# Psychopathy Treatment and the Stigma of Yesterday's Research

Rasmus Rosenberg Larsen

*Rasmus Rosenberg Larsen*

# Psychopathy Treatment and the Stigma of Yesterday's Research

ABSTRACT. The psychiatric diagnosis of psychopathic personality—or psychopathy—signifies a patient stereotype with a callous lack of empathy and strong antisocial tendencies. Throughout the research record and psychiatric practices, diagnosed psychopaths have been predominantly seen as immune to psychiatric intervention and treatment, making the diagnosis a potentially strong discriminator for treatment amenability. In this contribution, the evidence in support of this proposition is critically analyzed. It is demonstrated that the untreatability perspective rests largely on erroneous, unscientific conclusions. Instead, recent research suggests that practitioners should be more optimistic about the possibility of treating and rehabilitating diagnosed psychopaths. In light of this finding, concrete ethical challenges in the forensic practice surrounding the psychopathy diagnosis are discussed, adding to a growing body of research that expresses skepticism about the forensic utility of the diagnosis.

## INTRODUCTION

Psychopathy is one of the most studied and recognized psychiatric diagnoses in mental health research (Hare, Neumann, and Widiger 2012). The clinical prototype of a psychopathic patient includes traits of grave antisocial conduct, pathological lying, and a callous lack of empathy (Cooke et al. 2012). Relatedly, psychopaths are believed to be overrepresented in the criminal populace. Whereas psychopaths are estimated to make up about 1% of the general population, it is projected that some 30% of all incarcerated individuals might be psychopaths (Hare and Neumann 2008). As a result of these estimates, the psychopathy diagnosis has predominantly been researched and applied in forensic settings, yielding actuarial nontrivial information about behavior prediction, risk evaluation, treatment amenability, institutional placement, parole decisions, etc. (Gacono 2016; Hare, Black, and Walsh 2013).

While many of the traits associated with psychopathy also overlap with other personality and conduct disorders (Crego and Widiger 2015), psychopaths are nevertheless considered importantly unique on a number of parameters. One such central difference is the prevailing belief that—different from most psychiatric conditions—psychopathy is an essentially chronic, untreatable disorder (e.g. Hare, Black, and Walsh 2013). For example, in a survey of Swedish forensic practitioners (*n* = 90), Sörman and colleagues (2014) found that participants generally endorsed the view that (a) psychopaths cannot change, (b) that there is no treatment that can cure a psychopath, and (c) that criminal psychopaths cannot be rehabilitated. These findings were consistent with a 1993 survey of UK forensic practitioners (*n* = 515) that found that only 1% thought that psychopathic personality was always remediable; most answered that only in some cases could patients benefit from treatment (Tennet et al. 1993).

The view that psychopaths are immune to various forms of psychiatric intervention and rehabilitation is not a new development, but echoes a long-standing truism in the research history (e.g. Cleckley 1988; Hare 1998; Harris and Rice 2006; Maibom 2014; McCord and McCord 1964; Suedfeld and Landon 1978). Presumably as an effect of these beliefs, researchers have reported on widespread evidence that the psychiatric diagnosis is generally applied, not as an indicator of psychiatric treatment, but moreover as a discriminator for treatment and rehabilitation programs (Polaschek and Skeem 2018). As was recently argued by a team of leading researchers, forensic practitioners are better off considering *management* a more appropriate goal than *treatment* when dealing with psychopathic patients, given that there is "no evidence that treatment programs result in a change in the personality structure of psychopathic individuals" (Hare, Black, and Walsh 2013, 244–45).

Mirroring a growing sentiment among researchers, this article argues that the *untreatability view* about psychopaths is medically erroneous due to insufficient support of scientific data. Moreover, the aggregate of recent research appears to paint a comparatively more optimistic picture of psychopaths' response to psychiatric intervention. Such a perspective, if reasonable, raises novel ethical concerns expedient to the field of forensic psychiatry—for example, whether the clinical narrative and forensic practice concerning psychopathy meet the ethical standards for proper psychiatric professionalism. Speaking to this suspicion, new cautionary directions for future practices and research are discussed.

THE PSYCHOPATHY DIAGNOSIS AND ITS FORENSIC APPLICATION

The psychopathy diagnosis is arguably among the historically and currently most researched psychiatric conditions (Hare, Neumann, and Widiger 2012), and as a result, its research paradigm has become an increasingly large and challenging affair to navigate. These complexities are further amplified by pop-cultural and unscientific anecdotes that surround the field, colorfully portraying psychopaths as vile intraspecies predators, sometimes deviating wildly from the basic tenets of the empirical research (Berg et al. 2013). Thus, one strategy for a sober and informative discussion of psychopathy research is to start with some basic perspectives in terms of what exactly psychopathy *is* and *is not*.

It should be noticed that psychopathy is not an "official" psychiatric diagnosis, in the sense that its details are recognized by the broader psychiatric community. For instance, the diagnosis is not explicitly included in the latest edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5). Instead, the DSM-5 includes canonical psychopathic personality traits as *specifier* criteria under the diagnosis of *Antisocial Personality Disorder* (ASPD), ostensibly cataloging psychopathy as a subcategory to ASPD (for a discussion of the differences, see Crego and Widiger 2014). This should not necessarily be seen as a problematic aspect, though. Some researchers have argued that our understanding of psychopathy has greatly surpassed our understanding of ASPD, since the majority of research efforts (and funding) has migrated away from ASPD to the psychopathy diagnosis (e.g. Gacono 2016; Hare and Neumann 2008).

More fundamentally, though, classificatory descriptions of psychopathy in the psychiatric nomenclature can vary depending on the researchers we consult. For instance, some describe psychopathy as a *personality disorder*, others as a *clinical construct*, and some have argued that psychopathy is merely an *adaptive lifestyle* (e.g. Glenn, Kurzban, and Raine 2011; Hart and Cook 2012). In addition to these perspectives, the many different scientific theoretical accounts of the diagnosis are multifaceted. For instance, some posit psychopathy to be a cognitive disability, and others think it is an impairment of emotion dispositions (for a discussion of the contemporary accounts, see Brazil and Cima 2016). While these disagreements in the field are substantial, a more generous interpretation might be that they reflect a growing suspicion among researchers that psychopathy is a much more heterogenous disorder than previously assumed, that the diagnosis might consist of, or be divided into, several subtypes (e.g. Hicks and Drislane

2018) with varying underlying etiologies (e.g. Jurjako and Malatesti 2018; Stratton, Kiehl, and Hanlon 2015).

However, aside from these divergences, the more fundamental motivation for applying the diagnosis is that the diagnosis itself aims at signifying a common patient stereotype encountered in the psychiatric clinic. That is, over the decades of psychiatric professional practices, clinicians have come to a sort of consensus that there exists a specific class of patients who demonstrate a peculiar constellation of personality and behavior; namely, a markedly callous personality disposition (e.g. lack of empathy, glibness, grandiosity) and strong antisocial tendencies (e.g. violence, pathological lying, impulsivity). These are the concrete individuals that clinicians aim to demarcate when they apply the term 'psychopathy' (i.e. regardless of whether they see it as a disorder, construct, or something else).

More decisively, though, the majority of researchers generally agree that the syndromic constellation of so-called *psychopathic traits* is a sign of abnormality, positing that the homogeneity of observed traits across this particular "patient class" is caused by a discrete and shared underlying etiology (or a suite of different, yet discrete etiologies). Importantly, psychopaths are not seen as merely ill-behaved people with a socially appalling character. Certainly, there is not necessarily something psychologically abnormal about being deceitful and violent; we might even say this is what eventually differentiated *Homo sapiens* from other mammals (Wolin 1963). Rather, when psychologists refer to psychopathy as a psychiatric diagnosis, what is conveyed is a claim about a discrete *condition* or *symptom*, hypothesized to be caused by one or more likewise discrete etiological mechanisms (e.g. genes, neurobiological structures, cognitive functions, emotion deprivations, etc.) (Hare and Neumann 2008). Thus, when average people are deceitful and violent, this would be different from when psychopaths are so, since their behavior is caused or premediated by their psychological abnormality. Furthermore, this hypothesis also substantiates the larger forensic and criminological interest in psychopathy insofar that if psychopathy has discrete etiological mechanisms, we might be able to intervene medically with the violent antisocial behavior allegedly associated with psychopathy (e.g. Reidy et al. 2015).

