

Aggression

By

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Definitions

Anger

Aggression

Violence

- **Anger** is an emotion that motivates and energizes us to act. Anger can push people towards destructive behavior, However, anger can also energize people to make constructive changes..
- **Aggression** is a behavior motivated by the intent to cause harm to another person who wishes to avoid that harm.
- **Violence** is an extreme subtype of aggression; a physical behavior with the intent to kill or seriously injure another person. Aggression and violence are rarely constructive and are sometimes motivated by anger.

Neuroanatomy

- **The frontal lobes, particularly the orbitofrontal cortices, are prominent because of their critical role in social cognition and impulse control**
- **Limbic structures(**amygdala**) : mediation of basic emotion and drive-related behavior & can be excessively activated under certain circumstances to produce violence**
- **Frontal lobe lesions do not predict violent crime, but may increase the risk of violence by 10%**

Theories of aggression

- Instinct theory of aggression
- Frustration-Aggression Theory
- Social Learning Theory

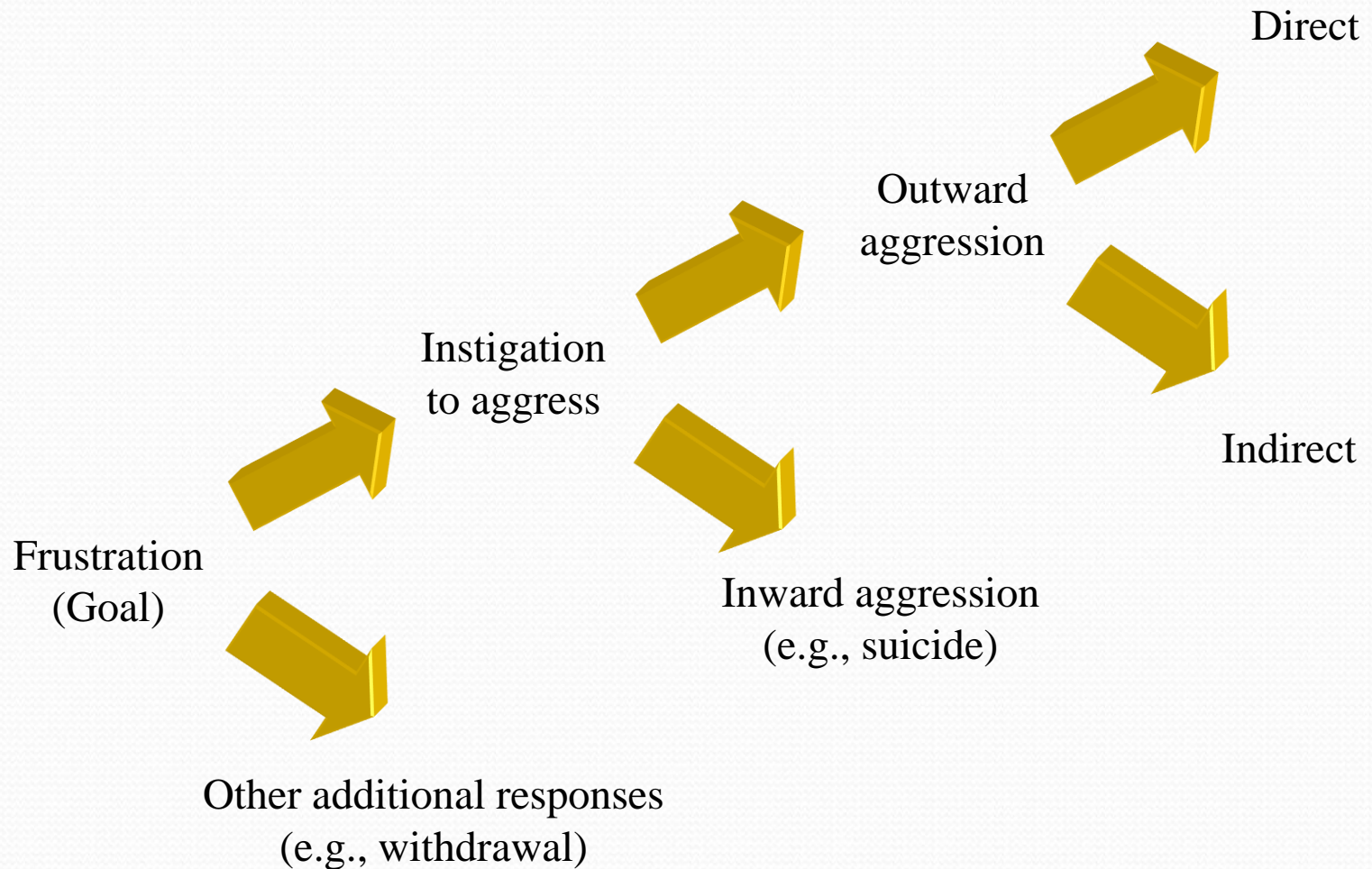
Instinct Theory of Aggression (Thanatos Theory)

- The first theory of aggression goes back to the days of Sigmund Freud. Freud believed that these two instincts exist together in every human mind, and that all behaviors stem from the balance of these two instincts. This may explain why we take anger out on others. Even if this anger or aggression is initially directed inward, Eros overpowers Thanatos. In an effort to keep ourselves alive, the aggression is directed outward.

