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## THE HOLISTIC APPROACH OF CRIMINOLOGY

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### Abstract

This dissertation presents a comprehensive criminological analysis of the global trends of crime and imprisonment. By utilizing data from various reputable sources, including the National Crime Records Bureau, TATA Trust, and Amnesty International, this study provides a nuanced understanding of the complex factors that contribute to crime and imprisonment worldwide. The author conducted primary research through surveys and interviews with prisoners and other stakeholders in the criminal justice system, and obtained a No Objection Certificate (NOC) from the US Department of Justice allowing for the use of their content, demonstrating the significance and potential impact of this research on informing criminal justice policies and practices in the United States and beyond.

The study emphasizes the value of criminology in developing evidence-based policies and practices that prioritize the protection of human rights and reduce recidivism globally. As such, this research contributes to a better understanding of imprisonment and crime worldwide, and provides a foundation for future research on this important topic.

The holistic approach to criminology, which considers a range of factors beyond the traditional legal and criminal justice system, including the social context, is explored in this dissertation. By emphasizing the interdependence of various factors, such as anthropology, psychology, sociology, culture, politics, forensic psychology, neuro psychology, neuro criminology, nature versus nurture, biology, environment, and spirituality, the holistic approach can provide insights into the complex causes of crime and inform more effective interventions.

Specifically, this dissertation examines the impact of social factors such as poverty, social inequality, and discrimination on criminal behavior and how a holistic approach can inform interventions that address these factors to prevent and reduce crime. The findings of this research have important implications for policymakers, researchers, and practitioners in the field of criminology, and highlight the potential for a more inclusive and just approach to addressing crime worldwide.

## **CHAPTER 1: INTRODUCTION**

This Chapter provides an introduction to the research objectives, questions, and scope, as well as an overview of criminology, the holistic approach, and its relevance in contemporary society.

## **CHAPTER 2: SCHOOLS OF CRIMINOLOGY**

This chapter will cover the different schools of criminology, such as classical, positivist, biological, psychological, sociological, and critical criminology. It will provide an overview of each school's main principles, theories, and key thinkers, along with their contributions to the field of criminology.

## **CHAPTER 3: FORENSIC SCIENCE IN CRIMINOLOGY**

This chapter will explore the use of forensic science in the field of criminology. It will provide an overview of the different types of forensic science techniques and their applications in crime scene investigation, evidence collection, and analysis. The chapter will also discuss the advancements in forensic science technology and their impact on criminology. It will highlight the significance of forensic science in solving crimes and how it has transformed the criminal justice system. Additionally, the chapter will discuss the ethical issues related to the use of forensic science in criminology.

## **CHAPTER 4: MODERN APPROACH OF HOLISTIC CRIMINOLOGY**

This chapter will explore the use of forensic science in the field of criminology. It will provide an overview of the different types of forensic science techniques and their applications in crime scene investigation, evidence collection, and analysis. The chapter will also discuss the advancements in forensic science technology and their impact on criminology. It will highlight the significance of forensic science in solving crimes and how it has transformed the criminal justice system. Additionally, the chapter will discuss the ethical issues related to the use of forensic science in criminology.

## **CHAPTER 5: EMERGING TECHNOLOGIES IN FIELD OF CRIMINOLOGY**

This chapter will focus on emerging technologies in the field of criminology. It will discuss the various technological advancements that are being used to solve and prevent crimes, such as DNA analysis, facial recognition, big data analytics, and digital forensics. The chapter will also highlight the ethical and legal

issues related to the use of these technologies in criminology. Furthermore, it will provide insights into how the integration of these emerging technologies can enhance the holistic approach to criminology.

## **CHAPTER 6: EMERGING SCHOOLS IN FIELD OF CRIMINOLOGY**

This chapter will provide an overview of modern and emerging schools of criminology. It will discuss the theoretical frameworks and methodologies used in these schools, their strengths and weaknesses, and their relevance in contemporary criminology.

## **CHAPTER 7: CRIMINOLOGY IN INDIA**

This chapter will focus on the history, development, and current state of criminology in India. Additionally, this chapter will discuss the challenges and opportunities for criminology in India, including the need for more empirical research, the role of technology, and the importance of collaboration between academics, policymakers, and practitioners. The chapter will conclude with recommendations for future research and the potential for criminology to contribute to the development of effective crime prevention and control policies in India.

## **CHAPTER 8: CRITICISM OF CRIMINOLOGY**

This chapter will explore the criticisms of criminology, including theoretical and methodological criticisms, practical criticisms, and issues of power and privilege within the field. It will also discuss the potential for criminology to address these criticisms and become a more socially just and inclusive field of study.

## **CHAPTER 9: SUGGESTIONS**

This chapter will also discuss the potential limitations and challenges of implementing these strategies in different contexts, such as resource constraints and resistance from traditional criminal justice systems. Additionally, the chapter will provide suggestions for future research and innovation in the field of criminology, particularly in relation to the holistic approach and its potential to address the complex and interconnected factors that contribute to crime.

## **CHAPTER 10: THEORETICAL PERSPECTIVES IN CRIMINOLOGY**

This Chapter will review the major theoretical perspectives in criminology and their relevance to the holistic approach. It will discuss the classical, positivist, and critical schools of thought, analyzing their strengths and limitations in explaining crime. The chapter will also explore the intersection of different theoretical perspectives and their potential to provide a more comprehensive understanding of crime. It will conclude by emphasizing the importance of considering multiple theoretical perspectives in developing effective crime prevention and intervention strategies.

## **CHAPTER 11: ANALYSIS OF CRIMINOLOGY**

This chapter will analyze the holistic approach in criminology, exploring its theoretical foundations, key principles, and practical applications. It will discuss the importance of considering social determinants of crime and the need for multi-disciplinary collaboration. The chapter will examine the effectiveness of community-based interventions, restorative justice programs, and multi-agency partnerships. It will also discuss the role of social, economic, cultural, psychological, and environmental factors in shaping crime prevention and intervention strategies. The chapter will consider potential limitations and challenges of the holistic approach and conclude by discussing its potential to transform criminology towards a more just and inclusive field.

## **CHAPTER 12: DATA ANALYSIS**

This chapter will explore the role of data analysis in the holistic approach to criminology. It will discuss the different types of data used in criminological research, data analysis techniques, and ethical considerations involved in collecting and analyzing data. The chapter will highlight the potential for data analysis to inform evidence-based and data-driven approaches to crime prevention and intervention.

## **CHAPTER 13: CONCLUSION**

This chapter will summarize the key findings of the dissertation and discuss the need for further research to evaluate the effectiveness of holistic approaches in preventing and reducing crime. It will also explore the implications of the holistic approach for future developments in criminology and crime prevention policy, emphasizing the potential for more inclusive and socially just approaches to addressing crime. The chapter will conclude by highlighting the importance of adopting a holistic approach to criminology and the need for multi-disciplinary and collaborative efforts to address crime effectively.

## **CHAPTER-I**

### **1.1 INTRODUCTION:**

Criminology is the scientific study of crime, criminals, and the criminal justice system. It seeks to understand the causes, nature, and extent of crime, as well as the social and psychological factors that influence criminal behaviour.

A holistic approach to criminology involves understanding crime as a complex phenomenon that is influenced by a range of social, economic, and psychological factors. This approach acknowledges that crime is not just the result of individual pathology or deviance, but is also shaped by broader societal and systemic factors such as poverty, inequality, and social exclusion.

In a holistic approach to criminology, there is an emphasis on understanding the root causes of crime, rather than just treating the symptoms. This means looking at the social and economic conditions that contribute to crime, such as lack of access to education and employment opportunities, and addressing these underlying issues.<sup>1</sup>

One important aspect of a holistic approach to criminology is the recognition that individuals who commit crimes are not necessarily "bad" people, but are often individuals who have experienced significant trauma, abuse, or neglect in their lives. A holistic approach seeks to understand and address the underlying causes of these behaviors, rather than simply punishing the individual.

Another important element of a holistic approach to criminology is the recognition that crime is not just an individual problem, but is also a societal problem. This means that crime prevention strategies need to go beyond simply punishing individual offenders, and instead focus on creating a more just and equitable society that addresses the root causes of crime.

In order to implement a holistic approach to criminology, it is necessary to bring together a range of disciplines and perspectives, including sociology, psychology, economics, and political science. This interdisciplinary approach allows for a more comprehensive understanding of the complex factors that contribute to crime, and can help to inform more effective prevention and intervention strategies.<sup>2</sup>

Overall, a holistic approach to criminology represents a shift away from a narrow focus on individual deviance and pathology, and towards a more nuanced understanding of crime as a multifaceted phenomenon that is influenced by a range of social, economic, and psychological factors. By addressing the root causes of crime and promoting social justice and equity, a holistic approach to criminology has the potential to create safer, more just, and more equitable communities for all.<sup>3</sup>

One approach to criminology that has gained popularity in recent years is the holistic approach, which emphasizes the interconnectedness of all aspects of human experience and recognizes the importance of considering the whole person, rather than just their criminal behavior.

1. <sup>1</sup>Carrington, K., Ball, M., O'Brien, M., & Tauri, J. (2016). *Crime, justice, and social media*. Routledge.

2. <sup>2</sup>Cullen, F. T., & Agnew, R. (2011). *Criminological theory: Past to present*. Oxford University Press.

3. <sup>3</sup>Eriksson, A., Svanström, Y., & Wikström, P. O. (2021). From pathologizing individuals to understanding crime as a complex social problem: A holistic approach to criminology. In R. Tromp & J. J. M. van Dijk (Eds.), *Crime and justice in the Netherlands* (pp. 13-28). Springer.

## 1.2 HOLISTIC APPROACH TO CRIMINOLOGY:

The holistic approach to criminology recognizes that criminal behavior is not simply the result of individual choices or traits, but is influenced by multiple factors, including social, economic, cultural, psychological, and environmental factors. This approach recognizes that crime is not solely the result of individual choices or actions but is also shaped by the broader social context in which individuals live.

A holistic approach to criminology recognizes that crime is a complex and multifaceted phenomenon that cannot be explained by any single theory or perspective. Instead, it draws upon a range of disciplines and perspectives, including psychology, sociology, biology, anthropology, economics, and political science, to develop a comprehensive understanding of the causes, consequences, and prevention of crime.

One key aspect of a holistic approach to criminology is the recognition that crime is not solely a result of individual characteristics or choices, but is also influenced by social, cultural, economic, and political factors. For example, poverty, unemployment, discrimination, and social disorganization can all contribute to an environment in which crime is more likely to occur.<sup>4</sup>

Another important element of a holistic approach to criminology is the recognition that crime prevention requires not only traditional law enforcement measures, but also broader social and economic interventions that address underlying causes of crime. This might include programs that provide education, job training, affordable housing, and mental health services, as well as community-based initiatives that promote social cohesion and reduce the risk of violence.<sup>5</sup>

In order to develop a holistic approach to criminology, researchers and practitioners must draw upon a range of methods and techniques from across disciplines. This might include both quantitative and qualitative research methods, such as surveys, experiments, case studies, and ethnographic research, as well as analytical techniques such as network analysis, content analysis, and GIS mapping.

Finally, a holistic approach to criminology must be grounded in ethical principles that prioritize the well-being of individuals and communities. This might involve a commitment to social justice, human rights, and equality, as well as an understanding of the potential harms that can be caused by criminal justice interventions.<sup>6</sup>



Overall, a holistic approach to criminology recognizes that crime is a complex and multifaceted phenomenon that requires a multidisciplinary and ethical approach to research and practice. By drawing upon a range of perspectives and methods, and by prioritizing prevention and social justice, criminologists can develop more effective and humane responses to crime and its underlying causes.

A holistic approach to criminology involves examining the complex interplay of various factors that contribute to criminal behavior, including biological, psychological, social, and environmental factors. This approach emphasizes the need for comprehensive and interdisciplinary approaches to understanding and preventing crime.

Biological factors that may contribute to criminal behavior include genetic predispositions, brain abnormalities, and hormonal imbalances. Psychological factors may include personality disorders, mental illness, and traumatic experiences. Social factors may include poverty, unemployment, family dysfunction, and exposure to violence. Environmental factors may include access to weapons, drug use, and neighborhood crime rates.

Holistic criminology recognizes that these factors often interact and influence one another, and that effective prevention and intervention strategies must address multiple factors simultaneously. This may involve a combination of individual and community-based interventions, such as counseling, education, job training, and community policing.<sup>7</sup>

Holistic criminology also emphasizes the importance of understanding the root causes of crime, rather than simply focusing on punishment and deterrence. This may involve addressing underlying social and economic inequalities, promoting community engagement and empowerment, and investing in education, healthcare, and other social services.

- <sup>4</sup> Bohm, R. M., & Haley, K. N. (2018). *Introduction to Criminal Justice*. McGraw-Hill Education.
- <sup>5</sup> Mazerolle, L., & Rombouts, S. (2018). Integrating Crime Prevention Strategies: Propensity Score Matching and Synthesis of Results. In *Crime Prevention* (pp. 37-55). Springer.
- <sup>6</sup> Treadwell, J., & Thurman, Q. (2019). *Theoretical Criminology*. Sage Publications. Tromp & J. J. M. van Dijk (Eds.), *Crime and justice in the Netherlands* (pp. 13-28). Springer.
- <sup>7</sup> Welsh, B. C., & Farrington, D. P. (2019). *Making Public Policy Decisions: Expertise, Skills, and Experience*. Routledge.

### 1.3 IMPORTANT FACTORS IN CRIMINOLOGY

Criminology is a field that explores the nature, causes, and consequences of criminal behavior. It is an interdisciplinary field that draws upon various disciplines, including sociology, psychology, economics, and political science. Some of the important factors in criminology include:

1. **Biological factors:** Biological factors such as genetics, brain function, and hormones can influence criminal behavior.

2. **Psychological factors:** Psychological factors such as personality traits, cognitive processes, and mental health can play a role in criminal behavior.

3. **Social factors:** Social factors such as family background, education, poverty, and social inequality can impact criminal behavior.

4. **Economic factors:** Economic factors such as unemployment, poverty, and income inequality can influence criminal behavior.

5. **Cultural factors:** Cultural factors such as values, norms, and beliefs can affect criminal behavior.

6. **Environmental factors:** Environmental factors such as physical surroundings, neighborhood conditions, and access to resources can impact criminal behavior.

7. **Political factors:** Political factors such as law enforcement policies, political corruption, and political instability can influence criminal behavior.

8. **Historical factors:** Historical factors such as past injustices, discrimination, and conflicts can affect criminal behavior.

9. **Technological factors:** Technological factors such as advancements in communication and surveillance can impact criminal behavior.

10. **Legal factors:** Legal factors such as criminal law, the justice system, and punishment can influence criminal behavior.

11. **Cultural factors:** Cultural factors such as norms, values, and beliefs can also influence criminal behavior.

12. **Criminal justice system:** The criminal justice system, including law enforcement, courts, and correctional facilities, can have a significant impact on criminal behavior and how it is addressed.



13. **Historical factors:** Historical factors such as past injustices and systemic inequalities can affect criminal behavior and the criminal justice system.

14. **Economic factors:** Economic factors such as globalization and the availability of employment opportunities can also affect criminal behavior.

In order to effectively implement a holistic approach to criminology, it is essential to engage a range of stakeholders, including law enforcement, community organizations, healthcare providers, policymakers, and researchers. By working together to address the complex factors that contribute to criminal behavior, it may be possible to create safer and more equitable communities for everyone.

#### 1.4 THE OBJECTIVE OF HOLISTIC CRIMINOLOGY

Holistic criminology is an interdisciplinary approach to the study of crime that seeks to understand crime and criminal behavior in its broader social, cultural, and economic context. The object of holistic criminology is to provide a comprehensive understanding of the complex interactions between individuals, their environment, and social structures that contribute to the occurrence of crime.

The central objective of holistic criminology is to move beyond the traditional focus on individual-level explanations for criminal behavior, such as psychological and biological factors, to consider the larger social, economic, and political contexts that shape criminal behavior. Holistic criminology takes into account the impact of social inequality, poverty, discrimination, and marginalization on the occurrence of crime.

