

Is aggression inborn (part of our instinctual biological nature) or do we learn it (nurture)?

Can it be modified?

What are the social and situational factors/circumstances that increase or decrease aggression?

## Aggression defined

- **Intentional** action aimed at doing **harm** or causing physical or psychological **pain**
- Aggression is not assertiveness
- Can be either physical or verbal
- An act is aggressive whether succeed in goal or not
  - I.e. drunk driver **unintentionally** runs you down while you're attempting to cross the street, isn't act of aggression, even though the damage is far greater than that caused by the beer bottle that missed your head because you ducked

## Hostile vs. instrumental aggression

### ■ Hostile aggression

Act of aggression stemming from a feeling of anger and **intended** to cause pain or injury

### ■ Instrumental aggression

An act of aggression that intends to hurt someone, but **as a means to a goal** other than causing pain

I.e. in football, a defensive lineman will usually do whatever it takes to thwart his opponent (the blocker) and tackle the ball carrier. This often includes intentionally inflicting pain on his opponent if doing so is useful in helping him get the blocker out of the way so he can get the ball carrier. This is **instrumental** aggression.

I.e. if he believes his opponent has been playing dirty, he might become angry and go out of his way to hurt his opponent, even if doing so doesn't increase his opportunity to tackle the ball carrier. This is **hostile** aggression.

## Aggression is optional

- Latest thinking is that aggression has evolved and has been maintained because it has survival value
- However, nearly all organisms have inhibitory mechanisms
- Even in the most violence-prone species, aggression is an **optional strategy** determined by animal's prior **social experiences** + the specific **social context**

## Factors in human use of aggression

- Innate tendency to respond to certain provocative stimuli by being aggressive—striking out against perpetrator
- Whether aggressive tendency is **expressed** in overtly is due to complex interplay between  
innate propensities +  
learned inhibitory responses +  
precise nature of the social situation
- Infinite ways humans can modify their aggressive tendencies within a given culture  
Changing social conditions can lead to dramatic changes in aggressive behavior

## Is aggression useful?

- Some evidence that aggression serves to ensure “survival of the fittest”
  - I.e. monkeys, elephant seals and dominance hierarchy and mating behavior
- Equating high achievement and advancement with hostility and aggression is confusing the issue as a problem or skill can be mastered without harming others or conquering them
- In the U.S. success is equated with “victory”
  - I.e. striving for high grades and SAT scores vs. loving learning
- However, cooperative behavior has survival value also
- Was competitive and aggressive behavior really about survival as hunter gatherers or did it occur later with ownership and protection of possessions?

## Catharsis—Does it work?

- Psychoanalytic concept
  - the release of energy
- Freud believed that humans had to release their natural aggressive tendencies to avoid a build-up and eventual explosion
  - I.e. water pressure building up in a container and needs to be drained to prevent an explosion
  - Society helps people to channel aggressive energy into useful behavior
    - Sublimate it
      - I.e. run your aggressive energy out on the track, punching bag, etc.
    - Analyze this

## Catharsis—research evidence

- Many studies of the dynamics of catharsis conclude that the opportunity to express aggression leads to **increasing**, rather than diminishing, aggression
  - Bushman—insulted→angry→3 experimental conditions:
    - Punching bag and encouraged to think about what made angry
    - Punching bag and think of activity as exercise
    - Sit still without punching anything
      - Those who sat still were least angry
      - Also, chance to express aggression against person who insulted
        - » Those who hit bag and thought about “enemy” blasted loudest and longest the unpleasant noise
        - » Those who sat still were least aggressive
        - » Therefore, physical activity (i.e. bag) neither dissipates nor reduces aggression
  - HS football—if catharsis is true, players would exhibit decline in hostility over course of season. Instead a significant **increase** over the season.
- Venting anger—directly or indirectly, verbally or physically—doesn’t decrease hostility, but increases it

## Catharsis and cognitive dissonance

- The notion of catharsis makes sense however, aggressive impulses are governed by feelings **and** by thinking
- Cognitive dissonance theory suggests that aggressive behavior must be rationalized, which justifies (or provokes) further aggression
  - Once you've shocked someone or made a nasty comment about your boss → easier to do again
  - Cognition "I have hurt Sam" is dissonant with cognition "I'm a decent person who doesn't go around hurting people" → focus on Sam's faults to justify hurtful, aggressive actions toward him.
    - Reduces dissonance and increases likelihood of future hurtful behavior