Frustration-Aggression Theory

Even if you can't remember the last time you were aggressive with someone, I can guarantee that you can remember a time in which you were frustrated with someone. Frustration is a common human emotion that comes up when someone or something is holding us back from reaching a goal.

Frustration-Aggression Theory



Social Learning Theory

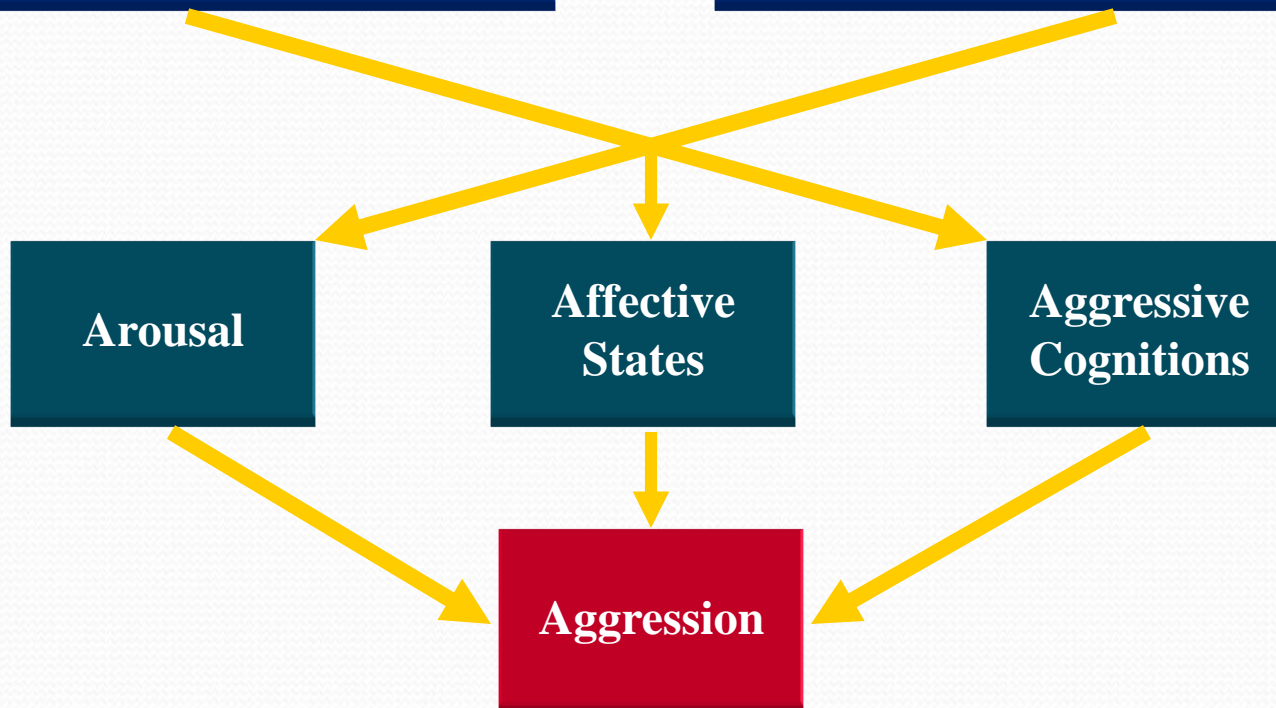
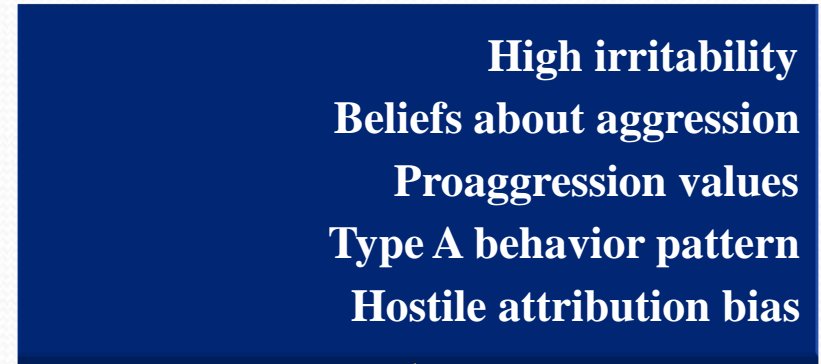
- The last aggression theory comes out of one of the most famous experiments of all time. The Social Learning Theory was proposed by Albert Bandura in the 1960s. Bandura is most known for his Bobo Doll experiment, which attempted to explain how children learn aggression from an early age. He proposed that aggression is a learned behavior. Children exert aggression simply because they are imitating what they have observed.

