



Review Article

Mental Health and Risky Behaviors in the Context of Criminology

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Abstract

Most criminology theories and criminologists explain questions such as “why do some people deviate from legal and social norms?” or “why do people commit crimes?” at the factual level. Criminology does not only treat crime as a set of actions or inaction defined within the legal parameters. Understanding what lies beneath the cognitive, emotional, and social aspects of the criminal act is highly dependent on the information available about the nature of the illegal act and the criminal. Criminal law also needs a broader perspective because of this need. In that sense, to understand the individual and socio-psychological aspects of crimes, it is vital to understand the details of current crimes and their perpetrators. For the perpetrator to be held accountable for their criminal act or inaction; they must have committed the said crime deliberately, knowing the consequences of their actions, must be aware that they will be punished as a result, and must have the ability to control their impulses. It is the basis of the law approach that individuals cannot be held responsible for their actions and cannot be punished if they cannot control their behavior. The perpetrator’s mental health at the time of the criminal act is evaluated by mental health professionals. While there is no relationship between the majority of people with mental disorders and criminal behavior, it can be said that certain disorders may be a risk factor in some criminal acts. However, even if a relationship can be established between some mental disorders and the criminal acts, it should also be investigated how this relationship was indirectly affected by variables such as low socioeconomic status, previous arrest records, or substance abuse. Therefore, it should be noted that mental disorders that affect perpetrators do not lead them to criminal acts.

Keywords: Criminal act; Criminology; Criminal responsibility; Forensic psychology; Mental health

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Criminal Act and Criminal Responsibility

From a legal perspective, it can be said that the crime is defined as an act that is done by a deliberate or negligent act of an individual who has the ability to understand the nature of their act, which is against the legal rules and requires the imposition of a penalty or security measure as a sanction [1]. It can be also seen as a social problem that is not approved by the society in which the individual lives [2]. It is seen that the person who commits a crime is someone who deliberately or accidentally commits a criminal act [3]. Most criminology theories and criminologists explain questions such as “why do some people deviate from legal and social norms?” or “why do people commit crimes?” at the factual level [4]. Criminology does not only treat crime as a set of actions or inaction defined within the legal parameters. Understanding what lies beneath the cognitive, emotional, and social aspects of the criminal act is highly dependent on the information available about the nature of the illegal act and the criminal. Criminal law also needs a broader perspective because of this need. In that sense, to understand the individual and socio-psychological aspects of crimes, it is vital to understand the details of current crimes and their perpetrators [5]. In the literature, there are different opinions explaining the source of the crime from different approaches. The first is that a criminal act is a free choice. According to this view, individuals commit crimes voluntarily due to internal (delight, pleasure, excitement or fear, etc.), personal and psychological (relieving stress, tension or depression, or avoiding responsibility), economic, social, or political rewards. Other views belong to theorists who accept that criminal behavior is not a free choice, but that there are conditions leading to the occurrence of crime. According to biological, psychological, sociological crime theories, factors such as genetic or physical abnormalities, inadequate socialization, imitation, and learning can cause criminal behavior [6].

Especially in violent behavior, if the violent behavior shown by the individual does not occur with the motive of self-protection, the person can be considered as “pathological” even if they have not received a psychiatric diagnosis before. The violent act can be explained by blockages occurring in certain periods of the individual’s personality development or by a traumatic experience. The criminal behavior that emerges in this direction can be understood within the context of psychopathology [7]. Crime is defined as an act that is done by a deliberate or negligent act of an individual, whose action requires the imposition of a penalty or security measure as a sanction [8]. For the perpetrator to be held accountable for their criminal act or inaction; they must have committed the said crime deliberately, knowing the consequences of their actions, must be aware that they will be punished as a result, and must have the ability to control their impulses. [9].

In this context, three basic elements are considered in the determination of criminal responsibility:

- The existence of a specifically prohibited action or conduct under the law (*actus reus*)

- The act or inaction that caused the crime must occur voluntarily (*mens rea*) [10].
- The temporal intersection between the criminal act and mental health during the crime [11].

