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The Impact of the Front End on Federal Sentencing and Beyond: Recidivism and More By Christine Dozier, Laura M. Baber, Roberto Cordeiro, Jonathan Muller, Kevin T. Wolff

STARR Skill Use and Supervision Outcomes By Jefferson E. Holcomb, Will Hicks, Melissa Alexander

Unlocking the Power of Implementation Science: Putting Principles into Practice Across Multiple Agencies By Rachel L. Miller, Shawn Trusten, Stephanie Buelow, Carter Diers, Alexandra Walker

Psychopathy: A Primer for Correctional Professionals By Arthur J. Lurigio, Patrick Carabell



philosophy and practice

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THIS ISSUE IN BRIEF

The Impact of the Front End on Federal Sentencing and Beyond: Recidivism and More

The authors discuss the "front end"—the pretrial stage of the criminal justice process. They note the pretrial stage impacts of pretrial detention and incarceration downstream, demonstrate how detention and mass incarceration are inextricably linked, discuss recent movements to incorporate science into federal criminal justice decision-making and sentencing reforms, and conclude that alternatives to incarceration programs can be a useful strategy that mitigates mass detention as well as mass incarceration. *Christine Dozier, Laura M. Baber, Roberto Cordeiro, Jonathan Muller, Kevin T. Wolff*

STARR Skill Use and Supervision Outcomes

The Staff Training Aimed at Reducing Rearrest (STARR) program has been widely implemented throughout the U.S. Probation and Pretrial Services system to increase the use of core correctional practices and evidence-based strategies in community supervision. Using data on federal supervision cases over a nine-year period, the present study evaluates the relationship between officer use of STARR skills, in general and by skill type, on supervision outcome. *Jefferson E. Holcomb, Will Hicks, Melissa Alexander*

Unlocking the Power of Implementation Science: Putting Principles into Practice Across Multiple Agencies 16

The authors highlight how Minnesota's criminal justice system, through a multi-agency community of practitioners, transformed their approach to work through the use of implementation science. The Five Dynamics of Effective Implementation model developed by ACJI distills the essence of implementation science into five key dynamics: people, data, culture, leadership, and feedback. The authors describe how organizations can pursue sustainable, incremental change within human-serving systems across diverse delivery frameworks, despite initial and continuing challenges.

Rachel L. Miller, Shawn Trusten, Stephanie Buelow, Carter Diers, Alexandra Walker

Psychopathy: A Primer for Correctional Professionals

Psychopathy is a constellation of personality traits that have been described in the annals of psychiatry, psychology, and criminology. The authors provide an overview of major aspects of psychopathy, including its characteristics, assessment, neuropsychiatric underpinnings, and effects on offender behavior and recidivism.

Arthur J. Lurigio, Patrick Carabell

DEPARTMENTS

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Federal Probation Style Sheet

The articles and reviews that appear in *Federal Probation* express the points of view of the persons who wrote them and not necessarily the points of view of the agencies and organizations with which these persons are affiliated. Moreover, *Federal Probation*'s publication of the articles and reviews is not to be taken as an endorsement of the material by the editors, the Administrative Office of the U.S. Courts, or the federal Probation and Pretrial Services System.

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The Impact of the Front End on Federal Sentencing and Beyond: Recidivism and More

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I. Introduction

These words from the federal courts' *Guide to Judiciary Policy*¹ establish the crucial importance of pretrial services' unique position to positively influence downstream criminal justice outcomes:

Pretrial Services is the front door to the federal criminal justice system and has the unique opportunity to lay the foundation for each defendant's success, not just during the pretrial period, but beyond ... preventing the front door from becoming a revolving door.

Though this ideal applies to every case released on pretrial supervision, nowhere is it exemplified more than in alternative to incarceration (ATI) programs. We highlight recent research on the outcomes of federal ATI programs, including the rates of rearrest for participants as compared to a statistically matched group who did not participate. This research significantly advances the state of knowledge about the efficacy of these programs in the context of federal court.

In this article, we will discuss the "front end"-the pretrial stage of the criminal justice process-and its critical importance in establishing the tenor and trajectory of a defendant's entire journey. We will discuss how the pretrial stage impacts the downstream outcomes that affect the defendant arguably for the remainder of his or her life and the deleterious effects of pretrial detention and incarceration; we will also demonstrate how mass detention and mass incarceration are inextricably linked. In addition, we will discuss recent movements to incorporate science into federal criminal justice decision-making and sentencing reforms, and finally, how alternatives to incarceration programs can be a useful strategy that mitigates mass detention as well as mass incarceration.

II. Bail Decision—the Hinge Moment

The bail decision sets the stage for the remainder of the defendant's case and beyond. The decision to release or detain a defendant pending case outcome is—in the words of U.S. District Court Judge James Carr—the "hinge moment²² that has material consequences that cannot be overstated. In his article "Why Pretrial Release Really Matters," Judge Carr argues that mass detention begets mass incarceration.³ That is, pretrial detention invites a greater likelihood of conviction and, once convicted, a greater likelihood of a prison term. And prison terms have life-long consequences. Judge Carr states, "Except for the District Court Judge's decision at sentencing, no decision in any criminal case is more important or consequential."⁴

In 2011, in their article entitled "Preentry: The Key to Long Term Criminal Justice Success?," Lowenkamp and Cadigan posed the question of whether the front end, i.e., the pretrial period, has long-term impact upon outcomes.⁵ Enough evidence has accrued that we can confidently answer that question with an unequivocal *yes*. The connection between the bail decision and downstream outcomes

¹ The Administrative Office of the U.S. Courts: *Guide to Judiciary Policy*, Volume 8, Part C, p. 2. This document is available internally to employees of the Judiciary only.

² Carr, J.J.G.(2017). Why pretrial release really matters. *Federal Sentencing Reporter*, 29, 217-220.

³ Id.

⁴ Id. at 219.

⁵ Cadigan, T., & Lowenkamp, C. (2011). Preentry: The key to long term criminal justice success? *Federal Probation* 75(2), 74-77.

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is well documented. Long-standing evidence, dating back to the 1960s, shows that pretrial detention itself is associated with poorer case outcomes and undesirable criminal justice effects downstream.6 Existing empirical evidence suggests that defendants subjected to pretrial detention are more likely to plead guilty and receive harsher sentences. In a 2017 study by Heaton et al. on misdemeanor pretrial detention, the authors found that detained defendants are more likely to plead guilty and more likely to receive custody sentences and longer custody terms.7 In a 2018 study on the effects of pretrial detention on conviction, future crime, and employment,8 Dobbie et al. found that though pretrial detention has no net effect on future crime, it decreases formal-sector employment and the receipt of employment- and tax-related government benefits. A more recent (2022) study concludes that pretrial detention is associated with future prison admissions and decreased formal labor market employment and results in an increased risk of technical violations because of more intensive probation supervision.9 In another 2022 study on how the consequences of pretrial detention vary between misdemeanor and felony cases,¹⁰ the authors found that pretrial detention has a larger effect on misdemeanor defendants, who are more likely to plead guilty and receive a custodial sentence.

Studies conducted in the federal system produce consistent findings. A 2014 study of federal pretrial detention¹¹ and its impact upon

⁸ Dobbie, W., Goldin, J., & Yang, C. S. (2018). The effects of pre-trial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *American Economic Review*, 108(2), 201-240.

⁹ Menefee, M. R., Harding, D. J., Nguyen, A. P., Morenoff, J. D., & Bushway, S. D. (2022). The effect of split sentences on employment and future criminal justice involvement: Evidence from a natural experiment. *Social Forces*, *101*(2), 829-863.

¹⁰ Thomas, C., Cadoff, B., Wolff, K. T., & Chauhan, P. (2022). How do the consequences of pretrial detention on guilty pleas and carceral sentences vary between misdemeanor and felony cases? *Journal of Criminal Justice*, *82*, 102008.

¹¹ Oleson, J. C., VanNostrand, M., Cadigan, T. P., Wooldredge. J. (2014). Pretrial detention choices and federal sentencing, *Federal Probation*, 78(1), 27-33.

sentencing reflects that detained defendants are more likely to receive prison sentences, and when they do, custody terms are longer. More recently, Diwani concludes that pretrial release lowers the possibility that a federal defendant receives a mandatory minimum sentence.12 A 2021 study of the impact of the release/detention decision on federal sentences posed the question of whether downward variances were granted. The results provide more direct evidence that being placed in pretrial detention results in less favorable sentencing outcomes. Using United States Sentencing Commission (USSC) data, DaGrossa and Muller found that defendants who were detained pretrial were 49 percent less likely to receive a downward variance, and of those who did, the variances were 26 percent smaller when detained pretrial.13 The authors conclude that "meaningful reduction in the prison population can and should be accomplished, in part, through more widespread use of pretrial release."14

Pretrial detention can bring about a host of ill effects to defendants. Loss of employment (and benefits, especially health insurance), residential instability, financial insecurity, and harmed family relationships are but a few of the many potential collateral consequences of even a brief period of detention. In contrast, meaningful interventions that can only be delivered to a person released to the community, such as substance abuse and mental health treatment, cognitive behavioral therapies, vocational and education services, can result in significantly more favorable sentences and substantially improve defendants' lives in the long run.

III. Default to Incarcerate Sentences

Beginning with the 2005 Supreme Court decision in *Booker v. United States*, changes in the legal landscape significantly affected sentencing. *Booker* ruled that the formerly mandatory sentencing guidelines were advisory only, and subsequent decisions provided the courts with additional flexibility in sentencing. Notwithstanding these substantial shifts in the law, the sentencing guidelines remain the core of federal sentencing determination, and the vast majority of sentences are imposed using this structure. Despite these changes in law, the federal criminal justice system continues to rely heavily upon incarceration. In fact, incarceration is imposed in 90 percent of cases.¹⁵ Further, the Sentencing Guidelines' structure does not incorporate ATI participation into consideration at sentencing.

This high rate of incarcerate sentences is especially disconcerting in light of considerable evidence of harm. A comprehensive meta-analysis of 116 studies of prison and recidivism conducted by Petrich, Pratt, Jonson, and Cullen found that custodial sanctions have no effect on reoffending or, worse yet, slightly increase reoffending.¹⁶ Though some justify incarceration to serve the purposes of retribution and punishment, the analysis concludes that incarceration cannot be justified on the grounds that it promotes public safety by decreasing recidivism, in that prison is criminogenic and has less favorable outcomes compared to non-custodial community supervision options. In essence, community supervision options are superior at producing desired outcomes of community safety.

In this article, we discuss recent outcome studies that suggest that federal alternative to incarceration programs may provide a meaningful alternative to unnecessarily harsh and costly—in both human and financial terms—custodial sentences *without expense to community safety*. We review the earlier studies on short-term supervision outcomes of new arrests, failures-to-appear, technical violations, employment, and illicit drug use. Finally, we discuss the results of a more recent quasi-experimental study that examines the impact of ATI participation on post-program recidivism rates.

IV. Recent Outcome Studies on Federal Alternative to Incarceration Programs

History of Outcome Studies

The recidivism study is built upon earlier work. Seven districts collaborated in 2018 to study the impact of ATI programs on defendant pretrial supervision outcomes. The study found that pretrial outcomes of rearrests, failures to appear, technical violations, employment, and drug use were superior.

⁶ Ares, C. E., Rankin, A., & Sturz, H. (1963). The Manhattan Bail Project: An interim report on the use of pre-trial parole. *NYUL Rev.38*, 67.

