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# Psychopathy: The Reflection of Severe Psychosocial Dysfunction

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## Abstract

Psychopathy is the result of the bundle of personality characteristics that typically displays socio-communicative impairment as well as restricted social skills and activities in which neurophysiological impairments are reported. The most prominent feature of psychopathy is that communication failures occur in interpersonal relations due to insincere charm for manipulations, grandiose self-perception, rule-breaking tendencies, irresponsibility and unpredictable impulsive behaviors. Since the individuals with psychopathic traits are very self-centered, they act on their emotional state. Their behaviors are driven by feelings and impulsive wishes. That is why, they are untrustable individuals. They have lots of difficulty and are considered to be dangerous in maintaining long-term relationships, particularly with their intimate partner. It is a critical mistake to assume that psychopathy is caused by the individual's incomplete individuality. This mistake leads to inability to be eliminated of the problems in not only correctional interventions in forensic settings but also treatment procedures in clinical settings. In this chapter, the characteristics of psychopathy are explained for providing some inspiration in the line of successful treatment procedures and intervention strategies in forensic and clinical settings.

**Keywords:** psychopathy, impairment, forensic clinical psychology, criminal psychology

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## 1. Introduction

Psychopathy is a personality traits bundle, which is the reflection of organizational personality problems during childhood and adolescent period and a personality disorder in adulthood. They have suffered from a kind of inability to develop genuine relationships with teachers, friends, or people with intimate relationships.

The motivation of human behaviors in daily life are directed via feelings and thinking structures. Human behaviors, on the other hand, have been emerged in the direction of the thoughts combined with sentiments, making sense, abstraction and inference. Therefore, there should be “knowledge” that directly contributes to the formation of philosophies and emotions underlying the behavior. Where does “knowledge” come from? Moreover, it is accepted that emotions have evolved from the influence of external factors on the areas of the brain. The external factors include genes, family environment, social environment and psychosocial development periods. Collectively, these factors are effective in the formation of our thoughts and feelings that underlie our behavior that reveals our motivation too. Emotions contribute to the formation of behaviors via matching experiences. As evolutionary psychologists have pointed out, brain, central nervous system has established appropriate systems for protecting the individual from sudden situations that constitute a rapid change of feelings. These systems are in the form of the transferred patterns for generations. These systems come together and help to regulate our behaviors. The oxytocin is very effective in the activation of these systems. The experimental studies have pointed out that there is significant impairment in the release of oxytocin in the individuals with psychopathy.

## **2. The characteristics of the individuals with psychopathy**

The individual with psychopathy has limited and also superficial affective processing with respect to remorse and anticipatory anxiety. Since impulsivity is one of the featured behavioral styles, general failure is inevitable to evaluate anticipated actions and to inhibit the inappropriate ones. As psychopathy is a bunch of personality characteristics rather than a disorder in itself, this perspective allows us to see the fact that psychopathy can also occur in other mental health disorders. Most professionals wrongly consider the psychopathic behavioral patterns as a sign of antisocial and sociopathic personality disorder. There is a huge amount of research studies suggesting that antisocial behaviors are the consequences of the emotional/affective impairments. This should not be taken into account as antisocial personality disorder. The individuals with psychopathy display focused aversive events and even “cold-blooded” criminal behaviors. The misunderstanding leads to misdescription of the psychopathic behavior pattern’s etiology. The concept of psychopathy is negatively effective in human behavior so that it becomes an important phenomenon for behavioral modification studies, correctional works and also treatment procedure in clinical setting. This importance derives not only from the definition of the problem but also from the fact that the individual and social building blocks involved in the psychosocial development of the individual are negatively and occasionally destructive. Some professionals believe in behaviors on the axis of psychopathic thought content result of the individual’s incomplete or misplaced individuality. This is an incomplete description. True, but incomplete! Psychopathy must be dealt with in the social context in which it interacts with the individual as the “knowledge” directly contributes to the formation of the philosophies underlying the behavior.