When we speak of the field of psychopathy research, then, what we are really referring to is a largely-coordinated scientific effort to corroborate this main hypothesis: The observed patient stereotype makes up a homogenous class of individuals, undergirded by one or more discrete etiologies.[1]

Although this research effort is multifaceted, it can be roughly divided into three interrelated, yet independent, research efforts: (1) *theoretically accounting* for what exactly makes psychopaths' psychology abnormal compared to normal individuals (e.g. Blair, Mitchell, and Blair 2005; Fowles and Dindo 2006; Hamilton and Newman 2018); (2) *empirically measuring* the etiological mechanisms of psychopathy (e.g. Ferguson 2010; Stratton, Kiehl, and Hanlon 2015; Werner, Few, and Bucholz 2015); and (3) an applied effort to build reliable and valid *assessment tools* capable of distinguishing psychopaths from non-psychopaths in the populace (e.g. Hare 2003; Lilienfeld and Widows 2005; Patrick, Fowles, and Krueger 2009).

In light of these different efforts, one common ground of confusion when speaking about psychopathy is when the various branches of research are conflated with or mistaken for one another; for example, when (1) theoretical accounts of psychopathy are conflated with (3) the work of building valid assessment tools. Indeed, the former is concerned with accounting for the *mechanics behind* observed traits, while the latter regards the methods to reliably and validly demarcate psychopaths from non-psychopaths *based on* observable traits. Analogously, this example equals comparing theoretical studies of diabetes (e.g. accounting for the mechanics of cellular abnormalities in the pancreatic islets) with the diagnostic testing for diabetes (e.g. measuring blood sugar levels). Although the two are importantly related, they are obviously two very different things. The former regards what diabetes *is*, while the latter is a proxy measure *of* diabetes. Conflating the former into the other in psychopathy research and practices will result in the mistaken belief that a psychopathy measure *is* psychopathy (indeed, a common misconception, e.g., Skeem and Cooke 2010).

Why is this nuance important? Because most of the times when the psychopathy diagnosis is introduced in forensic settings, what is really being discussed is (3) the *measure* of psychopathy. And as it is with all forms of psychiatric diagnostic assessments, there exists the very real possibility that the individuals we *measure* to have psychopathy are, in fact, not psychopaths (i.e. that they do not carry the hypothesized etiology). In such cases, we would be dealing with false positives, and many of the scientific inferences that we make about the psychiatric condition would not apply to the patient. It equals falsely asserting that a person has diabetes based on irregularities in blood sugar levels, which likewise would make the patient respond very differently to insulin injections (for a discussion

of such *false positives* in psychopathy research, see Larsen 2018; Skeem and Cooke 2010).

This point should not be taken lightly, since there are good reasons to believe that our psychiatric assessments in general yield a high number of such inaccurate diagnoses. Compared to biomedical diagnostic assessment tools, say, a test for diabetes, psychiatric assessment tools are much less accurate for a number of reasons. First, researchers broadly disagree on how exactly to account for an alleged disorder (i.e. theoretical disagreement). Second, research in psychiatric etiology is scarce and ambiguous (i.e. disagreement and unfamiliarity about causality). Third, because of theoretical disagreement and lack of etiological insight, the assessment tools being developed will naturally have fundamental inbuilt uncertainties. For instance, when we do not have a clear theoretical understanding of a disorder, let alone know its cause(s), it trivially follows that we cannot know with certainty that our assessments measure what they purport to measure. While it is obvious that many medical disorders seem straightforward to measure even in the absence of theoretical and etiological insight (e.g. scientists were relatively accurate when demarcating diabetic patients before they knew what diabetes was), psychiatric conditions are presumably theoretically and etiologically more complex, and their signs and symptoms relatively more elusive than "somatic" disorders. So, since a traditional biomedical diagnostic method (e.g. measuring diabetes) yields a surprisingly high number of false diagnoses notwithstanding its comparatively high accuracy rates,[2] we can soundly assume that psychiatric tools are comparatively much more erroneous due to both the *basic nature* and our *epistemic limitations* about what we are measuring.

With this cautionary note on psychiatric diagnostics in mind, the term 'diagnosed psychopath' shall in the following refer to a person who meets the, so to speak, *clinical standard* or *threshold* of psychopathy, namely, a person who has been assessed to be psychopathic with official field-specific assessment tools.

The most widely used psychopathy assessment method is the *Hare Psychopathy Checklist-Revised* (PCL-R) (Hare 2003) (see *Figure 1*). The PCL-R consists of 20 trait items, of which 18 load on two factors (and four facets). The assessment is carried out by analyzing patient records and conducting a semi-structured interview with the patient and scoring each of the 20 items from 0 to 2 points. The score zero is given if the trait is not present in the patient; score 1 if the trait is partially present;

or score 2 if the trait is a stable mark of the patient. Thus, the PCL-R score ranges from 0 to 40, where a conventionally decided cut-off score of a proper diagnosis is understood to be somewhere between 25 and 30 points. The diagnostic cut-off, however, is not implied as a hard line between *psychopathic* and *non-psychopathic*. Instead, the psychopathy diagnosis is broadly considered to be dimensional, where a score is better representative of the level of psychopathy in a patient (i.e. score 40 is considered "full blown" psychopathy) (for a peer-reviewed discussion of the PCL-R as a valid diagnostic tool, see Hare and Neumann 2008).
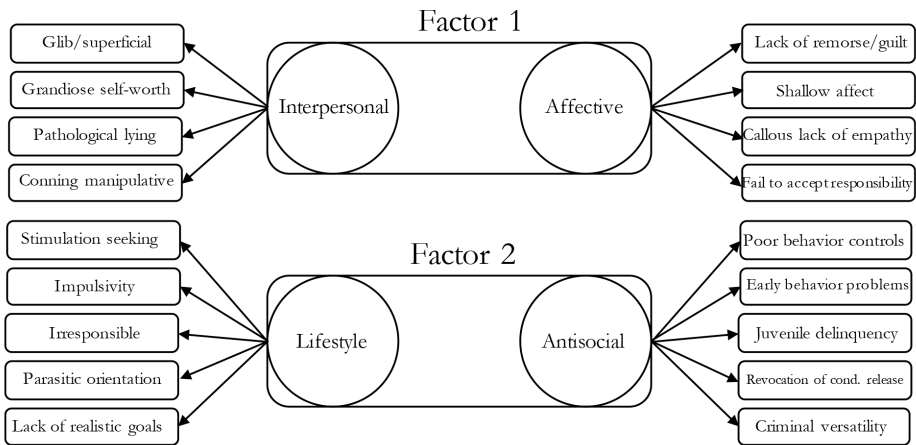
Figure 1. The Hare Psychopathy Checklist-Revised, two-factor and four-facet model (adapted from Hare and Neumann [2008]). In addition to these 18 factor-correlated traits, the PCL-R also includes the traits of many short-term marital relationships and promiscuous sexual behavior; although these two traits do not load on any factor, they are nevertheless believed to depict a shared characteristic of the patient class.

One of the advantages of the PCL-R is its *clinical reliability*, i.e. the extent to which two or more clinicians independently give the same patient a similar score (Blais, Forth, and Hare 2017). This makes the PCL-R particularly apt at discerning the patient class (i.e. so-called psychopaths) based on the aforementioned observable traits. Notice, again, that this does not mean that the PCL-R selects *actual* psychopaths (i.e. those who carry the hypothesized etiologies). It merely means that, if we take a random group of people, the PCL-R can reliably pinpoint which individuals *belong*, so to speak, to the patient class.

Because of this reliability, the PCL-R has been considerably effective in actuarial scientific research, measuring specific behavioral tendencies correlated with the patient class across various demographics. For example, one forensically-useful type of information that can be derived from applying the PCL-R is its correlation with violent recidivism in the criminal populace (e.g. Serin, Brown, and Wolf 2016; Yang, Wong, and Coid 2010). Thus, when we point to such correlations, what is really communicated is a data-driven statistical probability about future behavior (e.g. violence) insofar as one belongs to a reliably-demarcated patient class. This process is methodologically identical to how, say, an insurance company calculates the risk of driver accident probability; namely, associating the assessed person with generalized data on specific traits, say, age, gender, address, or occupation (Serin, Brown, and Wolf 2016).

It is primarily because of such actuarial data-driven efforts that the psychopathy diagnosis has gained its reputation as a legitimate tool for forensic application, not only for violence prediction, but also on a suite of other related issues, such as (though not limited to): child custody hearings, parole hearings, capital sentencing hearings, preventative detention, culpability, institutional placement, and treatment amenability (DeMatteo et al. 2014a; DeMatteo et al. 2014b; Edens and Cox 2012; Hare, Black, and Walsh 2013; Walsh and Walsh 2006).

## TREATING THE "UNTREATABLE"

One particularly-widespread usage of the psychopathy diagnosis (e.g., a PCL-R assessment) is to introduce it when making decisions regarding psychiatric treatment and rehabilitation program placements. In this context, a high psychopathy score (i.e., 25 or higher on the PCL-R) will thus be interpreted as indicating unamiable qualities in terms of successful treatment outcomes, which may then bar such a person from entering said programs (e.g., Polaschek and Skeem 2018). This practice expresses a deep *clinical pessimism* about diagnosed psychopaths insofar as the diagnosis is not invoked for treatment purposes, but, instead, for justifying clinical passivity (i.e., mere clinical management). In this section, the validity of the clinical pessimism surmounting diagnosed psychopaths will be reviewed, demonstrating that the belief is scarcely supported by the scientific research. Such a finding raises pressing ethical concerns for forensic psychiatrists, which will be discussed in the final section.