⁷ Heaton, P., Mayson, S., & Stevenson, M. (2017). The downstream consequences of misdemeanor pretrial detention. *Stan. L. Rev.*, *69*, 711.

¹² Didwania, S. H. (2020). The immediate consequences of federal pretrial detention. *American Law and Economics Review*, 22(1), 24-74.

¹³ DaGrossa, J., & Muller, J. (2021). Pretrial detention and the sentencing variance: An analysis of fixed effects across U.S. district courts., *Federal Probation*, 85(3), 27-33.

¹⁴ Id. at 32.

 ¹⁵ U.S. Sentencing Commission. (2021). Annual report and sourcebook of federal sentencing statistics, 61.

¹⁶ Petrich, Custodial sanctions and reoffending: A meta-analytic review. *Crime and Justice: A Review of Research, 50, 352-424.*

Furthermore, the case dispositions for this population were far more favorable, with half of the participants having their cases dismissed, versus none for non-participants. Additionally, significantly fewer defendants received custodial sentences, and of those who did, sentences were a fraction of the length of matched counterparts.¹⁷

Replicating these favorable findings from the first study with a larger and more recent data set (additional programs were included), researchers published their findings in "Expanding the Analysis: Alternatives to Incarceration across 13 Federal Districts." The replicated findings¹⁸ lend greater confidence that these positive outcomes are generalizable to other like programs in federal court.

The same research also examined demographic parity within ATI programs, finding apparent racial disparity in program participation, with Black participants represented at a lower rate than their representation in the general defendant population, while White and Hispanic defendants were overrepresented. This disparity persists even after statistical controls were applied to account for possible explanatory factors of risk, citizenship status, and charged offense. Though there is no evidence to suggest that program administrators practice disparate treatment, disparities in admission do suggest the possibility of disparate impact. The study made no attempt to discern the causes of such disparity, but causes are likely multi-faceted and variable by program. Importantly, the study found no disparity in program graduation rates among those admitted to the program. In fact, high success rates were comparable across all demographics.

Three-Year Follow-up Recidivism Study

Though research on smaller, one-program studies in the federal system have been done, Wolff et al. recently completed the first multijurisdiction study of recidivism rates for persons who participated in an ATI compared to a statistically matched comparison group who did not.¹⁹ Programs from 13 districts

were assessed, and the results were presented in the aggregate. Official criminal history data obtained from the Federal Bureau of Investigation's repository served as the source of the operationalized measure: arrests for criminal conduct one, two, and three years after program exit.

This study, like its predecessors, assembled data from the probation and pretrial services national case management system, Probation and Pretrial Services Case Tracking System (PACTS), for the participating districts and joined it with arrest data obtained from the FBI, comprising a sample of 26,283 defendants, 1,000 of whom participated in an ATI. Of participants who were no longer in the program at the time of the data draw, 81 percent completed the program successfully.

To assess the effectiveness of exposure to one of the ATI programs, however brief, the study examined rearrest rates for all who participated in an ATI, regardless of whether they completed the program successfully. Propensity score matching on important measures ensured maximum comparability of the two groups, allowing the research team to attribute differences more confidently in the outcome variables to program participation. In addition, because typically only participants who successfully complete a federal ATI program benefit from non-incarcerate sentences or dismissed dispositions, it examined the outcomes of those who successfully completed the program in comparison to their statistically matched counterparts.

Results of this novel analysis were encouraging, especially for the one-year follow-up period. For all 480 participants available for one-year follow-up, including both successful and unsuccessful participants, the ATI group exhibits statistically significant²⁰ lower rearrest rates for major offenses²¹ than the comparison group. Further, the ATI group was rearrested at a lower rate for miscellaneous major offenses. No differences in minor offenses were observed. The rearrest rates for 421 ATI defendants who successfully completed the program versus their counterparts were lower for the ATI-successful participants as well. Notably, those who completed the ATI program successfully were arrested at a statistically significant lower rate for violent offenses as well as miscellaneous major offenses.

The results for years two and three were more neutral, however. No statistically significant differences in rearrest rates for major or minor offenses were observed for all 436 successful and unsuccessful participants available for two-year follow-up. The same pattern holds when comparing successful completers against their matched counterparts.²² Likewise, for all 347 successful and unsuccessful participants available for three-year follow-up, no statistically significant difference in rearrest rates for major offenses was observed. Authors did however observe a statistically significantly higher rearrest rate for minor offenses for the ATI group. However, investigation of district differences in minor offense rates led researchers to conclude that these higher minor arrest rates were likely due to reporting differences by the state of Illinois and are likely not meaningful differences after all. The same holds when comparing the 324 successful ATI defendants against their matched counterparts.

Recidivism—whether defined as new arrests, new convictions, supervision revocations, or returns to prison—is often the sole measure commonly used by the "what works" literature to assess program performance. As context to their findings, Wolff et al. discuss the measure, citing scholars who point out its limitations. The authors argue that it is "inherently limited in its ability to account for the sometimes lengthy and uneven trajectories by which defendants internalize pro-social cognitions, slowly adopt a law-abiding identity, gain life skills that allow them to function responsibly, and experience turning-point life events, such as marriage, parenthood, and

¹⁷ Wolff, K. T., Baber, L. M., Dozier, C. A., & Cordeiro, R. (2020). Assessing the efficacy of alternative to incarceration across seven federal districts, *Justice Evaluation Journal 3*, No. 1, 26-53.

¹⁸ Baber, L., Wolff, K., Dozier, C., & Cordeiro, R. (2021). Expanding the analysis: Alternatives to incarceration across 13 federal districts. *Federal Probation*, 85(3).

¹⁹ Wolff, K., Baber, L., Muller, J., Dozier, C., & Cordeiro, R. (2024). Recidivism in alternative to

incarceration programs across thirteen federal districts. *Federal Sentencing Reporter*, *36*(3), 141-150.

 $^{^{20}}$ Statistical significance was assessed using a significance level of p < .05, indicating a 5% probability or less of obtaining the observed results if there is no true effect or difference.

²¹ Major offenses included those designated as felonies on the criminal history record and minor offenses include those designated as misdemeanors. When a designation was missing, the offense was given the designation that closely resembled the offense description of a similar offense(s). Infractions and arrests pursuant to warrants for community supervision technical violations were not included in the tabulations.

²² The large proportion of non-significant differences is at least partially due to the infrequent occurrence of rearrests in both the Alternative to Incarceration (ATI) group and non-ATI defendants. The modest sample sizes being analyzed along with the rarity of recidivism diminish the statistical power of analyses, making it challenging to detect effects even if they are present. Consequently, the potentially substantive differences in recidivism observed between the two groups may not necessarily lead to a statistically significant result.

employment, that are inconsistent with criminal behavior." $^{\scriptscriptstyle 223}$

As a *binary* measure (one simply recidivated or did not), the concept is at odds with the decades of desistance literature that acknowledge that desistance from criminal behavior is not a discrete event, but rather a process that is lengthy and complex, subject to interplay by complex internal and external forces. Recidivism measures alone fail to capture indicators of *progress* toward a law-abiding life, such as reductions in the seriousness of criminal activity or increases in time between release and criminal event.²⁴

Wolff et al. write about federal ATI programs:

Many present with severe criminal risks, needs, and responsivity factors. In addition to substance abuse disorders, which is the interventional focus of many programs in the federal system, many also have extensive and early-onset criminal histories, deeply entrenched criminal thinking patterns, anti-social friends and family, childhood and adult traumas, unstable childhoods and adolescence, educational and vocation deficits, and mental health disorders. The programs are typically 12 to 18 months, though in some programs, program length may be extended for struggling participants. The reality is that the intensive rehabilitation of the ATI program represents only a tiny but meaningful fraction of a defendant's life. With a three-year follow-up postprogram exit, these recidivism statistics reflect a small window into the participants' journey toward desistance.25

Recognizing the limitations of recidivism as the sole measure of program efficacy, the authors are currently conducting a comparative analysis of the impact on ATI participation on important life domains that are markers of successful integration into the community, such as employment, family relationships, social support networks, health care, and financial stability. The goal of this study is to provide a more complete understanding of the impact of these programs as told by the participants themselves. Though not on the immediate horizon, a study of participants' life journey from crime would provide a more rounded picture of the overall program impact. Such a study would investigate the nature, seriousness, and frequency of criminal behavior over time.

Efforts to Further Federal Alternatives to Detention and Incarceration—Incorporating Science into Decision-Making

The support of ATIs among a large contingent of judges has prompted the U.S. Sentencing Commission (USSC) to take a greater role in evaluating the impact of alternatives to incarceration initiatives and in educating federal stakeholders. At an October 2023 summit on alternatives to incarceration, Commission Chair Judge Carlton Reeves criticized sentencing guidelines that have resulted in "default to prison in nearly every case" and have exacerbated disparate outcomes among minority populations. Judge Reeves expressed his hope that federal sentencing practices can "reflect empathy, deliver mercy, and embrace alternative ways of delivering justice."26 Commissioner Judge John Gleeson reflects that the Sentencing Reform Act of 1984 specifically directs the USSC to ensure that the policies and practices reflect advancements and knowledge of human behavior related to criminal justice. Judge Gleeson states unequivocally that it has failed to do so.

The Commission's 2022-2023 priorities include a study of court-sponsored diversion and alternatives-to-incarceration programs, including consideration of possible amendments to the Sentencing Guidelines that incorporate completion of an ATI into sentencing considerations.

Judge Reeves' recent communication to federal judiciary stakeholders seeking information on alternative to incarceration programs and practices²⁷ demonstrates the Commission's follow-through on the 2023-2024 priority. The Commission's website points to studies, including those sponsored by the collaboration of 13 districts and discussed herein, and additional relevant information that can inform these discussions. The Commission promises future workshops and seminars to encourage dialogue and further exploration of the role of these programs in the federal system. Additionally, USSC's statutory imperative stated in the Sentencing Reform Act provisions of the Comprehensive Crime Control Act of 1984 to "reflect, to the extent practicable, advancement in knowledge of human behavior as it relates to the criminal justice process"²⁸ compels the Commission to consider the substantial research in existence.

Local Initiatives to Reduce Mass Detention and Incarceration

Districts are piloting various initiatives that impact bail and sentencing. To provide a more complete picture of the defendant, some include information about the defendant that speaks to critical aspects of their psvchosocial development. For example, some include the Adverse Childhood Experiences (ACES) screening assessment²⁹ in bail and presentence reports.³⁰ ACEs are traumatic experiences directly experienced or witnessed that involve neglect, violence, suicide, or pervasive instability that occur in childhood and can cause enduring brain dysfunctions. Such brain dysfunctions may be contributors to the defendant's criminality, and trauma-informed therapies may be appropriately recommended to the court. Moreover, we must not lose sight of the fact that parental incarceration is frequently an adverse experience, a serious collateral consequence imposed on the children of mass detention and incarceration. Parental incarceration has the potential to perpetuate harm for generations to come.

Others are incorporating measures to increase recommendations for non-incarcerate sentences and increase downward variances where appropriate. Others have amended the presentence report to reflect more meaningful consideration of defendant characteristics and circumstances in crafting an appropriate sentence recommendation, including special conditions of supervision.

In their article entitled "Supporting Responsive Federal Drug Sentencing Through Education" in the Workshop on Science Informed Decision Making, authors Gertner,

²³ Wolff, supra note 19 at 147.