Numerous studies have been conducted to investigate the etiology of psychopathy [2–4, 19, 38]. After many studies, it is generally accepted that lack of emotion (this feature may

makes them “cold-blooded” [62, 27, 28]) and remorse is the core feature of psychopathy, whereas there is still debate as to whether criminal behavior is a necessary feature of it or not [23]. Moreover, it has been suggested that antisocial behavior is the consequence of the affective impairments, which should not be considered as one of the diagnostic criteria [6–8].

It is good to redefine the question “what is psychopathy?” Some authors such as Cleckley called psychopathy as the mask of sanity [11]. Since 1941, Cleckley has been trying to conceptualize a psychopathic person’s thinking styles. According to Cleckley’s conceptualization, psychopathic individuals as a perfect copy of normally functioning individuals, able to mask their internal chaos being resulted in purposeful destructive behavior, often more self-destructive than destructive to others. Although intelligent, even charming external presentation has attracted attention, the individuals with psychopathy do not have the ability to experience genuine emotions internally. Cleckley investigates whether the mask of sanity is intentionally preferred to hide the lack of internal structure or the mask just results from semantic neuropsychological deficits. He concluded that it is an unidentified semantic impairment. It is claimed that there are 16 common defined criteria universally. These are lack of guilt, egocentricity, dishonesty, lack of anxiety, superficial charm, undependability, failure to learn from punishment, lack of insight into the impact of one’s behavior on others, failure to plan ahead, lack of emotions and failure to form long-term intimate relationships. Thus, psychopathy consists of multiple components ranging from the emotional, cognitive, interpersonal and behavioral spectrum. To catch the problem, both evidence-based and also at an early stage, objective measurement devices were developed. Psychopathy Checklist-Revised [24] is one of the most effective scientific measures among them. In many judicial institutions, it is part of best practiced protocols as it is well-designed to measure the psychopathic traits such as antisocial traits, behaviors, lifestyle, interpersonal and affective impairments. The individuals with psychopathy in their interpersonal relationships present grandiose, deceptive, dominant, manipulative, superficial, unable to form strong emotional bonds with others, affectively shallow, irresponsible, impulsive, tend to ignore social conventions, lacking in empathy, guilt and/or remorse characteristics [33].

### 3. The neural explanations on psychopathy

The ability of psychopathic individuals to empathize with others’ feelings is quite different than normal individuals. The individuals with psychopathic traits have limited arousal to the emotions of others [37, 39]. Dealing with their affective functioning, while they are watching videos depicting expression of pain, it is expected that higher activity in brain areas is involved in the affective response such as amygdala, the insula, as well as higher subjective ratings of personal distress [43]. However, individuals with psychopathic traits show less response than healthy ones. Neuroimaging studies examine the relevant brain regions and circuits being implicated in the condition of the orbitofrontal cortex, amygdala, and the anterior and posterior cingulate and adjacent (para)limbic structures of individuals with psychopathy. It is accepted that there is somehow a prefrontal lobe structure deficit in them [3, 20]. Perhaps, due

to this deficit, the low arousal, poor fear conditioning, lack of conscience and decision-making deficits have characterized the psychopathic actions [52]. Lockwood et al. [36] in their study examined the neural response of children with conduct problems by using functional magnetic resonance imaging (fMRI). They measured the neural responses to the pictures of others in pain with a large sample of children with conduct problems. They found that these children displayed atypical empathic responses and callous traits to others, and also conferred some risk for adult psychopathy. These children showed reduced blood oxygen level-dependent responses to others' pain in bilateral anterior insula, anterior cingulate cortex and inferior frontal gyrus, regions related with empathy for pain.

There is a series of models having attempted to account for the neurological functional impairments existed by the individuals with psychopathy. These are the left hemisphere activation hypothesis, the various positions proposing frontal lobe dysfunction, and finally, the somatic marker [14–16, 40, 49, 50, 52].

