

THE POSITIVE SCHOOL

Introduction

- While the reformers of the classical period were writers and philosophers, the positivists were more likely to be scientists, mathematicians, doctors, and astronomers.
- While the classical reformers sought to modernize and civilize the system within they lived, the Positivists reached out to order and explain the world around them.
- The earlier concentration on building a moral and fair system of justice and government was thus displaced by the scientific exploration and discovery of other aspects of life.
- Although the Classical thinkers believed that humans possess a rational mind and thus have free will to choose good over evil, the Positivists saw behavior determined by its biological, psychological and social traits.
- The primary characteristics of positivist criminological thought are a deterministic view of the world, a focus on criminal behavior instead of legal issues such as rights, and the prevention of crime through the treatment and rehabilitation of offenders.
- The use of scientific research techniques was common to those who studied criminals from a positivist perspective.
- In scientific analyses, data were collected to describe and explain different type of individuals as well as different social conditions.
- The theory of evolution, proposed by naturalists and anthropologists, formed a basis for the study of human behavior and, more specifically, of criminal behavior.

The Social Heritage of the Positive School

- At the beginning of the twentieth century, science became a major tool of scholars, and the world experienced a revolution in knowledge that brought countless changes in everyday life.
- Communication, the automobile, the airplane, the phonograph and electric lighting were introduced.
- Medicine embraced science, and researchers discovered germs and how to combat them.
- Sigmund Freud developed psychoanalysis, and Albert Einstein pronounced his theory of relativity.

- Science was applied to industry.
- Of great importance was the transformation of the agriculturally based aristocracies of the eighteenth century into complex, industrialized, urban societies.

The Intellectual Heritage of the Positive School

- Widespread use of science in the Positivist era.
- Positivistic philosophy (based on science) emphasized the importance of tested and systematized experience rather than pure speculations, or metaphysics.
- A second important in the rise of positivist criminology was the concept of evolution that emerged even before the writings of Charles Darwin
- A final influence on positivist criminology was the emergence of anthropology.

The Beginnings of the Positive School

- After many decades of dominance by the Classical School, academics and scientists were becoming aware that the deterrence framework did not explain the distribution of crime.
- Researchers focused on the fact that certain individuals or groups tend to offend more than others and that such inferior individuals should be eliminated.
- **Eugenics** refer to the study of and the policies related to the improvement of the human race via control over reproduction.
- In the early to mid 1800s, several perspectives were offered to establish a framework for distinguishing the more superior individuals or groups from the more inferior individuals or groups.
- **Craniometry** was the belief that the size of the brain or skull represented the superiority or inferiority of certain individuals or ethnic/racial groups.
- Under the craniometry assumptions the size of the skull was believed to reflect the size of the brain.
- Most studies of by the craniometers pointed out that the subjects of white, Western European descent were superior to other ethnic groups in terms of skull and brain size.
- Examinations of the brain were largely done with the intention of furthering the assumptions of Eugenics, using science to demonstrate that certain individuals/groups were inferior to others.

- **Phrenology** is the science of determining human dispositions based on distinctions in the skull, which are believed to conform to the shape of the brain.
- Phrenologists aimed to support the assumptions of eugenics and that some individuals were inferior to others.
- **Physiognomy** is the study of the facial and other bodily aspects to indicate developmental problems, such as criminality.
- Early physiognomy studies focused on contrasting various racial or ethnic groups to prove that some were superior or inferior to others.
- Charles Darwin published his work, *The Origin of The Species*, in the late 1800s and made a huge impact on societal views regarding the rank order of groups in societies.
- Darwin's model posited that humans had evolved from more primitive begins and that human species evolved from a number of adaptations preferred by natural selection.
- That is, some species are selected by their ability to adapt to the environment, whereas others do not adapt as well and die off, or at least become inferior in terms of dominance.
- Darwin's work was widely accepted by both society and scientists throughout the world, and falsely led to an inclination to believe that certain ethnic or racial groups are inferior or superior to groups
- Darwin's theory laid the groundwork for what would become the first major scientific theory of crime, Cesare Lombroso's theory of born criminals, which also tied together the assumptions and propositions of craniometry, phrenology, and physiognomy.
- The positive school was highly influenced by determinism. **Determinism** is the assumption that most human behavior is determined by factors beyond free will and free choice.
- The positive school attributed all kinds of behavior, especially crime, on biological, psychological and sociological variables.