²⁴ National Academies of Sciences, Engineering, and Medicine. (2022). *The Limits of Recidivism: Measuring Success After Prison*. https://nap. nationalacademies.org/catalog/26459/the-limitsof-recidivism-measuring-success-after-prison

²⁵ Wolff, supra note 19 at 147.

²⁶ Center for Justice and Human Dignity. (October 26-27, 2023). Rewriting the sentence II: Summit on alternatives to incarceration at George Washington Law.

²⁷ Email dated Oct 11, 2023, from Chair Carlton Reeves to Chief Probation and Pretrial Services Officers, District Court Clerks, and Chief Judges.

²⁸ 18 USC § 991(C).

²⁹ Adverse Childhood Experiences (ACEs) (cdc. gov), https://www.cdc.gov/violenceprevention/ aces/index.html.

³⁰ Ninth Circuit Judicial Conference. (July 31-Aug. 3, 2023). What happened to you? A conversation on trauma, resilience and healing. Portland, OR.

Edersheim, Kinscherff, and Snyder discuss the innovative education program³¹ of the Federal Judicial Center (FJC), which brings together legal and medical experts, federal court practitioners, and researchers to collaborate on an evidence-based approach to sentencing. Learning about behavioral sciences, and the neuroscience of addiction specifically, workshop participants examine how to craft individualized court responses using the most recent evidence available. One participant commented, "Perhaps in no federal criminal court context, other than federal problem-solving courts,³² are criminal court actors with different roles in the case given space to convene with a shared purpose of devising a coordinated response to a single person's case." ³³ Federal judges and practitioners have taken lessons from this workshop to implement in their districts and apply to a broader population than problem-solving court participants. One judge described this as "transformative" to her practices, while others expressed significant inspiration from a model that integrates the medical, behavioral, and criminal justice sciences.

V. Conclusion

Important questions remain about ATI programs in the federal system. What we do know, however, is that had it not been for their success in the ATI program, participants would have received a significantly more punitive sentence, and advanced in their journey—as well as their children's journey—to the "revolving door."

The default to incarcerate sentences in nearly every case is especially disconcerting in light of considerable evidence of its harm, as we discussed above. Effective, less punitive options must be exercised. Frontdoor programs and practices like ATIs can spare most defendants the harmful effects of pretrial detention and incarceration, preserving resources for the most egregious offenses and risky defendants. The recent research on federal ATIs discussed in this article demonstrates that pretrial detention and postconviction incarceration can be minimized without expense to community safety. The research demonstrates a substantial reduction in rearrests, greater compliance with release conditions (such as fewer positive tests for illicit substances), and responsible behavior (such as greater employment) among ATI participants while on supervision, offering an effective alternative to costly and harmful detention. Those benefits further accrue when defendants who successfully complete the arduous requirements of an ATI demonstrate rehabilitation and remain in the community following conviction. They remain in the community—as research is showing—without attendant expense to community safety in the form of increased arrests or arrests for violent crimes.

Unfortunately, as currently practiced in the federal system, ATIs have limited *systemic* impact on mass detention and incarceration. The limitation is clearly one of scale. Wolff et al. write,

ATIs represent a promising, yet—as currently practiced—inherently limited strategy in federal criminal justice reform. They allow persons charged with federal crimes to avoid the lifelong adverse consequences of lengthy custody terms, which most scholars agree are criminogenic. As the studies discussed in this article suggest, defendants can be diverted from otherwise harsh custodial sentences without risk to community safety. The programs are an effective escape hatch from deeply entrenched, overly punitive practices. They seek to intervene with the most intractable defendants with severe deficits who-absent the program as a viable alternative to detention-would almost certainly be detained pending case outcome. Detained without substance abuse or mental health treatment services. Detained with hindered access to counsel and deprived of the opportunity to work. Detained and estranged from family and support systems. Detained without an opportunity to demonstrate to the Court that given the right support, they can be rehabilitated, and that a more favorable case disposition or sentence can in fact better serve the fair administration of justice.34

Scalability and long-term sustainability of alternatives to incarceration programs depend upon the judiciary's commitment, demonstrated by adequate funding, policy support, and rigorous evaluation. Such programs in the context of larger criminal justice reforms—that are informed by advances in the behavioral sciences, sentencing reforms that de-emphasize incarceration, and bail practices that reserve detention as the "carefully limited exception"³⁵—move us forward towards the ideal: "to lay the foundation for each defendant's success, not just during the pretrial period, but beyond ... preventing the front door from becoming a revolving door."

It is long overdue.

³¹ Gertner, N., Eldership, J., Kerscherff, R., & Snyder, C.(2021). Supporting responsive federal drug sentencing through education in the workshop on science-informed decision making. *Federal Sentencing Reporter, 34,* 12-22.

³² Along with reentry courts, which focus on those on post-conviction supervision, alternative to incarceration (ATI) courts fall under the umbrella term of "problem-solving" courts. Both types typically target defendants with particular "problems" (e.g., substance abuse or mental health), that if addressed can lead to reductions in criminal future behavior.

³⁴ Wolff, supra note 19 at 149.

³⁵ United States v. Salerno, 481 U.S. 739, 755 (1987).

STARR Skill Use and Supervision Outcomes

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ALTHOUGH THE COMMUNITY supervision population has declined during the past several years, those on some form of community supervision still represent the largest number of individuals under correctional control, with nearly 3.8 million adults under probation or post-release supervision (Bureau of Justice Statistics, 2023). Research has increasingly demonstrated that despite its diversionary origins and intentions, community supervision can actually contribute to mass incarceration and expand the scope of correctional supervision in the United States (Jacobson et al., 2017; Phelps, 2013). Therefore, it is essential to understand the activities of community supervision officers and to assess officer activities and supervision strategies (Bonta et al., 2008; Labrecque et al., 2023). Otherwise, supervision risks continuing enforcement and surveillance-oriented strategies that, on their own, have demonstrated limited effectiveness in reducing violations or new criminal behavior. Worse, such strategies can lead to increased revocations and a recurring cycle of community and institutional supervision with the concomitant human, social, and financial costs (Horwitz; 2010; Jacobson et al., 2017; Klingele, 2013).

Over the past several decades, a number of supervision training programs have been

developed to improve officer use of skills and strategies consistent with evidence-based practice. Typically, these programs are based on core correctional practices of assessing and targeting client risks, focusing interventions on medium- to high-risk individuals, and the use of cognitive-behavioral strategies to improve client motivation and decision-making. Examples of such programs include STICS (Bonta et al., 2019, 2021), EPICS (Labrecque et al., 2015; Smith et al., 2012), Proactive Community Supervision (Taxman, 2008), and STARR (Lowenkamp et al., 2014; Robinson et al., 2012). While extensive research has been conducted on these programs, impact research tends to focus on comparing outcomes between pre-post intervention samples or clients supervised by trained versus untrained officers (Chadwick et al., 2015; e.g. see Bonta et al., 2021; Labrecque et al., 2015; Robinson et al., 2012; Taxman, 2008). Far less common is research that examines the relationship between specific officer intervention skills or activities and supervision outcomes (see Labrecque et al., 2023). This is not surprising, given that examining the "black box" of supervision activities often requires access to observational or other unique data that can be difficult to obtain (but see e.g., Louden et al., 2012; Raynor et al., 2014; Trotter & Evans, 2012). The recent meta-analysis by Labrecque et al. (2023) identified 25 studies published since 1996 examining various

outcomes associated with officer training programs. Specifically, these outcomes included the content of discussion during officer-client interactions, the specific core correctional practice skills used by the officer, and client recidivism. In general, existing research finds that officers who successfully completed training built on core correctional practices (such as STICS, EPICS, and STARR) are far more likely to use evidence-based intervention strategies during interactions with clients. While there was wide dispersion in the confidence intervals for some measures, Labrecque et al's (2023) review indicates that clients supervised by program-trained officers have improved supervision outcomes, especially among those supervised by officers with higher levels of program fidelity.

The present study adds to existing research by examining the Staff Training Aimed at Reducing Rearrest (STARR) program that has been widely implemented throughout the U.S. Probation and Pretrial Services system. STARR training seeks to create more constructive interactions between officers and those under their supervision by developing officer skills to help clients improve their decision-making and refrain from future activities that put their supervision, and the community, at risk (Robinson et al., 2012). STARR emphasizes the development and use of supervision skills such as role clarification, effective reinforcement and disapproval,

¹ This study, results, and implications are the authors' and do not reflect official PPSO policy.

problem-solving, and teaching and applying the cognitive model. These strategies and practices, largely built on the principles of cognitive-behavioral interventions and motivational interviewing, have been found to be effective in the community supervision of correctional populations and involuntary clients (Bonta et al., 2011; Trotter, 2006).

There has been limited research on the implementation and impact of STARR within the federal probation system. Studies conducted in the early stages of STARR implementation found that STARR was effective at reducing recidivism (Lowenkamp et al., 2014; Robinson et al., 2011; Robinson et al., 2012), and the reduction persisted over a more significant period of time compared to non-STARR supervised cases (Lowenkamp et al., 2014). Viglione et al. (2020) found that surveyed officers reported a high-level knowledge about and support for STARRbased supervision; however, respondents expressed concerns about program implementation similar to those noted in research on the implementation of other officer training programs. Alarid and Jones (2018) found that STARR-supervised clients reported their officers were using key program skills and had generally favorable opinions about their officer's efforts. Viglione and Labrecque (2021) found that policy changes to mandate the use of STARR during client interactions was effective in increasing the use of various STARR skills, though the overall use of STARR was still lower than expected. In their study on drug-testing outcomes in a STARR supervision district, Hicks et al. (2020) found that those supervised by a STARR-trained officer were more likely to have a positive drug test but no more likely to have their supervision revoked for positive tests than non-STARR supervised clients. More importantly, clients supervised by STARR-trained officers were significantly less likely to have their supervision revoked for a new crime (Hicks et al., 2020). This is consistent with a study by Labrecque and Viglione (2021), who found that STARR-supervised clients had more positive drug tests but fewer arrests and revocations of supervision compared to matched clients supervised by an officer not trained in STARR. Importantly, Clodfelter et al. (2016) examined the implementation of STARR in the district in the present study. They found that the training was delivered in a manner consistent with implementation best practices, and officers demonstrated high levels of fidelity to training during early

assessments. However, that study provided little evidence about the actual use of STARR skills or whether those skills were associated with client outcomes (Clodfelter et al., 2016).

The present work extends the growing literature on STARR by examining two key questions. First, what is the actual use of specific STARR skills as reported by federal probation officers in the district under study? Second, what is the relationship between the use of specific STARR skills and supervision outcomes?

Sample and Data Measures

Our sample includes 3243 client-terms of supervision in a single federal court district between 2011 to 2019. The sample includes only completed terms of supervision in which the supervision was revoked or ended successfully. This includes 2,938 separate clients, 287 of whom experienced more than one term of supervision. As noted in Table 1, the average term of supervision was slightly more than 950 days, with a minimum of 44 and maximum of 3213 days under supervision.