### **3.1. The left hemisphere activation hypothesis model**

According to the model, individuals with psychopathy have been suffered from unusual lateralization of language function. They may have fewer left hemisphere resources for processing language than the normal ones [25, 9]. Hare have found that individuals with psychopathy showed pronounced difficulty for the abstract category discrimination [24]. If the stimuli were presented at the left visual field, it is still unclear to what degree they are. There is a lack of specificity about why greater activation of left hemisphere systems disrupts the cortical functioning. There are some indicators of the “unusual” lateralization of language function in individuals with psychopathy. Unfortunately, there are no clear reasons why these impairments give rise to the development of psychopathy. All data from the experimental studies have been indicated that the excessive activation of the left hemisphere somehow has effect on cognitive processing but the direction and which conditions lead to this, is still unclear.

### **3.2. The frontal lobe dysfunction hypothesis model**

The authors claimed that psychopathic traits may occur due to frontal lobe dysfunctions [44, 40, 43]. This hypothesis was derived from three sets of data of patients with acquired lesions of frontal cortex, the neuropsychological studies on the individuals with antisocial traits and the neuroimaging studies on the individuals with antisocial behaviors. There is a common knowledge about frontal lobe dysfunction that it increases the risk of aggressive behavior. The patients with orbital and medial frontal cortex lesions are more likely to act in aggressive manner. It is known that aggressive individuals display impaired performance, impaired executive functions and present with reduced frontal activity during rest conditions [20]. However, the frontal lobe dysfunctional positions remain still unspecified. The experimental studies do not distinguish between different regions of prefrontal cortex, different forms of executive functions, and/or at the behavioral level, between reactive and instrumental aggression. The model, moreover, have failed to provide any detailed cognitive explanation as to why damaged functions mediated by frontal cortex lead to an increased risk of aggression [14].



### 3.3. The somatic marker hypothesis model

The somatic markers of this healthy individual provide affective coloring being automatically bias toward behaviors or a way from the available response options. In other words, the somatic marker provides an automated way of labeling a particular response being made. The rapid labeling occurs via “body loop” in which a “somatic marker” is conveyed to somatosensory cortices but it can also occur via an “as-if body loop” in which the body is by passed and reactivation signals are conveyed to the somatosensory structures. The somatosensory pattern marks the scenario as either good or bad, allowing the rapid reflection [15, 22]. Individuals with psychopathy appear to generate impaired somatic markers. Especially dealing with reactive aggression, the acting mechanism may occur in the manner of “hit that person but be punished later.” In a healthy individual, there will be activation of the linkage between knowledge of hitting and punishment and the emotional aversion to punishment. The consequent aversive somatic marker guides the healthy individual away from hitting the other. However, the individuals with psychopathy have suffered from the impairment in the somatic marker system. Thus, there is no somatic marker to guide their behavior. Therefore, it can be expected a similar outcome for instrumental aggression in these individuals.

Generally, dealing with neural explanations of psychopathy, there are both clear and unproven conclusions. It is clear that frontal lobe dysfunction may lead to increase in aggression. The dorsolateral executive dysfunction may be related to reactive antisocial behavior, but the relation is only correlational not causal. In contrast, ventral-medial and orbital frontal cortex dysfunction are causally associated with a heightened risk of reactive aggression. Dealing with the psychopathic acts, there are reasons to consider the maladaptive behaviors in psychopathy may be related to orbital and medial cortex dysfunctions. To what extent, these dysfunctions are causal is not clear enough. Much of work should be done to explain why frontal lesions increase the probability of reactive aggression and also psychopathic acts. In this regard, the somatic markers hypothesis can be taken into account, but the hypothesis has not had adequate scientifically proven explanations for reactive and instrumental aggression.

## 4. The cognitive explanations on psychopathy

As human behaviors directed by information processing strategies, here the term cognitive refers to information processing [9]. Thus, there are three main information processing models in the line of explaining the cognitive components of psychopathic thinking styles and behaviors [63]. These are the response set modulation hypothesis, Newman [43], the fear dysfunction models [19, 5, 38] violence inhibition mechanism model, Blair (1995), left hemisphere activation hypothesis, Kosson (1996), Frontal lobe dysfunction model, [22, 50, 51] and the Somatic Marker Hypothesis, Damasio (1994). The last three models focus primarily on the neural structure and level of the pattern. To provide a brief overview on the etiology of the psychopathy, these models will be described shortly.

