

# Psychopaths: Who are they, really?

By Stephanie Kaufman

The world has become increasingly fascinated by true crime—so much so that it has been termed the “true crime obsession”. With this, a morbid affinity for learning about prolific past and present serial killers has arisen. “Dahmer,” a Netflix series depicting the crimes of Jeffrey Dahmer, a Milwaukee serial killer who was prevalent in the news in the early 1990s, received an incredible 196 million hours viewed within its first week on Netflix [1]. This was a record for any show in the streaming service’s history.

Many true crime aficionados know that most of the serial killers in the United States’ past have been labeled as psychopaths by the media and general public. Does this cause the belief that psychopathic traits always lead someone to violence? I would argue it absolutely does. But while it may be true that many serial killers possess psychopathic qualities, these qualities are not the inherent cause of criminal or aggressive behavior. So, what is psychopathy? What really causes the emergence of psychopathy? What causes these traits to contribute to violence?

## Science of Psychopathy

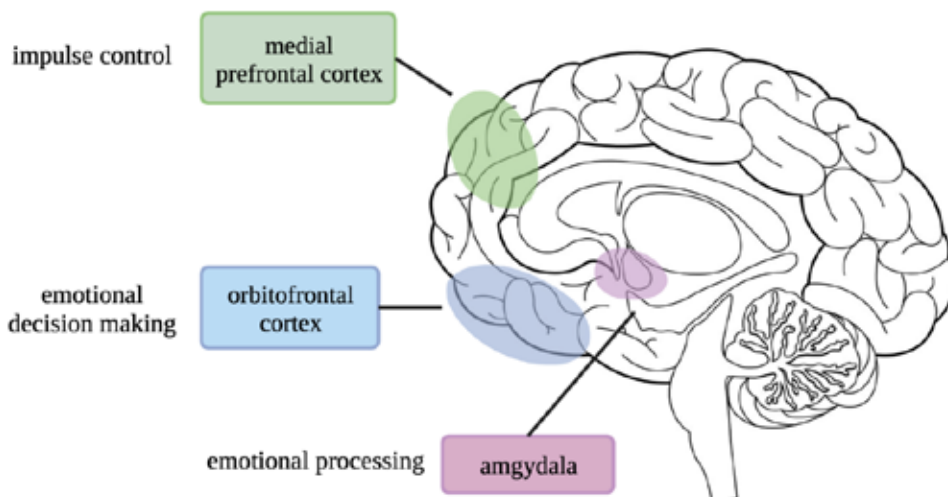
Psychopathy is a collection of personality, emotional, and behavioral features [2]. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5), used by psychologists and psychiatrists, essentially describes the traits of psychopathy with the diagnosis of antisocial personality disorder (ASPD) [3]. Many traits overlap in the descriptions of psychopathy and ASPD. In addition to behavioral commonalities, much of the research we will discuss in this article has examined psychopathic disorders as a whole, which majorly includes ASPD. So in this article, we will refer to psychopathy and ASPD synonymously.

Diagnostic tools and consensus among scientists (although there is not always agreement) broadly describe psychopathic individuals as impulsive, manipulative, and lacking empathy [3]. This is characterized by a disregard for rules and other people’s wellbeing [4]. These features can be caused by differences in neuroanatomical structures, genetics, and upbringing.

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There are several structures which seem to be different in psychopathic brains compared to others. The orbitofrontal cortex, which is involved in emotional decision making, is typically smaller in the brains of individuals who display high psychopathic traits [2]. The medial prefrontal cortex, which is involved in attention and inhibitory control, is also typically smaller [2]. These differences could contribute to the impulsive and risky decision making traits of psychopathy. Additionally, research has shown consistent abnormalities in the amygdalas of psychopaths [2]. However, these abnormalities sometimes range from both less volume to more volume than normal. It’s important to note that any abnormality can cause dysfunction. It seems obvious that structures that are smaller than normal may function less well, but it is also true that structures which are larger than normal do not necessarily function better. These amygdalar abnormalities likely contribute to the abnormal emotional processing which is characteristic of psychopathic cases.

