

Biological Theories of Crime

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For ages, folks have tried to figure out why some people turn to crime by looking at their bodies and genes. The idea is that some people are just wired to break the law more easily. Back in the late 1800s, guys like Cesare Lombroso thought criminals had weird physical traits that made them different (Craven, n.d.^[1])^[2]. Now, we've moved on from that. We look at genes, brains, and how they all work together. It's not just about what you're born with, but how that mixes with what happens to you in life (Portnoy, 2023)^[3]. People are checking out genes that might make you angry or quick to act, and looking at if weird brain stuff, like messed-up chemicals, could push people towards bad actions. Of course, this brings up some big questions. Is it right to pin things on someone's biology? This field is figuring out how to balance what science says with worries about judging people based on their bodies. They are also trying to figure out how the world impacts biology. Now, they use brain scans and genes to learn more and help stop crime and help people get back on track. This writing will look at where these theories came from, who pushed them forward, how genes and brains affect crime, how life changes biology, what's wrong with thinking it's all set in stone, and how we use this info in studies and real life.

History of Biological Theories:

Theories linking crime to biology go way back to the late 1800s. People were trying to get how we act through what our bodies did

and where we came from. Cesare Lombroso was a big name! People call biological criminology his baby. Lombroso thought some people were born criminals. He thought they had old-school features—like weird foreheads or jaws—that made them break the law (Craven). He said their brains weren't cooked right, so they couldn't control themselves. It was a switch from saying society was blame.

Back then, people were also into studying skull shapes and body types to find criminals. But these ideas had problems because they were too simple. Plus, some messed-up groups used them to do scary stuff like forced operations and being nasty to certain races (Nickerson, 2023). That made biological thinking go away for a while.

But after World War II, biology and brains got cool again. Folks started mixing genes with what happens around people. Brain scans and tests let scientists peek at how brains and genes change how social stuff messes with crime (Portnoy, 2023). So, now we don't just say it's in the genes. We see a mix of body and world.

So, biological theories went from simple to mixed-up ideas. You gotta know the story to get both the good and bad parts of using bodies to get crime today.

Big Names in Biological Criminology:

Cesare Lombroso, he's the man who started it all. He thought criminals were born that way and had physical marks, he called “atavistic stigmata.” Think weird foreheads or faces meaning they were throwbacks to cavemen (Craven, n.d.^[14]). His work had

issues but he got peeps thinking about how bodies and genes might affect crime.

After Lombroso, William Sheldon said body type mattered. He figured guys with muscles were more wild (mesomorphs). People didn't like his idea so much cause it was kinda simple.

These days, Adrian Raine uses brain scans in criminology. He sees messed-up brains with anti-social and crazy people. He says that if your brain's front part doesn't work well – that part controls your impulses – you might end up a criminal (Portnoy, 2023). This new way shows how knowing about bodies mixed with real-world stuff can help get crime.

Also, James Q. Wilson mixed biology with where you live. And studying hormones like testosterone showed more ways biology and the world came together to make people do crime stuff (Nickerson, 2023).

Basically, looking at bodies to solve crime turned from head shapes to genes, brains, and lives. It's all about teasing out what makes people do bad things.

How Genes Mess with Crime:

Figuring out how genes change crime gets lots of eye. It means that what you get from your parents can kinda make you more wild. It means that what happens to you isn't the only thing to blame. It also might be in your body already. Looking at twins and adopters tells a lot about how genes and life change people. Wild twins look alike more than tame twins, which means crime comes

from family. Genes make it harder but, how it does so, is still hard to learn, though.

Studying molecules helped to get at genes that might pick fights and act quick since it is a normal trait that leads someone to crime. For instance, if your gene called MAOA is bad – they sometimes call it the warrior gene – you may start fights quick if things around you are messed up. But just cause your genes are bad, it doesn't mean that something is going to happen. It just means you are going to act more on it because social troubles or bad times as a kid (Portnoy, 2023).

Also, checking all the genes helped find the ones at low levels that make people want to do crime. Now, this could do good by shining a light on how genes make one want to do crime. It just starts problems. Nobody want to be titled already. You could have risky genes. That does not mean that you are going to be bad. You could do good because you are protected by how your life plays out along with options you create.

Today, these studies shine a light on how genes change the want to do crime. This mixed up study where the genes meet the environment plays a bigger part as opposed to saying just biology or just society plays a part (Craven). This biosocial area helps the strategies to prevent by helping issues that lead to people doing things and dealing with how outside sources play a part in crime.

Brain Biology and Crime Links:

Looking at the brain helped to learn about how it changes crime by checking what parts play a role. Studies show that if the front area, the prefrontal cortex which makes decisions and thoughts,

doesn't work right, this brings a want to act bad or be violent. Less thoughts and changes in these areas cuts the ability to show fear and to hold in aggressive acts, which may end up with committing crime. Plus, the odd thing with these individuals is the area of the brain that takes in your feelings, the amygdala (Portnoy, 2023). Those with no feelings or are aggressive in this area of the mind cause these types of actions. From these irregularities in the brain, it shows that actions go more towards body traits that people think is of outside sources and morales.

