## Nature vs. nurture

Science, Genetics



The role of nature vs. nurture is relatively important, because the debate seeks to understand how a person develops factors such as personality, behaviors and intelligence. There are many child development theories that have been proposed by researchers and theorist which outline the developmental stages that infants, babies, children and adolescents go through and identify the typical ages at which these milestones occur. Managing children's aggressive behavior has been a concern for parents and educators for centuries. In the article, "Nature and nurture predispose to violent behavior: Serotonergic genes and adverse childhood environment" the authors are conveying in their hypothesis that certain psychological problems have been shown to be heritable and if given the right circumstances, individuals with those genes could find themselves engaging in criminal activity. Criminal behavior has always been a focus for psychologists due to the age old debate between nature and nurture. To fully understand the nature of how genes and the environment influence criminal behavior, one must first know how criminal behavior is defined. Law in our society is defined by social and legal institutions, not in biology (Morley & Hall, 2003). Therefore determining what constitutes criminal behavior can envelope a wide variety of activities and for that reason, researchers tend to focus on the wider context of antisocial behavior. While several routes to aggression have been proposed, no single factor is sufficient to explain the development of aggressive behavior. Longitudinal studies are sorely needed to observe aggressive behavior in children and to monitor their developmental trajectories. Society plays a fundamental role in influencing behavior. Poverty and crime has become an intrinsic part of society; which

unfortunately molds the behavior of people through imitation and reinforcement. As it states, in the article, " not only the genetic make-up, but environmental factors also influence human behavior". It is well known that early childhood environment also influences the later-life predisposition toward violent behaviors. Aggressive behavior can also be a function of national culture. Residents of some countries show a more pervasive tendency to think of violence as means of solving problems than persons living in other nations (Archer & McDaniel, 1995). In some cultures, ones religious view is expressed aggressively with the subject sacrificing his or her life (in some cases risking the lives of others) for the sake of their god. In other cultures, aggressive behavior is influenced by sports. American football, wrestling, ice hockey and boxing promote behavior that is intended to physically injure another person. Genetics may influence both development and behavior however, it fully determines neither. Genes are hereditable and are not affected by environment factors such as rearing conditions however rearing conditions can influence gene expression. A person's genes may predispose them to mental illness, diabetes or aggressive behavior however environmental factors may cause the emergence of these conditions. Aggression cannot be credited to just one origin. Biological and environmental factors are complementary in understanding the origin of aggression. The traditional phrase for the debate nature versus nurture should be re-phrased as nature being nurtured. A normal person must be provoked and aroused to act aggressively. A person may have a genetic predisposition to aggression but the act would not occur unless certain environmental influences are present. Personality traits and

disorders have recently become essential in the diagnosis of individuals with antisocial or criminal behavior. These traits and disorders do not first become evident when an individual is an adult, rather these can be seen in children. I agree to disagree with their results only because there has been some children and teenagers that live in a rural crime infested area that grow up to be non-violent and live successful lives, on the other hand there are some that end up joining gangs and never get to live to see age eighteen due to being killed by gun fire or some that end up in juvenile or jail. Children living in violent neighborhoods are aptly described as children living in urban war zones (Garbarino, 1991). They face a two-fold problem; these children lack pro-social adult role models to guide them and they do not have the opportunity to develop internalized self-control through developmentally appropriate play. Researchers agree on the point that genes influence personality traits and disorders. However, researchers also agree that there is an environmental component that needs to be examined because children and adolescents are limited to the extent of choosing an environment, which accounts for the greater influence of environmental factors in childhood behaviors. Another significant factor in the development of antisocial or delinquent behavior in adolescence is peer groups. According to the studies that were done in the article, the authors believe that violent behavior is a function of nature versus nurture because of the certain genes that such as the MAOA genotype that posed as a psychosocial risk factor and violent crime proves true in replication attempts or not, this does not make a case for an individual being exculpated by his genetic make-up. The results of this study did not change my opinion of the nature vs. nurture because I believe