There hasn’t yet been much research on the potential genes involved in psychopathy, but there is one gene which has shown promise in relation to psychiatric disorders [5]. Variants of the MAOA gene could be involved in impulsivity and aggression, both of which are hallmarks in psychopathy. Although the research on the genetics of psychopathy is currently limited, previous studies have shown that adult antisocial behavior often runs in families and is genetically heritable [6]. Twin studies in which identical twins are raised in different environments have suggested that both genetics and environment play important roles in the development of psychopathy. In fact, sometimes genes which would have otherwise stayed dormant and unnoticeable



**Figure 1:** Key brain regions and their roles contributing the development of psychopathy.

are triggered by environmental cues.

Environmental factors during childhood play a huge role in the developmental psychopathy pathway [6]. These factors can be categorized as intrafamilial (e.g. socioeconomic status, family dynamic, parent relationship) or extrafamilial (e.g. peers). One of the most important factors is the parent-child relationship. Parental rejection or an unloving relationship are strong predictors of antisocial behavior in the future [7]. Additionally, the experience of traumatic events in childhood is correlated with increased risk of violence and aggression, which can be associated with psychopathy [7]. It's important to note that while antisocial behavior as a child is positively correlated with psychopathic traits in adulthood, not all children and adolescents that display aggressive or antisocial behavior go on to develop into psychopaths.

## Psychopathy

## ≠ Violence

There are plenty of non-violent psychopaths in the world. You may have met one. Or several. These individuals are often termed "successful" psychopaths because they are not incarcerated [8]. This term can be confusing, so we should note that successful psychopaths are not successful because they're better criminals—they are successful because they are better able to fit into society. They likely do not commit violent acts, which are frowned upon and are difficult to hide.

There has been little research conducted on what differences cause a psychopath to be successful or unsuccessful. Scientists have conducted much of the research on psychopathic disorder within the context of institutions (e.g. prisons, juvenile detention facilities) [8]. This is largely due to the widespread misconception that psychopaths are always violent, so the best place to look for them is within populations of

known offenders. However, more research on non-incarcerated psychopaths has begun to come out in more recent years [9]. This has allowed for investigation into what traits might make a successful or unsuccessful psychopath. Proposed models of successful psychopathy theorize that successful psychopaths develop great inhibitory control and prosocial behaviors to combat their antisocial tendencies [8]. These models suggest that successful psychopaths are different from unsuccessful psychopaths in their ability to control impulses and improve interpersonal relationship skills (even if they are not genuine). There is some evidence which may even suggest that successful psychopaths do not have all the same impaired regions we discussed earlier in this article [9]. Some new research suggests that successful psychopaths may have higher levels of functioning in the orbitofrontal cortex, which is involved in emotional decision making, compared to unsuccessful psychopaths. This could enhance