The clinical pessimism concerning psychopathy is not only alive and well today, but it has arguably been the prevailing view for the better part

of the research history. One of the *founders* of contemporary psychopathy theories, Hervey Cleckley, famously characterized the paradoxical nature of treating psychopaths. In his five-edition opus, *The Mask of Sanity* (first published in 1941), Cleckley spends several pages musing about the difficulties of treating psychopathic patients. According to Cleckley, one peculiarity about psychopaths is that, contrary to his other psychiatric patients, psychopaths did not appear to find their attitudes and behaviors problematic, let alone psychologically vexing—to Cleckley a strong indicator of futility in treatment efforts (2015, 26–32). Although Cleckley actually concludes his work with a hair of optimism on future treatment options, his overall assumption about the then-current state of clinical efforts is short and dire: There is not really much that can be done (2015, 439).[3]

The clinical pessimism also made it into the single most read and cited book about psychopathy, Robert Hare's 1993 *Without Conscience*, which concludes with a snub:

> Many writers on the subject have commented that the shortest chapter in any book on psychopathy should be the one on treatment. A one-sentence conclusion such as, "no effective treatment has been found," or, "nothing works," is the common wrap-up to scholarly reviews of the literature. (1993, 194)[4]

Along these lines, the PCL-R *manual*—which makes up the foundation of the professional training of clinicians administering the PCL-R diagnoses—includes a similarly unenthusiastic section on treatment efforts (Hare 2003, 158–62). Here, the leading narrative is that, in general, "clinicians and researchers are rightly pessimistic about the treatability of psychopaths with traditional methods" (2003, 158). But, on top of this, the PCL-R manual also emphasizes a discomforting phenomenon in treatment research; namely, that diagnosed psychopaths have shown *iatrogenic,* or adverse reactions, to treatment efforts. Treatment actually makes them more antisocial, prompting institutional violence and post-release recidivism.

The particular study mentioned in the PCL-R manual showing adverse effects is a retrospective follow-up study by Rice, Harris, and Cormier (1992). This research examined the recidivism rates of 176 treated offenders and 146 untreated offenders from a maximum-security institution over the course of 10.5 years. Among these patients were 92 diagnosed psychopaths, of which 46 received treatment (i.e. an intensive therapeutic community treatment program [Barker 1980]). Expectedly, the

study found a significant difference in the *general* recidivism rates between psychopaths and non-psychopaths. However, the more interesting (and surprising) finding was that *violent* recidivism rates were substantially larger for treated psychopaths (77%), compared to nontreated psychopaths (55%). As such, violent recidivism was positively (i.e., adversely) associated with treatment efforts in diagnosed psychopaths. The study concluded on a speculative note: Community treatment programs that generally seek to cultivate pro-social empathic and caring qualities might inadvertently make psychopaths better equipped to "facilitate the manipulation and exploitation of others," and such treatment efforts could, therefore, be "associated with novel ways to commit violent crime" (Rice, Harris, and Cormier 1992, 409).

The study by Rice and colleagues (1992) was based on a relatively small number of patients with a specifically nondiverse demographic, yielding unique and surprising results. Therefore, its generalizability should have been interpreted with caution. Nevertheless, the impact of the study has turned out to be nothing short of profound. As was noted in a review of the treatment literature on psychopathy, the study by Rice and colleagues effectively "slammed the lid shut for many on the advisability of even attempting treatment" (Polaschek and Daly 2013, 195).

Despite their own, and a community-wide, inability to replicate these adverse effect findings, the authors accentuated their conclusion in a 2006 review article of the psychopathy treatment literature (Harris and Rice 2006). In conclusion, they highlighted their 1992 findings, emphasizing that there was no compelling evidence for positive treatment outcomes of psychopaths, and that there were potential adverse outcomes of treating psychopaths:

> We believe that the reason for these findings is that psychopaths are fundamentally different from other offenders and that there is nothing 'wrong' with them in the manner of a deficit or impairment that therapy can 'fix.' Instead, they exhibit an evolutionarily viable life strategy that involves lying, cheating, and manipulating others. (Harris and Rice 2006, 568)

The larger point is that actual *treatment* might be too optimistic; instead, practitioners should focus on *managing* the antisocial patterns of diagnosed psychopaths. Hence, practitioners should use the psychopathy diagnosis as a discriminator for clinical treatment.

If we pause for a moment and consider these adverse effect perspectives, they should, as a minimum, give ground to critical suspicion. One initial problem is that, while we might be satisfied with the claim that the patient

class selected by using the PCL-R potentially could be associated with adverse treatment effects, the way researchers here seem to qualify this view is not with a reference to a patient class, but, rather, with reference to an underlying belief about the *nature* of psychopathy. But if it is the etiological aspect—i.e., psychopathy proper—that is correlated with adverse effects, we are left wondering how exactly this effect can be strongly correlated with a patient class that, all things considered, must include a great number of false positives. It is important to emphasize that, when we make actuarial projections based on a patient class (e.g. PCL-R score > 25), these projections are entirely mute to any theory about underlying etiology (i.e., the actuarial claim is in and by itself a mere statistical observation). It therefore amounts to a logical leap of faith when these claims are translated into a narrative about adverse effects due to etiology that recommends management over treatment for the *entire* patient class (e.g. Hare, Black, and Walsh 2013). It is not that such claims are unintelligible from a hypothetical standpoint, though; it is, rather, that they seem insufficiently paired with critical scrutiny.

However, another problem with this narrative about untreatability and adverse treatment effects is that it is simply not supported by the overall research data, or, at least, the evidence in support of the widespread clinical pessimism is greatly disproportionate to the extent of the claim. For one, the study by Rice and colleagues (1992)—which arguably serves as the most compelling, fundamental evidence in favor of clinical pessimism—was based on patients undergoing an infamously problematic treatment program at the Oak Ridge Social Therapy Unit in Ontario, Canada. The treatment program was so harrowing that a class lawsuit was raised against the institution and its practitioners in 2000. In May 2017, a Canadian judge ruled in favor of the plaintiffs, comparing the alleged treatment to torture (Fine 2017).[5, 6] The details of the lawsuit confirmed widespread denigrating treatment procedures, such as chaining nude patients together for up to two weeks, keeping patients locked up in windowless rooms, feeding patients liquid food through tubes in the wall, experimenting with hallucinogens and delirium-producing drugs, and a complete disrespect and rejection of patient rights (Berg et al. 2013; D'Silva, Duggan, and McCarthy 2004; Ronson 2011).

In a 2016 interview, a former (recidivating) psychopathic patient from Oak Ridge, Jim Motherall, said that, when he was released from the institution in 1976, he was broken down and dysfunctional: "I wasn't ready to be on the street, I couldn't function on the street [. . .] I was angry.

I hated them [the practitioners]. I hated what they did, I hated what they stood for. And I couldn't control the anger. I had lost any ability to get hold of that anger" (Sherren 2016). To Motherall, and presumably many of his fellow patients forced through the torturous "treatment" program, his anger led to multiple violent offences after his release, and decades of additional confinement.

The remaining question is, of course, whether (psychopathic) patients such as Motherall had their hypothesized condition exacerbated and, therefore, recidivated faster and more violently, or whether the violence frequencies were a result of some other factors related to their treatment. To answer this question in an accurate scientific manner, we would have to look closer at the psychological profiles of each recidivating patient and also know the details of the exact treatment program they underwent. For example, perhaps we would find that only certain personality traits (and not PCL-R psychopathy as such) were correlated strongly with elevated aggression. Unfortunately, such details are not present in the research data of Rice and colleagues (1992), nor have we seen any serious efforts in re-evaluating the research conclusion in light of the malpractice disclosure, for example, either retracting the study or further qualifying the data collection, methods, research results, etc. (which, of course, is common practice when the integrity of a study is compromised).

But perhaps asking these questions about adverse effects, let alone trying to answer them, is also rather futile. For instance, Polaschek and Daly (2013) have argued that there is ample evidence that, in generalized and trivial ways, some treatment methods can potentially generate adverse outcomes in any patient class regardless of psychological disorder (e.g. Lilienfeld 2007; Skeem, Polaschek, and Manchak 2009). However, this is qualitatively different from claiming that specific treatment efforts (e.g. concrete maltreatment), or more profoundly, conventional treatment, *generally* makes diagnosed psychopaths at higher risk of recidivating—a grand view that needs more evidence than what can be drawn from a single compromised study (Polaschek and Daly 2013, 595). So far, Rice et al. (1992) remains the only cited evidence for the belief about adverse effects,[7] raising the question why it continues to play a significant role in the treatment literature.

