

Aggression



Psy 240; Fall 2007
Purdue University
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Layperson Definitions of Aggression

- We commonly use the word aggression to mean:
 - assertive
 - competitive
 - Forward/“fresh”
 - risk-taking
 - dominant, powerful
 - angry
- Factors that predict aggression are different from factors that predict these behaviors

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Working Definition

- Social psychologists define *aggression* as:
intent to harm another
- Problems with this:
 - hard to measure intention, so why don't we just say "Doing harm to others?"
 - Harming without intent *shouldn't* be called aggression
 - Not harming, but intending to do so, *should* be called aggression

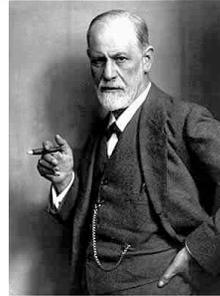
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Three Theoretical Perspectives on Aggression

- Psychodynamic (Freud)
- Sociobiological (Lorenz)
- Learning
 - I. Two-factor theory (Berkowitz)
 - II. Social learning (Rotter, Bandura)
 - III. GAM: General Aggression Model; (Anderson)

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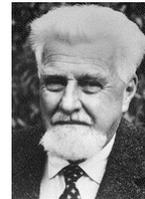
Freud's Psychodynamic Perspective



- We all possess an *innate* drive for sex and aggression. They are *inescapable*.
- Society functions to inhibit direct expression of these urges, so we seek socially acceptable means to express them
 - sex: creativity, the arts
 - aggression: sports, competition
- *Hydraulic Model*: aggressive tendencies build up over time and must be released (catharsis)
- Can achieve catharsis vicariously: *watching violence can release pent-up aggressive tendencies*

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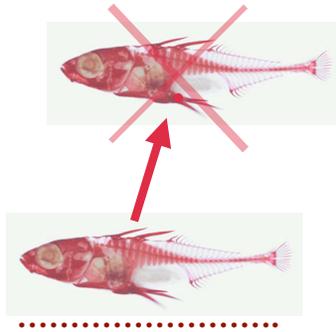
Sociobiological Perspective: Lorenz



- Aggression is innate, necessary *and adaptive*
 - Genes for aggression are passed along, whereas genes for passivity are not.
- Situational or environmental cues interact with genetic predispositions:
 - *Arousal* caused by hormones, etc.
 - A situational cue or trigger: *hard wired, not learned*
- The case of the “stickleback fish”

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Stickleback Fish



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Learning I: Two factor theory of aggression (Berkowitz)

- We are *not* born with innate tendencies to be aggressive
- Two factors must co-occur in order to produce aggression:
 - Arousal (could be hormonal, could be externally induced)
 - External cue (learned to be associated with aggression)



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Origins of 2-factor theory

- Originally stems from the “frustration-aggression hypothesis”

“Frustration, and only frustration, causes aggression, and only aggression”

Research Example:

- Children building blocks with desk-shaking button

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Problems with the Frustration-Aggression Hypothesis

- But, hypothesis overly strong and generally not supported, because:
 - Many things can instigate aggression
 - heat, insult, modeling or conformity
 - Frustration causes other feelings and behaviours
 - helplessness, perseverance, reactance

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Two-factor Theory

- *Internal arousal* +
- *External cue*, which is learned (via classical conditioning)

Both must be present

- Examples
 - Rifle study (lab)
 - Dunking booth study (field)
 - Horn-honking studies (field)

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The Presence of a Gun

	No Insult	Insult
No Gun	?	?
Gun	?	?
Badminton Racquet	?	?

Amount of Aggression as defined by intensity of shocks

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The Presence of a Gun

	No Insult	Insult
No Gun	<i>Low</i>	<i>Low</i>
Gun	<i>Low</i>	<i>High</i>
Badminton Racquet	<i>Low</i>	<i>Low</i>

Amount of Aggression as defined by intensity of shocks

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The Dunking Booth

	<i>No Insult</i>	<i>Insult</i>
<i>Pasture Backdrop</i>	?	?
<i>Guns & Saloon backdrop</i>	?	?