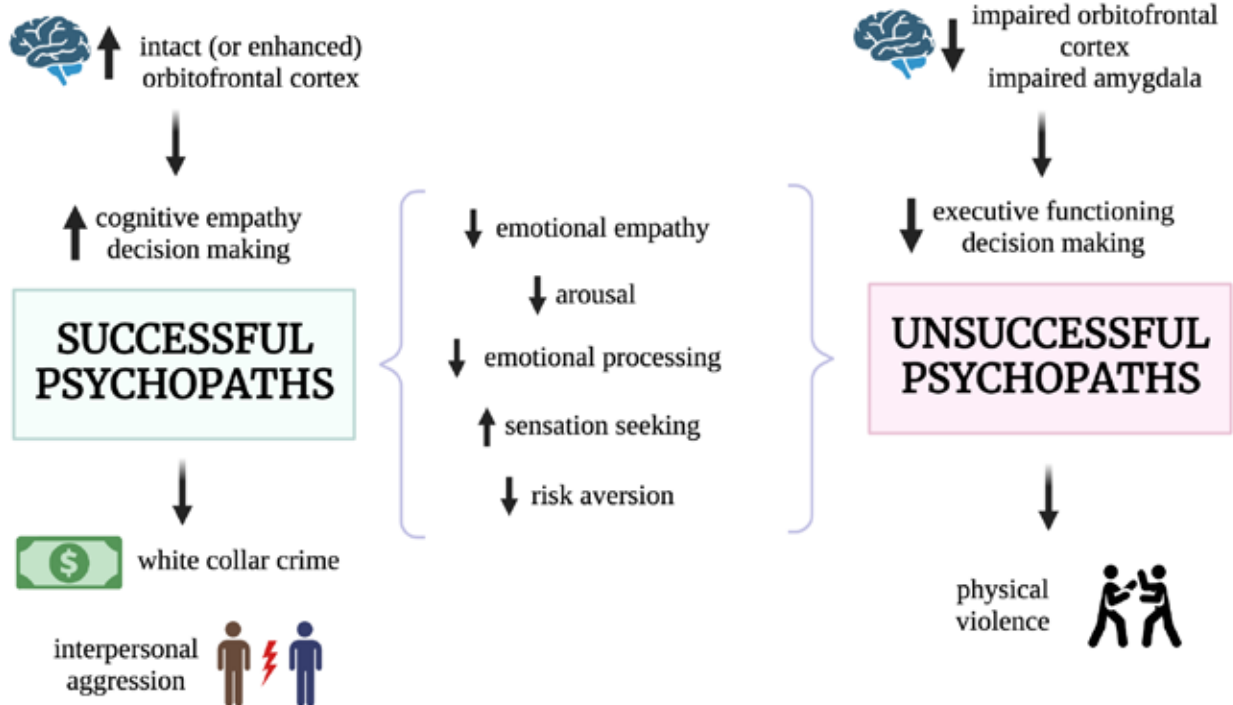


Figure 2. Created in Biorender, designed using images from flaticon.com. Figure adapted from [9].

their ability to control their impulses and better fit in with their peers. Oftentimes, these individuals are able to easily climb the corporate ladder because they've developed their interpersonal skills [10]. They're typically charismatic, well-groomed, confident, and intelligent. These things make them desirable employees and presumably effective leaders, so they tend to end up in positions of power. They are incredibly adept at building strong interpersonal relationships with influential individuals and manipulating these connections to benefit themselves. However, once they reach these positions it can become painfully clear that they are not always great leaders. They tend to excel when it comes to presenting themselves and their ideas but do not follow through with implementation.

Relatedly, despite the fact that successful psychopaths tend to avoid incarceration, they have been known to commit white collar crimes (e.g. money laundering and fraud) for which they are not caught [9]. These crimes are often nonviolent and perpetrators are caught far less often compared to violent offenders. White collar criminals are described to be "wealthy, highly educated, and socially connected, and they are typically employed by and in legitimate organizations" [10]. Psychopathic individuals may be especially equipped to carry these crimes out successfully because they are not as risk averse compared to the average person. One study found that individuals with high levels of psychopathic traits would engage in riskier behavior in a gambling game, even when they were gambling another person's money (rather than their own) [10]. The current research seems to find psychopathic individuals concentrated in business corporations and correctional institutions. Why might this be the case? There are a few reasons they may be drawn to corporations: 1) it's possible

that psychopathic individuals are attracted to business because they view it as an easy path to power and wealth, 2) psychopaths (typically successful ones) are very good at important aspects of business (e.g. interpersonal relations, taking risks). As for correctional institutions, there are another few reasons psychopaths might be primarily found there: 1) these institutions are filled with high risk individuals, many of whom may exhibit psychopathic traits, even if they range in how intensely the traits manifest, 2) perhaps scientists have only just begun looking outside the scope of violent offenders in their research of psychopathic disorder. In other words, it's likely not the case that psychopaths are only found in business corporations and correctional institutions; those may just be the places where researchers focus their attention in seeking out these individuals. But psychopathic individuals could be anywhere, working any job. So we should consider how the clinical community is measuring psychopathy and whether these measurements are geared towards violent and criminal behavior.

## ***How we're measuring psychopathy all wrong***

The study of psychopathy has evolved dramatically since the first stages of research. Although history is filled with individuals who are described to have traits congruent with our current clinical understanding of psychopathic disorders, it's only been in the last few hundred years that psychopathy has taken shape as a psychological disorder [4]. Just over the past decade or two there has been a huge uptick in the studies

and interests regarding psychopathy, most often in relation to the criminal justice system. Much of this research has been conducted using the Psychopathy Checklist-Revised (PCL-R), which was developed in the 1980s and was the first widely distributed measurement for diagnosing psychopathy. The PCL-R has been hailed as the "gold standard" for measuring psychopathy [3], but can it really be the most effective measure in every context? Many researchers have recently begun to argue that it cannot possibly be.