## Retaliation as overkill

- Kahn's experiment—medical technician taking physiological measurements from college students and making derogatory comments about them
  - Students able to vent hostility by expressing feelings about technician to employer (could result in loss of his job) or not provided with opportunity to express aggression
  - Students able to express aggression felt greater dislike and hostility toward tech than those inhibited
- Compared with tech's offense, costing job can be overkill
- Overkill maximizes dissonance—the greater the discrepancy between what the perpetrator did and your retaliation, the greater the dissonance. The greater the dissonance, the greater the need to derogate him
- If degree of retaliation is controlled so not overkill, can reduce the need for further aggression
  - Doob and Wood—subjects insulted by an accomplice and were given opportunity to retaliate to settle the score. Once the score was evened, no further need to punish tormenter. Those not given this opportunity to retaliate, chose to punish the tormentor.
- The real world can be messy because the pain we receive often feels greater than the pain we inflict on others
  - I.e. the other guy's broken leg is trivial, but our broken fingernail is serious
- Finger pressure experiment
  - Each side justifies themselves as just evening the score, but it escalates
    - The war of the Roses

## Causes of aggression

- Neurological/Chemical
  - Amygdala associated with aggressive behaviors in humans and animals—determines threat
    - When amygdala is electrically stimulated, docile organisms become violent and vice versa. When blocked, leads to docile.
    - Fight or flight depending on context—fight if less dominant others and flight if more dominant others
  - Serotonin levels inhibit impulsive aggression
- 1. Testosterone
- 2. Alcohol
- 3. Pain/Discomfort
- Frustration and Aggression
- Rejection, Exclusion, and Taunting
- Social Learning and Aggression
- Social Learning, Violence, and Mass Media

## 1. Testosterone

- The physical expression of aggression is linked to testosterone levels
  - I.e. naturally occurring testosterone levels are higher among prisoners convicted of violent crimes than nonviolent
- Injecting animals with testosterone increases aggression
- Behaving aggressively increases levels of testosterone in the blood
- In general, boys are more **physically** aggressive than girls
- Arrests are more violent crimes for men and more property for women

## Relational aggression

- “Social” form of aggression
- Activities aimed at hurting others by sabotaging their relationships with peers
- While boys are more **physically** aggressive, **relational** aggression is much more prevalent in girls
- This gender difference is biological and social—within a culture men more physically aggressive than women, but culture is also a factor
  - I.e. **women** from Australia and New Zealand more physically aggressive than **men** from Sweden and Korea
  - I.e. book/movie “Odd Girl Out,” Mean Girls

## 2. Alcohol

- Lowers inhibitions, including those against aggression
  - I.e. fistfights in bars and family violence with abuse of alcohol
  - Crime statistics show **75% of violent crime arrests involve alcohol**
- Alcohol also disrupts information processing, leading to aggressive responses due to missed or misunderstood social cues
- Controlled lab—legally drunk → increased violence to provocation vs. little or no alcohol
- Research shows that alcohol consumption  $\pm$  provoked → aggression

## 3. Pain and discomfort

- If experience pain and can't flee, attack often results
  - I.e. stub your toe, may act irritable toward closest target
  - “kick the dog”—displace onto closest person/thing
- Strong correlation between hot weather and riots and violent crime
  - “the long, hot summer”—increased tendency to riot during summer heat vs. F, W, SP
  - The hotter the increase in violent crimes, but not general crime

## Frustration and aggression

- **Aggression can be prompted by any unpleasant or aversive situation like anger, pain, excessive heat, etc.**
- **The most likely instigator of aggression**
- Frustration arises from the gap between expectations and attainments
- If thwarted on way to goal (i.e. flat tire and need to get to job interview or malfunctioning vending machine ate your last dollar when starved and on way to class/work), the frustration will increase probability of aggressive response
  - I.e. Barker, Dembo, Lewin frustrated children with seeing toys, but unable to play with them and after waiting, damaged the toys. The control group played with toys directly without delay and didn't exhibit aggressive play.
- Frustration is increased when a goal is near and your progress toward it is interrupted
  - I.e. stopped from eating a Big Mac just as you were about to bite into it vs. on the way to McDonalds
- Frustration increases even more if the interruption is unexpected or perceived to be unjustified
  - I.e. Kulik and Brown—students earning money calling for donations and the expectations led to believe about the rate of contributions. Of the callers led to expect a high rate (successful 2/3 of the time), more aggressive behavior was exhibited when donor refused and when their refusals seemed unjustified (“charities are a waste of time and a rip-off” vs. “I can't afford to contribute”)
- Frustration doesn't always lead to aggression, but it produces anger/annoyance and a readiness to act aggressively if other things about the situation are conducive to aggressive behavior
- Most frustration when goal is very close + expectations are high + goal is blocked unjustifiably

## Relative deprivation

- Frustration not result of simple deprivation, but “relative” deprivation
  - **Perception that you are deprived relative to others**
  - **Thwarted expectations**
  - “Revolutions are not begun by people with their faces in the mud, but people who have recently lifted their faces out of the mud and have had time to look around”
  - “Evils which are patiently endured when they seem inevitable, become intolerable once the idea of escape from them is suggested”
  - Aggression can be reduced by satisfying hope or minimized by eliminating it
  - I.e. LA and Detroit riots by African Americans not in geographical areas of greatest poverty, but in areas that things were bad for blacks relative to what whites had.
  - I.e. After graduation, I don’t pursue education and you pursue education. 10 years later, if I notice you have a better job than I do, I may be unhappy with my job, but won’t experience frustration because it’s an outcome of my choice. However, if we’ve both been educated and, and you have a white-collar job and I have a blue-collar job (because of my cultural background or gender), I will feel frustrated.