Modern Theory of Aggression

Social Determinants



Personal Determinants



Personal Determinants

Type A behavior pattern •

Hostile attributional style •

Narcissism (inflated self-esteem) •

Gender (higher in males when not provoked) •

males tend to use direct forms (push, shove, insult) •

females tend to use indirect (gossip, spread rumors) •

Personal Determinants

Biological •

Instinct theory - innate (unlearned) behavior pattern •

Freud- redirecting the “death instinct” (thanatos) to others •

Lorenz- inherited “fighting instinct” developed through the course of evolution (strongest survive) •

Neural Influences •

Genetic Influences •

Blood Chemistry •

high testosterone linked to higher aggression and less helping •

low levels of serotonin inhibit ability to restrain aggressive urges •



Neuromodulators Regulating Aggression

Serotonin

Serotonin facilitates **prefrontal** cortical regions, that are involved in modulating and often suppressing the emergence of aggressive behaviors primarily by acting on serotonin **5-HT₂** receptors in these regions.

Serotonin

- Studies that have shown that (**SSRIs**) reduce impulsive aggression.
- Studies have implicated reduced concentrations of the **serotonergic metabolite 5-hydroxy indole acetic acid** (5-HIAA) in aggressive personality disorder patients or individuals who have had violent suicide attempts.

Acetylcholine

- Abnormalities in cholinergic activity may contribute to hyperactivity of subcortical limbic regions and dysphoria or irritability, which can **trigger aggression**.

Norepinephrine

- Increased noradrenergic receptor sensitivity may be related to hyper-reactivity to the environment, which **indirectly** enhances the likelihood of aggression.

Dopamine

- Dopamine is involved in the **initiation** and performance of aggressive behavior
- Decreased D₁ receptors have been implicated in depressed patients with anger attacks.

Glutamatergic/gabaminergic systems

- **Imbalance** in glutamatergic/gabaminergic activity may contribute to **hyperactivity** of subcortical limbic regions.
- Tiagabine, (GABA uptake inhibitor) **decreases aggression**, possibly by suppressing reactions to aversive stimuli.

Oxytocin

- Oxytocin **reduces amygdala activity** in humans.
- A study have shown that :
Oxytocin concentrations in **CSF** are **inversely** correlated with aggression.

Vasopressin

- Vasopressin is implicated in aggression

- A study have shown that :

Vasopressin concentrations in **CSF** are **positively** correlated with life history of aggression in personality disorder patients.

Opiates

- Opiates have been related to aggression, particularly self-directed aggression.
- Reduced **CSF endogenous opioid** concentrations have been associated with **self-injurious behaviors** in patients with borderline personality disorder,

Neurosteroids

- While numerous reports have suggested correlations between **plasma testosterone** concentration and aggression, these relationships have **not always** been replicated and have been extensively reviewed elsewhere.

Sterols

- A number of retrospective studies suggest that **reduced cholesterol** is associated with **aggressive behavior**, including violent crimes and violent suicide attempts.
- Animal studies.

Social Determinants

frustration •

elicits aggression esp. when cause is unjustified •

direct provocation (physical or verbal) •

exposure to media violence •

primes aggressive thoughts; desensitizes viewers •

heightened arousal (provocation, exercise) •

arousal in one situation can persist and intensify •
reactions in another, unrelated situation

Types of aggression

- Physical Aggression - aggressive behavior that physically harms yourself or someone else, such as hitting, biting, using weapons, and kicking.
- Mental Aggression - aggressive behavior experienced with the intent of harming someone mentally, such as causing anxiety, stress, or depression.

- Emotional Aggression -aggressive behavior that harms someone emotionally and causes them to struggle with expressing themselves.
- Verbal Aggression - aggressive behavior that is spoken by one person to make another person feel less confident in their own skin.
- In most cases of aggressive behavior, one major type of aggression leads to another major type. That's why victims of aggressive behavior are met with so many different health and wellness concerns and why it only gets worse over time.

Hostile aggression - *behavior intended to harm another, either physically or psychologically, and motivated by feelings of anger and hostility*

Instrumental aggression - *behavior intended to harm another in the service of motives other than pure hostility (for example, to attract attention, acquire wealth, and to advance political and ideological causes)*

EFFECTS OF AGGRESSION AND VIOLENCE ON MENTAL HEALTH

- Victims of violent acts may experience serious mental health issues as a result, such as
- posttraumatic stress, depression, and anxiety.
- A person in an abusive relationship, for example, may fear further repercussions and feel unable to leave the relationship, thus potentially subjecting him- or herself to further harm.

Controlling Aggression

Catharsis (“blowing off a little steam”) •
does not reduce aggression •

Punishment •

must be prompt, strong, and justified •

Exposure to nonaggressive models •

place prosocial models in violent situations •

Controlling Aggression (con't)

Cognitive interventions •

apologizing can be effective •

engage in activities that distract attention away from •
causes of anger

Teach social skills •

better communication •

Induce incompatible responses •

humor •



Thank You