Outcomes for client terms were measured according to whether a term ended in successful termination (1) or revocation (0). We use a multilevel logit model to explore factors related to the likelihood that a client term ends successfully rather than in revocation. The primary variable of interest, officer STARR skill use, is measured in two ways using data in the federal client management software, Probation and Pretrial Services Automated Case Tracking System (PACTS). First, STARR % is the percentage of supervision contacts over a client's term that included at least one STARR skill during the interaction as reported in the officer's case management notes. Second, STARR type is a measure of the specific skill used during an interaction. The type of STARR skill(s) used in a specific interaction is largely determined by an officer's perception of a client's progress under supervision, a client's attitude and behavior, and other situational factors. Similar to prior studies on assessments of probationer-officer interactions, we collapse different skills into categories consistent with their primary purpose (e.g., Louden et al., 2012; Manchak et al., 2014). STARR is built upon several core activities (see Viglione & Labrecque, 2021). These include sharing essential information about the officer-client relationship, shaping client behavior activities, and building skills to empower and increase prosocial decisionmaking by clients. Therefore, we separate

STARR skills consistent with their primary function. Informational Skill is a measure of the use of Role Clarification, which is the primary informational STARR skill used at the beginning of nearly all supervision terms. Consistent with most cognitive-behavioral approaches, officer efforts to shape or structure client behavior using STARR may be categorized as offering either positive reinforcement or communicating some form of disapproval or reminder about the client's legal status and behavioral expectations. Because these may be in reaction to different client behavior and attitudes, and thus associated with different outcomes, we elected to separate shaping behavior skills into a Shaping Skill Positive (the total number of Positive Reinforcement contacts by the supervision officer over a client's term of supervision) and Shaping Skill Negative (the total number of Effective Authority, Effective Disapproval, or Effective Punishment contacts). The significance of this methodological approach is discussed in the concluding section. Finally, STARR seeks to empower clients with the tools to improve their own decision-making. Officers are encouraged to build these into their regular interactions with clients rather than in reaction to client behavior. The attribute Skill Building is a measure of the number of Problem Solving, Teaching the Cognitive Model, and Applying the Cognitive Model skill contacts reported by officers.

Furthermore, our analysis includes some key covariates noted by prior research as critically important considerations. Client risk (Risk) represents a client's risk level according to their Post-Conviction Risk Assessment (PCRA) score. Consistent with prior studies using PCRA data (e.g., Cohen et al., 2016; Starr & Cohen, 2021), scores were collapsed into quartiles (1 = low, 2 = medium,3 = medium high, and 4 = high risk) for each client-term of supervision. We segment client's race into three mutually exclusive and exhaustive categories: White, Black, and Other. Sex is measured as female (1) or male (0). We measure client's age as age in years at the beginning of a specific term of supervision, and Supervision Time is the number of days that the client was under supervision. Descriptive statistics for variables used in study analyses are reported in Table 1. As noted in Table 1, 27 percent of client-officer contacts had a reported use of at least one STARR skill. Remarkably, this is the same proportion of client contacts using a STARR skill found by Viglione and Labrecque (2021)

in a different federal district. It is worth noting that the proportion of STARR contacts reported by Viglione and Labrecque (2021) was the proportion following a policy change to increase the use of STARR skills in that district, as only 10 percent of client contacts involved a reported STARR skill use before the policy mandate (Viglione & Labrecque, 2021).

Results

Initial examination of study data raises several interesting observations. First, as reported in Figure 1, officers reported using Positive shaping skills far more frequently than Negative skills. This is consistent with the widely accepted view that cognitive-behavioral interventions should use a higher proportion of positive reinforcing activities compared to negative reinforcement or punishments to be most effective (Bonta & Andrews, 2017). Prior studies of STARR use in other federal districts have reported similar patterns of specific skill use (see Viglione & Labrecque, 2021; Viglione et al., 2020). The sharp increase in the use of all skill types between 2011 and 2014 can largely be attributed to the beginning implementation of STARR in 2011 and its continued development and expansion within the district. By 2015, nearly all officers in the district had been fully trained on the STARR program and the vast majority were deemed to be STARR "proficient" (Clodfelter et al., 2016).1 However, beginning in 2015, the use of specific STARR skills changed. For example, the use of Positive Shaping Skills generally leveled off and, with minor fluctuations, remained fairly consistent through 2019. While the use of Negative Shaping Skills increased consistently throughout the period under study, this increase was more modest after 2015. The sharp decline in the use of Skill Building after 2014 is most notable. By the end of the study period, Skill Building interactions appear to have become relatively rare and a mere fraction of their previous frequency. Additional comments about this finding will be highlighted in the Discussion and Conclusion section.

Supervision outcomes were modeled using multilevel logistic regression to account for the fact that some individuals had multiple terms of supervision. The two-level model accounts for individuals under supervision (Level 2) who are clustered in terms of supervision (Level 1).

Regarding the primary outcomes of interest, the larger the share of supervision contacts that involve STARR skills, the more likely a term will end successfully. As reported in

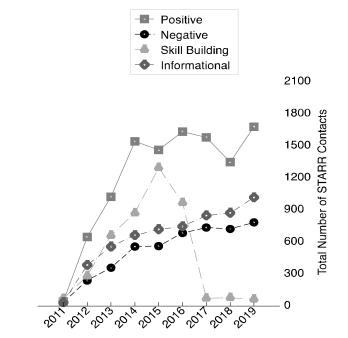
TABLE 1.	
Descriptive Statistics	5

Descriptive Statistics				
Variable	Mean	S.E.	Minimum	Maximum
Success (DV)	0.6685	0.0083	0	1
Risk	2.2091	0.022	1	4
STARR %	0.2746	0.0034	0	1
Informational	0.9892	0.0171	0	12
Skill Building	1.1042	0.0472	0	30
Shaping Positive	2.3259	0.0559	0	29
Shaping Negative	1.0607	0.0335	0	23
White	0.3577	0.0084	0	1
Black	0.6247	0.0085	0	1
Other	0.0176	0.0023	0	1
Female	0.1341	0.006	0	1
Violent Crime	0.0796	0.0048	0	1
Drugs	0.3605	0.0084	0	1
Weapons/Firearms	0.3256	0.0082	0	1
Sex Offenses	0.0126	0.002	0	1
Public Order	0.0086	0.0016	0	1
Obstruction/Escape	0.0157	0.0022	0	1
Immigration/Customs	0.0111	0.0018	0	1
Financial Offenses	0.1428	0.0061	0	1
Traffic/DWI	0.0435	0.0036	0	1
Age	39.3213	0.1914	17.8219	84.5808
Supervision Time (days)	966.4468	8.9787	44	3213

Note: Data include 3,243 client-terms.

FIGURE 1:

STARR Skill Use Over Time by Type



STARR SKILL USE AND OUTCOMES 11

Table 2, holding other covariates to their median values, a term of supervision in which 0 contacts included STARR skills had a 0.70 probability of ending successfully. A term in which all contacts included STARR skills had a 0.85 probability of ending successfully. Thus, increasing STARR skills from 0 to 100 percent increased the probability of a successful term of supervision by 15 percentage points.

STARR skill type was also associated with supervision outcome. As noted in Table 2, increased Positive Shaping Skills (.089) were associated with successful terms of supervision, while more frequent use of Negative Shaping Skills (-.24) and Skill Building (-.059) skills were associated with an increased risk of revocation. The use of Informational skills was not associated with supervision outcome.

Not surprisingly, clients whose risk level is higher are significantly less likely to experience a successful expiration of their term

of supervision than clients whose risk level is lower. Holding other covariates to their median values, the likelihood of a successful term of supervision for the lowest risk group is 0.88, while the likelihood of successful term of supervision for the highest risk group is 0.27. Thus, the lowest risk group is 61 percentage points more likely to experience a successful term of supervision than the highest risk group. The federal risk assessment instrument used in the present study (PCRA) has been subject to considerable analysis (Administrative Office of the U.S. Courts, 2018; Cohen et al., 2016; Johnson et al., 2011; Lowenkamp et al., 2013). While the PCRA has recently been revised (i.e., PCRA 2.0; see Serin et al., 2016), the current study highlights the predictive validity of the original measure and the continued importance of including a validated measure of risk in the assessment of supervision outcomes.

TABLE 2.

STARR Use and Supervision	Outcomes

Variable	Coef.	S.E.
Risk	-1.0044**	0.0791
STARR %	0.8644*	0.342
Informational	-0.0721	0.0568
Skill Building	-0.0593**	0.0207
Shaping Positive	0.0888**	0.0221
Shaping Negative	-0.2440**	0.035
Black	-0.0427	0.1186
Other	0.2894	0.4787
Female	0.4305*	0.1898
Drugs	0.3019	0.1969
Weapons/Firearms	0.3520+	0.1922
Sexual Offense	-1.7367**	0.4813
Public Order	0.8621	0.5905
Obstruction/Escape	0.2326	0.4303
Immigration/Customs	1.4981+	0.7772
Financial Offenses	0.8623**	0.2469
Traffic/DWI	2.9343**	0.5179
Age	0.0321**	0.0059
Supervision Time (days)	0.0018**	0.0001
Constant	-0.1144	0.3513
Offender Variance Component	0.0608	0.3042
Ν	3243	

Note: Outcome represents successful expiration of term (1) versus revocation for any reason (0). Reference categories are violent crime=1 for initial offense, White=1 for race, and male=1 for sex. Coefficients are estimated via multilevel logit, with variance components fit to each client. STARR skills are measured as counts. Risk is measured by dividing client risk based on PCRA into quartiles, 1 = lowest and 4 = highest. + p < 0.10, * p < 0.05, ** p < 0.01

The significant relationship between client risk and supervision outcomes warrants additional discussion. In particular, Figures 2-4 (pages 12 and 13) visually display the interactive relationship between the number of contacts involving a particular Skill Type (Positive Shaping, Negative Shaping, and Skill Building), Client Risk, and supervision outcome.2 Each figure highlights how risk level shapes the relationship between different STARR skills and supervision outcomes. For example, Figure 2 reveals that increasing Positive Shaping Skills is statistically more meaningful for high-risk clients than for lowrisk clients. However, increasing Negative Shaping Skill Use for low-risk clients has a more significant impact on this relationship than for high-risk clients. These findings will be discussed more in the concluding section.

Black clients were less likely to complete a term of supervision successfully, but this was not statistically significant. Client gender, however, was related to supervision outcome, as women were over 7.5 percentage points more likely to experience a successful term of supervision relative to men. Older clients were more likely to successfully conclude their term of supervision than younger clients, and the longer the Supervision Time, the more likely a client-term was to end successfully.

Findings on the relationship between Initial Offense and supervision outcome were interesting. Compared to clients who committed violent crimes, clients with DWI/Traffic offenses were the most likely to experience a successful term of supervision, and Sexual offenses were the least likely to conclude successfully. While terms of supervision for all initial offenses other than Sexual offenses were more likely to be completed successfully than terms for Violent offenses, this was statistically significant only for Financial Crimes and DWI/Traffic offenses. Terms for Sex offenses, however, were substantially less likely to end successfully than those for Violent offenses. Notably, terms of supervision for Sex offenses were 40 percentage points less likely to experience successful terms of supervision than terms of supervision for Violent offenses. Prior research on federal sexual offending clients indicates that this category includes a heterogeneous group with significant differences in recidivism rates across specific sex offenses and risk scores (Cohen & Spidell, 2016). The present study did not differentiate type of sex offenses. Furthermore, the present study combines revocation for new offenses and technical violations. Therefore, it

is possible that the higher revocation for terms of supervision for sex offenses may be due, in part, to more punitive responses to supervision violations and not to higher recidivism rates (see Cohen & Spidell, 2016).