Notwithstanding the discussion of potential adverse effects, there is actually evidence suggesting that the overall clinical pessimistic conclusions about psychopaths are too precarious. The first study to suggest this was by Randall Salekin (2002), who reviewed 42 treatment studies, positing

the unambiguous conclusion that the clinical pessimism associated with psychopathy has little scientific basis. Salekin highlighted a number of aggravating factors; mentioning a few should suffice. First, the study found a clear lack of valid generalizable data. For instance, out of the 42 studies, only four studies (9%) were based on the PCL-R, raising the question whether the different studies were actually studying individuals with the same traits or condition (i.e., unknown diagnostic compatibility). Second, although treatment outcomes varied greatly across studies, only one study reported adverse effects; namely, the study by Rice and colleagues (1992). This suggested to Salekin—presumably unaware that this treatment method would later be described as torture by a Canadian court—that the specific program of therapeutic community treatment administered by that particular institution was only *possibly* worsening the psychopathy condition (Salekin 2002, 105).

Curiously, although Salekin (2002) was arguably the most comprehensive large-scale review of the treatment literature of its time,[8] the publication of the second edition of the PCL-R in 2003 barely mentions these findings, merely declaring the following:

> Although some reviewers (e.g., Salekin 2002) have suggested that clinical pessimism might be replaced with clinical optimism, most clinicians and researchers are rightly pessimistic about the treatability of psychopaths with traditional methods. (Hare 2003, 158)

Thus, even though there was poor scientific basis for making such a claim—as demonstrated by Salekin (2002)—the creators of the PCL-R manual continued to insist on a speculative perspective. They write:

> Some clinicians and administrators hold the uncritical view that psychopaths who have participated in prison treatment programs must have derived some benefit. This may help to lull the criminal justice system and the public into the false belief that the psychopaths with whom they must deal have derived tangible benefits from treatment, simply because they and their therapist say so. Many psychopaths take part in all sorts of prison treatment programs, put on a good show, make "remarkable progress," convince the therapists and parole board of their reformed character, are released, and pick up where they left before they entered prison [Hare 1998].[9] (Hare 2003, 158)

It is difficult to see such a narrative as anything else than incongruent with scientific standards, and thus, at best, anecdotal. While the PCL-R cites the Salekin (2002) study, it fails to acknowledge it as compelling, which, of course, is odd given that the study is a substantial peer-reviewed survey

of the research literature. If extensive reviews and meta-analyses are not compelling scientific evidence, what is? Further, the literature raised in support of this alternative perspective in the PCL-R manual includes an extensive discussion of the study by Rice and colleagues (1992). We must assume, then, that the creators of the PCL-R, at the time of writing, were unaware of the fact that two to three years earlier to publication, a class action had been raised against the institution where Rice and colleagues (1992) collected their data, making public a mountain of evidence about disturbing psychiatric malpractices at Oak Ridge Social Therapy Unit.

For the past five to 10 years, however, a comparatively clearer, nuanced, and more optimistic picture about psychopathy and treatment has started to take shape. First, a few years after Salekin (2002), a review was published by D'Silva, Duggan, and McCarthy (2004) that specifically sought to investigate the hypothesized adverse effects of treatment associated with the PCL-R diagnosis. The team systematically evaluated 24 studies and found that, above all, the aggregate of research was in such a condition that it was poorly equipped to answer their basic question about adverse effect (e.g., lack of control groups, lack of methodological rigor, poor data quality). They argued that, when researchers actually do draw the conclusion that psychopathy is related to adverse treatment outcomes (i.e., untreatability), such an interpretation amounts to a "logical error" (2004, 175). Therefore, they expressed regret about the common practice that diagnosed psychopaths "are now being denied treatment on the basis that they are either untreatable or that treatment might make them worse" (2004, 175).

Less than a decade after the publication of Salekin (2002) and D'Silva, Duggan, and McCarthy (2004), a review study by Salekin, Worley, and Grimes (2010) stressed a number of salient points. First, although they saw emerging developments in the field toward addressing the unique challenges related to treatment of diagnosed psychopaths, the collective research effort did not make a "strong case for the notion that psychopathy is untreatable" (2010, 255). Second, there was ample evidence that (adult) diagnosed psychopaths could indeed benefit significantly from *standard* treatment programs (2010, 255). Although researchers and practitioners still battle with overcoming the seemingly unwarranted clinical pessimism, the two points stressed by Salekin and colleagues can now be traced broadly in the *research* field, though it is allegedly still far from a prevailing viewpoint among *practitioners* (Sörman et al. 2014).

Indeed, in the most recent and detailed evaluation of the treatment

literature, Polaschek and Skeem (2018) notice that perhaps the strongest barrier for scientifically answering the question about treatability is, ironically, the notable "dearth of research," perhaps propelled in part by the prevailing belief among both researchers and practitioners that the question about treatability has long been answered; namely, that psychopaths *cannot* be treated (2018, 710). What makes all of this ironic is that, instead of being a ground for neglecting treatment, diagnosed psychopaths should—according to canonical treatment guidelines—be viewed as prime targets for treatment efforts due to their common status as high-risk patients. Generally, treatment efforts are directed where it is likely to make an actual robust impact (i.e. the *Risk-Need-Responsivity* model). In other words, treatment should be aimed at individuals who, for example, are likely to recidivate. Naturally, high-risk patients, such as diagnosed psychopaths, would fall within this group (712).

With regard to effective treatment, Polaschek and Skeem (2018) underline that knowledge about concrete treatment methods is so far scarce, but they notice that there is evidence of positive treatment outcomes across the literature (e.g. Polaschek 2011; Skeem, Monahan, and Mulvey 2002; Wong et al. 2012). So, while research is certainly lacking, and, therefore, increased efforts should be expected to shed further light on the issue, Polaschek and Skeem also stress the importance of simply beginning to encourage and facilitate treatment efforts. Such attempts may "restore faith among members of the public that psychopathic individuals are not intractable threats who must be indefinitely detained," promoting the view that our justice system ought to "provide access to rehabilitation for all adjudicated individuals in need of it" (Polaschek and Skeem 2018, 726).

In addition to the studies highlighted by Polaschek and Skeem, novel approaches to treatment programs have in recent years shown that optimism is generally warranted. For example, Wong and colleagues (2012; 2015) developed a model using the PCL-R *factor scores* to guide treatment efforts insofar as some cognitive-behavioral treatment strategies[10] tend to be more efficient in psychopathic patients scoring high in Factor 2 items (i.e. typical criminogenic behavioral features), suggesting "that psychopaths and violent offenders in general have qualitatively similar treatment targets" (Wong and Olver 2015, 305). Utilizing this model, Sewall and Olver (2019) examined the correlation between psychopathy, treatment, and sexually violent recidivism in a group of men (n=302) and found that diagnosed psychopaths benefitted equally from treatment compared to non-psychopaths (consistent with other results, e.g. Polaschek

and Ross 2010). The authors concluded that their study "fuels optimism about the potential for psychopathic men to make meaningful risk-related changes akin to their nonpsychopathic counterparts" (Sewall and Olver 2019, 68). Similarly, Baskin-Sommers and colleagues tested a training program that purported to improve robust deficits found in psychopaths (e.g. attention deficits), and results strongly indicated that psychopaths "are capable of overcoming their subtype-specific deficits with practice and that receiving deficit-matched training results in generalizable change in these subtype-specific deficits" (Baskin-Sommers, Curtin, and Newman 2015, 51). Echoing this optimism, Brazil et al. (2018) highlighted the somewhat commonsensical point that as cognitive and behavioral research progresses, and new etiological insights about psychopathy are disclosed, such information is expected to yield comparatively much more precise intervention strategies.

As has been demonstrated, the research literature is rather clear with respect to two main points. First, there is virtually no concrete evidence that the psychopathy diagnosis should be adversely correlated with treatment efforts. Second, while there is significant evidence (though limited in scope) of successful treatment efforts, there is next to no scientifically based evidence in support of the thesis that psychopaths are generally immune to psychiatric intervention. In other words, the widespread *untreatability view* pertaining to diagnosed psychopaths is medically erroneous. Currently the *untreatability view* is rejected by the research record while forensic practitioners still maintain a widespread adherence to the precarious conclusions of outdated research narratives, which should raise a suspicion about the professional and ethical standards in the field.