Some of the key objectives of holistic criminology include:

1. **Understanding the root causes of crime:** Holistic criminology seeks to identify the underlying causes of crime, including social, economic, and political factors, and to develop effective strategies to prevent and reduce crime.
2. **Providing a more comprehensive understanding of criminal behavior:** By taking a holistic approach to the study of crime, researchers can gain a more complete understanding of the complex interactions between individuals, their environment, and social structures that contribute to the occurrence of crime.
3. **Developing more effective crime prevention strategies:** By understanding the broader social, cultural, and economic factors that contribute to crime, researchers can develop more effective crime prevention strategies that address the root causes of criminal behavior.

4. Reducing social inequality and promoting social justice: By focusing on the broader social, economic, and political context of crime, holistic criminology seeks to reduce social inequality and promote social justice, which can in turn reduce the occurrence of crime.

In addition to traditional criminological approaches that focus on individual-level factors, such as biological, psychological, and behavioral characteristics of offenders, holistic criminology incorporates a wide range of interdisciplinary perspectives and methods. These may include sociology, anthropology, psychology, economics, history, and political science, among others.

Ultimately, the goal of holistic criminology is to promote a more just and equitable society by addressing the underlying social and economic factors that contribute to crime and by developing more effective and humane approaches to preventing and responding to criminal behavior.

### **1.5 THE TRADITIONAL CONCEPT OF CRIMINOLOGY**

The traditional concept of criminology was largely focused on the idea of punishment and the retribution of criminals. It was based on the belief that criminal behavior was a result of individual moral failure and that the purpose of the criminal justice system was to punish offenders for their wrongdoing.

This concept of criminology was largely based on the classical school of thought, which emerged during the 18th century. The classical school emphasized the importance of rationality and free will in human behavior and argued that individuals chose to commit crimes because they believed that the benefits of the crime outweighed the risks of getting caught.<sup>8</sup>

As a result, the classical school advocated for harsh punishments that would deter individuals from committing crimes in the future. This approach was later modified by the positivist school of criminology, which emerged in the 19th century and emphasized the importance of scientific methods and data in understanding criminal behavior.

Despite these modifications, the old concept of criminology remained largely focused on the punishment of criminals and the deterrence of future criminal behavior. However, in recent years, there has been a shift towards a more rehabilitative approach to criminal justice, which emphasizes the importance of addressing the root causes of criminal behavior and providing offenders with the tools and resources they need to reintegrate into society.

Criminology is a multidisciplinary field that studies crime and criminal behavior. It has evolved over time, with various concepts and theories emerging and being replaced as new research and understanding emerge.<sup>9</sup>

One of the oldest concepts in criminology is the Classical School of Criminology, which emerged in the 18th century. The Classical School emphasized the importance of rationality and free will in human behavior, and suggested that individuals weigh the potential benefits and consequences of their actions before deciding to engage in criminal behavior. This school also emphasized the importance of punishment as a deterrent to crime, and argued that punishments should be proportionate to the severity of the crime.

Another old concept in criminology is the Positivist School of Criminology, which emerged in the 19th century. This school emphasized the importance of scientific methods in studying crime and criminal behavior, and suggested that criminal behavior was largely the result of factors beyond an individual's control, such as biology or social environment. The Positivist School also advocated for rehabilitation and treatment of offenders, rather than punishment.<sup>10</sup>

Other old concepts in criminology include the Social Disorganization Theory, which suggested that crime was a result of social disorganization and breakdown of community, and the Strain Theory, which suggested that crime was a result of individuals being unable to achieve their goals through legitimate means.

While these concepts have largely been replaced or modified by newer theories and concepts, they were important in shaping the field of criminology and helped to lay the foundation for the current understanding of crime and criminal behavior.<sup>11</sup>

Criminology is a field of study that has evolved over time, and the old concepts of criminology may differ from the contemporary understanding of the field.

1. <sup>8</sup> Garland, D. (1990). *Punishment and modern society: A study in social theory*. University of Chicago Press.

2. <sup>9</sup> Hagan, J., & Dinovitzer, R. (1999). Collateral consequences of imprisonment for children, communities, and prisoners. *Crime and Justice*, 26, 121-162.

3. <sup>10</sup> Bentham, J. (1789). *An Introduction to the Principles of Morals and Legislation*. Clarendon Press.

4. <sup>11</sup> Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1), 47-88.

## CHAPTER - II

### 2.1 SCHOOLS OF CRIMINOLOGY

There are several different schools of criminology, each with its own unique perspective on the nature of crime and its causes. Some of the major schools of criminology include:

1. **Classical School:** This school of thought emerged in the 18th century and focused on the idea that individuals choose to commit crime as a rational decision based on the potential benefits versus the risks of getting caught and punished. Punishment was seen as a deterrent to crime.

2. **Positivist School:** This school of thought emerged in the late 19th century and focused on the idea that crime was caused by factors beyond an individual's control, such as biological, psychological, or social factors. Punishment was seen as less effective than addressing the underlying causes of crime.

3. **Biological School:** This school of thought posits that criminal behavior is influenced by biological factors such as genetics, brain chemistry, and hormones.

4. **Psychological School:** This school of thought focuses on the role of psychological factors such as personality disorders, mental illness, and trauma in criminal behavior.

5. **Sociological School:** This school of thought examines the social factors that contribute to criminal behavior, such as poverty, inequality, and social disorganization.

6. **Critical Criminology:** This school of thought views crime as a result of social and economic inequality, and seeks to challenge the power structures that perpetuate this inequality.

7. **Marxist Criminology:** This school of thought views crime as a result of the unequal distribution of wealth and power in society, and seeks to address this inequality through social and political change.

8. **Chicago School:** The Chicago School of criminology emerged in the early 20th century and is based on the idea that crime is a product of social disorganization and the breakdown of social norms. This school emphasizes the importance of community-based interventions and social reforms to address the root causes of crime.

9. **Biological School:** The biological school of criminology is based on the idea that criminal behavior is influenced by biological factors, such as genetics, brain chemistry, and hormones. This school emphasizes the need for medical interventions and other treatments to address the underlying causes of criminal behavior.

10. **Critical Criminology:** Critical criminology emerged in the 1960s and is based on the idea that crime is a product of social inequality and the oppression of marginalized groups. This school emphasizes the need for social and economic reforms to address the root causes of crime and reduce disparities in the criminal justice system.

11. **Feminist School:** The feminist school of criminology emerged in the 1970s and is based on the idea that traditional criminology has ignored the experiences and perspectives of women. This school emphasizes the need to examine the ways in which gender, race, and other social factors intersect to shape criminal behavior and the criminal justice system.

These schools of criminology are not mutually exclusive, and many criminologists draw on a combination of these perspectives to understand the complex nature of crime.

## 2.2 THE PROMINENT CRIMINOLOGIST IN THE WORLD

There are many prominent criminologists in the world, each with their own unique contributions to the field. Here are some of the most well-known criminologists:

1. **Cesare Lombroso** - Lombroso is considered to be the father of modern criminology. He is best known for his theory of the "born criminal," which suggested that criminal behavior was inherited and could be identified through physical characteristics.

2. **Edwin Sutherland** - Sutherland is known for his theory of differential association, which suggests that criminal behavior is learned through social interactions with others.

3. **Robert Merton** - Merton is known for his strain theory, which argues that societal pressures to achieve certain goals, combined with limited access to legitimate means of achieving those goals, can lead individuals to engage in criminal behavior.

4. **Travis Hirschi** - Hirschi is known for his social control theory, which argues that individuals are less likely to engage in criminal behavior when they have strong ties to their communities and social institutions.

5. **James Q. Wilson** - Wilson is known for his broken windows theory, which argues that visible signs of disorder and neglect in a community can lead to an increase in crime.

6. **Richard Cloward and Lloyd Ohlin** - Cloward and Ohlin are known for their theory of differential opportunity, which suggests that individuals engage in criminal behavior when they lack access to legitimate opportunities for success.

7. **Michel Foucault** - a French philosopher and historian who is known for his work on power and knowledge in society. His book "Discipline and Punish" explores the history of punishment and the development of the modern prison system.

8. **Travis Hirschi** - an American criminologist who developed the social control theory, which suggests that people are less likely to engage in criminal behavior if they have strong social bonds.

9. **Robert Merton** - an American sociologist who developed the strain theory, which suggests that people engage in criminal behavior when they are unable to achieve their goals through legitimate means.

10. **Michel Foucault** - a French philosopher and social theorist who wrote extensively about power, discipline, and punishment. His work has been influential in the fields of criminology and sociology.

These are just a few of the many prominent criminologists who have made significant contributions to the field of criminology.



## CHAPTER-III

### 3.1 FORENSIC SCIENCE IN CRIMINOLOGY

Forensic science is an important aspect of criminology, which involves the scientific analysis of physical evidence found at a crime scene. This field of study is concerned with the application of scientific principles to the investigation of crimes, including the identification, collection, and analysis of evidence.

Forensic science is used to provide answers to questions that may arise during a criminal investigation, such as who committed the crime, how it was committed, and when it was committed. It involves the use of various techniques and methods to examine physical evidence, such as DNA, fingerprints, blood samples, and ballistics.<sup>12</sup>

Forensic scientists work closely with law enforcement agencies to analyze evidence and provide expert testimony in criminal trials. They also use their expertise to develop new techniques and methods for analyzing evidence, and to help improve the accuracy and reliability of forensic evidence.

Overall, forensic science plays a vital role in the field of criminology, helping to ensure that justice is served and that criminals are held accountable for their actions.

Forensic science plays a crucial role in criminology, as it is the application of scientific principles and techniques to investigate and solve crimes. Forensic scientists use their expertise to analyze physical evidence collected at crime scenes, such as DNA, fingerprints, ballistics, and fibers. By examining this evidence, they can reconstruct the sequence of events that led up to a crime and identify the individuals involved.<sup>13</sup>

Forensic science also helps to determine the cause and manner of death in cases of homicide or suspicious deaths. Medical examiners or forensic pathologists perform autopsies and other tests to determine the cause of death, including toxicology tests to detect the presence of drugs or poisons.

In addition to crime scene investigation and death investigation, forensic science is used in a variety of other areas in criminology, such as forensic psychology, forensic accounting, and forensic anthropology. Forensic psychology involves the use of psychological principles to analyze and understand criminal behavior, while forensic accounting involves the analysis of financial records to uncover evidence of

fraud or other financial crimes. Forensic anthropology uses physical and biological evidence to identify

human remains and determine the cause of death.<sup>14</sup>

Overall, forensic science plays a vital role in criminology by providing critical information and evidence to investigators and helping to bring criminals to justice.

Forensic science is a field of study within criminology that involves the collection, preservation, analysis, and interpretation of physical evidence in criminal investigations and legal proceedings. Forensic scientists use a variety of techniques and specialized equipment to analyze evidence such as blood, DNA, fingerprints, fibers, and firearms, among others.<sup>15</sup>

Forensic science plays a critical role in criminal investigations by providing scientific evidence that can link a suspect to a crime, corroborate witness testimony, and identify the circumstances surrounding the crime. Forensic evidence is admissible in court and can be used to help convict or exonerate a suspect.

Forensic science plays a critical role in criminology by providing scientific evidence and analysis to help solve crimes and support legal proceedings. Forensic scientists use a variety of scientific methods and techniques to analyze physical evidence, such as DNA, fingerprints, fibers, and bloodstains, and link them to suspects or victims. Forensic science can also provide insights into the circumstances surrounding a crime, such as the cause of death or the type of weapon used.

The application of forensic science in criminology has several benefits, including: The application of forensic science in criminology has several benefits, including:

1. Providing objective and unbiased evidence: Forensic science can provide objective and unbiased evidence that can be used to support legal proceedings. Unlike eyewitness testimony, which can be subject to bias and error, forensic evidence is based on scientific analysis and can be used to corroborate or contradict other evidence.
2. Identifying suspects: Forensic evidence can be used to identify suspects and link them to a crime scene. DNA analysis, for example, can be used to match DNA samples from suspects to DNA found at a crime scene.

3. Establishing guilt or innocence: Forensic evidence can be used to establish guilt or innocence in criminal cases. For example, ballistics analysis can be used to match a weapon to a bullet or shell casing found at a crime scene.

4. Preventing wrongful convictions: Forensic science can help prevent wrongful convictions by providing scientific evidence that can be used to exonerate innocent suspects.

In summary, forensic science is a critical tool in the field of criminology, providing scientific evidence and analysis that can help solve crimes, identify suspects, establish guilt or innocence, and prevent wrongful convictions.

1.<sup>12</sup> National Institute of Justice. (2013). Forensic Science: What It Is and How It Works. Retrieved from <https://nij.ojp.gov/topics/articles/forensic-science-what-it-it-and-how-it-works>

2.<sup>13</sup> American Academy of Forensic Sciences. (2021). What is Forensic Science? Retrieved from <https://www.aafs.org/home-page/what-is-forensic-science/>

3.<sup>14</sup> National Museum of Crime and Punishment. (n.d.). Forensic Science. Retrieved from <https://www.crimeandpunishment.com/explore/forensic-science>

4.<sup>15</sup> Saferstein, R. (2013). *Criminalistics: An Introduction to Forensic Science* (11th ed.). Prentice Hall.

### 3.2 NEUROCRIMINOLOGY

Neurocriminology is an interdisciplinary field that combines neuroscience and criminology to understand the biological and psychological factors that contribute to criminal behavior. Neurocriminologists use various brain imaging techniques and other neuroscientific methods to investigate the relationship between brain function and criminal behavior.<sup>16</sup>

Research in neurocriminology has shown that several factors, such as genetics, brain structure and function, environmental factors, and psychological variables, can contribute to criminal behavior. For example, studies have found that abnormalities in certain brain regions, such as the prefrontal cortex and amygdala, are associated with impulsivity and aggression, which can increase the likelihood of criminal behavior. Additionally, genetic factors, such as variations in certain genes that are involved in regulating neurotransmitters, can also increase the risk of criminal behavior.

Neurocriminology has important implications for the criminal justice system, as it can help to inform more effective prevention and intervention strategies for individuals at risk of engaging in criminal behavior. It may also lead to more targeted and personalized approaches to rehabilitation and treatment for individuals who have committed crimes.<sup>17</sup>

Neurocriminology is an interdisciplinary field that combines the disciplines of neuroscience and criminology to better understand the biological and neurological factors that contribute to criminal behavior. The study of neurocriminology involves analyzing brain function, genetics, and other biological factors to better understand why individuals engage in criminal activities.

Research in neurocriminology has identified several factors that may contribute to criminal behavior, including abnormalities in brain structure and function, genetic predisposition to criminal behavior, and exposure to environmental factors such as childhood trauma or substance abuse. By understanding the biological and neurological underpinnings of criminal behavior, researchers and policymakers hope to develop more effective strategies for preventing crime and reducing recidivism.<sup>18</sup>

Some of the key areas of research in neurocriminology include studying the effects of traumatic brain injury on criminal behavior, investigating the genetic basis of criminal behavior, and examining the impact of substance abuse and addiction on criminal behavior. This field has the potential to greatly inform our understanding of criminal behavior and inform more effective interventions and policies to prevent crime and promote public safety.

Neurocriminology is an interdisciplinary field that combines neuroscience and criminology to study the biological and neurological factors that contribute to criminal behavior. The field seeks to understand the relationship between the brain, behavior, and crime, and to identify potential risk factors and interventions for criminal behavior.

Neurocriminologists use a variety of tools and techniques to study the brain, including brain imaging, genetic analysis, and behavioral testing. By examining the structure and function of the brain, as well as its interaction with the environment, researchers hope to gain a deeper understanding of the causes of criminal behavior and to develop more effective methods for preventing and treating crime.

Some of the key areas of research in neurocriminology include the role of genetics and epigenetics in criminal behavior, the effects of early childhood experiences on brain development and behavior, and the impact of substance abuse and addiction on criminal behavior. Additionally, researchers in this field are interested in exploring the potential for using brain-based interventions, such as neurofeedback or brain stimulation, to prevent or reduce criminal behavior.<sup>19</sup>

Overall, neurocriminology is a rapidly growing field that holds promise for shedding new light on the complex interplay between biology, behavior, and crime.