#### 4.1. The response set modulation model

The model pointed out “a rapid and relatively automatic shift of attention from the effortful organization and implementation of goal-directed behavior to its evaluation” [43]. This brief and highly automatic shift of attention enables the individual to monitor and use information being peripheral to their dominant response set (i.e., “deliberate focus of attention” [37]. The physiological explanation of the model was based on the theory of Gray’s Septo-Hippocampal Lesions for Emotional Learning [44]. We know the individual with psychopathy has reduced automatic processing. Newman has explained this as “whereas most people automatically anticipate the consequences of their actions, automatically feel shame for unkind deeds, automatically understand why they should persist in the face of frustration, automatically distrust propositions that seem too good to be true and are automatically aware of their commitments to others, psychopaths may only become aware of such factors with effort”. Shortly according to the Newman’s model, individuals with psychopathy are not incapable of regulating his/her behaviors, they only need much more effort to regulate their behavior as there is a lack of “normal people automatic information processing” to guide their actions. The remarkable psychopathic characteristics such as impulsivity, poor passive avoidance and emotion-processing deficits can be dealt with a failure to process the meaning of information being perhaps incidental to their deliberate focus of attention [38]. Their actions called as goal-directed activity and in some circumstances as top-down directed attention process. Top-down attention modulates amygdala activation especially in psychopathy. For a long time, it is attributed that psychopathic acts are a fundamental deficit in fear arising from impaired amygdala function (Larson et al., 2013). The response set modulation model is an attention-based model. Individuals with psychopathy always operate under high load conditions during their goal-directed activities and/or top-down directed attention process. Their both goal-directed activities and top-down directed attention process are very effective so that they fail to incorporate other stimulus dimensions. In other words, attention to target stimuli dimensions so suppresses the representation of the unattended stimuli being not processed.

#### 4.2. The dysfunctional fear hypothesis model

This model defends the fact that there is impairment in the neurophysiological systems modulating fear behavior in individuals with psychopathy. They appear almost as incapable of profound remorse ([11], p. 340). Their moral socialization process is completed through the suffering from the use of punishment [19]. A healthy individual is frightened by punishment and decide not to engage in the actions causing punishment in the future. However, in psychopathic individuals, the fear-associated startle reflex has been found to be diminished or absent [46, 48]. The studies suggested that somehow there is a deficit in the amygdala in psychopathic individuals. Moreover, the imaging studies conducted recently have revealed a reduced activity in limbic circuits including amygdala in the individuals with psychopathy. Research on functional and structural frontal brain abnormalities has pointed out the evidence of decreased activity in orbito-frontal and limbic regions [4] and reduced prefrontal volume of gray matter [4, 50, 53, 65].

#### 4.3. Violence inhibition mechanism (VIM) model

The model had been meant to detail a cognitive model of the prerequisites for human moral socialization. Moral socialization occurs through the pairing of the mechanism by distress cues with representations of the acts causing the distress cues [61]. By association, these representations become triggers for the mechanism. The child from “normal development period” initially finds the pain of other individuals aversive and then through socialization, thoughts of acts that cause pain to others become aversive. It has been suggested that individuals with psychopathy have disruption to this system such that representations of acts causing harm to others do not become triggers for the violence inhibition mechanism model [61] (Blair et al. 2001b, Steven et al., 2001). Although the VIM model provides an explanation on the emergence of the instrumental antisocial behavior displayed by the individuals with psychopathy, it cannot account for the range of impairments shown by the individuals. The model cannot give reasonable explanation dealing with the response set modulation and fear hypotheses. This shortage leads to an expansion of the model at both cognitive and neural levels which is called “the integrated emotion systems model.” Finally, none of these three cognitive models can provide an adequate explanation of psychopathy. By the way, contrary to social and psychodynamic theories, these three models provide significant scientific tips not only for psycho-bio-social theories but also for neuropsychological research studies at least.