Discussion and Conclusion

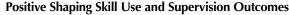
The present study sought to assess the relationship between use of STARR skills and supervision outcomes. More importantly, evidence about the type of STARR skill used and supervision outcomes could provide helpful insights into officer behavior and supervision outcomes. Results indicate that officers in the district under examination are using a range of STARR skills in interactions with those under their supervision, though perhaps not as consistently as desirable (see also, Viglione & Labrecque, 2021). Numerous studies have found that officers frequently do not fully incorporate training skills in their supervision practice, or at least not in a consistent and sustained manner (Bonta et al., 2019; Gleicher, 2020; Viglione, 2017, 2018). Furthermore, results provide strong evidence of a relationship between type of STARR skill and supervision outcomes. Positive Shaping skill use is associated with successful supervision outcomes and Negative Shaping skill use with supervision failure. However, Figures 2-4 highlight the important interaction between client risk level, STARR skill use, and supervision outcomes. These demonstrate that the use of particular STARR skills is associated with supervision outcome to a varying degree depending on client risk level. Put simply, the relationship between STARR Skill Use and supervision outcomes varies depending on the specific STARR skill and client risk level.

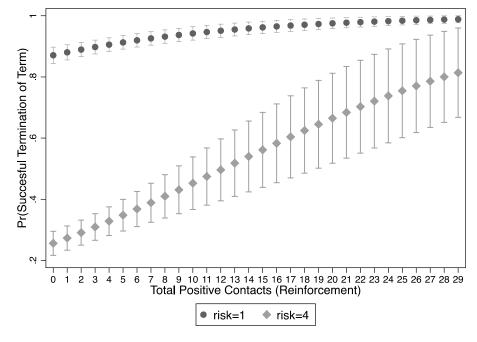
Unfortunately, the current data preclude an assessment of whether findings merely reflect officer behavior in reaction to client behavior or whether the use of directional skills had a preventive impact on future behavior and case outcomes. Officer actions likely influence client behavior but are also influenced by that behavior. This represents a potential problem of endogeneity that is difficult to overcome in social science research. It is likely that both relationships impact the present findings, but traditional means to differentiate causal effects in endogenous environments, such as instrumental variable analysis, were not possible with available data (e.g., Jones & Gondolf, 2002; Rhodes, 2010). Our inclusion of a validated measure of client risk in the model reduces concerns about omitted variable bias, but possible reverse causation or bidirectional

relationship is clearly a possibility with studies on the impact of behavioral programs in real-world settings. Methodologically, the decision to separate shaping skills based on their positive and negative characteristics appears to have merit. Preliminary analyses that collapsed all shaping skills into a single measure revealed a marginal relationship that was not statistically significant. Furthermore, model fitness statistics suggested that the single measure of shaping skills included attributes that were working in opposite directions and masking the actual relationship.³ Future studies on such activities should consider the likely endogenous and directional nature of particular officer activities and how that might impact interpretation of study findings.

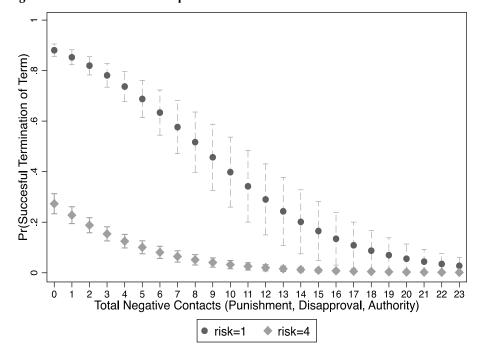
An interesting finding is the changing use of Skill Building over time and that the use of these STARR skills was associated with

FIGURE 2.







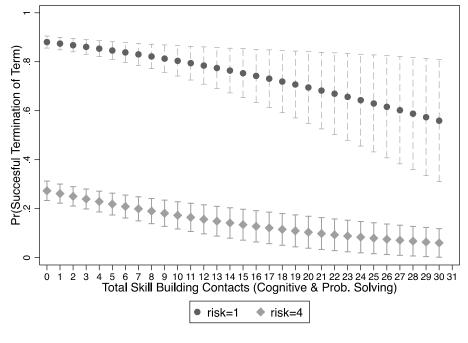


negative supervision outcomes (see Figure 4). It is unlikely that such skills actually increase revocations. A more likely explanation is that officers are engaging in Skill Building in response to negative client attitude and behavior. This is despite the fact that STARR training emphasizes such structuring skills should be part of normal supervision activities and interactions, rather than in reaction to particular circumstances. If Skill Building is more likely to be used by officers during interactions presenting attitudes or behavior contrary to successful supervision, such skills will likely be associated with supervision terms at increased risk for supervision failure. The impact that the dramatic decline in the use of these skills (see Figure 1) had on present findings is unclear. However, such a change is certainly noteworthy. A review of STARR training modules and comments by district supervisors support the observation that Skill Building interactions tend to be more time intensive and are a more challenging skill for officers to use effectively. This is supported by prior results for STARR showing that building skills, such as Teaching the Cognitive Model and Problem-Solving, are often the least used skills (Viglione & Labrecque, 2021). Additionally, as with any new program, enthusiasm for use of the skills may have declined over time. The sharp decline may also reflect officer preferences to focus on more intuitive and less time consuming Informational and Shaping skill use. The present study was

conducted in a district with extensive training, monitoring, and commitment to STARR program fidelity (Clodfelter et al., 2016). However, even in these environments, programs can experience program drift that may dilute program effectiveness. Discussions with the district indicate a renewed emphasis not only on the use of STARR, but particularly on the use of skill building interactions proactively, rather than solely reactively. Evidence of changing patterns of STARR skill use in an organizational setting committed to program fidelity raises questions about such changes in settings without the same level of support, commitment, and accountability. At a minimum, given the extensive research on the effectiveness of cognitive-behavioral interventions, federal districts should pay close attention to possible regression in officer use of Skill Building activities.

Finally, it is worth noting that all study data were pre-pandemic. The pandemic had a significant impact on supervision training and practice (Cohen & Starr, 2021; Mangione & Cohen, 2021; but see Hronick et al., 2021). Extensive research highlights the challenges and critical nature of ongoing monitoring of program implementation during the best of times. The present study suggests that, even in an organizational context supportive of STARR implementation, the use of STARR skills can vary over time. Those involved in the development and training of STARR in their own districts should continue to monitor

FIGURE 4. Skill Building and Supervision Outcomes



officer use of specific skills to ensure it is consistent with program fidelity and the potential impact of any changes in that use.

While informative, the present study suffers from important data limitations commonly found in evaluations of officer training on supervision outcomes. First, the study was based on a sample from a single federal district that has implemented STARR consistent with many of the best practices highlighted in the implementation scholarship. This has the advantage of reducing concerns about program implementation, but it may limit the generalizability to other districts where the STARR program has been implemented in a less rigorous or inconsistent manner. Next, relying on officer reporting of STARR skill use, rather than on direct observation, is another source of potential error. Using officer case notes and officer-produced records as sources of data on officer behavior can be problematic. In the present case, this may be mitigated by the district's use of regular fidelity checks and the emphasis on internal data collection and review by district administration. Nevertheless, this remains a possible source of error and bias. Perhaps most importantly, as an ongoing interactive intervention over the course of a term of supervision, the possibility of endogenous causal relationships could not be overcome with available data. We recommend that future research assess the use and impact of officer training in specific cases with repeated observational data. While challenging, such data could help researchers better understand how client behavior impacts officer use of cognitive-behavioral interventions and, more importantly, attempt to untangle the relationships between those interventions, post-intervention client and officer behavior, and supervision outcomes over time. Despite such concerns, the present study indicates that the use of STARR skills in general, and specific skills in particular, is associated with supervision outcome. Future efforts to specify these relationships would provide an important insight into the black box of supervision practices and the impact of officer training programs.

Endnotes

1. Follow-up communications with the chief probation officer from the district confirmed that while all officers continued to participate in training "booster sessions" throughout the study period, all officers were deemed STARR "competent" by the conclusion of the study period. Supporting data available upon request.

2. In situations where researchers analyze binary outcomes, and do so in reference to a theory that posits an interaction (e.g., the effect of one independent variable depends on the value of another independent variable), it is not uncommon to see researchers include interaction/product terms in their statistical models. Because product terms are the only way to test theories that include the idea of an interaction in the case of ordinary least squares with a continuous dependent variable, researchers often assume the same is true for binary outcome models like the logit and probit. Some statisticians have begun warning researchers that this practice is often misguided and unnecessary (Berry, Golder, & Milton, 2012; Berry, DeMeritt, & Esarey, 2010; Clark & Golder, 2023). Binary outcome models, as in the present study, apply a link function to transform data so that they more appropriately follow the assumptions of linear modeling. In the case of a logistic regression, this link function models the probability an outcome occurs (Pr(Y=1)/Pr(Y=0)) by first transforming this probability into a log of the odds ratio. The application of this link function means the entire model is *multiplicative* in the probability an outcome will occur because the model takes the *log* of that probability first. Thus, the impact of the STARR measures reported in Table 2 is based upon the interaction of control variables, including risk, and the predictor variables of interest. Figures 2-4 were created to visualize the interactive relationship between risk, STARR skill, and supervision outcomes.

3. We used two different methods to compare the model we report to one in which we combine positive and negative shaping contacts into a single measure (i.e., total shaping skill use). First, we used a likelihood ratio test, which suggests that separating contact type improves model-fit (LR Chi^2=68.52, p<0.01). Secondly, we also compared AIC and BIC (i.e., Akaike's Information Criterion and Bayesian Information Criterion) measures of model-fit. Lower AIC and BIC values suggest better model-fit and, in both cases, the model that separates shaping skills into positive and negative shaping skills produces lower AIC and BIC values. These tests reveal that although we lose efficiency by using two variables instead of one to measure this type of STARR contact, we gain more accurate insight into how these types of contacts shape supervision outcomes.

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Unlocking the Power of Implementation Science: Putting Principles into Practice Across Multiple Agencies

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THIS ARTICLE HIGHLIGHTS how Minnesota's criminal justice system, through a multi-agency community of practitioners, transformed their approach to work. Before this community formed, Minnesota faced the same challenge as many agencies nationwide—a gap between policy objectives and actual outcomes. Organizational change, whether through adapting existing practices or pioneering new approaches, requires a fundamental shift in how individuals perceive problems and their roles in solving them. The transformation in Minnesota demonstrates the power of implementing the principles of implementation science.

For over two decades, the criminal justice system in the United States has been striving to integrate evidence-based and research-informed practices. Despite this commitment, the overall impact on outcomes remains modest. Significant strides have been made in developing interventions to reduce recidivism and alter behavior, but there remains a crucial need for focused attention on implementation. This strategy often demands significant investments of time, effort, and resources beyond financial allocations and staffing increases.

Research indicates that knowing effective strategies alone is insufficient to drive substantial change. Even with new interventions, achieving positive, sustainable outcomes that can be consistently replicated has been elusive. Consequently, justice and human service agencies are under pressure to adopt researchdriven approaches that quickly and effectively demonstrate better results.

Data shows high failure rates of traditional change initiatives. Without tailored implementation support, only 14 percent of efforts successfully transition into everyday practice, often taking up to 17 years to achieve fidelity (Fixsen et al., 2009; Balas & Boren, 2000; Green & Seifert, 2005). Failed implementation can lead to leadership burnout, disillusioned staff, and public frustration.

However, there is a more effective approach grounded in the science of implementation. This discipline bridges the gap between intentions and practical implementation, requiring formal tools and structured interventions to drive impactful changes within organizations, leadership structures, and individual practices. The Five Dynamics of Effective Implementation model developed by ACJI distills the essence of implementation science into five key dynamics: people, data, culture, leadership, and feedback. These dynamics guide purposeful and intentional actions to achieve full implementation, defined as 50 percent of practitioners delivering new policies, practices, and programs with fidelity (Fixsen et al., 2019). When applied effectively, these dynamics align desired outcomes with real-world implementation.

