

Violence, Genetics and Ethics

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Abstract -

Gun violence has rapidly become a rising issue across the world in the past few years. In 2020, there were 5,222 firearm-related deaths in the United States alone. To put that into perspective, that is about 124 people dying from firearm injuries per day. In 2021, the number rose to a new height of 20,726. This incremental growth of a horrifying scenario needs to be curbed. As humans, we're meant to have a natural instinct to protect our own kind rather than have their blood on our hands and their death on our conscience. To quote Stevie Wonder, "Gun violence is real. People don't come back."

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I. Introduction -

Scientists have spent many years trying to find a concrete cause for violent and criminal tendencies. They narrowed down three major biological risk factors: Genetics, neuro-transmitters and neural-biology. Neuro-transmitters like serotonin, norepinephrine and dopamine were considered to have some sort of link with criminal activities. However, research has shown a strong relationship between low serotonin and antisocial tendencies; moderate relation between norepinephrine and criminal behavior and no effects of dopamine. All these hormones tend to work on the principle of impulse which plays a particularly important role in gun violence. Neural-biology refers to the structure and functioning of the brain. Data has shown that injuries to the brain -specifically in the prefrontal cortex- and environmental toxins such as drugs and alcohol influence the brain and cause antisocial behavior. Injuries to the brain have shown to limit control over impulses and aggression.

Despite the ongoing debate on the role of genetics on human behavior, research suggests that there are some inherited characteristics which may contribute to antisocial or criminal behavior. For example, a genotype which produces low levels of the enzyme 'monoamine oxidase' may predispose an individual to violent or antisocial behavior. However, this correlation of gene to behavior was only spotted when individuals with this gene grew up in abusive or violent households. This shows us that the environment plays an equally important factor in the development and dominance of these genes and factors.

Another important factor which may lead to aggression and violent behavior is mental health. Mental health sits at the intersection of biological and social factors. Evidence suggests that mental health can have both direct and indirect links to criminality. Research from the Dunedin Multidisciplinary Health and Development Study concluded that, in the age group committing most violent incidents, individuals with mental disorders account for a considerable amount of violence in the community. In terms of indirect links to criminality, maternal mental health problems are associated with negative outcomes for children, including emotional and behavioral problems. Many of these mental disorders are codependent on the environmental factors and response to certain stimuli.

With developing technology and extensive research, it is possible to predict the slight likelihood of violent behavior early on in a person's life. As shown before, studying the neural, neuro-transmittal and genetic structure of people can indicate their gravitation towards violence. People identified at a young age or through introspection and observation of behavior at later stages of life can give us a slight indication towards the potential people.

Ensuring that these people are brought up in stable environments with love and taught right from wrong can elicit change in their tendencies rapidly. Showing them the risks of gun violence and the scale of people hurt in the process from their family, friends, educators and loved ones can also elicit a humane response. Public policies should be made while keeping the factors affecting such people in mind. Prevention efforts guided by research on developmental risk can reduce the likelihood that firearms will be introduced into community and family conflicts or criminal activity. Prevention efforts can also reduce the relatively rare

occasions when severe mental illness contributes to homicide or the more common circumstances when depression or other mental illness contributes to suicide.

But as the saying goes, nothing in life is black and white. There is always some gray area remaining. The area in question here is the ethical implementation of these tests and mechanisms to scan mere children and put them into a box of potential criminals. To discount their situations and environmental stimuli which lead to their violent or aggressive tendencies. A member of my family was always an aggressive child. They would get into fights constantly, wear an angered expression and lash out often. His educators blamed the excessive consumption of video games and violent movies. The truth was, he was bullied in school for his weight. He found lashing out and fighting back to be a defense mechanism for his own safety. Identifying this factor, helping him regain his self confidence and grow into his body reduced his bullying and his aggression. He no longer got into fights and arguments and grew up to be an extremely competent and smart adult. Had he been pushed into a box of “suspects” or future violence, he would have closed off and resorted to other coping mechanisms.

The same way, many people going through these behavioral and neural scans can feel targeted and alienated from people their age. They can feel pressurized to lash out and defend themselves while losing their self identity. I believe it is important to find the root of the problem and focus on nurturing a person to shape them into a good individual rather than focusing on their nature and pushing tags and prohibitions.

The term criminal responsibility refers to a person's ability to understand his or her conduct at the time a crime is committed. In other words, what a person is thinking when he commits a crime, or what result is anticipated or expected when a crime is committed. Laws define crimes in terms of an act or omission (actus reus) and a mental state (mens reas). Criminal responsibility relates to the mental state element of a crime. As the saying goes, “if you can’t do the time, don’t do the crime.” Personally, I believe that an individual should be held responsible for their crime, however focus should also be put on the reason behind why the crime was committed. Yes, a crime was committed, people were put at risk and harmed and punishment is necessary, but it is also important to ensure that the person committing the crime gets the help they need and is nurtured into not committing such actions again.

II. Conclusion -

To conclude, I would like to reiterate my view and shine light on the many factors which work in tandem with the biological factors causing violent behavior. Would it be easier for humans to reduce gun violence by identifying children and adults and “fire-arm proofing” them? Maybe. But it is not the end all solution to the problem. Ignoring the unethical slant of the curve, there are still enough environmental and social factors which can push a person to pick up the arm. The goal is to help these people and nurture them to find their self identity and tap into the goodness of their conscience rather than to target, isolate or alienate them.

Citation -

- <https://www.apa.org/pubs/reports/gun-violence-prevention>
- <https://www.beehive.govt.nz/sites/default/files/Biological%20Risk%20Factors.pdf>
- <https://www.cwla.org/the-impact-of-gun-violence-on-children-families-communities/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4211925/>
- <https://www.jstor.org/stable/1602741>
- https://www.youtube.com/watch?v=AF_NBWpGdIU
- <https://www.pbs.org/newshour/show/can-violent-video-games-play-a-role-in-violent-behavior>
- <https://www.pewresearch.org/fact-tank/2022/02/03/what-the-data-says-about-gun-deaths-in-the-u-s/>

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