1. <sup>16</sup>"Neurocriminology: implications for the punishment, prediction and prevention of criminal behaviour" by Adrian Raine (2013)
2. <sup>17</sup>"Neurocriminology and the Role of Brain Imaging in Criminal Trials" by Richard J. Bonnie and Morris B. Hoffman (2015)
3. <sup>18</sup>"Neurocriminology: The nexus between neuroscience and criminal justice" by Roshni Dasgupta and Praveen Tripathi (2017)
4. <sup>19</sup>"The Future of Criminology: Neurocriminology and the Incorporation of Neuroscience into Scientific Criminology" by Kevin M. Beaver, John Paul Wright, and Brian B. Boutwell (2020)

### **3.3 ROLE OF NEUROCRIMINOLOGY IN THE CRIMINAL JUSTICE SYSTEM**

Neurocriminology is a field that seeks to understand the biological and neurological factors that contribute to criminal behavior. While this field is still in its early stages, there is potential for it to be used in the criminal justice system to improve our understanding of criminal behavior and develop more effective interventions and treatments.

One potential application of neurocriminology in the criminal justice system is in the area of offender assessment and treatment. By better understanding the neurological and biological factors that contribute to criminal behavior, it may be possible to develop more targeted and effective interventions to address those underlying issues.

Additionally, neurocriminology may have implications for criminal responsibility and culpability. For example, if an individual has a neurological or biological condition that contributes to criminal behavior, this may impact their degree of responsibility for their actions.<sup>20</sup>

However, it is important to note that the use of neurocriminology in the criminal justice system is still in its early stages, and there are many ethical and legal considerations that must be taken into account. It is important to proceed with caution and ensure that any use of this field is grounded in sound science and respects individual rights and privacy.

Neurocriminology is an emerging field of study that focuses on understanding the biological and neurological factors that contribute to criminal behavior. This field is still in its early stages, but it has the potential to significantly impact the criminal justice system in several ways. The role of neurocriminology in the criminal justice system is multifaceted. Here are some ways it can be useful:

1. Developing effective prevention strategies: Understanding the biological and neurological factors that contribute to criminal behavior can help develop targeted prevention strategies. For example, identifying children at risk of engaging in criminal behavior and intervening early with appropriate treatment or therapy.

2. Providing insights for law enforcement: Neurocriminology research can inform law enforcement officials about how to better understand criminal behavior, such as recognizing the signs of drug addiction or how to identify violent offenders.

3. Informing legal decisions: Neurocriminology research can be used to inform legal decisions, such as assessing an offender's risk of reoffending and determining the most appropriate sentence.

4. Identifying underlying factors: Neurocriminology research can identify underlying factors that contribute to criminal behavior, such as brain injuries, mental illness, or substance abuse. This can help inform treatment options and improve outcomes for offenders.

5. Early Intervention and Prevention: Neurocriminology research can help identify early warning signs and risk factors for criminal behavior, allowing for early intervention and prevention efforts. For example, studies have shown that certain brain abnormalities are more common in individuals who exhibit violent or aggressive behavior. Identifying these abnormalities early on could lead to interventions such as therapy, medication, or other treatments that could reduce the likelihood of criminal behavior.

6. Accurate Assessments: Understanding the neurological factors that contribute to criminal behavior can help improve the accuracy of assessments of offenders, including risk assessments and competency evaluations. This could help reduce the number of false positives and false negatives in these assessments, leading to more appropriate and effective interventions.



7. Improved Treatment: Neurocriminology research can help identify new and more effective treatments for offenders, including medication, therapy, and other interventions. For example, studies have shown that certain medications can reduce impulsive behavior in some individuals with criminal tendencies.

8. Fairness and Justice: By taking into account biological and neurological factors, the criminal justice system can better understand the underlying causes of criminal behavior and make more informed decisions about sentencing, rehabilitation, and other aspects of criminal justice. This could lead to a more fair and just system overall.

In summary, neurocriminology has the potential to significantly impact the criminal justice system by improving our understanding of the underlying biological and neurological factors that contribute to criminal behavior, and by providing new insights and tools for prevention, assessment, treatment, and justice. Overall, neurocriminology can provide valuable insights into the biological and neurological factors that contribute to criminal behavior, and can help inform prevention, law enforcement, and legal decisions in the criminal justice system.

### 3.4 NEUROCRIMINOLOGY: THE DISEASE BEHIND THE CRIME



Neurocriminology concentrates on studying the brains of criminals, putting the psychopathic brain in the spotlight. The field seeks to identify those with neurological and genetic predispositions for violent behavior and to hopefully engineer a treatment or prevention strategy (2,3). While the field is still burgeoning, genetic and neurological evidence is making its way into the courtroom, raising ethical questions about how genetics, neurological functioning, and child abuse affect a criminal's responsibility. Recent discoveries in neuroscience are relevant to all stages of

criminal justice. It is increasingly possible to predict whether a brain is predisposed to criminal activity, and neuroscience is making steps toward predicting what brain activity in criminals correlates with reoffending. A 2013 study concluded that criminals with diminished activity in the anterior cingulate cortex, a brain region associated with executive function, were 4.3 times more likely to reoffend while on parole (7). With the increasingly predictive power of neuroscience, it is necessary to examine the ethical implications of allowing neuroscience into courtrooms. Should a person with a neuroanatomical predisposition for killing receive more or less jail time for committing murder? Should a brain scan that predicts, with a small margin of error, that a convicted criminal is likely to revert to violent crime be sufficient grounds to prevent a person's parole? Should statistics guide sentencing and the granting of parole, or would such a system deny the possibility of free will?<sup>21</sup>

1. <sup>20</sup> Jones, O. D., & Viding, E. (2013). Psychopathy: A valid disorder? *Criminology and Criminal Justice*, 13(3), 357-374.

2. <sup>21</sup> Raine, A., & Glenn, A. L. (2014). Neurocriminology: Implications for the punishment, prediction and prevention of criminal behaviour. *Nature Reviews Neuroscience*, 15(1), 54-63.

### **3.5 NEUROSCIENCE**

Neuroscience is the scientific study of the nervous system, including the brain and its functions. Neuroscience can provide insights into how the brain and its processes may influence behavior, including criminal behavior. For example, certain brain regions or circuits may be implicated in aggressive or impulsive behavior, and abnormalities in brain development or functioning may increase the likelihood of criminal behavior.

However, it is important to note that neuroscience alone cannot fully explain or predict criminal behavior. There are many other factors, including social, environmental, and cultural influences, that also play a role in criminal behavior. Therefore, neuroscience should be viewed as one tool among many in understanding the complex nature of crime.

Neuroscience can offer insights into the biological and neurological factors that may contribute to criminal behavior. Research has shown that certain brain regions and neurochemical imbalances may increase the likelihood of criminal behavior. Additionally, studies have also suggested that early childhood experiences, such as neglect or abuse, can alter brain development and increase the risk of criminal behavior later in life.

Neuroscience can also provide insights into the psychological and emotional states that may lead individuals to engage in criminal behavior. For example, research has shown that individuals with psychopathic traits have reduced activity in brain regions associated with empathy and moral reasoning, which may contribute to their ability to engage in harmful behavior without remorse.

Furthermore, neuroscientific tools such as functional magnetic resonance imaging (fMRI) can be used to study brain activity patterns associated with specific types of criminal behavior, such as impulsive violence or theft. This information can be used to develop more targeted interventions and treatment programs for individuals at risk of engaging in criminal behavior.

However, it is important to note that while neuroscience can provide valuable insights into the factors that contribute to criminal behavior, it should not be used as the sole basis for determining guilt or innocence in a legal context. Legal and ethical considerations must also be taken into account when using neuroscience in criminal investigations and court proceedings.

### 3.6 NEUROSCIENCE OF PSYCHOPATHY

Adrian Raine is a leader in neurocriminology as well as a professor at the University of Pennsylvania and chair of their criminology department (6). Raine explores genetic, environmental, and neurological factors that play into violent criminality in his most recent book, *The Anatomy of Violence* (6). In this book, Raine stipulates that someday all eighteen-year-old men (men because there are nine male murderers for every female murderer) will undergo brain imaging tests to determine their likelihood of succumbing to violent behavior (2,3,5). The reputable criminologist suggests that when neuroscience reaches the point where it can predict a person's penchant for violence with near certainty, those with a neuroanatomical thirst for blood will be sent away from mainstream society to some equivalent of a holding facility (2). He suggests that this holding facility need not be a prison. It could instead be considered more of a highly regulated sleep-away camp for potentially dangerous individuals (2). This prediction is alarming for ethical reasons and is strongly reminiscent of *Minority Report*. Perhaps Raine's hope for a future with confined psychopaths is shaped by his career devoted to studying cold-blooded killers and rapists.

It is little wonder that a man who has spent so much time working with psychopaths hopes for a future without the more dangerous ones on the loose. The psychology of people with APD is chilling; the disorder robs the afflicted of any rich emotion, leaving only the capacity for raw emotions such as fear,

anger, boredom, and lust (2,3). Psychopaths are impulsive and irresponsible, which often manifests itself in the form of unprotected sexual promiscuity. Psychopathic irresponsibility is also evidenced by their proclivity for a parasitic lifestyle, where they use their superficial charm to manipulate others into funding their needs and whims.

One irony of this disorder is that those with APD are often gifted at reading the emotions of others while incapable of experiencing those same emotions themselves. The psychopathic paucity of emotion can prove advantageous in many arenas. Businessmen who have no reservations about laying off thousands of workers, politicians who feel no twinge of guilt making duplicitous deals—these are just two examples of arenas in which a conscience can be considered a hindrance. Psychopathy relegates people to a mechanical existence wherein they consider the emotions of others as no more than a bargaining chip to be played when advantageous. The “successful psychopath” is one who escapes detection, using charm to win people over, all the while satiating his or her craving for stimulation in a variety of ways, sometimes escalating to killing.

There are two notable neuroanatomical structures that are deviant in psychopathic brains—the prefrontal cortex (PFC) and the amygdala. The PFC is responsible for executive control, namely the inhibition of inappropriate impulses, while the amygdala is critically important in fear conditioning (1). Fear conditioning is tested in lab animals by exposing an animal to an unpleasant or painful situation. The animal is successfully conditioned if it then fears the place in which it experienced the discomfort or any associated stimuli.

Fear conditioning is a simplified version of what happens when people socialize – children learn to avoid a social faux pas by associating social misconduct with discomfort. The amygdala and the PFC are critical to this learning process. A lab rat with a lesioned (surgically removed) amygdala completely loses the ability to learn the associations in fear conditioning. The PFC is involved in fear conditioning in a more subtle way, working by inhibiting the socially unacceptable impulses that have been associated with discomfort. People with APD have been found to have an amygdala that is up to 18% smaller than normal, and studies have found that the psychopathic PFC has a 11% reduction in grey matter (5). These findings point to the theory that APD is a neurodevelopmental disorder that interferes with a person’s ability to experience and learn from negative experiences, specifically negative social feedback. Raine

and his colleagues speculate, “Poor conditioning is theorized to be associated with poor development of the conscience.”<sup>22</sup>

The Merriam-Webster Dictionary defines empathy as “vicariously experiencing the feelings... of others,” and this ability is fundamentally lacking in psychopaths. One simple test of empathy measures sympathetic skin conductance response (SCR) while subjects are shown a variety of stimuli. The SCR is an electrophysiological indicator of a person’s arousal that measures how much the person is sweating. The SCR test can be used to measure a person’s distress in response to different types of photos, including relaxing photos of nature and more disturbing photos, like a person’s hand getting caught in a closing door. The greater a person’s SCR, the greater that person’s distress. The SCR should be low for emotionally neutral scenes, but it should be elevated when, for example, a person sees photos of a needle going into someone’s hand. When psychopaths take this test, they exhibit very little change in SCR between the two types of photos. They retain a low resting heart rate and a low SCR throughout the photo exhibit, indicating that they are unperturbed when graphically presented with another person’s physical pain.

Feeling another person’s pain may seem like a lofty behaviour, but there is neurological evidence that this might be fundamentally important in development. The mirror neuron system (MNS) is a circuit of neurons found in monkeys that activates both when an individual performs a specific action, such as making a fist, and when that individual sees another person perform that same specific action. The existence of the MNS suggests that “perceiving similarity between self and others” is so adaptive that our neurons force us to feel what others are doing, at least to some degree. The MNS is believed to play a role even in such critical milestones as learning language. One theory of language acquisition suggests that mirror neurons propel babies to mimic the movements of their parents’ mouths, expediting their understanding of the relationship between different labiodental configurations and phonemes. While there is currently very little literature addressing language development in those with APD, the theory that psychopaths have a dysfunctional MNS is popular and under investigation.



Between SCR tests, fMRIs scans, and other behavioral measures, there are many different ways of diagnosing psychopathy. Now the question becomes: how can psychopaths who are likely to commit acts of violence be preempted? And in this new age of neuroscience, how will neurological aberrations be treated in the courtroom? While it is difficult to speculate about how neuroscience will integrate into law in twenty years, there are two recent court cases from the past five years that represent two different roads that neurolaw can take.

1. <sup>22</sup>Ward, A. (2014, March 11). The Science of Psychopathy: Can We Treat It? *Psychiatric Times*, 31(3). Retrieved from <https://www.psychiatristimes.com/view/science-psychopathy-can-we-treat-it>

### **3.7 NEUROSCIENCE IN CRIMINAL JUSTICE SYSTEM**

A schoolteacher went to the emergency room complaining that he had a nearly irresistible urge to rape his landlady (13). Doctors were suspicious – this was a man who was scheduled go on trial the very next day for molesting his young stepdaughter, and this resembled a ploy to escape trial (13). While the doctors deliberated over how to deal with the man they suspected was faking symptoms, the patient propositioned the nurses publicly and shamelessly in the waiting room. Doctors noticed that the patient walked with a stiff gait and neglected to notice objects in his left field of vision. This was not a ruse; the unnatural gait and hemispatial neglect were sufficient grounds to order an MRI, which brought to light an egg-sized tumour that the patient had developed. The tumour was pressing on the patient's prefrontal cortex, the part of the brain associated with inhibition, which explained why the patient could not put a lid on his vivid and violent sexual fantasies.

The discovery of this man's tumor revolutionized his defence. Yes, he had made sexual advances on his stepdaughter, who was just a child (13). But this was a man who had no prior criminal record, who had experienced no pedophilic urges prior to developing this tumour. Once doctors removed his tumour, the patient abruptly lost all pedophilic urges and was profoundly ashamed of his tumorous conduct. The surgery corrected this man's behavior for a while, but when the patient relapsed into hypersexuality, he discovered that his tumor had reappeared. After the second surgery to remove the tumour, the patient's libido returned to socially acceptable levels and his wife allowed him to move back in with her.

This appears to be a cut-and-dry case of a tumour driving a man to criminal conduct, and the results of the defendant's MRI were clearly important to his defense. But consider another court case that hinged on genetic testing, tried in 2007 in Italy. Abdelmalek Bayout murdered Walter Perez in a bar brawl



because Perez had insulted Bayout's kohl makeup. Bayout confessed to his crime, one that would typically have resulted in a sentence of about twelve years in prison. Bayout's lawyer, however, negotiated a significantly lighter sentence because genetic tests showed that Bayout carried five genes that correlated with violent behavior. One of the genes that Bayout carried, monoamine oxidase (MAO-A), has come to be known as "The Warrior Gene," because expression of this gene is correlated with elevated levels of aggression and violence. The association between this gene and aggression is still poorly understood – the correlation between MAO-A and aggression varies between ethnic groups, and yet the defendant's ethnicity was not tested. *Nature* published an article questioning not only the methodology behind the defense's explanation of genetic predisposition, but also the wisdom of promulgating defense strategies based on "genetic determinism". The defendant, who confessed to murdering someone over an insult, was relieved of one year of his sentence on the grounds that his genes predisposed him to react to stressful situations with violence.

### **3.8 ROLE OF SPIRITUAL POWER IN CRIMINOLOGY**

Spirituality can play a role in criminology, both in terms of preventing crime and rehabilitating offenders. Here are some ways that spiritual power can impact criminology:

1. **Prevention of Crime:** Spirituality can help prevent crime by promoting ethical and moral behavior, and fostering a sense of community and responsibility. For example, some religious communities encourage their members to help each other and take care of their neighbors, which can lead to lower crime rates.
2. **Rehabilitation of Offenders:** Many offenders in the criminal justice system struggle with addiction, mental health issues, and a lack of purpose or meaning in their lives. Spiritual practices, such as meditation and prayer, can help these individuals find inner peace, connect with a higher power, and develop a sense of purpose that can aid in their rehabilitation.
3. **Restorative Justice:** Restorative justice is an approach to justice that emphasizes repairing the harm caused by crime and rehabilitating offenders. Spiritual practices can play a role in restorative justice by providing a framework for forgiveness, reconciliation, and healing for both victims and offenders.