This article showcases Minnesota's experience, illustrating how organizations can pursue sustainable, incremental change within human-serving systems across diverse delivery frameworks. It is a testament to creativity, innovation, and the transformative power of implementation leadership and science in driving meaningful progress.

New Initiative, Same Old Story

In the early 2000s, Evidence-Based Practices (EBP) for corrections gained momentum in Minnesota, guided by the Eight Guiding Principles for Effective Interventions (Bogue et al., 2004). Agencies focused first on assessing clients' risk of reoffending to assign appropriate supervision levels. This soon led to questions about how to work effectively with those clients.

Minnesota's corrections system is unique, with three different delivery systems overseeing community supervision. This can mean a person on probation or parole may be supervised by a community, county, or state agency, or even multiple agencies simultaneously. The lack of collaboration between these agencies makes it difficult to work together on statewide initiatives like risk assessment tools or case planning.

Despite these divides, administrators and EBP trainers sought statewide collaboration. Numerous committees and advisory boards were formed to find successful implementation strategies for statewide EBP initiatives. One such group included passionate EBP trainers from all three delivery systems, with backgrounds in Motivational Interviewing (Miller & Rollnick, 2012), risk and need assessment (Andrews & Bonta, 2016), effective case management, and various cognitive skills curricula.

Feeling confident in "who" to implement with and "what" to implement, the group expanded their collaborative efforts. Despite their best efforts, the plan was riddled with mistakes, missteps, and outright failures. Their first step was creating a training program. Starting in the 2010s, they spent countless hours crafting Minnesota's case planning training. By 2012, they trained the first case planning trainers, focusing on teaching managers and supervisors across the state. The effort aimed to garner support for case planning and create buy-in around the curriculum. Trainers allowed agencies to request line staff training as needed, putting the responsibility for implementation in the hands of administrators.

Several agencies eagerly adopted the training, while others held out. Early advisory committees recommended agencies get trained and provided technological support for tracking case plans. However, this technical solution failed to yield impactful results. Agencies then trained more trainers to provide in-house training and support. When this approach faltered, policies were created to compel staff to start case planning.

Some agencies joined to comply with policy, but issues with the tracking system persisted. More time, money, and energy were spent altering technological systems, yet impactful results remained elusive. Agencies explored different case planning formats, but these technical solutions had little impact. The cycle continued, highlighting a key issue: "how" to implement effectively.

Minnesota's approach to case planning implementation followed a familiar path of repeated mistakes, not understanding that implementation science differs from correctional supervision science. Common implementation mistakes included:

- Train and Pray: Training trainers and staff repeatedly, hoping they would apply the information in practice.
- Policy Driven: Creating policies to enforce tools and skills without considering organizational culture or policy impact.
- Time Bound: Imposing arbitrary timelines that stifled implementation.
- Technical Solutions for Adaptive Problems: Focusing on technical measures to address mindset, attitude, and belief issues without defining the real barriers.
- Overlooked Organizational Culture: Ignoring the culture of organizations asked to implement changes and their openness to new measures.
- Overcorrected: Pushing hard to correct mistakes without long-term effectiveness.
- Hyperfocus on Funding and Staffing: Believing more money and positions would solve issues despite contrary evidence.

These failures led Minnesota EBP trainers and administrators to pursue further training to promote implementation with integrity and prevent future failures.

Creating a Common Language and Lens

The groundbreaking initiative began with a small group of leaders in Ramsey County who attended ACJI's Implementation Leadership Academy (ILA). Recognizing the need to bridge the gap between training and practical application, these professionals began meeting regularly to practice principles, apply tools, and maintain their knowledge. They understood that effective implementation was a science, not a checklist.

Staff trained in Ramsey County, despite different areas of expertise, found that implementation science provided a common language and approach focused on the five dynamics of effective implementation. This shared understanding facilitated communication and collaboration.

As the impact of implementation science grew in Ramsey County, they extended their reach to neighboring counties, sharing experiences and insights. This expansion led to the formation of the ACJI ILA Multi-Agency Community (hereafter Community), a space for professionals from various counties who completed the ILA to share projects, troubleshoot challenges, and apply learned principles. The emphasis on collaboration, connection, and creating a shared language has been vital.

The Community has become a resource for professionals seeking insights and perspectives on similar issues in different settings. Meetings offer opportunities to discuss challenges, exchange ideas, and navigate the complexities of implementing change in organizations.

The Power of a Multi-Agency Community

Connecting work across systems in Ramsey County and throughout Minnesota was crucial to success. This collaborative approach has proven invaluable as participants intertwine processes to achieve common goals. Embracing the normalcy of challenges in the change process fosters a sense of unity and growth. Champions for the work no longer felt isolated and fueled collective development.

The Community embraces being comfortable with discomfort. They navigate the difficulties of change, understanding that these moments signify true transformation. Failures became teachable moments, connecting members and creating a collective understanding of the challenges of organizational change. The Community has come to embrace that implementation is a process, not a one-time task.

Implementation leadership involves leading both minds and hearts, engaging in the work together, and discovering individual "whys." Aligning towards common goals, fostering diverse perspectives, and cultivating change within a cohesive team have proven impactful. Celebrating small successes along the journey strengthens relationships and sustains momentum, even when immediate changes are not visible.

Reflecting on their collaboration, they observed that adaptive changes often take a back seat to technical changes. While policies and procedures are crucial, implementation science principles encourage purposeful engagement. By focusing on adaptive changes and understanding the "why" behind their work, meaningful discussions and impactful results are achieved.

The Power of Shared Learning

One of the first examples of the power of the community to support an implementation effort was within the Minnesota Department of Corrections (DOC). The agency was in the middle of a "Dosage Probation" pilot (Carter & Sankovitz, 2014). The pilot represented a systematic change in the way the MN DOC measured success with clients, from that of a static probation term to a system in which they are discharged when the client is prepared for long-term success. The dosage that clients receive is based on time they spend working through cognitive-behavioral interventions with community providers and their agents. Once clients complete their "dosage" hours, discharge is an available option.

To provide dosage hours, probation agents need to change the way they do their daily work. They must change from being brokers of services to being change agents using cognitive behavioral interventions to build skills around their clients' criminogenic needs. At the time, agents had great engagement and motivational skills, but were not commonly guiding clients to focus on criminogenic need or using cognitive behavioral interventions.

To prepare staff for this new approach, much work was needed. The focus of initial planning for the dosage pilot was on coaching the agents to change the way they interacted with clients. Because no coaching was available before this, a committee was formed, a coaching model was created, and a separate coaching model pilot commenced. Several committee members volunteered to practice the coaching model with staff, half of whom were compelled to participate as a prerequisite to their dosage pilot work.

The implementation plan seemed to be a good one. Before it started, each coach discussed the coaching model pilot with prospective agents to be coached. The coaches developed metrics to indicate progress and surveys to embed feedback loops. Coaches worked individually with staff reviewing and coaching around their contacts with clients. Further, there were periodic Communities of Practice (CoPs) for the coaches to build skills, and the agents were encouraged to do the same. The coaching model pilot even hosted an event intended to create energy around the process.

After the pilot was officially launched, participation was slow. While the coaches knew that there would be an initial fear of providing audio recordings of themselves with clients, the hesitation to participate persisted longer than expected. It soon became apparent that, although the coaching model itself might have been well thought-out and based on science, the pilot participants did not share the coaches' vision. Some did not understand that their job was changing and why. Many were not ready for the challenge of being out front as leaders in the MN DOC based on their participation in such an intense pilot.

With this, some coaches began second guessing implementation decisions. Questions came up about the pilot's timing and about the skills and abilities of the coaches and agents. As is natural in the process of implementation, there was a temptation to overcorrect or fall back into familiar approaches, even when they knew those approaches had lacked sustainability in the past. The coaches then scheduled a focus group event with the pilot participants, but they were unsure how to proceed.

The coaches decided to share the challenges with the newly formed Community and discuss plans for the subsequent focus group with the pilot participants. The ACJI ILA group asked thoughtful questions and gave feedback that clearly supported the idea that the key issue was not about timing, skills, or the coaching model itself. The issue was that the coaches had overlooked the necessity to listen and provide support, fostering a creative, brave, less risk-averse culture. While the initial outline for the focus group was designed to build enthusiasm, the ACJI ILA group helped the coaches shift the focus of the event toward engagement, listening, and modeling vulnerability.

The result was that the focus group was split into three segments designed to allow coaches to model vulnerability and then foster honest discussion. It felt very uncomfortable at first for everyone involved. However, it quickly became apparent that the agents wanted to speak and be heard. This forum allowed them to voice their feelings of vulnerability in being ahead of the curve and being asked to lead. In the past, coaches had been searching and digging to get participants to engage. With a few changes to the approach, agents were speaking freely, and everyone was able to have an open dialogue.

Since that time, participation in the pilot has steadily increased and is slowly scaling up in size of coaches and participants. Since that first focus group, there have been two additional focus groups. The standard approach to designing these focus groups has become that of skill building, vulnerability, listening, working side by side, and always moving the needle on culture.

The Special Sauce of Multi-Agency Collaboration

In the realm of group dynamics, success is often rooted in the cultivation of an environment that fosters collaboration, innovation, and mutual support. The Community, having flourished amidst various challenges, attributes its success to a set of core components that form the bedrock of collective achievements.

Central to the Community's success is the establishment of a safe space—a zone where members feel secure to express ideas, voice concerns, and share perspectives without fear of judgment. This trust-filled environment has nurtured a culture of open communication, enabling us to explore innovative solutions and address challenges collaboratively. For instance, during brainstorming sessions when a new project is shared, team members are invited to share all ideas. This environment fosters creativity and ensures that even seemingly unconventional suggestions are considered without judgment.

Having a common language and lens for understanding and exploring implementation challenges was critical to the success of the Community. Acknowledging the inherent challenges in implementation is a cornerstone of success. By collectively recognizing the hurdles and pitfalls that often accompany projects, they are better equipped to navigate these complexities. This shared understanding facilitates a proactive approach to problemsolving and mitigates potential roadblocks.

It was also important for every member to have an equal opportunity to contribute and lead. Encouraging active participation from all ensures a holistic approach to decisionmaking and problem-solving. By valuing and using everyone's strengths, they harness the full potential of their collective capabilities. This group started a schedule that hands the baton from one agency to another to facilitate the meetings. This has helped everyone to learn and grow through diverse projects, ideas, and lessons of agencies across Minnesota.

Beyond the surface, members also developed a nuanced understanding of each other as individuals and system stakeholders. This deeper connection enables them to anticipate needs, support one another effectively, and act cohesively. Seeing beyond the obvious allows them to tap into the strengths and unique qualities that each member brings to the Community. They get to see each other past their roles and see the project need instead.

The simple yet profound act of feeling heard is a fundamental aspect of the group. They prioritize active listening, valuing each contribution and ensuring that every member feels acknowledged and respected. This inclusive approach empowers individuals to share their perspectives confidently, contributing to a culture of mutual respect.

