Theories of Violence and Aggression

By Jason Ittel
Questions:

- What does Judith Harris say parents can do to increase the probability of their children not becoming delinquent?
- What areas of the brain have been implicated in violent or aggressive behavior?
Overview:

- Evolutionary Psychology
- Political and Sociological Theories
- Harris’s Group Socialization Theory
- Organic and Brain Based Data
- Antisocial Personality Disorder
- Genetics
- Overview
Evolutionary Psychology:

- Aggression is a part of human nature that has developed due to various evolutionary forces and can be seen throughout the animal kingdom.
- Natural selection is powered by competition.
- The development of groupness was a catalyst for aggressive behavior.
- Aggression as a strategy of protecting or acquiring various resources for survival.
  - Food
  - Land
Evolutionary Psychology Continued:

- Competition over females and urge to pass on one’s genes has made males the more violent member of our species
  - Chimp behavior
  - Testosterone
  - Feelings of Dominance
  - Males’ Bodies

- Other Natural Aggressive Mechanisms:
  - Natural reflexes: Clenching fists and teeth
  - ANS fight or flight response
Positive Evolution Influences:

- Evolution has allowed humans to deploy mechanisms of aggression in highly selective ways.
- Our limbic systems are equipped with very large frontal lobes → more calculating and less spontaneous:
  - Override more primitive brain structures
  - Struggle between rational and self interest agents (id, ego, and superego)
Political and Sociology Views:

- **Political**
  - Failure of social system: poverty, poor educational system, and discrimination
  - Media influence
  - Poor Parenting
  - Discount of genetic basis for fear of creating racism

- **Sociology**
  - Social Learning Theory
  - Frustration-Aggression Theory
  - Differential Opportunity Theory
Harris’s Group Socialization Theory:

- From her book *The Nurture Assumption*
- Children are socialized by their peer groups
- Delinquent characteristics: aggressive, lack of fear, lack of empathy, desire for excitement, low intelligence
- Discounts direct parental influence on likelihood of child becoming delinquent
- Two factors predict probability of child becoming delinquent:
  - Genes contributed by parents
  - Peer group(s)
Harris’s Group Socialization Theory Continued:

- Things parents do influence:
  - Income effects
  - Their children’s neighborhood
  - Their children’s school they attend
  - Peer group status (to a degree)
    » Children who are rejected by their peers and have a lower peer group status have more behavioral and academic problems
Abused Children and delinquency:
- May be genetically predisposed for abuse by parents and therefore peers
- Abused children are often put into adoptive homes and lack stable peer groups
- Children abused through the stages of development may suffer brain damage as a consequence
Organic and Brain Based Data:

- Abnormalities in brain function are more likely to be found in criminals than abnormalities in brain structure.

- Many functional neuroimaging studies displayed prefrontal dysfunction, reduced regional blood flow in frontal areas, left temporal dysfunction, and hypofrontality in criminals.
  - 18% less active corpus callosum in a study of 41 murders.
  - Same study showed 6% increase in thalamus, amygdala, and limbic system.
    » These areas control basic emotions.
Organic and Brain Based Data:

- **Phineas Gage**
  - Tamping rod went through the front part of his brain
  - Damaged his prefrontal cortex
  - Premorbid Functioning: Normal
  - Postmorbid Functioning: impulsive, selfish, and aggressive although intelligence and memory were retained
Antisocial Personality Disorder:

- **About 25% of U.S. inmates have been diagnosed ASPD**

- **Symptoms:**
  - Apathy toward others, unremorseful, disregard of people’s rights, sense of entitlement, blameful to others, manipulative, affectively cold

- **Prefrontal Cortex has 11% less gray matter**

- **Brain imaging shows prefrontal cortex is less active in people with ASPD**

- **Prefrontal cortex inhibits the limbic system which has been implicated in aggressive behavior**
Organic and Brain Based Data:

- Study by J. Le'on-Carrio'n and F. J. C. Ramos on brain injury during development

- Findings:
  - Looked at violent and non-violent criminals
  - Both groups had sustained head injuries early in life
  - What differentiated the two groups was the fact that the violent criminals had a significantly larger history of head injury that was never treated
Conclusions of Study:

- Not seeking rehabilitation for brain injury may increase the probability of one to commit a violent crime.
- The neurocognitive deficits that are left untreated may cause the patient to confront and interpret situations erroneously and resort to motor activity such as violence.
- Implies that rehabilitation and education to reduce head injury should be more enforced to help reduce or prevent crime.
Genetics: 

- Genetics have an influence!
- There are probably multiple genes that have additive effect on criminal behavior
- Twin and adoption studies have proven that criminal behavior can be inherited
- Cloninger and Gottesman (1987):
  - Twin data
  - Heritability for property offenses was .78
  - Heritability for violent offense was .5
Conclusions:

- We all know the conclusions
- Genes and the environment act together to create violent or aggressive behavior but do not determine anything
- Abnormal brain functioning due to various factors may increase aggressive behavior
- Evolution has created us in such a way that only allows for aggressive behavior
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