Considering these elements, the importance of the mental state of the perpetrator during the crime becomes evident. It is the basis of the law approach in which people cannot be held responsible and punished for their actions in cases where they cannot control their behavior [12]. The perpetrator's mental processes at the time of the crime and whether these processes affect the offender's volition are evaluated by mental health professionals.

Aspects of Mental Illness Effecting Volition and Crime

Many factors can play a role in the occurrence of mental disorders. Factors such as age, gender, climate, genetics, family or social factors (culture, marriage, divorce, occupation, education, etc.), person's character, pregnancy, imprisonment and captivity, war, toxic substances, infectious diseases, hormones can lead to the occurrence or progression of mental illness [13]. Contrary to widely held belief, there is no relationship between most people diagnosed with mental disorders and criminal behavior, while certain disorders can be said to increase the risk factor for some criminal acts. Indeed, this does not cover the vast majority of people who have one or more diagnoses mentioned in this article. However, in the literature, similar disorders including Schizophrenia and positive symptoms, meeting the diagnostic criteria of one or more personality disorders in Bipolar Disorder, Depression and Second Axis Disorders, may increase the risk of violent and/or criminal behavior. When we look at the relationship between violent criminal behavior and psychopathology; in some cases of schizophrenia (especially in the paranoid form), the motivation of violence may be due to a delusion, while in Manic Disorders, an often explosive affect can make them prone to violence. When the causes of this condition were investigated, it was found that affective stimuli and associations that were neutral to others, could be perceived more threatening by patients with schizophrenia and bipolar disorder even in the absence of delusions and hallucinations. When people with schizophrenia and bipolar diagnoses are found to have substance abuse as comorbidity, they are at an increased risk of exhibiting criminal behavior [14].

Considering the life history of schizophrenic patients who were recorded in forensic records due to violent behavior, childhood abuse or neglect, parents' antisocial behavior or stressful life events are quite common [15]. Again, according to police records, people with Bipolar Disorder, who have shown violent behavior, have the diagnosis of Borderline Personality Disorder and childhood traumas as a comorbid [16]. The prevalence of Bipolar I and Bipolar II diagnoses was 25.34% and 13.55% in lifelong aggressive behaviors. This risk is always higher with grandiosity, high self-confidence, and anger attacks occurring in the manic episode. It has also been observed that crimes of sexual harassment, fraud, and theft are committed in the process of mania [17].

It is observed that in the murders committed by people who are diagnosed with depression, the causes such as narcissistic injury, perception of the person's humiliation, or a sense of shame can cause crime motivation [18]. The presence of delusions in depressive

patients with violent behavior should also be noted. In perpetrators with psychotic or severe depression, suicide can be observed after the murder. The causes such as dissociation due to a loss of self-esteem, feelings of despair and hopelessness, and the inability to carry the emotional burden, may lead to violent behavior in some depressive patients [19]. According to another study, it was reported that a statistically considerable number of people who committed the crime of theft met the depression criteria [20].

Personality is the sum total of the actual or potential behavior patterns of the individual. How the individual's interpersonal, cognitive, psychodynamic, and biological features come together is important in terms of personality patterns. Each trait encourages another factor to maintain the stability and behavioral consistency of the whole personality structure. Most people have flexible coping mechanisms that span a wide spectrum. However, those with personality disorders often display an imperfectly resistant image under stressful conditions. For this reason, since they usually continue their lives with the same coping strategies, their inability to solve problems constantly increases their stress levels, increases their fragility, and creates crisis situations [21]. Furthermore, difficulties in impulse control and emotion regulation may increase the risk of violence. Individuals with personality disorder mostly have a paranoid cognition and can perceive the neutral events occurring in the outside world as a narcissistic attack. They may rarely become egosyntonic [22]. Some personality disorders may have different qualities that guide the criminal act. Sadistic Personality Disorder, especially in the tormenting of humans and animals; while borderline Personality Disorder, Antisocial Personality Disorder, Paranoid Personality Disorder and Narcissistic Personality Disorder are a risk factor in impulsive crimes; Schizoid Personality Disorder, along with other personality disorders, may stand out as a risk factor only in sexual crimes [23]. It is stated that patients with personality disorders who exhibit violent behavior generally have another comorbid diagnosis and their risk of exhibiting violent behavior is increased when accompanied by substance abuse.