Too many chemicals in the brain plays a huge role by adjusting how a person acts bad. Like, having low serotonin plays a factor by making one want to do things without thinking and being violent, of which are things people who go out and commit violent actions play. When chemical dopamine isn't working it changes how the reward acts and wants to lead to risky options, that could lead to acts against the law to get what they want now.

Hormones, like testosterone, plays a similar part with aggressive actions that could lead to criminal acts (Craven). How these types of chemicals in the brain act is how biochemicals plays apart in traits that connect to criminology.

Advancements and brain imaging studies like fMRI, allows experts observe whats going on in real time between offenders and those who doing have behavior characteristics. These studies help to find out normal responses by people when it comes to feelings or if they're in trial compared to those who are watched.

These links doesnt show that there are musts due to world variables interplaying biologically; However, they give out strong evidence that crime cant be fully understood before checking the brain biology systems (Portnoy, 2023). When people Understand

this, it helps not only the mind aspect but also help methods to deal with disorders that lead to behavior.

World sources and Biological Interactions:

World sources play a leading spot in adjusting how biology leans for someone wanting to commit crime, which puts importance in getting how body and world plays with one another. Biosocial criminology puts that genes or messed up brain does not just act out on their own. It brings in what's going like home life, where society stands, school, and even things like trauma or drinking. With that, someone with gene markers for action or fighting are going to show wild actions when near outside sources such as being ill treated or being stressed as a child (Portnoy, 2023).

Development brain studies help show how people change and adjust through experience early on. Outside sources that mess with someone during development times lead neural paths that involves feeling and decisions, possibly growing someone want to do wild actions. On the other hand, helping spots help bring confidence even near those genetically wanting to do bad. It is important to consider both family traits and what the environment brings for criminology.

Epigenetics brings light to understanding how world experiences change gene ways without changing DNA. Stressful times, like being poor or left on the side, start epigenetic changes that change neurotransmitter systems that bring action and control. These adjustments do have lasting effects on how someone acts and can be passed through family lines, which leads to repeating crime in families under places with social trouble (Portnoy, 2023).

Also, it backs up a idea of knowing crime because of constant back and forth action.

This idea leans the support for policies to do things early and improvements to the environment other than pointing to individual biology. Society can help fix some issues- by raising education or dropping disadvantages neighborHoods- and drop the chance that it turns too committing crime. This shows that there are new views to help solve crime issues through the science ways.

Problems with Biological Determinism in Crime:

People often slam biological determinism in crime because it's too simple to say biology alone causes crime. Biological determinism tends to oversimplify why people commit crimes by saying it's all in their genes or brain. They skip out on all the social, money, and cultural stuff that affects what people do. Critics say this way of thinking can make people judge others based on their genes, which could lead to unfair treatment and policies that mess with people's rights and fair play (Portnoy, 2023). Also, when people used to think about crime based on biology, it led to some bad stuff, like eugenics and racism. Like Lombroso related crime as facial features, which is not right.

Another big problem is how these biological crime studies are done. A lot of them have small groups of people they are studying, don't follow them for long enough, and can't control all the outside stuff that could be messing with the results. This makes it hard to know if biology really causes crime or if it's just related. Like, maybe those brain problems in offenders come from bad experiences, not genes. So, critics want people to look at both biology and environment together, not just biology alone.

People also point out that if we focus too much on biology, we might not notice the unfair stuff in society. Things like being poor, not getting a good education, bad communities, and unfair biases all play a big part in what people do. If we just look at biology, we might miss these bigger issues that are super important for stopping crime. This agrees with the views that we should look at all things in crime.

In short, most of the arguments on biological determinism comes down to it being too simple, bad ethics, has flawed methods. All of these things push people to think about crime in a more balanced way, that involves both biology and life (Portnoy, 2023).

How Biological Theories Work in Modern Times:

These days, when people study crime from a biological angle, they're, more or less, trying to consider how genes, brains, and life come together, instead of thinking like everyone is just born as a criminal. In recent study, people are using brain scans, tests, and gene checks to find biological sign. For real world instance, brain scans have shown that people who struggle to control themselves and their emotions might be more prone to aggression and breaking rules. All of this helps everyone know and is helpful in understanding people.

In the real world, police and others use this information to think about who might commit crimes again or do bad things. They use brain info to add with regular mental evaluations. Also, treatments based on biology try to fix chemical imbalances in the brain that can lead to aggression. Programs are also trying to solve lack of nutrition, as they relate to behaviors of people.

The new biological side steps over on the old idea. In general, there is a lot of abuse cases of this type of thinking. Thus, most think of biology, like one of the many factors that comes into equation. (Portnoy, 2023). Overall, most of the thinking is to increase the accuracy in determining reasons for the cause.

References:

Nickerson, C., (2023). Biological Theories of Crime -
—Simply Psychology^[T5]. Retrieved from
<https://www.simplypsychology.org/biological-theories-crime.html>.

Portnoy, J., (2023). Biosocial Criminology: History,
Theory, Research Evidence, and
Policy^[T6]. Retrieved from
<https://www.tandfonline.com/doi/full/10.1080/15564886.2022.2133035>^[T7].

(2010)^[T8]. The Criminal Brain: Understanding Biological Theories
of Crime^[T9] Retrieved from
<https://muse.jhu.edu/pub/6/article/381713/pdf>.