The PCL-R was developed at a time when we knew less about psychopathy than we do now, yet the measure remains the most widely used today. The measurement was developed to assess correctional inmates—this means there was a violent population in mind when creating a scale to measure a disorder for which violence is not necessary for diagnosis [11]. Because of this, there is a disconnect between the measurement and our current conception of psychopathic disorder. One concern is that the PCL-R accounts mostly for antisocial behaviors and lacks assessment of the affective traits of psychopathy [11]. The antisocial behavior assessed is also within the framework of violence and/or aggression. As we've already seen, not all psychopaths are violent, so this scaffolding is insufficient. It also contributes to the misconception that psychopathy equates to violence. Once the PCL-R became so popular within the field, the construct of psychopathy began to be influenced by the measurement instead of the measurement being adjusted for the evolving definition of the disorder [11]. It is likely because of this that, until recently, criminal behavior was essentially assumed to be a key component of psychopathic disorder [11].

There are other measurements and scales which assess psychopathy, but many of them

are derived from the PCL-R or are simply not used enough yet. Overall, there seems to be a need to reform the assessment of psychopathy. Should there be different measures used within different contexts (e.g. in a clinical study vs in a correctional institution)? I would argue no, because there is no context which is necessarily a requirement for psychopathy. For example, we just finished discussing how criminality is not a requirement for a psychopathy diagnosis, despite the fact that the PCL-R was developed with criminal behavior at the forefront. As mentioned before, much of the previous research on psychopathy has been conducted within specific populations. The field hasn't done due diligence in investigating the prevalence of psychopathy elsewhere. Because of this, it would be irresponsible to construct a measurement with a context-dependent framework.

Does assessment reform require the reevaluation of our definition of psychopathy? Perhaps. Or perhaps it simply requires an elaboration of our current understanding. Throughout this article, it's become clear that psychopathy has many elements which contribute to its diagnosis. It is also misunderstood by many people, including psychologists and members of the criminal justice system—individuals for which the application of the psychopathic construct is crucial to their jobs. The necessity of this reform and expansion has been being discussed within the scientific community for over a decade, but little progress has been made to further change. Two articles, one published in 2010 and another published in 2022, both detail criticisms of the PCL-R and our current assessment of psychopathy [3],[11]. It seems not enough changed in those twelve years. How does this impact our society?

## Psychopathy and the legal system

Alongside the increase in scientific attention psychopathic disorder has received in recent years is an increase in concern from the public regarding psychopathic individuals [12]. This concern manifests in fear of psychopathic individuals which society believes to be violent, dangerous, and untreatable. Legal regulations throughout the United States and Europe reflect this fear [12]. There are 17 states in the US which allow involuntary civil commitment of violent offenders who are likely to reoffend, but measuring likelihood of recidivism is not a perfect science. The United Kingdom has implemented the legal term, "Dangerous Severe Personality Disorder," whose description includes dangerous individuals who exhibit antisocial behaviors due to their disorder. Germany has introduced criteria which allow preventive detention. Switzerland passed a petition which introduces "life-long detention for extremely dangerous and untreatable sexual and violent offenders." These regulations pose a threat to many individuals who may never become violent because the legal and clinical definitions of psychopathy and "dangerous personality disorders" have not been made universally clear.

The PCL-R is often used within the criminal justice system. There are several instances in which a psychopathy diagnosis is considered, parole hearings and death penalty sentencing among them [12]. In many cases, the PCL-R is used to determine if an offender will commit another act of violence if released. In European countries, the PCL-R is used in the same way in both prisons and forensic hospitals. The focus is

typically on aggressive or disruptive displays during their stay at the institution. Concerns arise in the validity of using the PCL-R to measure likelihood to recidivate as there is mixed evidence on how accurate it actually is in such context. On a large scale, the PCL-R is often considered predictive of violent recidivism. One study found that, in a group of over 300 patients with personality disorders, 55% of psychopathic individuals recidivated within 3.5 years while only 25% of non-psychopathic individuals recidivated in the same timeframe [12]. Although this may seem like a substantial difference, this means that a large number of psychopathic individuals did not recidivate. Additionally, another study found that at least 50% of the psychopathic cases reviewed were falsely classified as dangerous simply based on high PCL-R scores [12].