Individuals with antisocial personality disorder are defined as people who have a low tolerance for inhibition, low empathy, and unable to maintain social relationships [24]. Kumka defines antisocial who has criminal tendencies as people who generally "lack a normal sense of ethics and morality, live by their own rules, are prone to use cold-blooded, instrumental intimidation and violence to satisfy their wants and needs, and generally are contemptuous of social norms and the rights of others" [25]. Individuals diagnosed with Antisocial Personality Disorder are quite common in the prison population. According to a study, it is stated that between 50% and 80% of detainees meet the diagnostic criteria of Antisocial Personality Disorder [26]. In people with the antisocial disorder, child abuse can be seen between 10-15% and rape crime between 40-50%. There is information that, in sexual assault crimes, motivation generally occurs due to anger, hatred, sadism, or opportunism. Skepticism, hypersensitivity, and stress-laden conditions of people with Paranoid Personality Disorder keep them angry and counterattack. They can be involved in crime through physical or verbal aggression [27]. In the Narcissistic Personality Disorder, which is in pursuit of success and appreciation, when the malign features are evident, sexual assault and sexual abuse crimes can be seen more. People with this disorder can perform impulsive violence against a narcissistic injury [28]. In Borderline Personality Disorder, factors such as impulsivity, limited

identity, emotional disorders, and substance abuse can cause violent criminal behavior. Although people with Schizoid Personality Disorder are not characterized by violent behavior, they may show sudden bursts of anger when their personal space is violated or disturbed. Low self-esteem and lack of social skills increase feelings of anger. In Schizotypal Personality Disorders, the individuals who display magical thinking (claiming that they have telepathy and paranormal abilities), may exhibit unplanned and violent behaviors that are difficult to predict [29]. In Addictive and Avoidant Personality Disorders, it can be observed that these individuals experience intense anxiety because their self-esteem and social skills are quite limited. They may engage in criminal behavior after a real or imaginary rejection. While attempt against life may occur in addictive personality disorder, individuals with avoidant personality disorders mostly commit crimes of a sexual nature.

People with Sadistic Personality Disorder often commit crimes of a sexual nature and become more dangerous when accompanied by paraphilia. People with Sadistic Personality Disorder have antisocial and impulsive tendencies. They are socially withdrawn and have violent sexual fantasies. These conditions are accompanied by substance abuse. They plan their acts of violence meticulously. It can be said that they hide well due to their lifestyle [30]. In this context, it is vital to mention Dissociative Disorders, which are frequently overlooked in both forensic and clinical examinations. Research shows that men with Dissociative Experiences are involved in the forensic system more than they are treated in the health system [31]. However, Dissociation may accompany Schizophrenia, Depression or some other personality disorder [32]. The concept of “automatism” should also be considered in terms of how dissociative processes affect volition. The mode of behavior, called dissociative automatism, involves automatic behavioral episodes that are not consciously acknowledged. Dissociation also involves an uncontrolled condition of autohypnosis [33], susceptibility to hypnosis [34], extroverted aggression [35] and certain deficiencies with personality [36]. Therefore, Dissociative Experiences or disorders can affect the individual’s capacity of criminal responsibility.

Conclusion

Various branches of science that are interested in crime define criminal action as a behavior that deviates from social norms [37]. Although it has been attempted to establish a direct relationship between psychopathology and criminal behavior for a long time, it is known that most people with psychopathology do not have behavioral styles that can be described as a crime. Even if a relationship can be established between mental disorder and criminal acts, it should also be investigated how this relationship is indirectly affected by low socioeconomic status, criminal history, or substance abuse. Therefore, it should be emphasized that mental disorders of suspects do not automatically lead them to commit a crime. Moreover, it should also be considered that criminals with mental disorders are more easily apprehended than healthy individuals [38]. In this context, it is stated in the researches that some of the people who commit crime have more risk of committing certain types of crimes due to the nature of the disease and other risk factors.