Auguste Comte

- Much of the system of analysis that constitutes sociological positivism today was developed by *Auguste Comte*, a nineteenth-century French philosopher and social scientist who is credited with being the father of sociology.
- His approach to the study of social phenomena included an insistence on testable hypotheses, the use of comparative methods, the careful

classification of societies, a systematic approach to the study of social history, and the study of abnormality as a means of understanding normality.

- Comte's work, among that of others, prompted scientific studies of human social behavior.

Cesare Lombroso

- Basing his work on Darwin's theory of natural selection, **Cesare Lombroso** (1835-1909) created what is widely considered the first attempt toward scientific theory in criminology thought.
- Lombroso published *The Criminal Man* in 1876.
- His book created an immediate response in most Western societies, influencing both their ideas and their policies related to crime and justice.
- Lombroso thought that certain groups and individuals were *Atavistic*. That is, a person or feature of an individual is a throwback to an early stage of the evolutionary development. These individuals were called also **Throwbacks**.
- According to Lombroso, **heredity** is the principal cause of criminal tendencies. He addresses two forms of heredity, indirect and direct. **Indirect heredity** is the result of being born into a "generically degenerate family" (Lombroso, 1918, p. 136). Examples of the manifestations of indirect heredity are insanity, deafness, syphilis, epilepsy and alcoholism. Direct heredity is when one is born into a family with criminal parents.
- Lombroso developed a typology of criminals that included four general types: The born criminal, the criminal by passion, the insane criminal, and the occasional criminal. Within the category of the occasional criminal Lombroso delineated four subgroups – the pseudo-criminal, the criminaloid, the habitual criminal, and the epileptoid.
- **The Born Criminal.** Lombroso became convinced that a criminal was an immoral person, a sort of throwback to primitive man who had not developed to the same biological level as the modern, non-criminal man. Lombroso called this inferior being the "born criminal", a being who was pre-destined for criminal behavior due to his physical configuration. They represented approximately 1/3 of all offenders. According to Lombroso, the born criminal has the same "anatomical, skeletal, physiognomical, psychological, and moral characteristics peculiar to the recognized forms of epilepsy..." (Lombroso, 1911, p. 69)

- **Stigmata** are physical manifestations of the atavism of an individual, features that indicate a prior evolutionary stage of development.
- Stigmata consisted of facial and bodily features that deviated from the norm. (1) large jaws, forward projection of jaw, low sloping foreheads ; (2) high cheekbones, flattened or upturned nose; (3) handle-shaped ears; (4) large chins, very prominent in appearance; (5) hawk-like noses or fleshy lips; (6) hard shifty eyes, scanty beard or baldness; And, (6) insensitivity to pain, long arms.
- Lombroso professed that people who had more than five of these features were “born criminals.”
- **The Criminal by Passion.** Although Lombroso’s criminal by passion is more likely to be female than male, this category is distinguished not by gender, but by the high level of impetuosity and ferocity. Lombroso argues that, “the true criminal of passions suffers more from remorse than from any penalty the law can inflict” (Lombroso, 1911, p.186).
- **The Insane Criminal.** According to Lombroso, those labeled as insane criminals are kleptomaniacs, nymphomaniacs, habitual drunkards, and pederasts. Insane criminals commit crimes because of a “consequence of an alteration of the brain which makes them unable to discriminate between right and wrong” (Lombroso, 1911, p.186). For Lombroso, these individuals are truly insane and without responsibility of their actions.
- **The Occasional Criminal.** (1) *Pseudo-Criminals*: They break the law by a mere accident (i.e. someone that kill in self-defense); (2) *Criminaloid*: Minor offenders with weak personalities; (3) *Habitual Criminals*: They are defined as “individuals who regard systematic violation of the law in the light of an ordinary trade or occupation and commit their offenses with indifference” (Lombroso, 1911, p.111).
- Lombroso’s theory supported what were then Western world’s views on slavery, deportation, and so on. In fact, his theory coincided with a political movement that became popular at that time: The Fascist and Nazi movements of the early 1900s.