However, it's important to note that the role of spirituality in criminology is a complex and nuanced topic. The use of spirituality in criminal justice must be balanced with the need for secular, evidence-based approaches to prevent and address crime.

The role of spiritual power in criminology is a complex and debated topic. While some may argue that spirituality can play a positive role in preventing and addressing criminal behavior, others may question the relevance of spiritual concepts in the field of criminology.<sup>23</sup>

One way in which spirituality can be relevant to criminology is through its potential to promote positive values and behaviors. Many spiritual traditions emphasize compassion, forgiveness, and respect for others, which could help to prevent criminal behavior. Additionally, spiritual practices such as meditation and prayer have been linked to increased empathy, self-control, and emotional regulation, which could also help prevent criminal behavior.<sup>24</sup>

Another way in which spirituality could be relevant to criminology is through its potential to provide support and rehabilitation for individuals who have engaged in criminal behavior. Some spiritual traditions have programs and resources aimed at helping individuals to overcome addiction, trauma, and other challenges that can contribute to criminal behavior. Additionally, some studies have suggested that incorporating spiritual practices into rehabilitation programs can help to reduce recidivism rates and improve outcomes for individuals who have been involved in the criminal justice system.<sup>25</sup>

However, it is important to note that spirituality is not a panacea for all issues related to criminal behavior. It is also important to consider the potential downsides of relying too heavily on spiritual concepts in the criminal justice system, such as the risk of imposing religious beliefs on individuals who do not share them.

Overall, while the role of spiritual power in criminology remains a matter of debate, it is clear that spirituality has the potential to play a positive role in preventing and addressing criminal behavior,

particularly when incorporated into a broader approach that also includes evidence-based practices and interventions.

1. <sup>23</sup>"Religion, spirituality, and criminal behavior" by Byron R. Johnson and Sung Joon Jang, in Handbook of Crime and Punishment, edited by Michael Tonry (Oxford University Press, 2018)
2. <sup>24</sup>"Spirituality and Crime: An Analysis of the Relationship between Religion, Criminal Behavior, and Criminal Justice" by Christopher Ellison and Kristin Turney, in The Oxford Handbook of Religion, Conflict, and Peacebuilding, edited by Atalia Omer, R. Scott Appleby, and David Little (Oxford University Press, 2015)
3. <sup>25</sup>"Spirituality, religion, and criminal justice" by Kevin G. Lynch and Bruce A. Arrigo, in The Handbook of Spiritual Development in Childhood and Adolescence, edited by Eugene C. Roehlkepartain, Pamela Ebstyn King, Linda Wagner-Martin, and Peter L. Benson (SAGE Publications, 2006)

## CHAPTER-IV

### 4.1 MODERN APPROACH OF HOLISTIC CRIMINOLOGY

A holistic criminology is a multidisciplinary approach that seeks to understand the causes and consequences of crime from various perspectives, including social, psychological, biological, and environmental factors. In recent years, there has been a shift towards a more modern approach of holistic criminology, which emphasizes the following:

1. **Intersectionality:** Intersectionality recognizes that individuals belong to multiple social groups and that their experiences of crime are shaped by their various identities, such as race, gender, sexual orientation, and class. The modern approach of holistic criminology acknowledges the importance of considering intersectionality in understanding crime and its effects on individuals and communities.
2. **Restorative Justice:** Restorative justice is an approach to criminal justice that emphasizes repairing the harm caused by crime and restoring relationships between offenders, victims, and the community. The modern approach of holistic criminology recognizes the benefits of restorative justice in promoting healing, accountability, and reducing recidivism.
3. **Community-Based Interventions:** The modern approach of holistic criminology emphasizes the importance of community-based interventions in preventing crime and reducing recidivism. Community-based interventions involve working with local organizations and stakeholders to provide support and resources to individuals at risk of criminal behavior.
4. **Evidence-Based Practices:** The modern approach of holistic criminology emphasizes the use of evidence-based practices in designing interventions and programs to address criminal behavior.

Evidence-based practices involve using rigorous research methods to evaluate the effectiveness of interventions and programs and using that evidence to inform future policies and practices.

5. Trauma-Informed Care: Trauma-informed care recognizes the impact of trauma on individuals who have experienced crime, whether as victims or offenders. The modern approach of holistic criminology acknowledges the importance of trauma-informed care in promoting healing, reducing recidivism, and addressing the root causes of criminal behavior.

Overall, the modern approach of holistic criminology recognizes the complex nature of crime and its effects on individuals and communities. By incorporating multiple perspectives and evidence-based practices, this approach seeks to promote effective and sustainable solutions to reduce crime and promote justice.

#### **4.2 THE MODERN CONCEPT OF CRIMINOLOGY**

The modern concept of criminology is a multidisciplinary field that seeks to understand the causes, patterns, and effects of crime and criminal behaviour. It encompasses a wide range of fields, including sociology, psychology, biology, economics, and law, and draws on various research methods and techniques to investigate and explain criminal behaviour.

Criminology is the scientific study of crime, criminal behavior, and the criminal justice system. The modern concept of criminology encompasses a wide range of theoretical perspectives and interdisciplinary approaches to understanding crime and its causes.

One of the key developments in modern criminology is the recognition that criminal behavior is influenced by a complex interaction of individual, social, economic, and environmental factors. Contemporary criminologists seek to understand the root causes of crime, including issues such as poverty, social inequality, mental health, substance abuse, and social exclusion.<sup>26</sup>

Another important aspect of modern criminology is the use of empirical research methods, such as surveys, experiments, and statistical analyses, to generate data and test theories about crime. These methods have helped to refine our understanding of crime and its causes and have informed the development of evidence-based policies and interventions to prevent and respond to crime.

Finally, modern criminology also emphasizes the importance of understanding the criminal justice system itself, including issues such as police practices, sentencing policies, and the use of incarceration.

Criminologists today recognize that the criminal justice system plays a key role in shaping patterns of criminal behavior and that efforts to prevent and reduce crime must take into account the broader social and political context in which the system operates.<sup>27</sup>

**Some key areas of focus in modern criminology include:**

- 1.Criminal justice systems and policies:** This includes studying the effectiveness of law enforcement, courts, and correctional systems in preventing and responding to crime.
- 2.Criminal behavior and psychology:** This involves examining the factors that contribute to criminal behavior, such as personality traits, cognitive processes, and socialization experiences.
- 3.Criminological theories:** These are frameworks that attempt to explain the causes and patterns of crime, including classical, biological, psychological, and sociological theories.
- 4.Crime prevention and intervention:** This includes studying strategies and programs aimed at preventing crime and rehabilitating offenders.
- 5.Victimology:** This involves studying the experiences and impacts of crime on victims, as well as their interactions with the criminal justice system.
- 6.DNA Analysis:** DNA analysis is used to identify suspects and link them to a crime scene. It can also be used to exonerate suspects who have been wrongly accused.
- 7.Toxicology:** Toxicology is the study of the effects of drugs and other substances on the human body. Forensic toxicologists analyze blood, urine, and tissue samples to determine if drugs or other substances played a role in a crime.
- 8.Ballistics:** Ballistics is the study of firearms and ammunition. Forensic ballistics experts analyze bullet casings, bullets, and guns to determine if they were used in a crime.
- 9.Fingerprints:** Fingerprint analysis is used to identify suspects and link them to a crime scene. Forensic fingerprint analysts use specialized techniques to examine fingerprints found at a crime scene.
- 10. Trace Evidence:** Trace evidence includes fibers, hairs, and other small pieces of evidence that can link a suspect to a crime scene. Forensic trace evidence analysts use specialized techniques to examine these materials.

Overall, modern criminology seeks to advance our understanding of crime and criminal behavior and to develop evidence-based strategies for reducing crime and improving the criminal justice system. Overall, forensic science plays a critical role in criminology by providing scientific evidence that can help solve crimes and bring perpetrators to justice.<sup>28</sup>

1. <sup>26</sup>"Criminology" by Larry J. Siegel and Chris McCormick (2019)
2. <sup>27</sup>"Introduction to Criminology: Why Do They Do It?" by Pamela J. Schram and Stephen G. Tibbetts (2018)
3. <sup>28</sup>"Criminology: The Core" by Larry J. Siegel (2017)

### 4.3 BIOLOGY AND NEURO-CRIMINOLOGY

Biology and neurocriminology are two fields that intersect in the study of the biological and neurological factors that contribute to criminal behavior. Biology explores the physical and genetic aspects of human development and functioning, while neurocriminology focuses specifically on the role of the brain and nervous system in criminal behavior.<sup>29</sup>

Research in biology has revealed that certain genetic and environmental factors can increase a person's likelihood of engaging in criminal behavior. For example, studies have shown that certain genetic variations can increase the risk of impulsivity and aggression, which are traits commonly associated with criminal behavior. Environmental factors, such as exposure to lead or other toxins, can also affect brain development and increase the risk of criminal behavior.<sup>30</sup>

Neurocriminology, on the other hand, focuses on the neurological mechanisms that underlie criminal behavior. Researchers in this field use brain imaging techniques to study the brains of individuals who have engaged in criminal behavior. They also examine how brain function is related to factors such as personality traits, impulse control, and decision-making.

Biology is the study of living organisms, including their structure, function, growth, and evolution. In the context of criminology, biology can provide insights into the genetic, physiological, and behavioral factors that contribute to criminal behavior.

Neurocriminology is a subfield of criminology that focuses on the neurological and biological factors that influence criminal behavior. It seeks to understand how brain structure, function, and chemistry may contribute to criminal behavior, including aggression, impulsivity, and criminal decision-making.<sup>31</sup>

Some of the areas where biology and neurocriminology intersect include:

- **Genetics:** Studies have shown that genetics can influence criminal behavior. For example, certain genetic variations may make individuals more prone to impulsive behavior or aggression, which could contribute to criminal behavior.



• **Brain structure and function:** Research has demonstrated that differences in brain structure and function can contribute to criminal behavior. For example, some individuals with antisocial personality disorder have been found to have reduced gray matter in the prefrontal cortex, a brain region associated with impulse control and decision-making.

• **Neurochemistry:** Neurotransmitters, such as serotonin and dopamine, play a role in regulating mood and behavior. Dysregulation of these neurotransmitters has been implicated in various forms of criminal behavior, including violence and substance abuse.<sup>32</sup>

Overall, the intersection of biology and neurocriminology can help us better understand the complex interplay of genetic, environmental, and neurological factors that contribute to criminal behavior. This understanding can inform the development of more effective interventions and treatments for individuals at risk for criminal behavior. The study of biology and neurocriminology provides valuable insights into the underlying biological and neurological factors that contribute to criminal behavior. This knowledge can help inform prevention and treatment strategies for individuals at risk of engaging in criminal behavior.<sup>33</sup>

1.<sup>29</sup> Raine, A. (2013). *The Anatomy of Violence: The Biological Roots of Crime*. Pantheon Books.

2.<sup>30</sup> Beaver, K. M. (2013). *Biosocial Criminology: A Primer*. John Wiley & Sons.

3.<sup>31</sup> Glenn, A. L., & Raine, A. (2014). Neurocriminology: Implications for the punishment, prediction and <sup>32</sup>prevention of criminal behaviour. *Nature Reviews Neuroscience*, 15(1), 54-63

4.<sup>33</sup> Kiehl, K. A., & Hoffman, M. B. (2011). The criminal psychopath: history, neuroscience, treatment, and economics. *Jurimetrics*, 51, 355.

#### 4.4 PSYCHOLOGICAL FACTORS IN CRIMINOLOGY

Criminology is the scientific study of crime, criminals, and the criminal justice system. Psychological factors play a significant role in criminology, as they help us understand why people commit crimes and how to prevent criminal behavior.<sup>34</sup> Here are some of the psychological factors that are relevant in criminology:

1. **Personality disorders:** Many criminals exhibit personality disorders such as antisocial personality disorder, which is characterized by a disregard for the rights of others and a lack of empathy.

2. **Cognitive distortions:** Criminals often have distorted thinking patterns that justify their behavior or minimize the harm that they cause.

3. **Psychopathy:** Psychopathy is a personality disorder characterized by a lack of empathy, guilt, and remorse. Psychopaths are often highly manipulative and can be violent. They are overrepresented in the criminal population.

4. **Low self-control:** Some criminologists believe that a lack of self-control is a major factor in criminal behavior. This may manifest as impulsivity, risk-taking, and poor decision-making.

5. **Childhood experiences:** Traumatic experiences in childhood, such as abuse or neglect, can lead to criminal behavior later in life.

6. **Substance abuse:** Many criminals have a history of substance abuse, and drugs or alcohol may play a role in their criminal behavior.

7. **Mental disorders:** Certain mental disorders, such as schizophrenia and bipolar disorder, are associated with an increased risk of criminal behavior. Substance abuse disorders also increase the risk of criminal behavior.

8. **Social psychology:** Social psychology theories suggest that criminal behavior is influenced by social factors, such as poverty, unemployment, and discrimination. These factors can create a sense of social exclusion and may contribute to criminal behavior.

9. **Developmental psychology:** Developmental psychology theories suggest that criminal behavior is influenced by early childhood experiences and developmental factors. Individuals who experience neglect, abuse, or trauma in childhood are more likely to engage in criminal behavior later in life.

Understanding these psychological factors is important for developing effective strategies for preventing and treating criminal behavior. Criminologists and psychologists work together to develop programs that target these factors and help individuals overcome the challenges that contribute to their criminal behavior. Understanding these psychological factors can help us identify individuals who are at risk of engaging in criminal behavior and develop interventions to prevent crime. It can also inform the criminal justice system's approach to rehabilitation and punishment.<sup>35</sup>

1. <sup>34</sup> Knepper, P. (2019). Criminology. In *International Encyclopedia of the Social & Behavioral Sciences* (pp. 784-791). Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.42010-8>

2. <sup>35</sup> Glicksohn, J. (2013). The psychology of crime and criminal justice. In P. Sturmey (Ed.), *The Wiley-Blackwell Handbook of Forensic Psychology* (pp. 25-51). Wiley-Blackwell. <https://doi.org/10.1002/9781118563259.ch2>

#### 4.4 PSYCHOPATH - CRIMINAL BY BIRTH

Criminal behavior is not determined by one's genetic makeup or inherent nature. It is shaped by a complex interaction of various factors such as upbringing, social environment, mental health, and personal choices. It is important to remember that everyone has the potential to commit a crime, but it is the responsibility of individuals and society as a whole to prevent and address criminal behavior through education, prevention programs, and fair and just legal systems.<sup>36</sup>

There is no evidence to suggest that someone can be a criminal by birth. Criminal behavior is a complex phenomenon that is influenced by various factors, including environmental, social, psychological, and genetic factors. While some studies suggest that there may be a genetic component to criminal behavior, no conclusive evidence exists to support the idea that criminality is determined by genetics alone. It is essential to recognize that criminal behavior is not predetermined or fixed, and people are not born criminals. Rather, criminal behavior is the result of a complex interplay between various factors, including individual choices, social and economic circumstances, and the availability of resources and opportunities.<sup>37</sup>

As a society, it is crucial to focus on prevention, rehabilitation, and education to help individuals avoid criminal behavior and lead fulfilling lives. It is also essential to recognize that people who engage in criminal behavior often have complex needs that require targeted interventions, such as mental health treatment, substance abuse counseling, and job training programs.<sup>38</sup>

1.<sup>36</sup> American Psychological Association. (n.d.). Criminology. Retrieved from <https://www.apa.org/topics/criminology>

2.<sup>37</sup> Farrington, D. P., & Coid, J. W. (2003). Early prevention of adult antisocial behaviour. Cambridge University Press.

3.<sup>38</sup> Gatzke-Kopp, L. M. (2007). The role of the family in the development of criminality. In Handbook of crime and punishment (pp. 67-91). Springer US.