Indeed, the criminal behavior that has been designed and put into action is handled differently in criminal proceedings. Nevertheless, depending on the disorder, some of the disorders caused by mental

pathology, which are related to thinking, feeling, evaluation, decision making, or impulse control, may lead to the occurrence of illegal behavior. Explanations and researches regarding the loss of function that each disorder will create in the individual’s capability to predict the consequences of their action are particularly important especially in terms of criminal capacity and criminal responsibility. In the clinical sample, the diagnostic criteria guidelines such as DSM V and ICD-10, which are used as a diagnostic tool for psychopathology, do not always fully meet the needs for examinations in the forensic process. It is clearly stated in the preface of DSM V that the diagnostic criteria in the book may not be able to meet the need in the forensic evaluation and that there is a need for information gathering and additional measurement and evaluation tools other than the diagnostic criteria [39]. In forensic mental examination; to take into account the characteristics of some disorders that may lead to criminal behavior and to examine the temporal intersection of the criminal act and mental health of the perpetrator in this context will contribute greatly to legal processes. However, information on the risks of the processes caused by mental disorders, the implementation of preventive health policies regarding the “social hazard” situation of individuals, or the creation of treatment programs after criminal behavior are important from the perspective of modern criminal law.

References

1. Koksall F, Elis YY (2011) *Crimes and Elements in the Legal System*, Ankara: Inspection Board.
2. Kizmaz Z (2002) *Economic Structure and Crime: A General Evaluation on Some Research Findings*. *Firat University Journal of Social Sciences*.13: 279-304.
3. Nazdır M (2010) *Deliberate Murder and Investigation of Psychosocial Characteristics in Offenders: Criminal Analysis*, Unpublished Master Thesis, Ankara: Ankara University Institute of Health Sciences.
4. Akers RL, Sellers CS (2009) *Criminological Theories: Introduction, Evaluation and Application* (5th Edition), New York: Oxford University Press.
5. Isiktak Y (2013) *Justice Psychology*, Istanbul: Istanbul Bilgi University Publications, Pg no: 360.
6. Mirror YE (2005) *Family Assessment and Psychopathological Findings in Violent Children*, Unpublished Master’s Thesis, Diyarbakır: Dicle University Institute of Social Sciences.
7. Oral TC (2010) *Violent Behavior and Criminal Responsibility in Bipolar Affective Disorders*, Istanbul: Istanbul University Cerrahpaşa Faculty of Medicine, Medical Specialty Thesis.
8. Alacakaptan U (1970) *Elements of Crime*, AUHF Yayinlari, No: 263, Ankara, Pg no: 10.
9. Oncu F, Sercan M (2007) *Forensic Psychiatry in Criminal Law. Forensic Psychiatry Practice Guide*. (Ed. Sercan M), Psychiatric Association of Turkey, Ankara, Pg no: 33-50.
10. Kinscherff R (2010) *Proposition: A personality disorder may nullify responsibility for a criminal act*. *J Law Med Ethics* 38: 745-759.
11. Mohino S, Amadeo P, Itziar I (2010) *Personality disorders and criminal responsibility in the Spanish Supreme Court*. *J Forensic Sci* 56: 150-154.
12. Yalug İ, Kocabasoglu N, Aydogan G, Gunel B (2003) *Obsessive Compulsive Disorder and Panic Disorder Depression and Personality Disorder Comorbidity*. *Dusunen Adam Magazine* 16: 28-34.
13. Dokuz Z (1966) *Forensic Psychiatry: Our Mental Diseases and Toxicomania Legislation*, Istanbul: Istanbul Printing House, Pg no: 25-27.