Amount of Aggression as defined by number of bean bags thrown

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The Dunking Booth

	<i>No Insult</i>	<i>Insult</i>
<i>Pasture Backdrop</i>	Low	Low
<i>Guns & Saloon backdrop</i>	Low	High

Amount of Aggression as defined by number of bean bags thrown

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Learning II: Social learning

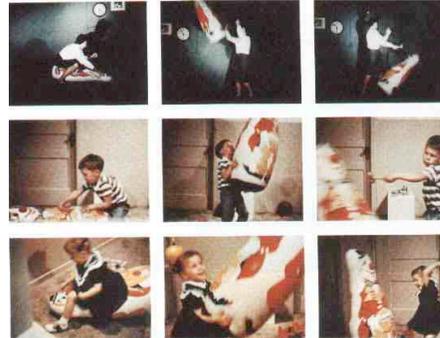
- Aggression is learned, not innate
- We learn
 - either directly through reinforcement of aggressive behaviors; OR
 - by modeling others who are behaving aggressively
 - aggressive behavior must be rewarded
 - aggressive behavior must be seen as real

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Bandura's Bobo Doll Studies



- Participants were normal children
- Watched violent TV episode or various “control” episodes that were not violent
- Manipulated whether aggressor in video was rewarded or not
- Observed children in play area after they watched video
- Aggression defined as number of times the children hit the bobo doll



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Results indicate that...

- Viewing *rewarded* violence increases violent behaviors in children.
- Viewing *unrewarded* violence does not necessarily increase violence
- Choice of control groups are very important when conducting this research
- So, what are the effects of watching violence? Catharsis or modeling?

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Media Effects on Suicide

Phillips, 1977, 1978

- U.S. suicides increase after publicized suicide stories
- the more publicity given to the suicide story, the higher the suicide rate thereafter; and
- the rise occurs mainly in the geographic area where the suicide story is publicized

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Media Effects on Suicide

Phillips, 1977, 1978

- Additionally, automobile fatalities also increase just after publicized suicide stories;
- the more publicity given to the stories, the greater the increase in automobile fatalities, and
- the increase occurs mainly in the area where the story is publicized.

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Media Effects on Suicide

Phillips, 1977, 1978

- Also, single-car crash fatalities increase more than other types, and
- the driver in these crashes is significantly similar to the person described in the suicide story, while the passengers are not.
- THEREFORE:
 - suicide stories appear to elicit additional suicides, some of which are disguised as auto accidents

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Media Effects on Homicide

Phillips

- What sort of media-depicted homicide would be modeled?
 - Rewarded
 - Made exciting
 - Perceived as real
 - Culturally Justified
- What is shown on TV that fits these criteria?



Heavyweight Prizefighting

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Media Effects on Homicide

Phillips

- Across U.S., homicide rates increased by 12.5% following highly publicized prize fights.
- The more publicized the fight, the greater the increase in the rate
- The relationship between prize-fight and homicide rate persisted after statistically controlling for day of week, seasons, and other extraneous variables

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Media Effects on Homicide

Phillips

- *Hypothesis 1:*
 - Prize fighting triggers an increase in gambling, which in turn provokes anger, fighting, and murder.
 - However, increased homicide rate *did not* occur following the Super Bowl. Therefore, not supported.
- *Hypothesis 2:*
 - Prize fight merely precipitated a murder that would have occurred anyway, even in the absence of the prize fight.
 - Found no evidence of any *dip* in homicides soon after the peak. Therefore, not supported.
- *Hypothesis 3:*
 - Social learning / modeling hypothesis. Was there victim modeling? -- is a person is more likely to aggress against a target victim if his target is similar to the victim? This hypothesis **was supported**:

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Media Effects on Homicide

Phillips

- White-loser prize fights are followed by significant increases in young, white male homicides; in contrast, Black-loser prize fights do not seem to trigger young, white male homicides
- Black-loser prize fights are followed by significant increases in young, Black male homicides. White-loser prize fights do not trigger significant increases in Black male homicides.

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Violence in Japanese TV:

Personal Observations

- Japan has (or had) extraordinarily low violent crime rate
- Japan has explicit violence/nudity on TV, even on Sunday mornings
- How can this be?
 - Offenders NOT rewarded
 - The consequences of the violence are shown, not ignored. Grieving widows, children, etc.