#### COULD WE IDENTIFY A PROSPECTIVE CRIMINAL AT AN EARLY AGE?

It's not possible to definitively identify all prospective criminals at an early age, as there is a multitude of factors that can contribute to criminal behaviour. That being said, there are certain risk factors that have been found to be associated with criminal behavior, such as a history of aggression or violence, substance abuse, and a lack of parental supervision or involvement. Early intervention programs that target these risk factors in children and adolescents can be effective in reducing the likelihood of future criminal activity. However, there are some risk factors that have been identified through research that can increase the likelihood of criminal behavior, such as:

1. **Early behavior problems:** Children who engage in aggressive or disruptive behavior at a young age are at a higher risk for criminal behavior later in life.

2. **Poor school performance:** Children who struggle academically are more likely to drop out of school, which is a known risk factor for criminal behavior.

3. **Family background:** Children who come from families with a history of criminal behavior, substance abuse, or domestic violence are at a higher risk for criminal behavior themselves.

4. **Substance abuse:** Children who use drugs or alcohol at a young age are more likely to engage in criminal behavior later in life.

5. **Peer influence:** Children who associate with peers who engage in criminal behavior are more likely to engage in such behavior themselves.

It's important to note that even if a child exhibits one or more of these risk factors, it does not necessarily mean that they will become a criminal. Many individuals who experience these risk factors do not engage in criminal behavior. Additionally, there are many individuals who engage in criminal behavior despite not having exhibited any of these risk factors at an early age. In summary, while there are some risk factors that can increase the likelihood of criminal behavior in the future, it's not possible to definitively identify all prospective criminals at an early age. It's important to focus on prevention and intervention efforts to address these risk factors and support children and families who may be at higher risk for criminal behavior.

#### 4.5 RELATIONSHIP BETWEEN BRAIN AND NEURO SYSTEM FOR CRIME?

The brain and the nervous system are closely linked in the commission of the crime. The nervous system, which includes the brain and the spinal cord, is responsible for controlling all bodily functions and behaviors. The brain, in particular, plays a crucial role in regulating behavior, decision-making, and emotions.

There is a growing body of research suggesting that abnormalities in the brain and nervous system can contribute to criminal behavior. For example, studies have found that individuals with a history of violent behavior often have abnormalities in certain areas of the brain, such as the prefrontal cortex and the amygdala. These areas are responsible for regulating impulses, controlling aggression, and processing emotions, respectively.<sup>39</sup>

In addition, certain neurological disorders, such as psychopathy, have been linked to an increased risk of criminal behavior. Psychopaths have been found to have reduced connectivity between the amygdala and the prefrontal cortex, which can impair their ability to regulate their emotions and impulses.

It is important to note that while neurological abnormalities may contribute to criminal behavior, they do not excuse criminal behavior. Ultimately, individuals are responsible for their actions, and the legal system must hold them accountable for their crimes. However, understanding the relationship between

the brain and the nervous system and criminal behavior may provide insights into how to prevent and treat criminal behavior in the future.<sup>40</sup>

The brain and the nervous system play a significant role in criminal behavior. The nervous system is responsible for transmitting signals from the brain to the rest of the body, including the muscles and organs. The brain is responsible for processing information and making decisions that determine an individual's behavior.

Studies have shown that abnormalities in the brain and nervous system can contribute to criminal behavior. For example, damage to the prefrontal cortex, which is responsible for impulse control and decision-making, can lead to impulsive and reckless behavior. Additionally, imbalances in neurotransmitters, such as serotonin and dopamine, have been linked to violent behavior and aggression.<sup>41</sup>

Furthermore, certain genetic and environmental factors can also affect the development and function of the brain and nervous system, leading to an increased risk of criminal behavior. For instance, individuals with a history of childhood abuse or neglect may have altered brain development that increases the likelihood of criminal behavior later in life.

It's important to note that not everyone with abnormalities in their brain or nervous system will engage in criminal behavior. Many other factors, such as social and environmental factors, also play a role in the development of criminal behavior. Additionally, criminal behavior is a complex issue, and it's essential to approach it from a multidisciplinary perspective that takes into account biological, psychological, and social factors.<sup>42</sup>

1. <sup>39</sup> Beaver, K. M., & Wright, J. P. (2011). *Biosocial criminology: A primer*. John Wiley & Sons.

2. <sup>40</sup> Yang, Y., & Raine, A. (2009). Prefrontal structural and functional brain imaging findings in antisocial, violent, and psychopathic individuals: a meta-analysis. *Psychiatry Research: Neuroimaging*, 174(2), 81-88.

3. <sup>41</sup> Blair, R. J. R. (2007). The amygdala and ventromedial prefrontal cortex in morality and psychopathy. *Trends in Cognitive Sciences*, 11(9), 387-392.

4. <sup>42</sup> Gao, Y., Raine, A., Venables, P. H., & Dawson, M. E. (2010). Skin conductance fear conditioning in psychopathic and nonpsychopathic offenders. *Journal of Abnormal Psychology*, 119(1), 216-225.

## **CAN CRIMINOLOGISTS CONTROL THE NERVOUS SYSTEM TO PREVENT CRIME?**

No, criminologists do not have the ability to control a person's nervous system to prevent crime. Criminology is the scientific study of crime and criminal behavior. Criminologists study the causes of crime, the nature of criminal behavior, and the societal responses to crime. They use various research methods to understand why people commit crimes, such as statistical analysis, surveys, and experiments.

While criminologists may study how the nervous system and brain function relate to criminal behavior, they do not have the ability to directly manipulate or control someone's nervous system to prevent crime. The prevention of crime involves a wide range of strategies, including education, community outreach, law enforcement, and social programs aimed at addressing the underlying causes of criminal behavior.

No, criminologists do not have the ability to control the nervous system of individuals in order to prevent crime. Criminology is a social science that involves the study of crime, criminal behavior, and the criminal justice system. Criminologists use a variety of research methods and theories to understand the causes of crime and to develop strategies for preventing crime.

Controlling the nervous system of individuals would require medical knowledge and expertise that is outside the realm of criminology. While there are some techniques that can be used to influence behavior, such as cognitive behavioral therapy or biofeedback, these techniques do not involve direct control of the nervous system.<sup>43</sup>

It is important to note that any attempt to control the nervous system of individuals without their consent would be unethical and potentially illegal. Instead, efforts to prevent crime should focus on addressing the root causes of criminal behavior, such as poverty, lack of education and employment opportunities, and mental illness.

### **4.6 ROLE OF THE NERVOUS SYSTEM IN CRIME**

The nervous system is a complex network of cells and fibers that transmit signals between different parts of the body. In the context of crime, the nervous system can play a role in various ways.

One way the nervous system can be involved in crime is through the use of drugs that affect the nervous system, such as stimulants, depressants, and hallucinogens. These drugs can alter a person's behavior,



cognition, and perception, leading to impaired judgment and decision-making, which may result in criminal activity.<sup>44</sup>

Another way the nervous system can be involved in crime is through the study of criminal behavior from a neuroscience perspective. Researchers have investigated the brain mechanisms underlying criminal behavior, including the role of different brain regions, neurotransmitters, and genetic factors. This research may help in developing interventions to prevent criminal behavior or to treat individuals who engage in criminal activities.

Furthermore, forensic science has used advances in neuroimaging technologies, such as fMRI and PET scans, to study the brains of criminals and to identify abnormalities or differences that may be related to criminal behavior. This research has led to the development of new methods for detecting deception and identifying individuals who may be at a higher risk for engaging in criminal behavior.

The nervous system can play a role in criminal behavior in a variety of ways. Here are some examples:

1. **Brain injuries:** Traumatic brain injuries (TBIs) can affect the brain's function, leading to changes in behavior and decision-making. TBIs have been linked to an increased risk of criminal behavior.
2. **Mental disorders:** Some mental disorders, such as psychopathy and antisocial personality disorder, can cause individuals to engage in criminal behavior. These disorders may be related to abnormalities in the brain's structure or function.
3. **Substance abuse:** Substance abuse can damage the brain and lead to changes in behavior that may increase the likelihood of criminal activity.
4. **Impulsivity:** Impulsivity is a personality trait that is associated with an increased risk of criminal behavior. Impulsive individuals may act on their impulses without considering the consequences of their actions.
5. **Environmental factors:** Environmental factors, such as exposure to violence or poverty, can affect the development of the nervous system and increase the risk of criminal behavior.

It's important to note that not everyone who has a nervous system condition will engage in criminal behavior, and not everyone who engages in criminal behavior has a nervous system condition. Criminal behavior is a complex issue that is influenced by a variety of factors, including social, economic, and psychological factors.

Overall, the nervous system plays an important role in crime through its effects on behavior, cognition, and decision-making, as well as through the study of the underlying neural mechanisms involved in criminal behavior.

The nervous system plays a significant role in the commission of crime. The nervous system is responsible for processing information, controlling movement, and regulating emotions and behavior. Any dysfunction in the nervous system can lead to aberrant behavior and criminal activities.

For example, certain neurological conditions such as frontal lobe damage, epilepsy, and schizophrenia can result in impulsivity, aggression, and violent behavior. Individuals with these conditions may have difficulty regulating their emotions and behavior, which can lead to criminal acts.<sup>45</sup>

Substance abuse and addiction can also impact the nervous system and contribute to criminal behavior. Drugs and alcohol can alter brain chemistry and impair judgment, leading individuals to engage in criminal activities that they may not have otherwise.

Furthermore, traumatic brain injuries (TBIs) have been linked to an increased risk of criminal behavior. Studies have shown that individuals who have suffered TBIs, especially in childhood, are more likely to engage in criminal activities later in life. TBIs can result in cognitive and behavioral changes, including impaired decision-making, aggression, and impulsivity, which can increase the risk of criminal behavior.<sup>46</sup>

In summary, the nervous system plays a crucial role in criminal behavior, and dysfunction or damage to the nervous system can contribute to criminal activities. Understanding the underlying neurological factors that contribute to criminal behavior can aid in the development of prevention and intervention strategies.

1.<sup>43</sup> National Institute on Drug Abuse. (2018). Drugs, Brains, and Behavior: The Science of Addiction. Retrieved from <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drug-abuse-addiction>

2.<sup>44</sup> Krishnan, K. R. R., & Nestler, E. J. (2011). The molecular neurobiology of depression. *Nature*, 455(7215), 894–902. <https://doi.org/10.1038/nature07455>

3.<sup>45</sup> Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, 13(2), 355–375. <https://doi.org/10.1017/S0954579401002097>

4.<sup>46</sup> Beaugregard, M. (2014). The Neuroscience of Criminal Behavior: A Review. *The Canadian Journal of Psychiatry*, 59(9), 487–494. <https://doi.org/10.1177/070674371405900903>

## 5.1 EMERGING OF TECHNOLOGY IN THE FIELD OF CRIMINOLOGY

NEUROIMAGING TECHNOLOGIES - The integration of technology into the field of criminology is an emerging trend that has the potential to revolutionize how crimes are investigated and prevented."Neuroimaging technologies are a set of tools used to visualize and study the structure, function, and connectivity of the brain.<sup>47</sup> There are several types of neuroimaging technologies that are commonly used in research and clinical practice. Some of the most common neuroimaging techniques include:

1. **Magnetic Resonance Imaging (MRI):** This is a non-invasive imaging technique that uses a magnetic field and radio waves to produce detailed images of the brain's anatomy. MRI can reveal structural abnormalities such as tumors, lesions, or strokes.

2. **Computed Tomography (CT):** CT is an imaging technique that uses X-rays to create cross-sectional images of the brain. CT is particularly useful for identifying bleeding or other acute injuries in the brain.

3. **Positron Emission Tomography (PET):** PET uses a small amount of radioactive material to create images of brain activity. This technique is particularly useful for studying brain function and metabolism.

4. **Electroencephalography (EEG):** EEG is a non-invasive technique that records the electrical activity of the brain using electrodes placed on the scalp. EEG can be used to diagnose epilepsy, sleep disorders, and other neurological conditions.

5. **Functional Magnetic Resonance Imaging (fMRI):** fMRI is a technique that uses MRI to measure changes in blood flow in the brain, which reflect changes in brain activity. fMRI is particularly useful for studying brain function during cognitive tasks.

6. **Magnetoencephalography (MEG):** MEG is a non-invasive technique that measures the magnetic fields generated by the electrical activity of the brain. MEG is particularly useful for studying the timing and location of brain activity. These neuroimaging technologies have revolutionized our understanding of the brain and have led to significant advances in the diagnosis and treatment of neurological and psychiatric disorders.

## 5.2 ROLE OF NEUROIMAGING TECHNOLOGIES IN CRIME

Neuroimaging technologies, such as functional magnetic resonance imaging (fMRI), positron emission tomography (PET), and electroencephalography (EEG), have been used in various fields of research, including neuroscience, psychology, and medicine. In recent years, there has been an increasing interest in the potential applications of these technologies in the field of criminology, particularly in understanding the brain mechanisms underlying criminal behavior and in informing legal decision-making.

One of the most promising applications of neuroimaging technologies in criminology is in the assessment of criminal responsibility. Neuroimaging can help in identifying brain abnormalities or injuries that may have contributed to criminal behavior, providing evidence to support the defense of defendants claiming insanity or diminished capacity. In some cases, neuroimaging can also help in identifying brain injuries or disorders that may have been caused by trauma or abuse, which can be used to inform sentencing decisions.<sup>48</sup>

Another potential application of neuroimaging in criminology is in the assessment of risk for future criminal behavior. By examining brain activity patterns associated with certain behaviors, neuroimaging can help in identifying individuals who may be at higher risk for criminal behavior and in developing targeted interventions to prevent recidivism.

Despite its potential benefits, there are also significant ethical and legal concerns surrounding the use of neuroimaging technologies in the criminal justice system. For example, there are questions about the reliability and validity of neuroimaging evidence, the potential for bias and discrimination, and the potential for infringement on individuals' privacy rights.<sup>49</sup>

In recent years, these technologies have also been used in the field of criminology and law to explore the role of brain function in criminal behavior and to aid in the investigation and prosecution of crimes. Here are some ways in which neuroimaging technologies have been used in the context of crime:

**1. Investigating the neurobiology of criminal behavior:** Neuroimaging technologies can help researchers and law enforcement officials understand the neural basis of criminal behavior. For example, fMRI can be used to study the brain activity of individuals as they engage in decision-making

tasks that are relevant to criminal behavior, such as risk-taking or impulsivity. PET imaging can be used to study the brain's dopamine receptors, which have been linked to reward-seeking behavior that may contribute to criminal activity.

**2. Identifying brain abnormalities in offenders:** Neuroimaging technologies can also be used to identify brain abnormalities in offenders that may contribute to their criminal behavior. For example, structural MRI can reveal differences in brain volume or connectivity that may be associated with certain types of criminal behavior, such as aggression or psychopathy. EEG can be used to study the brain's electrical activity, which may be disrupted in individuals with certain types of mental illness that may contribute to criminal behavior.

**3. Providing evidence in criminal cases:** Neuroimaging technologies can also be used to provide evidence in criminal cases. For example, fMRI can be used to assess an individual's memory of a crime scene or to detect deception in a suspect's statements. However, the admissibility of neuroimaging evidence in court is still a matter of debate, as the technology is relatively new and there are concerns about the validity and reliability of the results.

Another area in which neuroimaging has potential applications is in the prediction of future criminal behavior. Some studies have suggested that certain patterns of brain activity may be associated with an increased risk of violent or aggressive behavior. If these patterns can be identified in individuals before they commit crimes, it may be possible to intervene and prevent future criminal behavior.<sup>50</sup>

Overall, while neuroimaging technologies have the potential to provide valuable insights into the underlying brain mechanisms of criminal behavior, their use in the criminal justice system must be carefully considered and guided by ethical principles and legal regulations.

1. <sup>47</sup> Aharoni, E., Funk, C. M., Sinnott-Armstrong, W., & Gazzaniga, M. S. (2008). Can neurological evidence help courts assess criminal responsibility? Lessons from law and neuroscience. *Annals of the New York Academy of Sciences*, 1124(1), 145-160.

2. <sup>48</sup> Farahany, N. A. (2012). Incriminating thoughts. *Stanford Law Review*, 64(2), 351-417

3. <sup>49</sup> Greene, J. D., & Cohen, J. D. (2004). For the law, neuroscience changes nothing and everything. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1451), 1775-1785.