Enrico Ferri

- Lombroso student
- Ferri believed that crime was caused by a number of factors including physical (race, geographics, temperature, and climate), anthropological (age, sex, organic, and psychological), and social factors (customs, religion, economics, and population density).

- Ferri supported the notion that in any given social environment, with generally fixed conditions, only a certain amount of crime could be realized. This was called the Law of Criminal Saturation.
- Ferri also developed a fourfold classification of murders that appears in his book *Homocide*, based on the insane, the occasional, the born criminal and the criminal of passion.

Raffaele Garofalo

- Lombroso student
- Garofalo believed that civilized people have certain basic sentiments about the values of human life and property; absence of these sentiments indicated a lack of concern for fellow humans.
- Finding a combination of environmental, circumstantial, and organic reasons for criminal behavior, Garofalo termed such behavior (lack of concern for others) a deficiency of altruistic sensibility, which was more frequent among “members of certain inferior races.” In essence, he believed that certain people are morally less developed than others.
- Garofalo also commented on the legalistic nature of definitions of crime, believing that these definitions limit them in application and situation. Instead, he formulated the more universal notion of natural crime, by which he referred to acts that all civilized societies would really recognize as offensive.
- Garofalo believed that the dangerousness of the criminal was the criteria on which social crime-fighting priorities should be based.

The IQ Testing Area

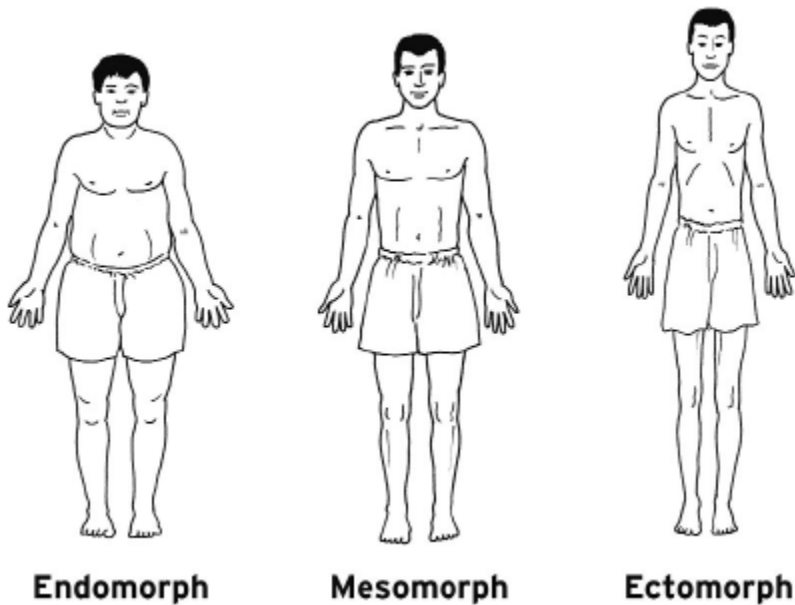
- After refuting the atavistic theories of Lombroso, a new theory emerged based in a more quantified measure that was originated by **Alfred Binet**.
- This measure was the intelligence coefficient – **IQ**.
- At that time, the IQ was calculated as chronological age divided by mental age, which was then multiplied by 100, with average scores being 100.
- Binet created IQ scores to identify youth who were not performing up to par on educational skills.
- Binet believed that IQ could be improved as people could be trained to improve their IQ's.
- Unfortunately, when Binet work was brought to the United States, his basic assumptions and propositions were twisted. H.H. Goddard used IQ

scores for the purpose of deporting, sterilizing, and ridding society of those not smart enough.