## PSYCHOPATHY AND THE STIGMA OF YESTERDAY'S RESEARCH

In the remainder of this article, ethical perspectives and issues related to administering the psychopathy diagnosis will be discussed with a special focus on the matters concerning its use as a treatment amenability assessment. The aim of this final section, however, is not only to draw conclusions from the foregoing analysis, but also to add some general remarks to a growing sentiment in psychopathy research that encourages contributions in ethics (e.g., Edens, Petrila, and Kelley 2018; Lyon, Ogloff, and Shepherd 2016; Pickersgill 2009). It should be underlined, though, that ethical discussions in forensic psychiatry are somewhat meager due to its status as a relatively young field (Appelbaum 2008). Further, thoughtful discussions about the ethics of psychopathy research and practices are

not just meager but next to nonexistent (perhaps due to its even younger status as a field). Serious discourse has yet to manifest broadly across the paradigm (although some admirable efforts have been made analyzing the role of psychopathy with respect to specific *legal* issues, e.g., Edens, Petrila, and Kelley [2018]).

Before examining the specific ethical challenges that emerge in the practice of utilizing the psychopathy diagnosis, a short comment is needed in order to establish which ethical principles we should use to assess the following discussion. While the American Psychiatric Association provides a general set of guidelines for the psychiatric profession (the so-called Principles of Medical Ethics), some researchers have sought to amend these guidelines with crucial nuances specifically applicable to forensic psychiatry (for an overview, see Austin, Goble, and Kelecevic [2009]; Niveau and Welle [2018]).[11] For example, Paul Appelbaum (1997; 2008) has developed what he calls the standard position, two basic principles to define the ethical obligations of forensic psychiatric practitioners, in particular.

The first principle is that of *truth-telling*; namely, practitioners' testimony must always reflect their truthful, honest opinion. But it cannot be not just any true opinion. If that were the case, ignorant psychiatrists would then be able to serve any side and any objective ethically, as long as their statement were genuinely believed. Rather, Appelbaum (2008) stresses that there is an ethical obligation for forensic psychiatrists to accurately base their testimony on concrete "scientific data on the subject at hand and the consensus of the field," regardless of which side in the adversarial court system their comments may favor or disadvantage (2008, 196). At first glance, this principle sets an increasingly high standard for an ethical guideline, since the scientific data of psychiatric research can be unreliable, and its theories are often non-validated and disputed, raising the question whether there really are scientifically-truthful psychiatric claims. However, Applebaum holds that when psychiatric research has established something akin to a consensus, practitioners may report on such information regardless of it being robustly validated. For example, where different forms of psychotherapy might lack peer-reviewed validity, some practitioners and clients may still benefit from such procedures, making them perfectly justified in terms of ethical standards. Indeed, one can still *do good* with unestablished science.

The second principle is that of *respect for persons*; namely, that in the quest of giving truthful, scientifically-accurate testimonies, forensic

psychiatrists must qualify their expertise so they always "respect the humanity of the evaluee," refraining from engaging in "deception, exploitation, or needless invasion of the privacy" of the people being examined, reported, or testified about (Appelbaum 1998, 197). This principle has several moderating applications. For one, if this principle were not applied, it would then follow that practitioners could engage in any practice as long as it were connected to seeking or conveying the truth; for instance, they could deceitfully exploit an unprepared witness to get to the truth. Another qualification of the second principle is that it sets limits for what and how specific information is introduced to various stakeholders (e.g., in the adversarial court system). Where scientific truths might be conveyed with a genuine incentive, the forensic practitioner ought also to exert some standard awareness of, say, what potentially negative effects such information may have on the individual.[12]

With these ethical principles in mind, let us briefly consider the common practice with regards to applying the psychopathy diagnosis in *treatment amenability* processes. As mentioned, the psychopathy diagnosis is introduced in court or a correctional setting primarily as a way to provide data-driven actuarial testimonies about a patient, specifically by correlating and inferencing the specific patient to a reliably established patient class (i.e., PCL-R diagnosed psychopaths). That is, by assessing a patient with psychopathy (i.e., a particular PCL-R score), we can thereby, due to established empirical research, make an inference to the specific behaviors that are tested for in the research. This practice, of course, deviates markedly from drawing inferences based on mere "professional opinion." As such, the practice of making data-driven (i.e. actuarial) inferences is seemingly on par with the first principle in the standard position (i.e. truth-telling) since it is based on widely accepted scientific procedures (e.g. Serin, Brown, and Wolf 2016).[13]

Notice, though, that according to the standard position, the scope of what exactly can be inferred from a psychopathy diagnosis will be fully contingent on the actual peer-reviewed research. That is, the psychopathy diagnosis can be used only as an inference about issues that have been tested for and validated by the research community. For example, it has been shown that there is a weak to moderate correlation between a high PCL-R score and violent recidivism (e.g., Yang, Wong, and Coid 2010). With this knowledge at hand, a forensic psychiatrist can therefore *truthfully* inform the court or correctional system of such specific probabilities and the extent to which they translate to the concrete case. Again, what makes

such an inference truthful is simply that it is a scientific peer-reviewed qualified statement.

Regretfully, though, there is growing evidence that the psychopathy diagnosis has been used to make inferences to actuarial issues that have never been tested for. In a review study of how the psychopathy diagnosis has been introduced in court cases, Lyon, Ogloff, and Shepherd (2016) found a number of problematic applications. For example, they identified one case in which the psychopathy diagnosis was introduced in court to argue that the patient was incapable of reading and comprehending intricate information, due to his high PCL-R score (2016, 194). As the authors stressed, since there are no particular studies that test for such a hypothesis in the patient class, that inference is invalid. In accordance with the first principle in the standard position, then, introducing such invalid references (e.g., reading and comprehension capabilities) will thus amount to an instance of unethical practice due to it being scientifically *untruthful*.

Similarly, then, it appears clear that the use of the psychopathy diagnosis as a treatment amenability discriminator, specifically as an instrument to explicitly prohibit diagnosed psychopaths from entering rehabilitation and treatment programs, fails to meet the ethical demands of the first principle in the standard position. As it was shown, not only is the evidence for the untreatability hypothesis scarcely supported, but evidence of the stronger narrative about adverse effects is also insufficient. Instead, it was shown that the research literature has yielded increasing positive evidence for treatment and intervention effects on diagnosed psychopaths (e.g. Polaschek 2011; Polaschek and Skeem 2018; Sewall and Olver 2019; Skeem, Monahan, and Mulvey 2002; Wong et al. 2012). As a minimum, it is safe to say that there is no established consensus that psychopaths are untreatable (Olver 2018).

Moreover, the case for unethical practices might be stronger than merely providing misinformation to the court and correctional institutions. Not only does the practice of treatment discrimination fail on the first principle (i.e., truth-telling), but it also appears to fail on the second principle (i.e., respect for persons). Indeed, the patients in question are not offered the treatment they rightfully need. This omission effectively eclipses the broader standing guidelines of administering psychiatric intervention, specifically, that high-risk patients are fundamentally high-priority individuals (i.e., the *Risk-Need-Responsivity* model). Arguably, such practices are not only problematic from the patient's perspective (as

their well-being is neglected), but, from the perspective of the greater good of society, such practices effectively increase social risks, as high-profile dangerous individuals are eventually released back into society without a proper attempt at rehabilitating treatment.

In addition to this deeper ethical suspicion, it is perhaps worth noticing that the *psychiatric pessimism* that appears to frame practitioners' dealings with psychopaths does not only boil down to a question of actual treatment, but it may also amount to a kind of harmful stigma. Its effects may transport deeply into the judicial system, well beyond the psychiatrist–patient relationship. Indeed, the belief that psychopaths are unlikely to rehabilitate, or, so to speak, are untreatable, seems to also have stabilized among lay people. For example, in a survey of people attending jury duty ($n = 400$), Smith et al. (2014) found that respondents were generally doubtful about whether criminal psychopaths could successfully rehabilitate back into society, and they remained largely undecided about the scenario of curing or treating psychopaths (2014, 496). Although one might argue that lay people are outside of the proper forensic psychiatric concern, there are reasons to treat such findings seriously. Indeed, nonexperts are importantly involved in everything from jury duty to parole decisions to the forming of public policies, which makes them central stakeholders for forensic psychiatrists.

Speaking to this suspicion of a broader stigmatizing effect of the untreatability narrative, Edens, Petrila, and Kelley (2018) noted that many key decisions in the legal system (e.g. parole decisions, capital sentencing, institutional placement, permanent detention) rest pointedly on evaluating whether the patient will be dangerous in the *future*. When a high-risk patient is assessed with psychopathy and, therefore, considered psychiatrically untreatable (as opposed to treatable), it is not far-fetched to suggest that this is taken to imply the aggravating notion that such a person is highly unlikely to change, let alone be responsive to correctional restraint and deterrence, and thus represents as a *chronic* future institutional and social risk (for similar perspectives, see DeMatteo et al. 2014a; DeMatteo et al. 2014b; Edens et al. 2013).