### 5. Crime and psychopathy

Crime is an act fulfilled by social, psychological and biological factors. No one can say that criminal behavior is caused only by social factors. As everyone knows, social causes of crime have also psychological pathways. Individuals behave differently in their psychosocial conditions in the face of unlawful life events. The personality and intelligence of all human beings concerned filter objective conditions and determine their perception. For example, poverty may cause some people to rebel against the authority—government and even a society, while others blame themselves, their lack of cognitive ability, their ignorance and perhaps on their incapable skills. These factors are well-documented by the authors such as Lazarus [13].

To understand the relation between a criminal behavior and psychopathy, we should try to understand the causal pathways involved. Recidivism is another important concept as the concept corresponds to an act of an individual repeating a criminal behavior, a habitual relapse and a chronic tendency toward repetition of the criminal acts [44, 47, 30]. In this regard, we come to mention of the “personality dimensions” [46, 48]. Why do most of us act in a socially desirable way, while some others do not? In fact criminals know what is right and wrong except the mentally retarded criminals. They just prefer “the wrong” to the right. Why? The literature pointed out roughly three conditions”:

1. Individuals who do not have enough socially approved experiences. In other words, parents, teachers and even peers cannot give a child proper reinforcers.



2. Somehow, the wrong experiences are reinforced. Even in some local cultures, parents encourage their children to act aggressively and in an inappropriate way. The parents prefer to use much more punishment than reward to prepare their children for the hard and aversive life conditions [47].
3. Not being aware of the consequences of behaviors, but repeating those behaviors over and over.

Since individuals with psychopathy do not have knowledge of the consequences of their actions, they do not realize that all the disturbing life events they experience are just because of their actions and thinking styles, in short being themselves [42].

It is obvious that social causes of crime have psychological pathways. Every individual acts differently to inequality, poverty and injustice. These all may lead to some individuals to act unlawfully against society while others blame themselves, their ignorance, their lack of skill and even they perceive unemployment as just punishment to themselves [32, 33]. As mental health professionals, we know that the nature of some personality traits such as psychopathy is quite related to criminal behaviors. The chain begins with DNA, since DNA is the genetic structure underlying individual differences. The evidence from literature shows clearly that most of the variance for individual differences in personality is due to both genetic causes [64, 65] and social environment where the individual has been born and grown in [54, 57, 58]. These two sources of individual differences constitute the distal and proximal antecedent conditions for individual differences.

No doubt, there are no genes for criminality but there is a risk of criminal behavior through the genes coding for structural proteins and enzymes influencing metabolic, hormonal and the other physiological processes [62, 63]. Why do most of people not act in criminal behavior? It is because of the laws. By the way, some people have a strong tendency to be "a criminal." Do those people not know about the laws? No, they know as well as anybody. However they prefer to act as the wrong to the right. When we react to something, if it is wrong we are punished by our parents, our teachers, our peers, and so on, but when we act in a socially approved way, we are rewarded. Every occasion serves to reinforce how we act. These experiences are conditioned and are called as "conscience." There is a lot of evidence that psychopathic individuals and criminals show relatively poor conditionability compared with "normal" individuals [24, 29, 41]. Raine claims that arousal has effects on criminality [51–53]. The criminals have psychopathic personality characteristics and acts [42, 31]. Research shows that there is converging evidence for the powerful relation between psychopathy and serious repetitive crime, violent behavior, instrumental and "cold-blooded" violence and violent behavior [38, 25, 10]. What can be done? How can it be reduced? Increasing severity of punishment would not have a large positive effect. As we know that trouble behaviors in kindergarten are relatively predictive of later criminal act, deviant behaviors and psychopathic tendencies. It is adequate to conduct longitudinal training programs and prevention programs as much as earlier stages of the developmental process. It is well-known that one caution should be given on the occasion of the first offense, but serious punishment should follow the next offense. Moreover, nowadays, we know that correctional interventions must be based on behavioral approaches taking root

from learning theories. Psychologists also suggest that correlations of future criminality can be found in early childhood. What does it mean? It means that the prevention programs must began with early childhood educational systems. School, certainly, has deeply a civilizing influence. Finally, it is so important to educate the parents in the line to teach their children to exist themselves without entering into the personal sphere of the others. The child growing up with the awareness of the personal sphere learns to respect the rights of others.