- Goddard believed that IQ was innate. IQ levels could not be changed and they were hereditary.
- Goddard labeled low IQ Feeble-mindedness – those who had significantly below average levels of intelligence.
- Ranking from the best to the lowest intelligence, the first group was morons, the second-lowest group was the imbeciles, and the lowest-intelligence group was the idiots.
- Goddard, from an eugenics point of view, believed that the biggest threat to the progress of humanity were the morons.
- Goddard took his research team to the major immigration center in Ellis Island in the early 1900s to identify the Feeble-minded as they attempted to enter the United States.
- At the end of his career, Goddard admitted that intelligence can be improved.
- The U.S Government typically sterilized individuals, typically women, based on IQ scores of the parents.
- In *Buck v. Bell* (1927), the U.S. Supreme Court upheld the use of sterilization for the limiting reproduction for feeble-minded individuals according to an IQ score.
- Sterilization continues until the 1970s in the United States.
- In the 1970s, **Travis Hirschi** and **Michael Hindelang** published a study that examined intelligence in youths. This study showed that the IQ of delinquents or criminals is about 10 points lower than the scores of noncriminals. In addition, other studies have shown that having low verbal intelligence has the most significant impact in predicting delinquent and criminal behavior.
- The rebirth in studies regarding the link between intelligence and criminality seemed to reach a peak with the publication of Richard Herrnstein and Charles Murray's *The Bell Curve* in 1994. In here, the authors argued that people with low IQ are destined to be unsuccessful in school, become unemployed and commit crime. They believed that intelligence is primarily determined, with little chances of improving it

Body Type Theory: Sheldon's Model of Somatotyping

- William Sheldon believed that people could be classified into three body shapes, which correspond with three different personality types. (1) **Endomorphic** (fat and soft) tend to be sociable and relaxed; (2) **Ectomorphic** (thin and fragile) are introverted and restrained; and, (3) **Mesomorphic** (muscular and hard) tend to be aggressive and adventurous.
- Sheldon, using a correlational study, found that many convicts were mesomorphic, and they were least likely to be ectomorphic.



Contemporary Positivistic Theories

Family Studies

- The most notable family studies were done in the early 1900s by Dugdale, in his study of the Jukes family, and Goddard, who studied the Kallikak family.
- These studies had the goal to find out if certain families were more prone to criminality than others, which would indicate that crime is inherited.
- Goddard's study showed that a much higher proportion of children from that family became criminal. Goddard thought that many members of the Kallikak family fit Lombroso's theory of stigmata.
- Two important conclusions were drawn from the family studies that were done in the early 1900s: (1) Criminality is indeed more common in some families; in fact, no study has shown otherwise; and, (2) These studies showed that criminality by the mother had a much stronger influence on the future criminality of the children than did the father's criminality.

Twin Studies

- Twin studies involved the examination of identical twin pairs versus fraternal twin pairs.
- Identical twins are also known as **monozygotic** twins (MZ) – They are identical in terms of genetic makeup.
- Fraternal Twins are also known as **dizygotic** twins (DZ).
- The goal of the twin studies was to examine the concordance rates between MZ twin pairs versus that of DZ twin pairs regarding delinquency.
- Concordance is a count based on whether two people (or a twin pair) share certain trait (or lack of trait); for our purposes, the trait is criminal offending.
- If genetics plays a major role in determining the criminality of individuals, then it would be expected that MZ twins would have a significantly higher concordance rate for being criminal offenders than would DZ twins. Research has proven this hypothesis.

Adoption Studies

- Adoption studies examined the predictive influence of the biological parents versus that of the adoptive parents, who raised the children from infancy to adulthood.
- In these studies, the adoptees were typically given up for adoption prior to six months of age, meaning that the biological parents had relatively no interaction with their natural children as they were raised from infancy by the adoptive parents.
- The most important adoption study was done by Sarnoff Mednick and his colleagues. They found that the highest predictability for future criminality was found for adopted youth who had both biological parents and adoptive parents who were convicted criminals.
- The Mednick study also showed that the criminality of biological parent(s) had far greater predictive effect of future criminality of offspring than did the criminality of adoptive parents.

Twins Separated at Birth

- In these studies, many investigated individuals did not know they had a twin. Also, the environments in which they were raised were extremely different (poor v. wealthy)..
- The University of Minnesota study found that the twin pairs studied often showed extremely similar tendencies for criminality.
- This finding supports the assumption of the role of genetics and heredity on criminal activity as environment simply cannot account for all of the similarities found in studies on identical twins both raised together or separated at birth.