In sum, there are good reasons why we should be ethically worried about the practice of introducing the psychopathy diagnosis for treatment amenability purposes. First, it is insufficiently based in scientific research. Second, it seems to violate the respect psychiatrists ought to have for their patients, unjustifiably stripping patients of serious rehabilitation efforts (with potential harm to them and the broader society). Third, we

speculate that the untreatability perspective presents judges and jurors an aggravating, stigmatizing perspective of chronic antisocial behaviors, which adds extrajudicial, unfair hurdles to the patient's process in the judicial and correctional system. In other words, the probative value of a PCL-R assessment is outweighed by its prejudicial effects.

In light of such a conclusion, we might ask what ought to be done in forensic psychiatry to alleviate this seemingly unethical procedure. Although one obvious recommendation is to stop using the psychopathy diagnosis in treatment amenability assessments, there might be reasons to suggest more critical and wider-ranging recommendations. In their recent article, which surveyed a handful of important legal and ethical issues related to psychopathy and violence risk assessment, Edens, Petrila, and Kelley (2018) concluded with a critical question; namely, whether forensic psychiatrists should "abandon the use of psychopathy assessments, particularly PCL-R scores, to influence decision making" in court and correctional settings, given a growing evidence of forensic misuse and limited scientific validity (2018, 746). Their question seems to signal a growing skepticism in the field about the broader motivations and incentives behind the use of the psychopathy diagnosis, as well as a scientifically critical attitude toward the alleged truths communicated by the diagnosis. Perhaps it is time for the field to stop and more profoundly reconsider research and practices regarding the psychopathy diagnosis. Indeed, it is becoming increasingly clear that, although researchers might find it unproblematic to study this alleged pathology through their lenses in the ivory tower, the nuances and complexities that immerse this diagnostic category are lost in the adversarial process of court and correctional settings.

## ACKNOWLEDGEMENTS

## NOTES

1.  Notice that when researchers pursue the view that psychopathy is *not* homogenous, but instead a heterogenous construct that covers over several subtypes, these subtypes are then hypothesized to make up a homogenous (sub)class, with one or more discrete etiologies.
2.  For an example of how to estimate the extent of false positive in diagnosis, see van Stralen et al. (2009).

3. Ironically, the first person to suggest the existence of the psychopathy diagnosis, the American polymath Benjamin Rush, was rather optimistic about the role of the psychiatrist, professing that medical insight into this disorder eventually would contribute to eradicating social evils at large (Rush [1786] 1972, 37).

4. Hare is here paraphrasing a well-known quote from Suedfeld and Landon (1978).

5. *Barker v. Barker,* ONSC 3397 C.F.R. 2017.

6. In an official statement, Judge Perell said: "I appreciate that apart from professional renown and advancement, there was no self-serving gratification for the Defendant physicians at the expense of the Plaintiffs [but] it is a breach of a physician's ethical duty to physically and mentally torture his patients even if the physician's decisions are based on what the medical profession at the time counts for treatment for the mentally ill" (Fine 2017).

7. One study has reported adverse effects associated with specific PCL-R traits (i.e. Factor 1), although adverse effects were not correlated with the total PCL-R score (Hare et al. 2000). This finding, however, has not been replicated. For the opposite findings, namely, that the same PCL-R traits can be associated with *positive* treatment outcomes, see Burt, Olver, and Wong (2016). Another study found *indications* of adverse effects (Seto and Barbaree 1999). This study, however, was later retracted after a follow-up study (Barbaree 2005).

8. However, there were some attempts at reviewing the treatment literature before Salekin (2002). For instance, a study by Garrido, Esteban, and Molero (1995) reported on two separate meta-analyses, though without providing the needed detail on references and methods. A book by Dolan and Coid (1993) offered a comprehensive review of the treatment literature and concluded that the collective research suffered from lack of stable diagnostic criteria, had problematic sampling procedures, ill-described treatment processes, and an unsystematic measure of treatment outcomes, making it difficult to draw any scientifically meaningful conclusions. For a similar portrayal of the research efforts before Salekin (2002), see Harris and Rice (2006).

9. For what it is worth, the reference included at the end of this quote from the PCL-R manual is to Hare (1998), a book chapter that includes a three-paragraph section titled, *recidivism following treatment*. In this section, Hare includes an extensive discussion of the study by Rice and colleagues (1992).

10. For an anthology on cognitive-behavioral treatment, see Kazantzis, Reinecke, and Freeman (2010).

11. Notice that forensic psychiatry is a *subspecialty* in psychiatry insofar as the profession deals with mental functioning and behavior in legal and correctional settings (Bloom and Schneider 2016). Although the concrete role of a forensic psychiatrist can vary, it typically involves providing nontrivial information to the court and correctional settings, assisting the evaluation of fitness to stand trial, responsibility, sentencing, institutional placement, parole decisions, treatment, rehabilitation, and more (Bloom and Schneider 2016, 693–718).

12. While the standard position has been broadly endorsed by practitioners and theorists, it is not without its strong critics. Alan Stone (2008) has argued that the standard position can never claim any neutral ethical worth. For instance, as Stone argued, due to the adversarial system in a court setting, forensic psychiatrists are bound to deliver statements that can potentially be both good and bad for the patient in question. As Stone puts it: "Psychiatrists are immediately over the [ethical] boundary when they go into court" (2008, 168).

13. This is not necessarily an unproblematic claim. Although the forensic psychiatric profession is ethically challenging (in both practical and theoretical affairs), we might here stress that it is not obvious that *actuarial data* meet the standard of "truth telling." Indeed, actuarial science is inherently uncertain due to its probabilistic nature. As one reviewer of this article pointed out, maybe the overall actuarial data on diagnosed psychopaths are simply too weak to make any *truthful* assertions about the patient class (this concern is also raised in Serin, Brown, and Wolf [2016]). Such a reservation would be even stronger if we weigh the possibility of large-scale false positives within the PCL-R patient class (Larsen 2018).

## REFERENCES

Appelbaum, Paul. 1997. "A Theory of Ethics for Forensic Psychiatry." *Journal of the American Academy of Psychiatry and the Law Online* 25 (3): 233–47.

———. 2008. "Ethics and Forensic Psychiatry: Translating Principles into Practice." *Journal of the American Academy of Psychiatry and the Law Online* 36 (2): 195–200.

Austin, Wendy, Erika Goble, and Julija Kelecevic. 2009. "The Ethics of Forensic Psychiatry: Moving Beyond Principles to a Relational Ethics Approach." *Journal of Forensic Psychiatry & Psychology* 20 (6): 835–50. doi:10.1080/14789940903174147.

Barbaree, Howard. 2005. "Psychopathy, Treatment Behavior, and Recidivism: An Extended Follow-Up of Seto and Barbaree." *Journal of Interpersonal Violence* 20 (9): 1115–31. doi:10.1177/0886260505278262.

Barker, Elliott. 1980. "The Penetanguishene Program: A Personal Review." In *Therapeutic Communities in Corrections*, edited by Hans Toch, 73–81. New York: Praeger.

Baskin-Sommers, Arielle, John Curtin, and Joseph Newman. 2015. "Altering the Cognitive–Affective Dysfunctions of Psychopathic and Externalizing Offender Subtypes with Cognitive Remediation." *Clinical Psychological Science* 3 (1): 45–57. doi:10.1177/2167702614560744.

Berg, Joana, Sarah Smith, Ashley Watts, Rachel Ammirati, Sophie Green, and Scott Lilienfeld. 2013. "Misconceptions Regarding Psychopathic Personality: Implications for Clinical Practice and Research." *Neuropsychiatry* 3 (1): 63–74. doi:10.2217/npy.12.69.

Blair, Rachel, Derek Mitchell, and Karina Blair. 2005. *The Psychopath: Emotion and the Brain*. Malden: Blackwell Publishing.

Blais, Julie, Adelle Forth, and Rober Hare. 2017. "Examining the Interrater Reliability of the Hare Psychopathy Checklist-Revised Across a Large Sample of Trained Raters." *Psychological Assessment* 29 (6): 762–75. doi:10.1037/pas0000455.

Bloom, Hy, and Richard Schneider. 2016. "Forensic Psychiatry." In *The Lawyer's Guide to the Forensic Sciences,* edited by Caitlin Pakosh, 669–718. Toronto: Irwin Law Inc.

Brazil, Inti, and Maaike Cima. 2016. "Contemporary Approaches to Psychopathy." In *The Handbook of Forensic Psychopathology and Treatment,* edited by Maaike Cima, 206–26. New York: Routledge.

Brazil, Inti, Josanne van Dongen, Joseph Maes, Rogier Mars, and Arielle Baskin-Sommers. 2018. "Classification and Treatment of Antisocial Individuals: From Behavior to Biocognition." *Neuroscience and Biobehavioral Reviews* 91: 259–77.

Burt, Grant, Mark Olver, and Stephen Wong. 2016. "Investigating Characteristics of the Nonrecidivating Psychopathic Offender." *Criminal Justice and Behavior* 43 (12): 1741–60. doi:10.1177/0093854816661215.