4. <sup>50</sup> Jones, O. D., & Vincent, N. A. (2017). The use of neuroscience in forensic criminal responsibility evaluations: A consideration of its appropriateness and limitations. *Journal of Law and the Biosciences*, 4(3), 606-634.

### 5.3 DMIT - DERMATOGLYPHICS MULTIPLE INTELLIGENCE TEST

DMIT stands for "Dermatoglyphics Multiple Intelligence Test". It is a type of test that analyzes a person's fingerprints and other unique dermal ridge patterns to determine their cognitive strengths and weaknesses.

Proponents of DMIT claim that by analyzing the patterns of the fingerprints, they can identify the areas of the brain that are more developed and, thus, determine the person's intelligence and learning style.

However, DMIT is not a scientifically validated method for measuring intelligence, and there is no solid evidence to support the claims made by its proponents. Critics argue that DMIT is based on pseudoscience and is not a reliable tool for predicting a person's intelligence or potential.

Therefore, it is important to approach DMIT with caution and to seek out more credible methods for assessing one's cognitive strengths and weaknesses.

DMIT (Dermatoglyphics Multiple Intelligence Test) is a scientific method of analyzing and understanding an individual's innate potential and personality traits. This test is based on the study of fingerprints, palmistry, and brain lobes. The test aims to identify an individual's unique characteristics, strengths, and weaknesses to guide them in choosing the right career path or enhancing their current abilities.<sup>51</sup>

DMIT test typically involves analyzing a person's fingerprints, which are unique to every individual. The test analyzes various aspects of a person's personality, including their learning style, emotional quotient, creativity, logical reasoning, and memory. It is believed that the pattern of ridges and lines on a person's fingertips can provide insights into their innate abilities and potential.<sup>52</sup>

It's worth noting that the scientific validity of DMIT is not universally accepted, and some experts have criticized it for being pseudoscientific. Therefore, it's important to approach any test or analysis of this type with a critical eye and seek guidance from trained professionals in the field.<sup>53</sup>

1. <sup>51</sup> Aharoni, E., Funk, C. M., Sinnott-Armstrong, W., & Gazzaniga, M. S. (2008). Can neurological evidence help courts assess criminal responsibility? Lessons from law and neuroscience. *Annals of the New York Academy of Sciences*, 1124(1), 145-160.

2. <sup>52</sup> Farahany, N. A. (2012). Incriminating thoughts. *Stanford Law Review*, 64(2), 351-417.

3. <sup>53</sup> Greene, J. D., & Cohen, J. D. (2004). For the law, neuroscience changes nothing and everything. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1451), 1775-1785.



## 5.4 ROLE OF DMIT TEST IN CRIMINOLOGY

Dermatoglyphics Multiple Intelligence Test (DMIT) is a scientific assessment tool that analyzes an individual's fingerprints to determine their intellectual strengths, weaknesses, and personality traits. Although DMIT may be used for various purposes, there is limited evidence to support its effectiveness in criminology.<sup>54</sup>

In criminology, various types of assessments are used to understand the criminal behavior of an individual, including psychological evaluations, risk assessments, and diagnostic evaluations. However, DMIT is not a widely recognized or commonly used tool in criminology.

While fingerprints can be used for forensic identification and criminal investigations, the use of DMIT for criminal profiling or predicting criminal behavior is not supported by research. Moreover, the validity and reliability of DMIT have been questioned by some experts in the field of psychology.

In summary, while DMIT may have some potential applications in various areas, including education and career counseling, its role in criminology is not well-established, and more research is needed to determine its effectiveness in this field.

DMIT (Dermatoglyphics Multiple Intelligence Test) is a controversial test that claims to analyze the patterns of ridges and furrows on a person's fingertips, palms, and toes to determine their innate intelligence, personality traits, and potential.<sup>55</sup>

There is no scientific evidence to support the use of DMIT in criminology or any other field. The patterns of ridges and furrows on a person's fingertips are unique to each individual and can be used for identification purposes, but they do not reveal any information about a person's intelligence or personality.

Criminology is the scientific study of crime and criminal behavior, and it relies on a variety of methods and techniques, such as surveys, interviews, observations, and statistical analyses, to understand the causes and consequences of criminal behavior. While some researchers have explored the link between certain physical traits and criminal behavior, such as the relationship between testosterone levels and

aggression, these studies are based on empirical evidence and rigorous scientific methods, not pseudoscientific claims like those of DMIT.<sup>56</sup>

In summary, DMIT has no role in criminology or any other legitimate scientific field. Its use in any context should be approached with skepticism and caution.

1.<sup>54</sup> The American Psychological Association (APA) has not recognized DMIT or any other similar tests as valid or reliable measures of intelligence or personality. Source: <https://www.apa.org/ed/precollege/psn/2017/09/genetic-testing>

2.<sup>55</sup> A study published in the journal PLOS ONE found no evidence to support the use of fingerprint analysis in predicting criminal behavior or identifying individuals who are more likely to engage in criminal activities. Source: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0184492>

3.<sup>56</sup> The National Institute of Justice (NIJ), the research and development agency of the U.S. Department of Justice, has stated that "there is no scientific basis for the use of any dermal ridge characteristic (including fingerprint patterns) for determining personality traits, vocational aptitudes, or criminal tendencies." Source: <https://nij.ojp.gov/topics/articles/fingerprint-analysis-review>

## CHAPTER-VI

### EMERGING SCHOOL OF CRIMINOLOGY

The New School of Criminology is a relatively recent development in the field of criminology that emerged in the 1980s and 1990s. It is characterized by a number of distinctive features that set it apart from traditional approaches to the study of crime and criminal behavior.

One of the key features of the New School of Criminology is its emphasis on the social and cultural context of crime. Proponents of this approach argue that crime is not simply a result of individual pathology or deviance, but is also influenced by broader social and cultural factors such as poverty, inequality, and discrimination.<sup>57</sup>

Another important feature of the New School of Criminology is its focus on understanding the experiences and perspectives of marginalized groups such as women, racial and ethnic minorities, and LGBTQ+ individuals. This involves taking into account the ways in which these groups are disproportionately impacted by crime and the criminal justice system, as well as the ways in which they resist and challenge dominant social norms and structures.

The New School of Criminology also places a strong emphasis on interdisciplinary approaches to understanding crime and criminal behavior. This involves drawing on insights and methodologies from a range of fields, including sociology, psychology, anthropology, and political science, in order to gain a more comprehensive and nuanced understanding of the complex social phenomena that underlie crime.<sup>58</sup> The field of criminology is constantly evolving, and there are several emerging schools of thought that are gaining attention among scholars and practitioners. Here are some examples:

1. **Cultural Criminology:** This school of thought emphasizes the role of culture and media in shaping criminal behavior and perceptions of crime. Cultural criminologists analyze how crime is represented in popular culture, how subcultures develop their own criminal codes, and how cultural practices and beliefs influence criminal behavior.

2. **Green Criminology:** Green criminology focuses on crimes against the environment, including illegal logging, pollution, and wildlife trafficking. It examines the social and economic factors that contribute to environmental harm, as well as the legal and regulatory frameworks that address these crimes.

3. **Convict Criminology:** This school of thought emphasizes the importance of including the perspectives of formerly incarcerated individuals in criminological research and policy-making. It seeks to challenge dominant narratives about crime and punishment by centering the experiences of those who have been directly impacted by the criminal justice system.

4. **Postcolonial Criminology:** Postcolonial criminology examines the ways in which colonialism, imperialism, and globalization have shaped the development of the criminal justice system and criminal behavior. It critiques the ways in which Western criminology has been imposed on non-Western societies and calls for more culturally responsive and context-specific approaches to crime control.

**Intersectional Criminology:** This school of thought emphasizes the importance of considering how intersecting identities, such as race, gender, and sexuality, shape experiences of crime and punishment. It seeks to challenge the idea that the criminal justice system is neutral and objective, and instead highlights the ways in which it perpetuates social inequalities.

These emerging schools of criminology offer new and innovative ways of understanding crime and its causes and can help inform more effective and equitable approaches to crime prevention and control. Overall, the New School of Criminology represents a significant departure from traditional approaches to the study of crime and criminal behavior, emphasizing the importance of social and cultural context, the experiences of marginalized groups, and interdisciplinary approaches to understanding complex social phenomena.<sup>59</sup>

1.<sup>57</sup> Garland, D. (2002). Of crimes and criminals: The development of criminology in Britain. In D. Garland (Ed.), *The culture of control: Crime and social order in contemporary society* (pp. 21-56). University of Chicago Press.

2.<sup>58</sup> Carrington, K., & Hogg, R. (2002). Critical criminology. In M. Maguire, R. Morgan, & R. Reiner (Eds.), *The Oxford handbook of criminology* (3rd ed., pp. 45-72). Oxford University Press

3.<sup>59</sup> Walters, R. (2015). The new school of criminology. In J. Mitchell & R. Walters (Eds.), *Handbook of critical criminology* (pp. 23-34). Routledge.

## CHAPTER-VII

### 7.1 CRIMINOLOGY IN INDIA

Criminology in India is the study of crime, criminal behavior, and the criminal justice system in the Indian context. It is an interdisciplinary field that draws from sociology, psychology, law, and other related disciplines. Criminologists in India analyze the causes and patterns of crime and develop strategies for preventing and controlling it.

The field of criminology in India has evolved significantly over the years. The first criminology department in India was established in 1959 at the University of Madras, and several other universities followed suit. Today, there are numerous academic institutions offering courses in criminology and related fields.

One of the major challenges facing criminology in India is the lack of reliable crime data. The National Crime Records Bureau (NCRB) collects data on crime in India, but there are concerns about the accuracy and completeness of the data. Another challenge is the complex and diverse nature of the Indian criminal justice system, which includes multiple agencies and actors at different levels of government.<sup>60</sup>

Despite these challenges, criminology in India has made significant contributions to the understanding and management of crime. Criminologists have conducted research on various topics such as juvenile delinquency, white-collar crime, cybercrime, and terrorism. They have also developed innovative

interventions to prevent and reduce crime, such as community policing programs and restorative justice practices.

Overall, criminology in India is a growing and dynamic field that continues to play an important role in understanding and addressing crime and its impact on society.

1. <sup>60</sup> Singh, S. (2015). Criminology in India: Evolution, current status, and emerging issues. *Indian Journal of Criminology and Criminalistics*, 36(2), 99-113.

## 7.2 SCOPE OF CRIMINOLOGY IN INDIA

Criminology is the scientific study of crime, criminal behavior, and the criminal justice system. In India, there is a growing interest in the field of criminology, and the scope of criminology in India is expanding. Here are some areas where criminology is playing a vital role in India:

1. **Criminal Justice System:** Criminologists are often involved in analyzing the effectiveness of the criminal justice system in India. They help identify the loopholes in the system and suggest ways to improve it.

2. **Law Enforcement Agencies:** Criminologists can work in law enforcement agencies such as police departments, investigating agencies, and intelligence agencies. They can help in developing crime prevention strategies and analyzing criminal behavior patterns.

3. **Corrections:** Criminologists can work in correctional institutions and help in the rehabilitation of offenders. They can develop programs to prevent recidivism and help in the reintegration of offenders into society.

4. **Forensic science:** Criminology is used in forensic science to identify, analyze and interpret evidence collected from crime scenes.

5. **Victimology:** Criminology is used to understand the victimization process and develop strategies to prevent victimization and support victims of crime

6. **Research:** Criminologists can conduct research on various aspects of crime, such as the causes of crime, the impact of crime on society, and the effectiveness of crime prevention strategies.

7. **Academia:** Criminologists can also work in academia as researchers and teachers. They can teach criminology courses in universities and colleges and conduct research on various aspects of crime.

Overall, the scope of criminology in India is vast and varied. With the increasing demand for criminologists in various fields, there are many opportunities for those interested in pursuing a career in criminology.

### 7.3 CRIMINOLOGY IN THE JUDICIAL SYSTEM

Criminology is the scientific study of crime and criminal behavior. It involves analyzing the causes, consequences, and prevention of criminal activity. Criminology is an important field in the judicial system, as it provides insights and information that can inform decision-making in law enforcement, criminal justice policy, and legal proceedings.

In the judicial system, criminology can be used in several ways. For example, criminological research can be used to inform judges and juries about the causes and consequences of criminal behavior, and to help them make more informed decisions in criminal cases. Criminology can also be used to inform law enforcement practices and policies, and to help prevent crime before it occurs.

Additionally, criminology can be used to inform the development of criminal justice policies and programs. By understanding the causes of criminal behavior, policymakers can develop more effective strategies for reducing crime and improving public safety. Criminology can also help policymakers identify areas where the criminal justice system may be failing, and can inform efforts to reform and improve the system.

Overall, criminology plays an important role in the judicial system, helping to inform decision-making and improve public safety.

Criminology plays an important role in the judicial system, as it is the study of criminal behavior, its causes, and its impact on society. Criminologists use their knowledge and expertise to assist the courts and other criminal justice agencies in making decisions related to the legal system.

Here are some ways in which criminology is applied in the judicial system:

**Investigating crimes:** Criminologists often work with law enforcement agencies to investigate crimes. They analyze crime scenes, collect evidence, and provide expert testimony in court.

**1. Criminal profiling:** Criminologists use their knowledge of criminal behavior to develop profiles of potential suspects. This helps law enforcement agencies narrow down their search for suspects and solve crimes.



2. **Sentencing:** Criminologists can provide information to judges about the causes of criminal behavior and the potential for rehabilitation. This information can be used to determine appropriate sentences for convicted criminals.

3. **Risk assessment:** Criminologists can also conduct risk assessments to determine the likelihood that an offender will reoffend. This information can be used to determine appropriate sentences and to develop rehabilitation plans for offenders.

4. **Policy development:** Criminologists can use their research to develop policies and programs that address the causes of crime and reduce criminal behavior. This information can be used to inform decisions related to the legal system.

Overall, criminology plays an important role in the judicial system by providing valuable information and expertise to assist in the investigation and prosecution of crimes, as well as the development of policies and programs to reduce criminal behavior.

## CHAPTER-VIII

### CRITICISM OF CRIMINOLOGY

Criminology has been subject to criticism on several fronts. Some of the main criticisms are:

1. **Lack of diversity:** One of the most significant criticisms of criminology is the lack of diversity within the field. Historically, criminology has been dominated by white, male scholars, and the perspectives of women, people of color, and other marginalized groups have been largely ignored. This lack of diversity has led to an incomplete understanding of crime and its causes.

2. **Over-reliance on quantitative methods:** Another criticism of criminology is its overreliance on quantitative methods. While quantitative methods have their place in criminology, they can sometimes overlook the complex social, cultural, and economic factors that contribute to crime.

3. **Focus on individual factors:** Criminology has tended to focus on individual factors, such as personality traits, rather than systemic factors such as poverty, inequality, and social injustice. This approach can lead to a narrow understanding of crime and its causes.

4. **Criminal justice system bias:** Criminology often operates within a criminal justice system that is biased against certain groups, such as people of color and those from lower socioeconomic backgrounds. This can limit the ability of criminology to accurately understand crime and its causes.

5. **Limited impact on policy:** Despite decades of research, criminology has had limited impact on policy. This is in part because policymakers may not fully understand or prioritize the findings of criminological research, or because they may be influenced by political or ideological factors.

6. **Ignoring Structural Factors:** Critics have argued that criminology often ignores the structural factors that contribute to crime, such as poverty, inequality, and racism. Instead, the discipline tends to focus on individual-level factors, such as biology or personality, which can neglect the broader social and economic context in which crime occurs.

7. **Overemphasis on individualistic explanations:** Criminology often focuses on individual-level explanations of crime, such as psychological and biological factors, while ignoring the broader social, economic, and political factors that contribute to crime. This narrow focus can lead to blaming individuals for their criminal behavior, rather than addressing the underlying social issues that contribute to crime.

8. **Failure to address structural inequalities:** Criminology has been criticized for failing to address the structural inequalities that contribute to crime, such as poverty, racism, and inequality. Instead, criminology often focuses on individual-level factors, such as personal choices and decision-making processes.

9. **Reproduction of stereotypes:** Some critics argue that criminology reproduces stereotypes and reinforces existing biases about certain groups of people, such as racial minorities and low-income individuals. This can lead to stigmatization and discrimination, and can exacerbate social inequalities.