Part of the push to attempt to measure recidivism and lock up those who score too high on the PCL-R comes from the pervasive myth that psychopaths are untreatable. It seems that individuals who are likely to commit more violent acts and are unable to be helped should be removed from society. However, it is clear that the fear of psychopathic individuals can lead to drastic behavior that may be unwarranted. For example, there are many adolescents in juvenile detention facilities who score relatively high on the PCL-R (adapted for young adults). Should these young individuals be preemptively locked away? Should we conduct screenings to weed potentially psychopathic individuals out of society? I would argue that this would be a step in the wrong direction for multiple reasons that we've already discussed in this article: 1) Psychopathy is a variable cluster of features in multiple categories of measurement (genetics, neuroanatomical structures, behavioral patterns, etc.), so it would be extremely difficult to accurately as-



sess every risk factor appropriately; 2) The current “gold standard” for assessing psychopathy has many structural and methodological issues which cause it to be effective in specific settings regarding specific outcomes; 3) Psychopaths are not always dangerous— how can we construct measurements which do not only measure psychopathic traits but also likelihood to be violent?; 4) To remove psychopathic individuals completely from society is to assume that these individuals cannot be rehabilitated. Is it possible for psychopaths to benefit from treatment?

## ***Treatment of psychopathy***

The myth that psychopaths are therapeutically untreatable is pervasive throughout the general public and the scientific community. Many clinicians don’t believe it’s possible to rehabilitate psychopathic offenders. However, this belief is based on old research [13]. Research that was primarily conducted using therapeutic techniques which did not work well for the intended population. Our understanding of psychopathic dis-

order has come a long way since those studies, so it’s possible that we could develop better psychotherapeutic treatments now. For example, we now know that there are different forms of psychopathy, similar to how there are different forms of depression. Individuals who score high on affective traits of psychopathy are more difficult to treat compared to individuals who score high on antisocial traits of psychopathy [14].

To be sure, psychopathy is often more difficult to treat compared to other disorders. There are a variety of reasons this can be the case, and it depends on the individual in treatment [14]. Sometimes psychopaths are resistant to treatment because they aren’t motivated to believe they’ve done anything wrong. Sometimes they’re difficult to treat because they do not connect emotionally with their treatment providers (as in, their deficits are in affect and interpersonal connection, so they do not connect with anyone). Sometimes they attempt to use deceit and manipulation tactics to persuade therapists they are making therapeutic progress but it isn’t genuine. However, despite all these potential pitfalls and complications, there are some

more recent studies that suggest therapeutic interventions can help psychopathic offenders.

One study examining a small number of inmates in New Zealand attempted to use a 11 month program based on cognitive behavioral therapy (CBT) to rehabilitate violent psychopathic offenders [13]. CBT is often used in the treatment of psychopathology and is a very successful tool in most cases. It is founded in thought-provoking conversation with a trained clinical psychologist. The goal is to help mold thinking and behavior to be more adaptive. This experimental program ultimately led to “modest success”— the attempted rehabilitation of twelve psychopaths led to just under half of them showing long-standing progress.

Another study examined a much larger group of violent offenders in the Canadian prison system [15]. They utilized an 8 month program which was also founded in CBT practices. This study assessed pretreatment risk using a standardized scale (Violence Risk Scale; VRS) meant to measure likelihood of recidivism. There was a correlation between individuals who scored high on the PCL-R and VRS, but there were individuals

who scored high on psychopathic traits but not necessarily high on the likelihood to recidivate. After the program, the inmates were followed for over 15 years to see if they recidivated (recidivism was classified as any arrest after release). The results of that study are shown in the figure below. There were eight groups total, each with multiple offenders within it. High and low PCL-R scores indicate the individual's psychopathic score. High and low change indicates if the individual finished the therapeutic program or not (high = they completed the program; low = they did not complete the program). The level of risk is based on the pretreatment VRS scores (red = high risk; green = low risk).

These results show some surprising patterns. It seems the most important factor is pretreatment risk, not PCL-R score. This means that the VRS scale is a better predictor of recidivism than psychopathic score is. Remember, the PCL-R measurement was

originally constructed to assess likelihood of reoffending, so this is an important finding. These results also suggest that the therapeutic intervention was not significantly effective in this sample. The authors of this study theorized this could be due to individual differences to the commitment of therapy. They did not take the quality of therapeutic participation into account in this study, so just because an inmate completed therapy doesn't mean they completed it well. Part of this could be due to some of the potential pitfalls we discussed previously. Still, the authors posit that this study adds to the optimism of psychotherapy for psychopaths. Not only that, but it seems to show that psychopaths do not always recidivate— high PCL-R scores were not a strong predictor of recidivism here.