Cleckley, Hervey. 1988. *The Mask of Sanity: An Attempt to Clarify Some Issues about the So-Called Psychopathic Personality* (5th ed.). St. Louis: Mosby.

———. 2015. *The Mask of Sanity: An Attempt To Clarify Some Issues About the So-Called Psychopathic Personality* (2nd ed.). Mansfield Centre: Martino Publishing.

Cooke, David, Stephen Hart, Caroline Logan, and Christine Michie. 2012. "Explicating the Construct of Psychopathy: Development and Validation of a Conceptual Model, the Comprehensive Assessment of Psychopathic

Personality (CAPP)." *International Journal of Forensic Mental Health* 11 (4): 242–52. doi:10.1080/14999013.2012.746759.

Crego, Cristina, and Thomas Widiger. 2014. "Psychopathy, DSM-5, and a Caution." *Personality Disorders: Theory Research and Treatment* 5 (4): 335–47. doi:10.1037/per0000078.

———. 2015. "Psychopathy and the DSM." *Journal of Personality* 83 (6): 665–77. doi:10.1111/jopy.12115.

D'Silva, Karen, Connor Duggan, and Lucy McCarthy. 2004. "Does Treatment Really Make Psychopaths Worse? A Review of the Evidence." *Journal of Personality Disorders* 18 (2): 163–77. doi:10.1521/pedi.18.2.163.32775.

DeMatteo, David, John Edens, Meghann Galloway, Jennifer Cox, Shannon Smith, and Dana Formon. 2014a. "The Role and Reliability of the Psychopathy Checklist-Revised in US Sexually Violent Predator Evaluations: A Case Law Survey." *Law and Human Behavior* 38 (3): 248–55. doi:10.1037/lhb0000059.

DeMatteo, David, John Edens, Meghann Galloway, and Jennifer Cox. 2014b. "Investigating the Role of the Psychopathy Checklist-Revised in United States Case Law." *Psychology Public Policy and Law* 20 (1): 96–107. doi:10.1037/a0035452.

Dolan, Bridget, and Jeremy Coid. 1993. *Psychopathic and Antisocial Personality Disorders: Treatment and Research Issues*. London: Gaskell.

Edens, John, and Jennifer Cox. 2012. "Examining the Prevalence, Role and Impact of Evidence Regarding Antisocial Personality, Sociopathy and Psychopathy in Capital Cases: A Survey of Defense Team Members." *Behavioral Sciences & the Law* 30 (3): 239–55. doi:10.1002/bsl.2009.

Edens, John, Karen Davis, Krissie Smith, and Laura Guy. 2013. "No Sympathy for the Devil: Attributing Psychopathic Traits to Capital Murderers Also Predicts Support for Executing Them." *Personality Disorders: Theory, Research, and Treatment* 4 (2): 175–81. doi:10.1037/a0026442.

Edens, John, John Petrila, and Shannon Kelley. 2018. "Legal and Ethical Issues in the Assessment and Treatment of Psychopathy." In *Handbook of Psychopathy*, 2nd ed., edited by Christopher Patrick, 732–51. New York: The Guilford Press.

Ferguson, Christopher. 2010. "Genetic Contributions to Antisocial Personality and Behavior: A Meta-Analytic Review From an Evolutionary Perspective." *The Journal of Social Psychology* 150 (2): 160–80. doi:10.1080/00224540903366503.

Fine, Sean. 2017. "Doctors Tortured Patients at Ontario Mental-Health Centre, Judge Rules." *The Globe and Mail*, June 7. https://www.theglobeandmail.

com/news/national/doctors-at-ontario-mental-health-facility-tortured-patients-court-finds/article35246519/

Fowles, Don, and Lilian Dindo. 2006. "A Dual-Deficit Model of Psychopathy." In *Handbook of Psychopathy,* 1st ed., edited by Christopher Patrick, 14–34. New York: The Guildford Press.

Gacono, Carl, ed. 2016. *The Clinical and Forensic Assessment of Psychopathy: A Practitioner's Guide*, 2nd ed. New York: Routledge.

Garrido, Vicente, Cristina Esteban, and C. Molero. 1995. "The Effectiveness in the Treatment of Psychopathy: A Meta-Analysis." *Issues in Criminological and Legal Psychology* 12: 57–59.

Glenn, Andrea, Robert Kurzban, and Adrian Raine. 2011. "Evolutionary Theory and Psychopathy." *Aggression and Violent Behavior* 16 (5): 371–80. doi:10.1016/j.avb.2011.03.009.

Hamilton, Rachel, and Joseph Newman. 2018. "The Response Modulation Hypothesis: Formulation, Development, and Implications for Psychopathy." In *Handbook of Psychopathy,* 2nd ed., edited by Christopher Patrick. New York: The Guilford Press.

Hare, Robert. 1993. *Without Conscience: The Disturbing World of the Psychopaths Among Us*. New York: The Guilford Press.

———. 1998. "Psychopaths and Their Nature: Implications for the Mental Health and Criminal Justice System." In *Psychopathy: Antisocial, Criminal, and Violent Behavior,* edited by Theodore Millon, Erik Simonsen, Morten Birket-Smith, and Roger Davis, 188–212. New York: Guilford Press.

———. 2003. *Hare Psychopathy Checklist–Revised*, 2nd ed. Toronto: Multi Health System.

Hare, Robert, Pamela Black, and Zach Walsh. 2013. "The Psychopathy Checklist-Revised: Forensic Applications and Limitations." In *Forensic Uses of Clinical Assessment Instruments,* 2nd ed., edited by Robert Archer and Elizabeth Wheeler, 230–265. New York: Routledge.

Hare, Robert, Danny Clark, Martin Grann, and David Thornton. 2000. "Psychopathy and the Predictive Validity of the PCL-R: An International Perspective." *Behavioral Sciences & the Law* 18 (5): 623–45. doi:10.1002/1099–0798(200010)18:5<623::Aid-Bsl409>3.0.Co;2-W.

Hare, Robert, and Craig Neumann. 2008. "Psychopathy as a Clinical and Empirical Construct." *Annual Review of Clinical Psychology* 4: 217–46. doi:10.1146/annurev.clinpsy.3.022806.091452.

Hare, Robert, Craig Neumann, and Thomas Widiger. 2012. "Psychopathy." In *The Oxford Handbook of Personality Disorders,* edited by Thomas Widiger, 478–504. New York: Oxford University Press.

Harris, Grant, and Marnie Rice. 2006. "Treatment of Psychopathy: A Review of Empirical Findings." In *Handbook of Psychopathy,* 1st ed., edited by Christopher Patrick, 555–72. New York: The Guilford Press.

Hart, Stephen, and Alana Cook. 2012. "Current Issues in the Assessment and Diagnosis of Psychopathy (Psychopathic Personality Disorder)." *Neuropsychiatry* 2 (6): 497–508. doi:10.2217/Npy.12.61.

Hicks, Brian and Laura Drislane. 2018. "Variants ('Subtypes') of Psychopathy." In *Handbook of Psychopathy,* 2nd ed., edited by Christopher Patrick, 297–332. New York: The Guilford Press.

Jurjako, Marko, and Luca Malatesti. 2018. "Neuropsychology and the Criminal Responsibility of Psychopaths: Reconsidering the Evidence." *Erkenntnis* 83: 1003–25.

Kazantzis, Nikolaos, Mark Reinecke, and Arthur Freeman. 2010. *Cognitive and Behavioral Theories in Clinical Practice*. New York: Guilford Press.

Larsen, Rasmus. 2018. "False Positives in Psychopathy Assessment: Proposing Theory-Driven Exclusion Criteria in Research Sampling." *European Journal of Analytic Philosophy* 14 (1): 33–52.

Lilienfeld, Scott. 2007. "Psychological Treatments That Cause Harm." *Perspectives on Psychological Science* 2 (1): 53–70. doi:10.1111/j.1745–6916.2007.00029.x.

Lilienfeld, Scott, and Michell Widows. 2005. *Psychopathic Personality Inventory—Revised: Professional Manual*. Lutz: Psychological Assessment Resources.

Lyon, David, James Ogloff, and Stephanie Shepherd. 2016. "Legal and Ethical Issues in the Assessment of Psychopathy." In *The Clinical and Forensic Assessment of Psychopathy: A Practitioner's Guide,* 2nd ed., edited by Carl Gacono, 193–216. New York: Routledge.

Maibom, Heidi. 2014. "To Treat a Psychopath." *Theoretical Medicine and Bioethics* 35 (1): 31–42.

McCord, William, and Joan McCord. 1964. *The Psychopath: An Essay on the Criminal Mind*. Princeton, NJ: Van Nordstrand.

Niveau, Gerard, and Ida Welle. 2018. "Forensic Psychiatry, One Subspecialty with Two Ethics? A Systematic Review." *BMC Medical Ethics* 19 (1): 1–10. doi:10.1186/s12910–018–0266–5.