14. Volavka J (2013) Violence in Schizophrenia and Bipolar Disorder. *Psychiatr Danub* 25: 24-33.
15. Van Dorn R, Volavka J, Johnson N (2012) Mental Disorder and Violence: Is There a Relationship Beyond Substance Use?. *Social Psychiatry Psychiatric Epidemiology* 47: 487-503.
16. Garno JL, Gunawardane N, Goldberg JF (2008) Predictors of Trait Aggression in Bipolar Disorder. *Bipolar Disorder* 10: 285-292.
17. Grant BF, Stinson FS, Hasin DS, Dawson DA, Chou SP, et al. (2005) Prevalence, Correlates, and Comorbidity of Bipolar I Disorder and Axis I and II Disorders: Results From the National Epidemiologic Survey on Alcohol and Related Conditions. *J Clin Psychiatry* 66: 1205-1215.
18. Rosenbaum M (1990) The Role of Depression in Couples Involved in Murder- Suicide and Homicide. *American Journal of Psychiatry* 147: 1036-1039.
19. Malmquist CP (1995) Depression and Homicidal Violence. *International Journal of Law and Psychiatry* 18: 145-162.
20. Faulk M (1994) *Basic Forensic Psychiatry*, Cambridge: Blackwell Scientific Publications, Pg no: 83-92.
21. Grossman S, Millon C, Meagher S, Ramnath R (2004) *Personality Disorders in Modern Life*, Wiley Pub: New Jersey, Pg no: 9.
22. Esbec E, Echeburura E (2010) Violence and Personality Disorders, *Clinical and Forensic Implications*, *Actas Esp Psiquiatr* 38: 249-261.
23. Stone MH (2007) Violent Crimes and Their Relationship to Personality Disorders. *Personality and Mental Health* 1: 138-153.
24. Gelder M, Gath D, Richard M (1994) *Cencise Oxford Textbook of Psychiatry*, London: Oxford University Press, Pg no: 78-79.
25. Bartol CR, Bartol AM (2012) *Introduction to Forensic Psychology, Research and Application*, California: SAGE Publications, Pg no: 258-259.
26. Hare RD (1998) Psychopathy, Affect and Behavior (In D.Cooke, A.Forth& RD Hare Eds), *Psychopathy: Theory, Research and Implications for Society*. Dordrecht, The Netherlands: Kluwer.
27. Rigonatti SP, Serafim AP, Caires MA, Guerra AH, Arboleda FJ, et al. (2006) Personality Disorders in Rapists and Murderers From a Maximum Security Prison in Brazil. *International Journal of Law and Psychiatry* 29: 361-369.
28. Nestor P (2002) Mental Disorders and Violence. *American Journal of Psychiatry* 159: 1973-1978.
29. Coid J, Yang M, Roberts A, Ullrich S, Moran P, et al. (2006) Violence and Psychiatric Morbidity in a National Household Population- a report from British Household Survey. *Am J Epidemiol* 164: 1199-1208.
30. Marshall WL (2007) Diagnostic Issues, Multiple Paraphilias and Comorbid Disorders in Sexual Offenders: Their Incidence and Treatment. *Aggression and Violent Behavior* 12: 16-35.
31. Spitzer C, Barnow S, Freyberger HJ (2006) Recent Developments in the Theory of Dissociation. *World Psychiatry* 5: 82-86.
32. Deniz D (2015) Childhood Traumas and Dissociative Experiences in Individuals Involved in Crime, *Istanbul University Forensic Medicine Institute*.
33. Sar V (2014) Psychotraumatology and Dissociative Disorders: An Avenue of Innovation in Studies on Mental Health. *Journal of Psychology & Clinical Psychiatry* 1: 365-377.
34. Butter LD, Duran REF, Jasiukaitis P, Kopman C, Spiegel D, et al. (1996) Hypnotizability and Traumatic Experience: A Diathesis-Stress Model of Dissociative Symptomatology. *Am J Psychiatry* 153: 42-63.
35. Spiegel H, Greenleaf M, Spiegel D (1995) Hypnosis In *Comprehensive Textbook of Psychiatry* (Editors, Kaplan RM, Sadock B) (7th Edition) Lippincott William and Wilkins, New York.
36. Algul A, Ates MA, Gülsun M et al (2009) Relationship of Self-Injury Behavior with Aggression, Childhood Traumas and Dissociation in Antisocial Personality Disorder Cases. *Anadolu Journal of Psychiatry* 10: 278-286.
37. Allen JG, Lewis DA (1999) Dissociative Detachment and Memory Impairment: Reversible Amnesia or Encoding Failure. *Comprehensive Psychiatry* 40: 160-171.
38. Vinkers DJ, De Beurs E, Barendregt M, Rinne T, Hoek HW (2011) The relationship between mental disorders and different types of crime. *Criminal Behaviour and Mental Health* 21: 307-320.
39. Deniz D (2017) Reliability in the Diagnosis of Personality Disorders and Criminal Responsibility. *The Bulletin of Legal Medicine* 22: 124-129.



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