Continued Breakthroughs and Roadblocks

The implementation of evidence-based practices (EBPs) in Minnesota's community supervision presents both challenges and opportunities for growth. One key hurdle is fostering multi-agency collaboration, as differing practices across community, county, and state agencies create barriers to consistent statewide adoption. Organizational culture also plays a critical role, with invisible cultural barriers and resistance to change often slowing progress. While technical solutions, such as policy enforcement and tracking systems, are necessary, they are not sufficient on their own. Addressing adaptive challenges like shifting mindsets and securing staff buy-in is equally vital, particularly in initiatives such as the dosage probation pilot, where staff engagement has been slow.

Promising strategies for overcoming these obstacles include expanding continuous

communication, shared learning, and fostering a culture of trust and openness, as demonstrated in pilot coaching models. Balancing technical and adaptive solutions, supported by leadership training, coaching, and feedback loops, can help reshape organizational culture and sustain engagement. Celebrating incremental progress will also be key in maintaining momentum and morale as broader goals are pursued.

However, certain realities must be accepted. Change takes time—research shows that full fidelity in new practices can take years to achieve. Uneven adoption across agencies and the inevitability of leadership and staff turnover are additional challenges that will persist. Nonetheless, with a sustained focus on communication, collaboration, and cultural adaptation, Minnesota can continue advancing toward its goals of effective, evidence-based community supervision.

Conclusion

In our pursuit of big goals, we often overlook the small victories along the way. Even when things don't go as planned, there is still progress, and we can learn from it. Minnesota's experience shows us how to make the most of what we have instead of always seeking something new. It also teaches us how to break down barriers within organizations and across system stakeholders that naturally arise when we're trying to make changes from within. The Implementation Leadership Academy and our Multi-Agency Community have demonstrated that leaders and champions don't have to face success or failure alone. Sustainable change requires collaboration and drawing on people's experiences, guided by implementation science.

Organizational culture plays a significant role in implementation efforts and affects the decisions organizations make to align people, processes, and policies with their implementation strategy. Often, this culture is invisible to those within the organization but can profoundly impact progress. By involving people from outside the original organization, Minnesota leaders identified and overcame cultural barriers hindering progress. This allowed for reflection, constructive criticism, and feedback in a non-threatening way, opening new possibilities for everyone involved.

Even with a dedicated team supporting change, it is still challenging. Humans are not naturally great at change, even when it is essential for our health and well-being. The Minnesota Community provided a space for leaders and champions to be vulnerable, have fun, and be challenged by their work in meaningful ways. It required participants to set aside their titles and positions, creating a supportive community of peers who understand the difficulties of this work.

Understanding implementation science and how to lead change in organizations is crucial for leaders aiming to bring about lasting change. Sustainable implementation takes time and effort. It is about more than just following plans; it is about fostering a culture of adaptability, resilience, and innovation. With dedication and a strategic approach informed by implementation science, leaders can guide their organizations toward meaningful and lasting change.

The Minnesota Community has reshaped the narrative of Community Corrections in the state by applying the principles of implementation science and leadership. Starting from a small initiative in Ramsey County, it has grown into a statewide movement, showing that transformative change is not only possible but enriching. The emphasis on collaboration, learning, and celebrating successes together represents a new era in community-driven impact. As professionals continue to gather, share, and evolve, the legacy of the Minnesota Community will undoubtedly leave a lasting impact on the landscape of Community Corrections in the state. This article serves as a guide and inspiration for other agencies striving to bridge the gap between policy and practice, ultimately achieving better outcomes for communities and individuals alike.

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Psychopathy: A Primer for Correctional Professionals

THE CLOSURE OF STATE psychiatric facilities and other public policy changes beginning in the late 20th century increased the number of people with serious mental illness (PSMIs) entering the criminal justice system at every level, from pretrial detention to post-incarceration release, resulting in numerous changes in programming, housing arrangements, and caseload management strategies (Lurigio & Swartz, 2000). Consequently, the criminal justice system has been altered to accommodate the behavioral healthcare needs of people with substance use and other psychiatric disorders (Council of State Governments, 2002; Lurigio, 2011). In the context of these changes, there is a category of mental disorders that can complicate the supervision of PSMIs. Known as "personality disorders," this category is described in the current edition of the Diagnostic and Statistical Manual-Text Revision (DSM-5-TR), which is the nomenclature of mental disorders used by mental health practitioners for diagnosis, treatment, and insurance reimbursement (American Psychiatric Association [APA], 2022).

Most relevant to the DSM-5-TR and its implications for community corrections practices is antisocial personality disorder (ASPD), which is defined by criminality. The primary diagnostic criterion of ASPD is the "failure to obey laws and norms by engaging in behavior which results in a criminal arrest or would warrant criminal arrest." Thus, by definition, because probationers and parolees have all been convicted of a crime and many have a history of delinquency and adult criminality, they would automatically meet the critical criteria for ASPD, rendering the diagnosis useless in the formulation of differentiable supervision plans. Psychopathy, a mental disorder highly related to ASPD, is presently absent from the personality disorder category. In many respects, psychopathy is a relative of ASPD with differentiable personality characteristics and affective traits that make psychopaths insidiously dangerous offenders (DeAngelis, 2022).

Psychopaths are comfortable breaking the law, are indifferent to the suffering of others, and are impervious to the consequences of their harmful behaviors (Hare, 1993). Long before "OCD" and "borderline" became common terms, "psychopathy" was in the lexicon. First appearing as an entry in Merriam-Webster's 1865 edition, the term's overuse and gratuitous insertions into conversations, news reports, and entertainment media belie the seriousness of the disorder. Its absorption into colloquialism has also obscured its complicated nature. The ease with which psychopathy has emerged in popular discourse also trivializes the harm that psychopaths inflict on others, often without victims' awareness of their motives (Reidy et al., 2013).

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Current Article

This article is intended to raise awareness about psychopathy and its related conditions, as well as how it can challenge the management of offenders under community corrections supervision. We describe the history and defining characteristics of psychopathy and explain the differences between psychopathy and two similar terms used synonymously to characterize people who engage in repeated criminal behaviors: sociopathy and ASPD. The distinctiveness of psychopathy as a separate psychological disorder can be misunderstood as a result of this overlap. Therefore, this paper explains how psychopathy compares to sociopathy and ASPD in terms of etiology, signs and symptoms, and treatment.

In some respects, sociopathy and ASPD are more closely related to each other than to psychopathy. Therefore, these two terms are used interchangeably here for greater conciseness in writing. The label "psychopath" is also adopted instead of the more acceptable term "people with psychopathy," which is the standard style of usage when describing a medical or psychiatric disorder. Finally, this article describes the relevance of psychopathy to community corrections practices in the context of risk-needs-responsivity (RNR). As stated by Kiehl and Hoffman (2011, p. 355), "given psychopathy's enormous impact on society in general and on the criminal justice system, in particular, there are significant benefits to increasing awareness of the condition."

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Psychopathy

History and Overview

Psychopathy is a constellation of personality traits in the annals of psychiatry, psychology, and criminology (e.g., Cleckley, 1942, 1982; Hare, 1993). Early case studies identified psychopathy in both men and women (Karpman, 1941), and recent studies have reported that men and women manifest symptoms differently (Efferson & Gleen, 2018). Psychopathy was among the first recognized personality disorders (Pinel, 1806), and it continues to receive attention from social and forensic scientists, clinicians, and other experts. As a personality disorder, "psychopathy" is defined as an enduring, maladaptive, and deeply ingrained pattern of disturbed cognition, affect, and behavior that deviates from social norms and is a permanent element in a person's psychological makeup, response repertoire, and views of themselves and others (APA, 2022).

Personality disorders damage interpersonal relationships, diminish levels of functioning, and involve departures from culturally appropriate behavioral expectations (APA, 2022). Unlike the other 10 personality disorders in the DSM-5-TR, psychopathy is not currently included as a distinct diagnostic category (APA, 2022). Descriptions related to psychopathy appeared in the first two editions of the DSM. Hervey Cleckley (1941, 1976), a renowned pioneering psychiatrist, listed the core psychopathic traits in his groundbreaking book The Mask of Sanity. These traits were among the diagnostic criteria listed for ASPD in the DSM-II (APA, 1968), which was called "sociopathic personality disorder" in the DSM-I (APA, 1952). To achieve greater inter-judge reliability, the DSM-III removed most of Cleckley's personality characteristics of psychopathy from the diagnostic criteria for ASPD in favor of more easily quantifiable and measurable behavioral indicators (APA, 1980).

With the paradigmatic diagnostic shift in DSM-III, psychopathy and ASPD became distinct categories (Kosson et al., 2006). Psychodynamic and psychoanalytic models of mental illness were replaced with quantifiable diagnostic criteria favoring behaviors over personality characteristics, which increased diagnostic reliability (i.e., consistency in placing patients in the same diagnostic categories) at the expense of diagnostic validity (i.e., precision in placing patients into the "correct" diagnostic categories; Frances, 2013). Hence, a diagnosis of ASPD corresponds more closely with the behavioral and antisocial dimensions of psychopathy than with its interpersonal or affective traits, which are among the defining elements of psychopathy (Hare et al., 1991). Psychopathy now appears in the appendix of the DSM-5-TR, embedded in the triarchic psychopathy measure, indicating that it warrants further research and might become a discrete diagnostic entity in subsequent editions (APA, 2022; Patrick et al., 2009).

Psychopaths are adept at hiding their true natures and motivations from others, which explains their success in committing crimes, especially those that require deceit, duplicity, and cunning. This "mask of sanity" (Cleckley, 1941, 1976) also renders psychopaths both invisible and fascinating to the public. The common characteristic of psychopaths is their ability to pose, lie, cheat, and steal under the persistent guise of reputability and trustworthiness. They possess no empathy for others and give no serious thought to the consequences of their actions. Throughout history, psychopaths have caused extensive harm to others, always without conscience and frequently without accountability or punishment (Hare, 1993).

Prevalence and Costs

Using standardized assessments, prevalence studies have estimated that psychopaths constitute 1 percent of the U.S. population and are likely to be found in much larger proportions in organized crime groups and correctional populations (Patrick, 2022). For example, psychopathic offenders represent an estimated one-quarter of all prison inmates in the United States and disproportionately contribute to the total cost of crime (Hare, 1991). Nearly one-third of male violent offenders in a community-based setting were deemed psychopathic using a standard diagnostic tool (Grann, 2000). One study estimated that psychopaths comprise 16 percent of adult males in jail and prison and on probation and parole, totaling 1.1 million offenders (Kiehl & Hoffman, 2011). Another study estimated that psychopathic offenders were responsible for 27 percent of crimes in North America, costing between \$245.5 billion and \$1.6 trillion (Gatner et al., 2022). Hence, the economic, emotional, and psychological toll they exact on their victims and taxpayers is enormous (DeAngelis, 2022).

The financial costs and human suffering attributable to psychopathy are estimated to be considerable, and the widespread failure of psychopaths to contribute to the workforce is also problematic (Viding, 2019). Accordingly, the disorder demands more attention in psychiatric and criminological studies and practices as well as in the field of corrections, where psychopaths are more common than in the general population (Patrick, 2022). As stated by Hare (1996, p. 131), "given the morbidity of psychopathy and its negative impact on society, it is difficult to imagine that any mental disorder, save perhaps schizophrenia, could be considered a greater public health concern." The costliness and harmfulness of psychopathy necessitate further research to better understand its pathogenesis and to develop effective interventions to better manage psychopathic offenders in the community and reduce their harmfulness to others (DeAngelis, 2022).