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Videogame Violence



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Violent Video Games

- Craig Anderson



Brad Bushman



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General Aggression Model

- Anderson & Bushman, 2002
- Single Episode Model

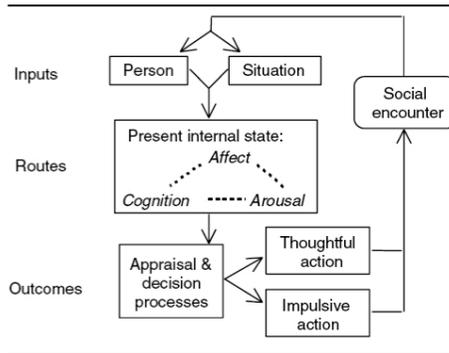
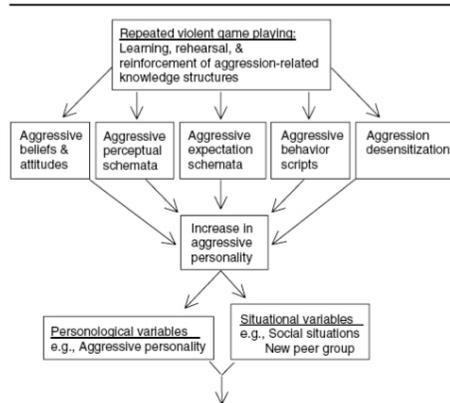


Figure 1 Single episode general aggression model. SOURCE: Anderson and Bushman (2002b), with permission from the Annual Review of Psychology, Volume 53 ©2002 by Annual Reviews, www.annualreviews.org.

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General Aggression Model

- Multiple Episode model



General Aggression Model, as In Figure 1

Figure 2 Multiple episode general aggression model: Long-term effects of video game violence. SOURCE: Anderson and Bushman (2002b), with permission from the Annual Review of Psychology, Volume 53 ©2002 by Annual Reviews, www.annualreviews.org.

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Effects of Violent Video Games on Hostile Expectation Bias

- Participants played either a violent (*Carmageddon*, *Duke Nukem*, *Mortal Kombat*, *Future Cop*) or nonviolent (*Glider Pro*, *3D Pinball*, *Austin Powers*, *Tetra Madness*) video game.
- Then they read ambiguous stories about potential interpersonal conflicts.
- Asked what the main character would do, say, think, and feel as the story continued.

GOING TO A RESTAURANT

Jane had worked hard all day long cleaning her apartment. She was tired but decided to reward herself with a meal in one of the restaurants down the street. Upon entering the restaurant, Jane decided upon a Caesar salad, French onion soup, and filet mignon. Some 15 minutes later, a waiter came around to take her order. Time slowly passed and Jane was getting hungrier and hungrier. Finally, about 45 minutes after her order had been taken, Jane was about to leave when she saw the waiter approaching with her food.

What happens next?

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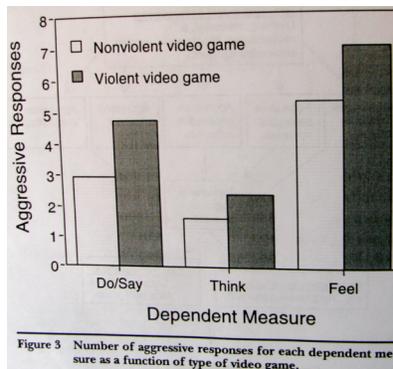
Effects of Violent Video Games on Hostile Expectation Bias

- Sample responses:
- Do/Say:
 - Eat and refuse to pay
 - Punch the waiter
 - "I hope this isn't your real job!"
 - "What did you have to do, butcher a cow?"
 - Steal the silverware
 - "Keep the food. I'm gone!"
 - Dump the food on the waiter's head
 - Swear at the manager
 - "I wish I had him as my waiter!" (pointing to another waiter)
 - "Did you have to go to France to get the French onion soup?"
 - I was contemplating whether this floral centerpiece was edible.
 - She calls the restaurant and orders four steaks to pick up by a different name
- Think:
 - "Damn this service is shitty."
 - Hit the waiter.
 - "This guy needs to be fired."
 - "WHAT IDIOTS!!!"
 - "I hate this waiter!"
 - "This place sucks!"
 - "No tip here."
 - "They better not charge me for this food."
 - "What took so damn long?"
 - "I should set this table cloth on fire!"
 - "I'm going to tell everyone how lousy it is here."
 - "I should write to the newspaper about this place."
- Feel:
 - Mad
 - Hostile Offended
 - Irritated
 - Pissed off
 - Cranky
 - Frustrated with the service
 - Angry
 - Cruel
 - Pushed to the limit
 - Bitchy

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Bushman & Anderson Study: Results

- Those playing violent video games were more likely to report that the main character would:
 - Act
 - think, and
 - feel
- more aggressive.
- This supports GAM.



From Bushman & Anderson, *PSPB*, 28, 1679-1686.

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Measures of Aggression

- Shocks
- Noise Blasts
- Negative evaluations
- Horn honking
- Bobo Doll hitting
- Hot Sauce Allocation
- Self-reports of intentions

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Discussion Topic

- In your opinion, does any of this help to explain recent school shootings?

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