Olver, Mark E. 2018. "Can Psychopathy Be Treated? What the Research Tells Us." In *New Frontiers in Offender Treatment: The Translation of Evidence-Based Practices to Correctional Settings*, edited by Elizabeth Jeglic and Cynthia Calkins, p. 287–306. Cham: Springer International Publishing.

Patrick, Christopher, Don Fowles, and Robert Krueger. 2009. "Triarchic Conceptualization of Psychopathy: Developmental Origins of Disinhibition, Bold-

ness, and Meanness." *Development and Psychopathology* 21 (3): 913–938. doi:10.1017/S0954579409000492.

Pickersgill, Martyn. 2009. "NICE Guidelines, Clinical Practice and Antisocial Personality Disorder: The Ethical Implications of Ontological Uncertainty." *Journal of Medical Ethics* 35 (11): 668–71. doi:10.1136/jme.2009.030171.

Polaschek, Devon. 2011. "High-Intensity Rehabilitation for Violent Offenders in New Zealand: Reconviction Outcomes for High- and Medium-Risk Prisoners." *Journal of Interpersonal Violence* 26 (4): 664–82. doi:10.1177/0886260510365854.

Polaschek, Devon, and Tadgh Daly. 2013. "Treatment and Psychopathy in Forensic Settings." *Aggression and Violent Behavior* 18 (5): 592–603. doi:10.1016/j.avb.2013.06.003.

Polaschek, Devon, and Elizabeth Ross. 2010. "Do Early Therapeutic Alliance, Motivation, and Stages of Change Predict Therapy Change for High-Risk, Psychopathic Violent Prisoners?" *Criminal Behaviour and Mental Health* 20 (2): 100–11. doi:10.1002/cbm.759.

Polaschek, Devon, and Jeniffer Skeem. 2018. "Treatment of Adults and Juveniles with Psychopathy." In *Handbook of Psychopathy,* 2nd ed., edited by Christopher Patrick, 710–31. New York: The Guilford Press.

Reidy, Dennis, Megan Kearns, Sarah Degue, Scott Lilienfeld, Greta Massetti, and Kent Kiehl. 2015. "Why Psychopathy Matters: Implications for Public Health and Violence Prevention." *Aggression and Violent Behavior* 24: 214–25. doi:10.1016/j.avb.2015.05.018.

Rice, Marnie, Grant Harris, and Catherine Cormier. 1992. "An Evaluation of a Maximum Security Therapeutic Community for Psychopaths and Other Mentally Disordered Offenders." *Law and Human Behavior* 16 (4): 399–412. doi:10.1007/bf02352266.

Ronson, Jon. 2011. *The Psychopath Test: A Journey Through the Madness Industry*. New York: Riverhead Books.

Rush, Benjamin. 1972. *Two Essays on the Mind: An Enquiry into the Influence of Physical Causes upon the Moral Faculty, and on the Influence of Physical Causes in Promoting an Increase of the Strength and Activity of the Intellectual Faculties of Man*. New York: Brunner/Mazel Publishers.

Salekin, Randall. 2002. "Psychopathy and Therapeutic Pessimism. Clinical Lore or Clinical Reality?" *Clinical Psychology Review* 22 (1): 79–112.

Salekin, Randall, Courtney Worley, and Ross Grimes. 2010. "Treatment of Psychopathy: A Review and Brief Introduction to the Mental Model Approach for Psychopathy." *Behavioral Sciences & the Law* 28 (2): 235–66. doi:10.1002/bsl.928.

Serin, Ralph, Shelley Brown, and Angela Wolf. 2016. "The Clinical Use of the Hare Psychopathy Checklist-Revised (PCL-R) in Contemporary Risk Assessment." In *The Clinical and Forensic Assessment of Psychopathy: A Practitioner's Guide,* 2nd ed., edited by Carl Gacono, 293–310. New York: Routledge.

Seto, Michael, and Howard Barbaree. 1999. "Psychopathy, Treatment Behavior, and Sex Offender Recidivism." *Journal of Interpersonal Violence* 14 (12): 1235–48. doi:10.1177/088626099014012001.

Sewall, Lindsay, and Mark Olver. 2019. "Psychopathy and Treatment Outcome: Results from a Sexual Violence Reduction Program." *Personality Disorders— Theory Research and Treatment* 10 (1): 59–69. doi:10.1037/per0000297.

Sherren, Reg. 2016. *The Secrets of Oak Ridge*. Canada: Canadian Broadcast Corporation.

Skeem, Jennifer, and David Cooke. 2010. "Is Criminal Behavior a Central Component of Psychopathy? Conceptual Directions for Resolving the Debate." *Psychological Assessment* 22 (2): 433–45. doi:10.1037/a0008512.

Skeem, Jennifer, Devon Polaschek, and Sarah Manchak. 2009. "Appropriate Treatment Works, But How? Rehabilitating General, Psychopathic, and High-Risk Offenders." In *Psychological Science in the Courtroom: Consensus and Controversy,* edited by Jennifer Skeem, Kevin Douglas, and Scott Lilienfeld, 358–84. New York: Guilford Press.

Skeem, Jennifer, John Monahan, and Edward Mulvey. 2002. "Psychopathy, Treatment Involvement, and Subsequent Violence Among Civil Psychiatric Patients." *Law and Human Behavior* 26 (6): 577–603. doi: 10.1023/A:1020993916404.

Smith, Shannon, John Edens, John Clark, and Allison Rulseh. 2014. "So, What Is a Psychopath? Venireperson Perceptions, Beliefs, and Attitudes About Psychopathic Personality." *Law and Human Behavior* 38 (5): 490–500. doi:10.1037/lhb0000091.

Sörman, Karolina, John Edens, Shannon Smith, et al. 2014. "Forensic Mental Health Professionals' Perceptions of Psychopathy: A Prototypicality Analysis of the Comprehensive Assessment of Psychopathic Personality in Sweden." *Law and Human Behavior* 38 (5): 405–17. doi:10.1037/lhb0000072.

Stone, Alan. 2008. "The Ethical Boundaries of Forensic Psychiatry: A View from the Ivory Tower." *Journal of the American Academy of Psychiatry and the Law Online* 36 (2): 167.

Stratton, John, Kent Kiehl, and Robert Hanlon. 2015. "The Neurobiology of Psychopathy." *Psychiatric Annals* 45 (4): 186–194.

Suedfeld, Peter, and P. Bruce Landon. 1978. "Approaches to Treatment." In *Psychopathic Behavior: Approaches to Research*, edited by Robert Hare and Daisy Schalling, 347–376. Chichester, UK: Wiley.

Tennent, Gavin, Duncan Tennent, Herbert Prins, and Anthony Bedford. 1993. "Is Psychopathic Disorder a Treatable Condition?" *Medicine Science and the Law* 33 (1): 63–66. doi:10.1177/002580249303300111.

van Stralen, Karlijn, Vianda Stel, Johannes Reitsma, Friedo Dekker, Carmine Zoccali, and Kitty Jager. 2009. "Diagnostic Methods I: Sensitivity, Specificity, and Other Measures of Accuracy." *Kidney International* 75 (12): 1257–63. doi:https://doi.org/10.1038/ki.2009.92.

Walsh, Tiffany, and Zach Walsh. 2006. "The Evidentiary Introduction of Psychopathy Checklist-Revised Assessed Psychopathy in US Courts: Extent and Appropriateness." *Law and Human Behavior* 30 (4): 493–507. doi:10.1007/s10979–006–9042-z.

Werner, Kimberly, Lauren Few, and Kathleen Bucholz. 2015. "Epidemiology, Comorbidity, and Behavioral Genetics of Antisocial Personality Disorder and Psychopathy." *Psychiatric Annals* 45 (4): 195–99. doi:10.3928/00485713–20150401–08.

Wolin, Sheldon. 1963. "Violence and the Western Political Tradition." *American Journal of Orthopsychiatry* 33 (1): 15–28. doi:10.1111/j.1939–0025.1963.tb00355.x.

Wong, Stephen, Audrey Gordon, Deqiang Gu, Kathy Lewis, and Mark Olver. 2012. "The Effectiveness of Violence Reduction Treatment for Psychopathic Offenders: Empirical Evidence and a Treatment Model." *International Journal of Forensic Mental Health* 11 (4): 336–49. doi:10.1080/14999013.2012.746760.

Wong, Stephen, and Mark Olver. 2015. "Risk Reduction Treatment of Psychopathy and Applications to Mentally Disordered Offenders." *CNS Spectrums* 20 (3): 323–31.

Yang, Min, Stephen Wong, and Jeremy Coid. 2010. "The Efficacy of Violence Prediction: A Meta-Analytic Comparison of Nine Risk Assessment Tools." *Psychological Bulletin* 136 (5): 740–67. doi:10.1037/a0020473.