Cytogenic Studies: The XYY Factor

- A chromosome is the threadlike part of the cell that carries hereditary information in the form of genes.
- The normal human genetic complement consists of 23 pairs of chromosomes. One of these pairs determines sex.
- Women have two X chromosomes and men usually have an X and a Y chromosome.
- However, in 1 in 500 to 1,000 live male births, an individual has an extra Y chromosome.

- This XYY abnormality is often characterized by tallness and severe acne and sometimes by skeletal malformations and mental deficiency. In addition this abnormality has been linked with criminality
- Chromosomal mutations have been strongly linked to criminality
- Cytogenetic studies showed that somewhat random abnormalities in an individual's genetic makeup can have profound influence on his or her level of criminality.

Hormones and Neurotransmitters: Chemicals That Determine Criminal Behavior

- Various chemicals in the brain and the rest of the body determine how we think, perceive and react to various stimuli.
- Hormones, such as testosterone and estrogen, carry chemical signals to the body as they are released from certain glands and structures.
- Some studies have linked high levels of testosterone in the body with criminal or aggressive behavior.
- Other studies have shown that hormonal changes in females can cause criminal behavior
- The most studied neurotransmitters in relation to criminal activity are dopamine and serotonin
- **Dopamine** is commonly linked to feeling good (Good food, sex activities...). Illicit drugs, such as cocaine and methamphetamine enhance the level of dopamine in our system
- The relationship between dopamine and criminal behavior is probably curvilinear, such that both extremely high and extremely low levels of dopamine are associated with deviance.
- Regarding **Serotonin**, studies have consistently shown that low levels of serotonin are linked with criminal offending.
- Serotonin is a very important in all information processing in the nervous system.

Brain Injuries

- Studies have consistently shown that damage to any part of the brain increases the risk of crime by individuals in the future. Specifically, damage to the frontal and temporal lobes (particularly those on the left side) appears to have the most consistent associations with criminal offending.

- The **frontal lobes** are the area of the brain where the realm of higher-level problem solving and executive functioning takes place.
- Any normal reasoning relies on this executive area of the brain because it is the region that determines long-term consequences. If people suffer damage to the frontal lobe, they will be far more inclined to act on their emotional urges without any logical inhibitions imputed from the frontal lobe region.
- The **temporal lobe** region is highly related to the memory and emotional structures of the brain.
- Any damage to the temporal lobe, which is located above the ear, is likely to damage these structures or the effective communication of these structures to other portions of the brain.

Central and Autonomic System Activity

- The **Central Nervous System (CNS)**, which largely involves our brain and spinal columns, and governs our voluntary motor activities.
- Empirical studies of the influence of CNS functioning on criminality have traditionally focused on brain wave patterns, with most using electroencephalograms (EEGs).
- Studies have compared brain wave patterns of known chronic offenders to those of “normal” people. These studies have shown that the wave patterns of chronic offenders are abnormal as compared to the normal population.
- Four types of wave patterns are found from slowest to fastest: Delta, theta, alpha, and beta.
- Psychopaths tend to have more activity in the theta patterns, whereas normals tend to show more activity in the fast alpha or beta types of waves. These findings reveal that the cortical arousal of chronic offenders tends to be significantly slower than that of people who do not commit crimes.
- The second area of the nervous system that has been most linked to criminal behavior is the Autonomic Nervous System (ANS), which is primarily responsible for involuntary motor activities such as heart rate, dilation of pupils, and electric conductivity in the skin.
- Studies have consistently shown that individuals who have a significantly low level of ANS functioning are far more likely to commit criminal acts.
- People who have such low levels of ANS arousal tend to experience what is known in the psychological literature as “stimulus hunger.” Stimulus

hunger means that individuals which such a low level of ANS arousal may constantly seek out experiences and stimuli that are risky and often illegal.

- In addition, children who are diagnosed with the disorder of Attention-Deficit-Hyperactivity Disorder (ADHD) have a higher likelihood of becoming criminal than their peers.
- Children who do not fear punishment at all are likely to have a lower than average ANS level of functioning. Such individuals are likely to become chronic offenders if this disorder is not addressed because they will not respond to discipline or consider the long-term consequences of their risky behavior.

Sources

Williams, F. P., & McShane, M. D. (2010). *Criminological Theory*. Upper Saddle River, NJ: Pearson