that every individual is different and even if a child is genetically predisposed to negative and violent behaviors, these behaviors are only activated by an insecure or violent environment. A positive, nurturing environment in early childhood is likely to produce a well-adjusted, happy child, despite genetic predispositions and raising children in a positive, safe and healthy environment corresponds to a decrease in the possibilities of a child growing up to be a deviant or criminal even if a person if born with a certain type of gene. References Berkowitz L. 1974. Some determinants of impulsive aggression: role of mediated associations With reinforcements for aggression. Psychology Rev 81: 165—176. Bouchard TJ. 1994. Genes, environment and personality. Science 264: 1700—1701. Buss DM. 1995. Evolutionary psychology: a new paradigm for psychological science. Psychology Inquiry 6: 1—30. Campbell A, Sapochnik M, Muncer S. 1997. Sex differences in aggression: does social Representations mediate form of aggression? Br J Soc Psychology 36: 161—171. Garbarino J, Kostelny K, Dubrow N. What children can tell us about living in danger? Am Psychology. 1991; 46: 376—383. Espelage, D., Bosworth, K., & Simon, T. R. (2000, summer). Examining the Social Context of Bullying behaviors in early adolescence; Journal of counseling and development. Retrieved from Academic search premier database. Henderson, M. (2009, March). Nature vs. nurture; Please don't ask. NY Times. Retrieved from Academic Search Premier Database. Higley JD, King ST Jr., Hasert MF, Champoux M, Suomi SJ, Linnoila M. 1996. Stability of Inter-individual differences in serotonin function and its relationship to severe aggression and competent social behavior in rhesus macaque females. Neuro-psychopharmacology 14: 67—76. Loeber R,

Stouthamer-Loeber M. 1998. Development of juvenile aggression and violence: Some Common misconceptions and controversies. Am J Psychology 53: 242—259. Loehlin JC. 1992. Genes and Environment in Personality Development. Sage Publications: Newburg Park, CA. Magnavita, J. J. (2012). Theories of Personality. San Diego, CA: Bridgepoint Education, Inc. Morley, K., & Hall, W. (2003). Is there a genetic susceptibility to engage in criminal acts? Australian Institute of Criminology: Trends and Issues in Crime and Criminal Justice, 263, 1-6. McGue M, Bouchard TJ. 1998. Genetic and environmental influences on human behavioral Differences. Annual Review Neuroscience 21. Plomin R. 1990. The role of inheritance in behavior. Science 249: 183—188. Plomin R, Owen MJ, McGuffin P. 1994. The genetic basis of complex human behaviors. Science 264: 1733—1739. Reif, A., Rosler, M., Freitag, C. M., Schneider, M., Eujen, A., Kissing, C., Retz, W. (2007). Nature and nurture predispose to violent behavior: Serotonergic genes and adverse childhood environment. Neuro-psychopharmacology. 32, 2375-2383. Retrieved from http://www. nervenklinik. uk-wuerzburg. de/fileadmin/uk/psychiatrie/Dokumente/Forschung/Psychiatric Neurobiology and Bipolar Disorder Program/MAO-A and violent crime. pdf. Scholer, S. (2001). Play nicely: Recommendations for managing aggression in young children. Nashville, TN: Vanderbilt University. Seroczynski AD, Bergeman CS, Coccaro EF. 1999. Etiology of the impulsivity/aggression Relationship: Genes or environment? Psychiatry Res 86: 41—57. Staner L, Mendlewicz J. 1998. Heredity and role of serotonin in aggressive impulsive behavior. Encephala 24: 355—364. Tecott LH, Barondes SH. 1996. Genes and aggressiveness. Behavioral genetics. Curr Biology 6: 238—240. Vitiello B, Stoff DM. 1997.

Subtypes of aggression and their relevance to child psychiatry. J Am Academy Child Adolescent Psychiatry 36: 307—315.