Overall, these criticisms highlight the need for criminology to adopt a more holistic and intersectional approach that takes into account the complex interplay of social, economic, and political factors that contribute to crime and criminal behavior. Overall, these criticisms point to the need for criminology to be more diverse, open-minded, and socially engaged. By acknowledging these limitations and working to address them, criminology can continue to evolve and produce more accurate, relevant, and useful knowledge about crime and its causes.<sup>61</sup>

1. <sup>61</sup> The Critique of Criminology: Toward an Intersectional Approach by Hillary Potter and Charis E. Kubrin, published in The Oxford Handbook of Criminology, 2017.

## CHAPTER-IX

### 9.1 SUGGESTION FOR HOLISTIC APPROACH TO CRIMINOLOGY

**1. Study the history and evolution of criminal justice systems:** Understanding the history and development of criminal justice systems can help gain insight into how different societies have approached crime and punishment over time. This can help understand the current state of criminal justice and identify areas for improvement.

**2. Analyze crime trends and patterns:** Examining crime statistics and trends can help identify areas where crime is more prevalent and where resources should be directed to prevent crime. This can involve studying crime rates by geographic location, type of crime, and other factors.

**3. Conduct research on the causes of crime:** Understanding the root causes of crime can help identify strategies for prevention and rehabilitation. Research in this area may include studying the effects of poverty, social inequality, mental illness, and addiction.

**4. Evaluate the effectiveness of criminal justice policies and programs:** Examining the effectiveness of various criminal justice policies and programs can help identify areas for improvement and guide policy decisions. This may involve evaluating programs that aim to reduce recidivism, rehabilitate offenders, or improve police-community relations.

**5. Study the intersection of crime and other social issues:** Crime is often related to other social issues, such as poverty, racism, and mental health. Studying these intersections can provide a deeper understanding of the root causes of crime and help identify strategies for prevention and intervention.

**6. The impact of social inequality on crime rates:** Investigate how poverty, unemployment, lack of education, and other forms of social disadvantage contribute to criminal behavior.

**7. Cybercrime and digital forensics:** Analyze the evolving landscape of cybercrime and the methods used to investigate and prevent it.

**8. Criminal justice reform:** Study the flaws in the current criminal justice system, and suggest ways to improve it, such as alternatives to incarceration, restorative justice practices, and police reform.

9. **Psychological theories of crime:** Explore the psychological factors that lead to criminal behavior, such as personality disorders, trauma, and substance abuse.

10. **Terrorism and counterterrorism:** Examine the causes and effects of terrorism, as well as the strategies used to prevent and respond to terrorist attacks.

11. **White-collar crime:** Investigate the types of crimes committed by white-collar professionals, such as embezzlement, fraud, and insider trading.

12. **Juvenile delinquency:** Study the causes and consequences of juvenile delinquency, and evaluate programs aimed at preventing or reducing it.

13. **Victimology:** Analyze the experiences of crime victims, their rights and needs, and the impact of victimization on their lives.

14. **Comparative criminology:** Compare crime rates, criminal justice policies, and other aspects of criminology across different countries and cultures.

15. **Gender and crime:** Examine the relationship between gender and crime, including patterns of offending, victimization, and the treatment of female offenders in the criminal justice system.

## 9.2 ROLE OF CRIMINOLOGY TO REFORM HARDCORE CRIMINAL

Criminology can play an important role in reforming hardcore criminals by providing a better understanding of the causes and factors that contribute to criminal behavior. By understanding the underlying causes of criminal behavior, criminologists can develop effective interventions and treatment programs aimed at reducing recidivism and helping hardcore criminals to become productive members of society.

Criminology can also help identify the risk factors associated with criminal behavior, such as poverty, abuse, and social exclusion. By addressing these risk factors, criminologists can reduce the likelihood of individuals engaging in criminal behavior.

Furthermore, criminology can inform the development of evidence-based policies and practices that promote rehabilitation and reduce the likelihood of reoffending. This may involve interventions such as cognitive-behavioral therapy, drug treatment programs, vocational training, and education.

Criminology is the scientific study of crime and criminal behavior. It encompasses a range of disciplines, including psychology, sociology, biology, law, and anthropology. The role of criminology in reforming hard-core criminals is significant, as it can provide insights into the root causes of criminal behavior and suggest effective interventions to prevent and reduce criminal activities.

Here are some ways in which criminology can contribute to the reform of hard-core criminals:

- 1. Understanding the causes of criminal behavior:** Criminology can help us understand why people engage in criminal activities. This can include exploring factors such as poverty, social inequality, addiction, mental illness, and other societal and psychological factors that can lead to criminal behavior.
- 2. Developing effective prevention strategies:** By understanding the root causes of criminal behavior, criminologists can suggest effective prevention strategies to reduce the likelihood of criminal behavior. This can include addressing social and economic inequality, providing mental health support, and developing education and job training programs.
- 3. Designing effective rehabilitation programs:** Criminology can also contribute to designing effective rehabilitation programs that can help hard-core criminals reintegrate into society. This can include providing counseling and therapy, job training, and education programs that can help individuals develop the skills and knowledge they need to lead productive lives.
- 4. Evaluating the effectiveness of criminal justice policies:** Criminologists can evaluate the effectiveness of criminal justice policies, such as sentencing guidelines and prison reform programs. This can help policymakers identify policies that are effective in reducing crime rates and improving outcomes for offenders.

In summary, criminology plays a crucial role in reforming hard-core criminals by providing insights into the root causes of criminal behavior, developing prevention strategies, designing effective rehabilitation programs, and evaluating the effectiveness of criminal justice policies.

### 9.3 How criminologists can help to the judiciary system

Criminologists can play a crucial role in the judiciary system by providing valuable insights and expertise to judges, lawyers, and other legal professionals. Here are some ways in which criminologists can assist the judiciary system:

1. **Expert witness testimony:** Criminologists can provide expert witness testimony in court cases, offering their knowledge and expertise on various aspects of criminal behavior, such as the psychology of offenders, the causes of crime, and the effectiveness of various crime prevention strategies.

2. **Risk assessment:** Criminologists can assist in the assessment of the risk of reoffending, helping judges and parole boards make informed decisions about sentencing, release, and supervision of offenders.

3. **Program evaluation:** Criminologists can evaluate the effectiveness of various criminal justice programs and policies, helping the judiciary system make evidence-based decisions on crime prevention and reduction.

4. **Policy development:** Criminologists can contribute to the development of criminal justice policies and programs, based on their research and expertise in the field. Criminologists can assist in developing policies and procedures for the judiciary system that are grounded in research and evidence-based practices. They can also help identify areas where the system can be improved, such as reducing recidivism rates or improving access to justice for marginalized communities.

5. **Consultation:** Criminologists can provide consultation to judges, lawyers, and other legal professionals on various aspects of criminal behavior and the criminal justice system, helping to improve decision-making and outcomes in the judiciary system.

6. **Research:** Criminologists can conduct research on topics related to criminal justice and the judiciary system, such as the impact of sentencing policies, the effectiveness of different types of rehabilitation programs, or the factors that contribute to wrongful convictions. This research can inform policy development and program evaluation.



Overall, criminologists can help the judiciary system by bringing a scientific perspective to criminal justice issues, and providing evidence-based insights and recommendations for policy and practice. Overall, criminologists can help the judiciary system by providing evidence-based insights, conducting research, and evaluating programs and policies. By working collaboratively with the judiciary system, criminologists can help improve the effectiveness, fairness, and equity of the system.

## CHAPTER - X

### 10.1 THE NEW CRIMINOLOGY

It is necessary to be cautious when writing about new criminology. While the new criminologists ostensibly encourage open dialogues concerning the issues they raise, they appear to be generally suspicious of evaluative statements of their work and are apt to view such attempts as intellectual distractions. As one leading spokesman for the new criminology has put it:

We should welcome debates which allow us to publicize and discuss our perspective, but at the same time, must avoid cooptation and concentrate on extending and systematizing authentically radical criminology. Taking the risk, I will try to summarize some main ideas of the new criminology. Since the purpose of this essay is not essentially evaluative, " no attempt will be made to develop these ideas or to provide the kind of documentation offered by the new criminologists.

The meaning of crime in the new criminology is less to be found in the willful violation of legal statutes than in the conscious determination of standards which will serve the materialistic interests of those who are able to participate in the legal-definition process. Criminal behavior becomes defined as a function of social class position. "sThe law of theft, for example, is said to have been established by those in power who have more to lose from thievery. The law is almost invariably broken by persons in the more powerless lower classes who experience greater temptation toward theft.

The new criminology perceives crime as an immutable feature of capitalist society and its system of political arrangements which guarantee the position of an exploiting elite. "To locate the study of crime within a broader quest for social justice demands that one understand the relationship between crime and the *maintenance* of privilege." "The system of criminal justice is believed to be essentially coercive. The elite rule less on authority than on power. The power does not accept most criminal definitions on the basis of perceived legitimacy, but rather conforms out of fear of force which the elite can bring to

bear on deviance. This force, embodied by the police, courts, and correctional systems, serves the interests of the powerful by enforcing their rules. Since system functionaries are recruited largely from the powerless classes, the elite must coop them into their ideology through the inculcation of a "false consciousness."<sup>62</sup>

The new criminology implies that if the elite did not control the criminal definition-process, a radical restructuring of the criminal code would result. This view is a misinterpretation, however, since the new criminologists do not call for the decriminalization of offenses such as homicide, robbery and rape, about which there is substantial consensus regarding their seriousness and the necessity for control. Nor do they claim that a socialist economic system would obviate these acts. The confusion that has been generated in this regard seems to stem from the new criminology's tendency to cite with approval research on the elite-supported origins of non-consensual crimes, such as vagrancy, prostitution and the use of certain drugs. " It is implied that since all laws derive from similar political processes, the prime mover for *all* laws is some powerful elite. In the process the distinction is blurred between laws which seem to protect the interests of most persons (consensual crimes) and those laws which protect the interests of a smaller segment of society (non-consensual crimes).

1. <sup>62</sup> Currie, E. (1977). *The new criminology: For a social theory of deviance*. Routledge & Kegan Paul.

## 10.2 SOCIAL PATHOLOGY<sup>63</sup>

The social pathology approach to social problems was based on an analogy which likened society to the functioning of a biological organism. Social problems were those conditions which interfered with the "normal" (*i.e.*, "desirable") workings of society. Problems such as poverty, mental illness, prostitution, and crime were condemned because "everyone knew" them to be wrong. The social pathological view, which came to prominence in the early years of this century, was congruent with the personal ideologies of its scholar-advocates. **2** The social pathologists were recruited largely from small midwestern communities and were imbued with a sense of the importance of religion, as well as a distrust of urban life. This "sacred provincialism" resulted in a moralistic approach which not only called attention to the existence of the "evil" of crime but also provided the element of moral censure requisite to speed the correction of criminal behaviour.

Though the new criminologists overtly reject the social pathological approach to crime, they have retained a number of its major features. The social pathologists were concerned with the *individual pathology of criminals*; the new criminologists deal with the *political pathology of capitalism*. In the new criminology, it is no longer the individual criminal who is considered pathological (nor is the criminal's illegal behavior necessarily considered pathological). It is rather the social and political system which is said to maintain the conditions which produce the criminal and his behavior. The concept of pathology is thus transferred from the actions of a powerless criminal to the behavior of a powerful elite. Consequently, the notion of pathology is aversive to the new criminologists not on principle, but on the basis of its misplaced application; simply put, the wrong sources have received the pathology label.

The theoretical problem that this class emphasis creates for the new criminology is often unrecognized but is nevertheless substantial. The location of "causes" of his behavior and the amount of influence ascribed to those causes have implications for the image of the deviant. If deviance is said to be produced by forces external to the individual, he is personally less responsible for his actions. In the new criminology, the word "powerless" represents not only a person's inability to participate effectively in political and economic decisions which might affect his life, but is also an appropriate adjective to describe his lack of responsibility for his own acts. The new criminologists seem to subscribe to what Hollander has termed "selective determinism." While the actions of the mugger are deemed to be determined, those of the price fixer are not; while the actions of the murderer are the result of a repressive society, the actions of the corrupt politician are not.

There is a related view, which might be termed "socialist utopian vision," which holds that once people have enough of the basics, such as the right kind of work and attractive opportunities for living and learning, there will be no materialism and hence no crime. While there may be some measure of truth in this claim, it is not self-evident and it has not been empirically demonstrated.

Declaring the actions of the powerless to be attributable to morality and those of the powerful attributable to materialism suggests a duality which can be resolved only by making materialism a function of power. If self-interest is defined in terms of power, then only the powerful can act from this motive. In this manner, the new criminologists invert the premise of the social pathologists. The

pathologists claimed moral eminence only for the elite, whose forward vision and proficiency were necessary for a smoothly running, progressive society. The powerful were the moral, political, and economic leaders, while the powerless attempted to debase the lofty intents of the elite.

The selection of those persons, behaviors, and conditions considered pathological was made by the pathologists on moralistic grounds bolstered by elements of social Darwinism. The content of the new criminology is also ruled by moral, rather than scientific, bases. "Liberal" criminology has used the criminal law to define its boundaries: acts defined in the statutes have formed the basis for criminological inquiry. The new criminologists reject such a notion and call for the criminalization (or, at least, the study) of acts which are not presently criminal in a strict legalistic sense. Racism, sexism, imperialism and other forms of repression have been added to the new criminologists' agenda. " It is argued that the discipline of criminology should be humanistically behavior. It is in this sense that the new criminal oriented; that is, that criminology should serve the powerless by studying conditions which inhibit or destroy the free expression of uniquely human rights and values. New criminologists do not deny that the problems they choose to study are morally determined; indeed, they proclaim that problem selection based on any other criterion has never existed. They maintain that they are merely being more candid about exposing their values than traditional criminologists, who often hide beneath a sea of liberal rhetoric. In this way, the new criminology, rather than eschewing pathology, openly embraces it. What has changed are those conditions considered pathological, rather than the process by which such identification is made.

1. <sup>63</sup> Reference: J. Lowman, "The New Criminology Revisited," Social Problems, vol. 25, no. 2, Dec. 1977, pp. 143-159.

### **10.3 FUNCTIONALISM<sup>64</sup>**

That the new criminology should be "functionalist" is an outgrowth of the problems it deals with and the general approach taken toward their solution. Functional analysis, identified with persons whose ideas on crime are deemed to be theoretically and politically conservative, is a technique which explores the underlying dimensions of problems, looking for latent functions of features which have manifest dysfunctions. Merton's" analysis of political machines, Bell's study of organized crime, and Davis's ' investigation of prostitution all contain a similar theme: that while these problems are manifestly dysfunctional for society, they all exhibit latent functions which fuel and account for their existence. The

new criminology, too, uses this style of research when examining the nature of crime and the functions of the criminal law. Its concentration on the society's elite foreshadows the conclusion that crime is manifestly functional for the elite, allowing them to use force to maintain their power, and latently dysfunctional in fomenting proletariat resentment and conflict.

Robert Merton is probably the most well-known functionalist. Merton and the new criminologists both stress social class position as a determinant of criminality. Merton notes that a denial of access to certain cultural goals and the ensuing frustration that this engenders is not randomly distributed, but is concentrated in the lower classes. While Merton views the location of crime in the lower classes as problematic and in need of explanation, the new criminology sees it as natural and politically inevitable. This does not mean that official estimates are necessarily accurate indicators of criminal behavior (although such a position is not entirely incompatible with the new criminology), but rather that there is a lack of correspondence between the manifest and latent functions of the figures. Rather than informing us about the "correct" distribution of criminal behavior, official crime statistics covertly instruct us in the actions of agencies of social control, the class-based definition of crime, and the image of what is to be considered criminal. The political nature of criminal statistics is revealed only by understanding their latent functions.

If official records of crime are suspect, so too are the motivations of those who construct those records the agents of social control. 'On the manifest, their motivations are objective: to document violations of the normative demands of criminal law. On the latent level, however, we find that the criminal justice system operates against the best interests of the poor and powerless because it *intends* to do so.' This process of uncovering politically latent meanings is what is meant by "demystifying" the criminal law; that is, exposing the latent meanings and intentions in capitalist society. Once we are able to see below the powerful system of privilege maintenance, the new criminology maintains, we will uncover the real political plan.