Given that new studies have begun the process of developing effective therapies for psychopathic individuals and have shown some promise in their en-

deavors, I believe it to be inappropriate to continue to condemn psychopathic offenders to life removed from society. The public's understanding of psychopathy is limited and often only made worse by the media's fixation on violent psychopaths in the world. The unknown can be scary, and it's clear that there is not enough known about psychopaths. Emphasis must be placed on this research if we are to continue the prevalent discussions of psychopathy within the general population and the criminal justice system. Ignorant conversation and, sometimes, policymaking seems a recipe for disaster. I hope the reading of this article dispelled some misconceptions you may have held or simply taught you something unexpected. Perhaps now you can comment on true crime series with knowledge and vigor.

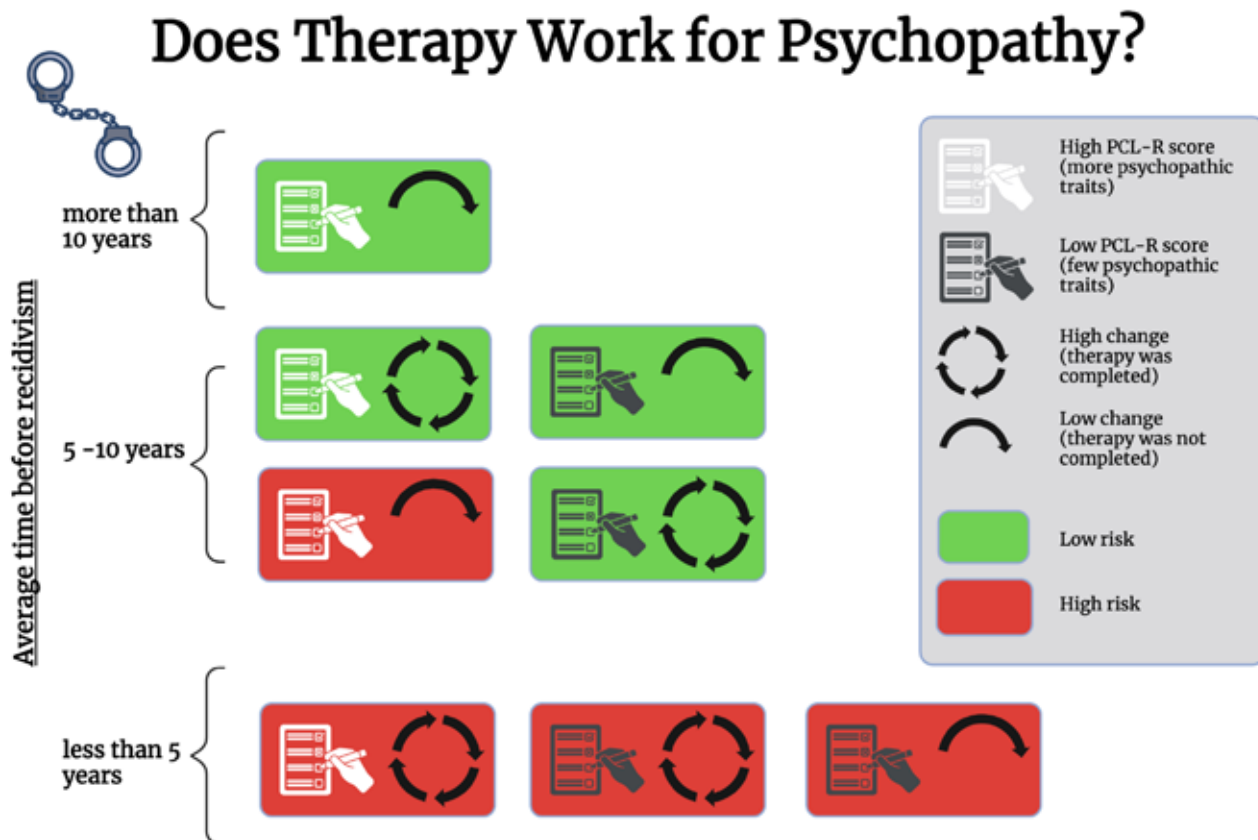


Figure 3. Created in Biorender, designed using images from flaticon.com. Figure adapted from [15].

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