## 6. Psychopathy and other mental disorders

In classification systems, psychopathy appears in childhood, adolescent and adulthood disorders. In childhood and adolescent period, it emerges as a conduct disorder before the age of 15 and antisocial personality disorder as in the adulthood. The psychopathic characteristics include aggressive and destructive behaviors on one side and deceitfulness and/or theft, non-aggressive rule-breaking behaviors on the other side [34, 35, 39].

Repeated illegal acts, impulsiveness, hostile-aggressive behavior, acts endangering self or others, failure to make stable future plans and deceitfulness are the most common features of an individual with psychopathic traits in adulthood. The age criterion is at least 18 years old.

Psychopathy in childhood is manifested as conduct disorder [59]. It is apparent as aggression toward people or animals, destruction of property, deceptiveness or stealing and serious rule violations. Achenbach [1] created Child Behavior Checklist to define aggressive and delinquent behavior syndrome in childhood.

It is accepted that individuals with psychopathy often are violent [26]. They can use all of our empathy against us. Schizophrenics tend to live in an uncertain world being malevolent. Actually, schizophrenia is a heartbreaking disease. A schizophrenic may hear, see and believe things that are simply not real. This of course depends also on their psychotic level. It is known that schizophrenia is a psychotic disorder prominent by highly severe impaired thinking, emotions and behaviors. Patients with schizophrenia typically cannot filter sensory stimuli and may have impaired perceptions of sounds, colors and other factors of their environment [45, 60]. Most of them gradually withdraw from their social interactions and also lose ability to engage their personal hygiene and needs.

Bipolar patients may act as psychopath. The patients especially in manic episode may display psychopathic behavioral patterns. In this period, they may be callous. As grandiose thinking style is at the forefront, they may act in the form of rule breaking, have a strong tendency for criminality but all these may only occur in the manic episode and are curable. Individuals with psychopathy permanently have all of these vulnerabilities.

Borderline disorder may include some psychopathic tendencies. They sometimes behave like individuals with psychopathy. They have basic trust issues and also needy and demanding characteristics. Borderline individuals cannot be "goal directed." In contrast with borderline patients, individuals with psychopathy is self-assured, has appropriate plan for manipulation of the others and they can easily continue with their plans, and "cold-blooded." Individuals

with psychopathy never have a history of suicidal acts, they engage in acts such as calculated controlling and manipulation of the others.

There have been a few studies searching at the comorbid psychopathy in schizophrenic patients. Violent patients with schizophrenia have higher psychopathy scores than those who are not violent [45]. These patients also have a higher number of criminal acts [56, 60]. Some authors claim that psychopathy is a robust predictor of violent, recidivism especially in patients with schizophrenia [61, 55]. On the other hand, there is no study that includes more detailed dimensional measures of personality and interpersonal relations of the patient population.

Dealing with the connection between schizophrenia and psychopathy could be more criminal. The patients have higher trait impulsivity and aggression scores on psychometric assessments [17, 18]. They have less self-control, more aggressive, deviant and impulsive personality style [12, 21].

People with psychosis have lost the capacity to think and behave rationally. This impairment results in breaking the bond with reality. The patient become bizarre and begins to have delusions, experience false perceptions such as hallucinations. Individuals with psychopathy may be in psychotic state as a result of many different underlying conditions; sometimes brain tumors and/or some of physical abnormalities. This is called pseudo psychosis as when the appropriate medical treatment is applied, psychotic symptoms disappear. Moreover, Alzheimer's and other types of dementia also cause a kind of psychotic state.

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