## Rejection, exclusion, taunting

- I.e. Columbine HS
  - Tip of the iceberg of social environment of many high schools overcome with exclusion, rejection, taunting, and humiliation
    - Hierarchy of cliques with athletes, class officers, cheerleaders, and “preppies” at the top and those referred to by the top as “nerds,” “goths,” “geeks,” “loners,” “homos” at the bottom
    - Those at the top reject, taunt, and ridicule those at the bottom
- Abu Ghraib
- Twenge, Baumeister et al—meet and who would want to collaborate with in future—nobody wants to work with you (rejects) and opportunity to aggress→expressed more intense hostility than those not excluded

## Social learning and aggression

- Social learning plays an important role in whether or not a person will be aggressive in a given situation
- SL can inhibit aggressive response by taking responsibility for actions, but anonymity→deindividuation
  - State of lessened self-awareness, reduced concern over social evaluation, and weakened restraints against prohibited forms of behavior
- SL impacts how intention is attributed to agent of pain/frustration
  - I.e. Mallick and McCandless frustrated 3<sup>rd</sup> graders by having another child’s clumsiness prevent them from achieving a goal that would’ve resulted in a cash prize. Some were given a reasonable/unspiteful explanation for the behavior (he was “sleepy and upset”) which resulted in less aggression directed at the interfering child.
- The tendency for frustration to provoke aggression can be strengthened if the experience of frustration is combined with exposure to certain provocative stimuli
  - I.e. Berkowitz—subjects paired with an accomplice introduced as either a “college boxer” or “speech major.” This accomplice provoked the subjects by shocking them. ½ viewed a violent prizefighting scene while others viewed an exciting but nonaggressive film clip. When given the chance to shock the confederate, those who’d seen the violent movie segment administered more and longer shocks. Of those who’d seen the prizefighting film and were introduced to the confederate as a “boxer,” delivered more shocks than those paired with “speech major.”
- The presence of an object associated with aggression can cue an aggressive response—priming
  - Aggressive stimulus (i.e. gun) vs. neutral stimulus (i.e. badminton racket)

## Bandura “Bobo doll” clip

[http://www.youtube.com/watch?v=pDtBz\\_1dkuk](http://www.youtube.com/watch?v=pDtBz_1dkuk)

## Social learning, violence, and mass media

- Classic research by Bandura and colleagues on social learning—"Bobo doll"
  - Children watched an adult abuse a doll
  - Children imitated adult **and** engaged in "innovative" aggression against the doll

## Violence on TV

- Lots of research in this area
- Mass media—esp TV—is a powerful agent of social learning—socialization
- 61% of TV programs contain violence and 78% of those are without remorse or penalty for it
- High correlation between amount of TV violence watched and viewer's aggressiveness
- Accumulates over time - strength of correlation increases with age
- "Overwhelming" evidence demonstrates that watching violence increases aggression in children
- Especially true of children prone to aggressive responses
  - I.e. Josephson—film of police violence or nonviolent bike racing and then played floor hockey. Watching the violent film had the effect of increasing the number of aggressive acts during the game—primarily by those previously rated as highly aggressive by their teachers.

## Violence on TV

- Average 12-year old has witnessed 100,000 acts of violence on TV
- One aspect of watching so much violence is "priming" – seeing violence increases the probability of an aggressive response to pain or frustration
  - I.e. Phillips and homicide rates in the US increased during the week following a heavyweight boxing match. The more publicity surrounding the fight, the greater the subsequent increase in homicides.
- Repeated exposure to unpleasant events has a numbing effect on our sensitivity to those events
- Several research studies have shown that heavy TV watchers show less reaction to "real life" violent events
  - I.e. Thomas—viewing a violent police drama or an exciting, but nonviolent volleyball game. Then observe a verbally and physically aggressive interaction between two preschoolers. Those who watched the police show responded less emotionally than those who'd watched the volleyball game.

## Why does media violence affect viewers' aggression?

1. "If they can do it, so can I."
  - Weakens previously learned inhibition against violent behavior
2. "Oh, so that's how you do it."
  - Watching characters on TV express violence might trigger imitation by providing ideas about how one might go about it
3. "I think it must be aggressive feelings that I'm experiencing."
  - Watching violence makes the feeling of anger more easily available and makes an aggressive response more likely simply through priming. So, an individual might erroneously construe their own feeling of mild irritation as anger and might be more likely to lash out
4. "Ho hum, another brutal beating; what's on the other channel?"
  - Watching a lot of mayhem seems to reduce both our sense of horror about violence and our sympathy for the victims, making it easier for us to live with violence and maybe easier to act aggressively