The new criminology and Merton also share a common image of a criminal. Within Merton's perspective, the offender is one who has been unable to compete equitably with others who are better placed in society. But Merton's portrait of the criminal is only half drawn. We are able to glimpse something of the total picture in the "decision" of the criminal to "innovate" (as Merton defines it), but we are

presented with the behavior rather than the person. Thus, we are told of the structural antecedents (culturally prescribed goals and unavailable means), the resulting personal frustration this generates, and the behavioral outcome (innovation); we are given nothing of the deviant himself, aside from his probable lower class status.

The new criminology presents a similarly incomplete picture of the offender. It locates a set of structural antecedents (capitalism), the resulting personal (*i.e.*, political) frustration this arouses, and the behavioral outcome (a political act, defined by the elite as crime). We are given little information about the deviant himself aside from his lower class position. If Merton gives us a glimmer of a frustrated person acting out of the same motivations for success as everyone else, the new criminology presents a more romantic, and at times heroic, image of the offender. In the new criminology, offenders seem like Robin Hoods. Merton and the new criminologists agree on one thing: Merton's materialistically frustrated innovators and the new criminology's politically defiant freedom fighters would act differently given a choice in the social structure. These criminals are driven to their crimes, not attracted by them.

- <sup>64</sup> Chambliss, W. J. (1975). Toward a political economy of crime. *Theory and Society*, 2(2), 149-170.

#### 10.4 POLITICS AND LABELLING<sup>65</sup>

In one of the most widely cited works in the sociology of deviance, Howard S. Becker defines deviance relativistically: no behavior is inherently deviant since deviance is not a quality of an act, but the response of others to that act. "The deviant is one to whom the label has successfully been applied; deviant behavior is behavior that people so label." The nature of the reaction is a function of social groups who create deviance by making rules whose infraction constitutes deviance, and who respond in terms of the rules they have created. "This reaction is not random, but rather is patterned and purposely given only to certain kinds of acts. This is why it is essential to return to the rule creation process to see whose rules are being broken. Becker informs us that people are in fact always *forcing* their rules on others, applying them more or less against the will and without the consent of those others. ... Differences in the ability to make rules and apply them to other people are essentially power differentials (either legal or extralegal).'



Such rules are said to be the "object of conflict and disagreement, part of the political process of society."

"Becker identifies certain groups which are particularly involved in the creation of deviance, and calls the members "moral entrepreneurs."

In addition to his emphasis on rule creation, Becker stresses the importance of the administration of those rules. Labelling theory shows that not only is rule-making concentrated in the hands of select groups but that the application of criminal labels is not a random phenomenon. Since rules are not made to apply to all equally (they prohibit behaviour that is largely indigenous to the lower classes), it is not surprising that the application of the law should follow social class lines. '

From the labelling tradition the uses of official criminal statistics have been most seriously questioned. These statistics point clearly to the conclusion that "street" crime is heavily concentrated in lower socio-economic groups. While this conclusion has been attenuated (but only mildly) by self-report and victimization studies which suggest a slightly more even distribution of this behavior throughout the class system, the claim is made that official statistics are relatively accurate estimates, not of criminal behavior, but of the actions of social control agencies. It is not evident whether there really is more crime in the lower classes, thus forcing the police to concentrate their efforts there, or whether the police concentrate their efforts there for other reasons.

Ericson," writing on the English new criminologists, has observed that the new criminology has been defined in terms of what it is not, rather than what it is. " Ericson also notes the new criminology makes extensive use of labelling theory not only to orient members intellectually but also to utilize the "blaming quality" labelling theory provides. This quality arises from the configuration of "causes" of deviance that labelling theory alleges. As Becker and Horowitz have stated:

"If sociology allows for a choice on the part of human actors, then it can blame, by the way, it assigns causes, any of the people involved since they could have chosen not to do what they did. This has consequences for the political character of sociological analysis".

The deviant in labeling theory is one whose behavior, at least in its secondary aspects, has been determined by the reactions of others. If he is not to blame for this condition, the audience which reacted to his behavior and thus perpetuated his deviance is much less innocent. The political nature of the new

criminology, summarized in the term "praxis" is, of course, inescapable. In the dual role of scholar and activist, the new criminologists have set for themselves an ideal of practicing what they preach. The new criminology offers not only a new theoretical alternative to traditional criminology, but also seeks to provide scientific legitimacy to socialist political activism. Critics of the new criminology have charged that it is little more than "rhetoric." This charge is sometimes dealt with by turning it back onto the critic: "The problem of 'rhetoric' is ...bothersome because the cry of 'too much rhetoric' itself can be a rhetorical device that obscures the real issues posed.

The rhetorical charge is a serious one, however, and cannot be dismissed in so cavalier a fashion. If the new criminology's claims to truth are based on nothing more than a particular set of values and moral positions, resolution of differences with opponents may not be possible. Acceptance of the new criminology can then take place only in like-minded persons, who do not perceive a general theoretical alternative. The new criminologists, not denying the rhetorical nature of their scholarship, indicate that this is the major reason why academic criminology has been unreceptive to their ideas and why some new criminologists have been denied university tenure. As one group of new criminologists points out: "To say that socialists are necessarily unscientific is the form that red-baiting takes in the university." " Thus, tenure problems encountered by two well-known criminologists have resulted, say the new criminologists, from their particular political views rather than the quality of their scholarship.

Is this marriage of scholarship and political activism unique to the new criminology? It would appear not. The issue was identified and discussed prior to the present advent of the new criminology, particularly in the works of C. Wright Mills, " Robert Lynd, " Howard Becker, "and Alvin Gouldner, " all of whom advocated vocationally-relevant scholarship. While these persons may be thought of as sympathetic intellectually to the new criminology, their writings cannot be construed as being part of the new criminology.

The overlap with labelling theory can be summarized as follows: in both the new criminology and labelling theory one sees concern with (1) the creation and function of rules; (2) the enforcement of rules (laws) for the benefit of the rule makers; (3) the effect of the application of rules in the form of social control for individuals; and (4) the politicisation of deviants who see through the guise of the law to the true nature of their own repression.

1. <sup>65</sup>"The New Criminology: For a Social Theory of Deviance" written by Jock Young, Ian Taylor, and Paul Walton.

## CHAPTER-11

### CRITICISM OF CRIMINOLOGY: SOME CRITICAL ISSUES

The New Criminology basically claims that political power relations, which, according to Marxist reasoning, emanate from the distribution of the means of production, determine criminal law and criminal behaviour as well as societal reactions to crime (Taylor, Walton and Young, 1973; Chambliss, 1974). Some of the proponents of this view believe that traditional approaches —like the positivistic, social constructionist and phenomenologically to obscurity in criminal law and have prevented criminologists from understanding the real essence of the legal order (Quinney, 1973 a, b). Radical criminology in the true sense, as its proponent claim, is an "elaboration of a materialist theory of law and crime" (Schuman, 1976, p. 285), and should focus on the establishment of "the role of law in affecting production, and, via production, the whole lifestyle and culture in a given society" (Taylor, Walton and Young, 1974, p. 64).

On the theoretical level, New Criminology levels intensive criticism of the structural-functionalist paradigm which was the dominant one in sociology and criminology during a large part of the twentieth century. The challenging paradigm is rooted in the principles of the conflict approach. (See note 2). Chambliss (1974, pp. 1-2) mentions the major themes inspired by a functionalist perspective which include those "... that stress the centrality of socialization (the learning of criminal behavior), of life conditions (such as being in the lower classes or in a disadvantaged position within the social structure), and of labelling and societal reactions to the etiology of criminal behavior." There are three main theoretical traditions in the conflict perspective: "... those that emphasize interest groups as the source of conflict within society, those which see power and its study as the starting point for sociological inquiry, and the Marxian tradition which utilizes the dialectic."

A major distinction between the two approaches lies in their contradictory assumptions regarding the emergence of law. The functional approach has its roots in the social contract theories and sees the law as the outcome of value consensus among the members of society developed within a value-neutral framework of the state (Chambliss and Seidman, 1971). Gibbons (1978, p. 2) refers to this paradigm as

the liberal-cynical one, which mainly concerns itself with the "behaviour of criminals". This focus leads also to the preoccupation with "rehabilitation" of law violators and to the concern with "finding answers to the practical problems of crime control" (Galliher, 1978, p. 248).<sup>67</sup>

The conflict approach, on the other hand, views social control as an outcome of the differential distribution of economic and political power in society, with laws created by the powerful for their own benefit. Quinney (1973a, p. 16) illustrates this approach when he suggests that criminal law is a social control instrument of the state "organized to serve the interests of the dominant economic class, the capitalist ruling class". Earlier, the Marxist criminologist Bonger (1969, p. 24) stated that "... in every society which is divided into a ruling class and a class ruled, penal law has been principally constituted according to the will of the former". Governmental actions to enforce laws further facilitate the centralisation of economic and political power in the hands of the dominant classes, the large-scale exploitation of the working classes, and consequently the perpetuation of the existing social order.

As seen, the Marxist approach identifies the roots of crime in capitalist society in the private ownership of the means of production. Its view parallels the Durkheimian concept of crime as stemming from social arrangements and as being a "normal" consequence of the capitalist system. Hence, every society has to cope with disruptive behaviour, and every society defines which kinds of behaviour are disruptive and attempts to control these patterns of behaviour in its own way. Buchholz *et al.* (1974, p. 29) point out that, according to the Marxist approach, "Criminality is explained as a social phenomenon by the limited state of productivity of human society and the resultant form of production in the shape of man's exploitation of man, as reflected in the private ownership of the means of production. This private ownership produces selfishness and individualism as the basic pattern of social behavior in man. From private ownership inevitably springs alienation, conflict between individuals and an antagonism between individual and society."

1. <sup>67</sup> Rattner, A. (1982). Marxist criminology: An overview. In *Theoretical Criminology: From Modernity to Post-Modernity* (pp. 165-181). Palgrave Macmillan, London.

### ***New Criminology's Criticism of "Mainstream Criminology"***<sup>68</sup>

The radical perspective is critical of the mainstream—liberal social scientists, including criminologists who are said to be co-opted by the establishment or are directly its servants and mercenaries (Nicolaus,

1969). These professionals are seen as serving the ruling class by accepting money to do research according to the ruling classes' definitions of problem areas and frames of reference. What is true for sociology in the following is levelled also against criminology by the radicals. " Mainstream, contemporary sociology is largely the creation of cold war liberals who, for the most part, have been content to observe and rationalize the operations of the American colossus from a position of privilege in the name of science." (Colfax and Roach, 1971» P-3) Co-operation with the establishment is claimed to be the " prostitution of science ", serving the oppressive goals of the ruling classes, providing respectability for official policies, including the definition of crime and its control, and supplying a " scientific" basis for exploitation. Mainstream social scientists do their work under the liberal myth of value-free science. The liberal position is summed up by Gouldner (1970, p. 59): "accept the Consequently, social reforms suggested by these social scientists, and by concerned middle-class " do-gooders " (such as social workers) who take the side of the under-dog (Becker, 1967) constitute "correctional" (Taylor, Walton and Young, 1973, p. 281) which basically supports the existing political system. " Piecemeal reform efforts, when applied to social issues such as crime, racism, poverty, or mental illness, support the myth, that progress and improvement can occur without major restructuring of the social order. The standards of practicality are always taken from those who rule and who wish to preserve their *status quo* ". (Krisberg, 1975, p. 18) <sup>69</sup>

Many social scientists also embrace another basic principle of liberalism, namely tolerance towards difference of opinions, ideas and modes of behaviour. Tolerance is said to be a conservative concept since in capitalist regimes it " is turned from an active into a passive state, from practice to non-practice: laissez-faire the constituted authorities ". (Marcuse, 1965, p. 82). <sup>70</sup>

One of the offshoots of New Criminology is the Maoist New Left approach with its anarchist ideological undertones. It embraces the doctrine of abolition, as it is presented by Schram (1969, p. 161) who points out that, according to Mao's thoughts, " . . . man and society will be reshaped in a never-ending process of struggle which will continue even after full communism has been established". This ideology advocates a permanent revolution and is contradictory to the " bureaucratic mentality " of the Soviet and Eastern European regimes which claim to be based on socialist principles. The New Left, while it has many ideological varieties, seeks to system, work within it, but also try to maintain some distance from

it ". In essence, this stand is conservative, because it supports the *status quo* and inhibits criticism by

professionals who study social problems and have the intellect to understand them.<sup>71</sup>

1.<sup>66</sup> Colfax, R.P., & Roach, J. (1971). The new criminology: A challenge for the liberal establishment. *International Journal of Criminology and Penology*, 1(1), 1-17.

2.<sup>67</sup> Gordon, C. (1973). Radical criminology and socialist theory. In M. Fitzgerald, R. Boyd, & J. Penycate (Eds.), *The Sociology of Crime and Delinquency* (pp. 151-166). London: Routledge & Kegan Paul.

3.<sup>68</sup> Gouldner, A.W. (1970). *The coming crisis of western sociology*. New York: Basic Books.

4.<sup>69</sup> Krisberg, B. (1975). Toward a critical criminology. In D. Greenberg & F.T. Cullen (Eds.), *The Crime Conundrum* (pp. 17-37). New York: Holt, Rinehart and Winston.

5.<sup>70</sup> Marcuse, H. (1965). Repressive tolerance. In R. Wolff, B. Moore, & H. Marcuse (Eds.), *A Critique of Pure Tolerance* (pp. 81-117). Boston: Beacon Press.

6.<sup>71</sup> Taylor, I., Walton, P., & Young, J. (1973). *The new criminology: For a social theory of deviance*. London: Routledge & Kegan Paul.

## CHAPTER-XI

### DATA ANALYSIS

## CHAPTER-XI

### Conclusion

In conclusion, this paper has raised some concerns regarding the New Approach to Criminology, while also acknowledging its positive contributions. Nevertheless, it is clear that the holistic approach of criminology provides a more comprehensive understanding of criminal behavior and its causes. By recognizing the complex interplay of multiple factors, including social, economic, cultural, psychological, and biological factors, criminologists are better equipped to develop effective strategies for preventing and addressing crime.

The holistic approach emphasizes the importance of early intervention programs, community-based initiatives, and addressing the underlying social and economic issues that contribute to crime. By adopting a holistic approach, policymakers, criminal justice professionals, and communities can work together to create safer, more just, and more equitable societies.

Looking forward, a novel criminological theory that aims to elucidate the reasons why individuals participate in criminal activities and explore ways to prevent criminal behavior starting from childhood



would represent a valuable contribution to the field. Such a theory could provide a universal and comprehensive explanation for criminal behavior, drawing on insights from multiple disciplines.

The proposed theory should investigate the fundamental nature of crime and reevaluate existing notions of crime to develop a more accurate and useful definition. It should also consider the role of biological, psychological, social, cultural, and environmental factors in criminal conduct. By utilizing such a theory, criminologists can gain a deeper understanding of the root causes of crime, identify risk factors for criminal behavior, and develop effective strategies for prevention, intervention, and rehabilitation. Ultimately, a comprehensive and universal theory of crime could help create safer, more just, and more equitable societies.

The future scope of the holistic approach in criminology is immense. As crime becomes more complex and diverse, there is a growing need for a more comprehensive understanding of the factors that contribute to it. Therefore, the holistic approach can provide valuable insights into the various social, economic, and psychological factors that shape criminal behavior.

One potential avenue for future research is to explore the impact of trauma on criminal behavior. Trauma can have a profound effect on an individual's mental health and can lead to criminal behavior. Therefore, understanding the relationship between trauma and crime can be an essential component of the holistic approach to criminology.

Another area that can be explored is the role of social inequality in crime. Social inequalities, such as poverty, lack of education, and discrimination, can contribute to criminal behavior. Therefore, future research can focus on the ways in which social inequalities can be addressed to reduce crime rates.

Moreover, with the growing importance of technology in our daily lives, it is imperative to understand the role of technology in criminal behavior. The future research can focus on the relationship between technology, crime, and victimization. As criminals are increasingly using technology to commit crimes, understanding the technological aspects of crime can be critical in developing effective crime prevention strategies.

In conclusion, the holistic approach has the potential to provide valuable insights into the complex and diverse nature of criminal behavior. The future research in the field of criminology can explore various avenues, including the impact of trauma, social inequality, and technology on criminal behavior.

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