "throw it all away."



Self-disclosure enables Love and Relationships

Definition (Self-disclosure): Revealing intimate aspects of oneself to others. Includes personal experiences, thoughts, feelings, fears — often what people casually call "venting" or, more negatively, "trauma dumping."

It's a vital process for developing emotional closeness and trust.

Definition (Disclosure reciprocity): This is the give-and-take of personal sharing in relationships. When two people mutually disclose, they tend to feel closer and more connected.

But when only one person is doing all the sharing (especially if it's intense or one-sided), it can:

- Create emotional imbalance.
- Lead to discomfort or emotional distancing.
- Make the recipient feel like they're being emotionally dumped on.

Remark: We're encouraged to be open — but judged for doing it "too much" or "wrong". So, it is not necessarily a bad thing or good thing. It really depends on particular scenarios and the timing

Common reasons of all types of relationship breakdown

Dissimilarity: Differences in values, goals, lifestyles, or interests can drive a wedge between partners.

Low Rewards / High Costs: Relationships are viewed like a balance sheet. If what you get out of the relationship doesn't outweigh what you're putting in, dissatisfaction rises.

Inequity: Perceived unfairness (e.g., one partner gives more than the other) can erode connection.

Attractive Alternatives: If a better partner seems available, it reduces commitment to the current one.

Etc.: Could include stress, poor communication, infidelity, or emotional neglect.

These themes directly tie back to Rusbult's Investment Model and Social Exchange Theory.

Research-Based Predictors of Marital Stability

These factors are associated with lower chances of divorce:

- **Married after age 20**: More maturity and better partner choice.
- **Long pre-marriage dating**: Allows for informed commitment.
- **Similar education**: Reduces power imbalances or lifestyle mismatches.
- **Stable income**: Financial stress is a major relationship strain.
- **Small-town life**: May offer more social support and fewer distractions.
- **No premarital pregnancy**: Allows for intentional family planning.
- **Similar age and religion**: Increases compatibility and shared values.

What Makes Relationships Work (or Fail)?

Unsuccessful relationships:

- More criticism, disapproval, and negative emotion.
- Escalation of conflict, often without resolution.
- Lack of emotional safety or mutual respect.

Successful relationships:

- Use positive communication (approval, agreement, laughter).
- Repair conflicts quickly and fairly — they "fight clean."
- Focus on emotion regulation and mutual support.
- Balance criticism with affection and validation.

Singlehood: A Valid and Fulfilling Relationship Status

Research finds that a single person is more likely:

- to be happy with their friendships (Park et al., 2021)
- to be happy with their sex life (Park & MacDonald, 2022)
- to be older than 40 (Park et al., 2022)
- to be low in desire for a partner (Hill Roy et al., 2023)
- to be a woman (Hoan & MacDonald, under review)
- to be queer (Canaletti et al., in prep)
- to be strongly motivated by independence (Park et al., 2023)
- to be high in secure attachment (MacDonald & Park, 2022)