Core Features

The validation of clinical assessment tools to measure psychopathy has fostered advances in understanding and differentiating psychopathy from similar conditions. Moreover, new techniques to view the living brains of psychopaths and nonpsychopaths have revealed correlations between brain imaging and measurement scale results that demonstrate concurrent and construct validity. In other words, different methodologies for measuring psychopathy are correlated, which suggests that the condition is a demonstrable mental disorder.

Psychopaths and nonpsychopaths not only score differently on assessment tests in the expected directions but also show different neuropsychiatric activity when responding to various stimuli in brain imaging tests (DeAngelis, 2022; Kiehl & Hoffman, 2011).

Psychopathy is characterized by a variety of related features. For example, its earliest defining aspects were criminality, addiction, sexual deviancy, and other so-called aberrant behaviors in the absence of severe mental illness (i.e., psychosis; Pinel, 1806). As Pinel recognized, different types of antisocial behaviors are highly related (e.g., crime and drug use). Notably, he also observed that psychotic symptoms and intellectual deficits were unlikely to be present in psychopathic patients (Pinel, 1806).

Based on Cleckley's (1941, 1976) case analyses, the hallmarks of psychopathy are persistent deviancy, interpersonal charm, impoverished affect, purposeful behavior, and a profound lack of empathy, remorse, and guilt. Like Pinel, Cleckley (1941, 1976) determined that psychotic symptoms and diminished intelligence were exclusionary features of psychopathy. He considered psychopathy to be a distinct mental illness or taxon with a discernable etiology. As discussed below, other experts have distinguished psychopaths from nonpsychopaths by the former's extreme manipulativeness, paucity of conscience, and inability to form stable relationships (McCord & McCord, 1964).

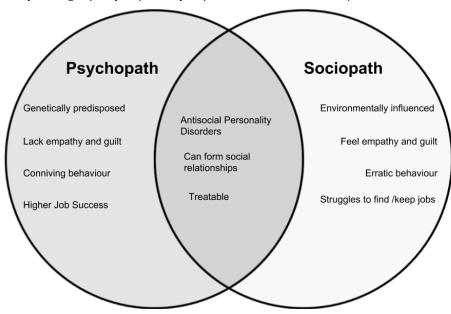
Psychopathy is an assortment of distinct personality traits that fall into two major groupings: interpersonal-affective (interactions and emotions) and impulsive-antisocial (harmful behaviors; Patrick, 2022). These traits are manifested in early conduct problems, callousness, unemotionality, and antisocial acts and are included in assessments of psychopathy (Marsh & Blair, 2008; Skeem & Cooke, 2010). Furthermore, evidence supports the notion that psychopathy exists on a spectrum and is not a simple binary disorder (like psychopathic or nonpsychopathic). Some 30 percent of the U.S. population displays symptoms and signs of psychopathy, from mild to severe, with those at the high end of symptomology falling among the 1 percent of subjects included in the general prevalence estimates of psychopathy. These individuals pose the most significant harm to others (DeAngelis, 2022; Hare & Neumann, 2008).

Triarchic Model

The triarchic model, which aligns with tools that measure the construct, delineates psychopathy as a conjugate of three traits scored on the dimensions of boldness (e.g.,

FIGURE 1

Overlap among Psychopathy, Sociopathy, and Antisocial Personality Disorder



dominance and resilience), meanness (e.g., low empathy, callousness, exploitation, and manipulation), and disinhibition (e.g., impulsiveness, irresponsibility, and easy boredom; Patrick et al., 2009). The diagnostic features of psychopathy (e.g., pathological lying and criminal versatility) could be multiplicative rather than additive in combination, which means that one feature can both co-occur with another and exacerbate it (Walsh & Kosson, 2008).

Triarchic traits reflect the characteristics measured in the PCL-20-R and described in Cleckley's (1976) groundbreaking case studies. The triarchic traits also corroborate the fivefactor model of personality (agreeableness, conscientiousness, openness, neuroticism, and extraversion; Drislane et al., 2018) and the items in the multidimensional personality questionnaire (Brislin et al., 2015).

Cognate Conditions

As mentioned above, "psychopathy" is a widely misunderstood and misused term, often confused with "sociopathy" and "ASPD," which is unsurprising considering the overlap among the conditions (see Figure 1). "Sociopathy" overlaps with "psychopathy" but is distinguished from psychopathy by its etiological emphasis on socioenvironmental factors. Sociopathy is mainly viewed as a product of poverty, poor parenting, and neighborhood influences. The definition of "sociopathy" consists primarily of deviant behavioral characteristics without the interpersonal–affective features necessary for a determination of psychopathy (Strickland et al., 2013).

Poverty is a correlate of criminal activity and a predictor of formal involvement in the criminal justice system. Lower-class socioeconomic environments are more criminogenic, as they offer residents fewer educational and employment opportunities and are often characterized by hopelessness, intergenerational isolation, impoverishment, and racism (Wright et al., 2001). Criminal behaviors are found at all levels of socioeconomic status, but like other social problems that are more common in improvised environments, such as mental illness and public health conditions, crime and delinquency are also more common in lower-class communities (Lurigio, 2011; Tittle & Meier, 1991). People who commit crimes because of environmental influences are labeled sociopaths. As with ASPD, criminal behavior and delinquency are among the defining traits of sociopathy, which also shares several other traits with psychopathy and ASPD. It is not considered a diagnosable mental disorder as much as a disadvantaged social status defined by criminality.

Psychopathy's closest diagnostic counterpart, ASPD, is defined in the DSM-5-TR (APA, 2022) by a history of conduct disorder before age 15, along with numerous other diagnostic criteria, such as impulsivity, the inability to plan, unlawful behaviors, a failure to conform to social norms, a lack of remorse, and repeated lying. Like psychopathy, other traits and behaviors of ASPD include duping victims for pleasure or personal profit, showing irritability and aggressiveness, provoking physical altercations or assaults, and displaying wanton disregard for the safety of themselves or others. Other ASPD criteria include persistent irresponsibility, an unstable work history, and refusal to honor monetary obligations. Akin to psychopaths, people with ASPD are indifferent to the harm or loss that they inflict on others. Another DSM-5-TR diagnosis related to psychopathy is conduct disorder with limited prosocial emotional specifiers (i.e., callous-unemotional traits; APA, 2022).

The overlap among psychopathy, sociopathy, and ASPD is expected in part because psychopathy checklist–revised (PCL-R) scores (see below) are highly correlated with the diagnostic criteria of ASPD (Patrick, 2022). The differences among them stem from variations in theoretical perspectives and conceptual frameworks, as well as contrasting emphases on different symptoms in disciplinary contexts (i.e., sociology [sociopathy], psychology [psychopathy], and psychiatry [ASPD]). With regard to ASPD, the DSM-5 notes that "[t]his pattern (of symptoms) has also been referred to as psychopathy, sociopathy, or dyssocial personality disorder" (APA, 2013, p. 659). This shows that the psychiatric nomenclature explicitly recognizes overlaps among the three conditions.

The International Classification of Diseases 11 (World Health Organization, 2018) also includes a diagnosis (dissocial personality disorder) that parallels sociopathy, psychopathy, and ASPD and comprises many of their characteristics (e.g., callousness and a lack of empathy; Farnam & Zamanlu, 2018). Again, the differences are more nuanced than dramatic: ASPD is captured by measurable clinical criteria designed to achieve diagnostic reliability, sociopathy emphasizes environmental and structural influences related to deviancy from social norms, and psychopathy involves psychodynamic and behavioral concomitants arising from a rigid personality structure. Notably, psychopathy is also closely related to narcissistic personality and substance use disorders (Widiger & Crego, 2018).

Sociopaths can be differentiated from psychopaths based on research and clinical observations. In terms of violence, psychopaths are more controlled and calculated, using violence as a means to an end rather than an end in itself. Sociopaths, on the other hand, are more reactive in their displays of violence owing to greater degrees of impulsivity and emotional dysregulation. The criminal behavior of psychopaths is more deliberate and calculated, with consideration given to minimizing clues and the risk of apprehension. Sociopaths are more opportunist and risk-taking in their criminal endeavors. Although psychopaths appear normal in their social relationships, they are purely transactional and superficial in their attachments to others. They are predatory and interested only in self-fulfillment, showing no hesitation in victimizing family members and friends for gain. Sociopaths can empathize, attach to others emotionally, and experience remorse or guilt after committing crimes (Ruhl, 2023).

Assessment of Psychopathy

The attributes of psychopathy parallel those of ASPD, but the assessment of psychopathy requires more clinical understanding than that of ASPD because of the former's personality features. The measurable core traits of psychopathy include grandiosity, shallow

affect, a lack of remorse or guilt, glibness and superficial charm, callousness, a lack of empathy, a need for stimulation and proneness to boredom, pathological lying, and manipulativeness (Hare, 2003). The Hare Psychopathy Checklist-Revised (PCL-R), which is the gold standard for recognizing psychopathy in adults, is a tool comprising 20 items, each scored by a trained examiner on a scale of 0-2. The maximum score is 40; a score of 30 or above is the widely accepted demarcation or cutoff for a diagnosis of psychopathy (Hare, 2003; Hare et al., 2018). Investigators have grouped Hare scores into low (20 and below), moderate (21-29), and high (30 and higher; Kiehl & Hoffman, 2011), with high scores predicting higher levels of criminality, contact with the criminal justice system, and incarceration (Cornell et al., 1996). The PCL-R has four major factors from which its items are derived: interpersonal (e.g., pathological lying), affective (e.g., lack of remorse or guilt), lifestyle (e.g., lack of realistic long-term goals), and antisocial (e.g., juvenile delinquency; Hare, 2003).

Like many mental disorders, psychopathy can be viewed as dimensional rather than categorical (APA, 2013), with ASPD at the lower or less severe end of the psychopathy continuum (Coid & Ullrich, 2010). Psychopathic traits are presumed to be distributed throughout the general population, with prevalence decreasing as scores on the PCL-R increase (Neumann et al., 2015). Psychopathy is determined by scores at the high end of that distribution (Hare & Neumann, 2008; Hart & Hare, 1996).

Genetics of Psychopathy

Like other mental disorders, the etiology of psychopathy consists of complex biological, sociological, and psychological factors (Kiehl & Hoffman, 2011). Efforts to differentiate among its symptoms (e.g., impulsivity and emotionality) have helped reveal the condition's principal nature (Anderson & Kiehl, 2014). Psychopathic traits are associated with high-profile offenders (e.g., serial killers) and malicious or narcissistic autocrats. As a complex behavioral phenotype, psychopathy is purported to be a genetically loaded disorder of unknown origin, manifested by a lack of anxiety and emotional expressiveness, as well as a proclivity to commit violent crimes for monetary gain, sexual gratification, or other manifest purposes, known as "instrumental violence" (Anderson & Kiehl, 2014; Hare, 1999; Hare & Hart, 1993; Viding, 2019).

Twin and Adoption Studies

Evidence for the heritability of psychopathy can be found in monozygotic-dizygotic twin studies, which demonstrate higher concordance rates among identical twins than among fraternal twins, as well as in adoption and family studies, which indicate more similarities among biological relatives than nonbiological relatives. Specifically, psychopaths raised apart from their psychopathic biological parents are more similar to them in terms of their psychopathic traits and criminal histories than they are to their nonpsychopathic adoptive parents, with whom they spent their early lives. These results suggest genetic propensities and neurocognitive vulnerabilities in psychopathy-related personality traits and behaviors (e.g., Cecil et al., 2014; Hyde et al., 2016; McCrory, 2018; Viding & McCrory, 2012).

Laboratory Studies

Psychopaths have blunted physiological responses to threats of prospective punishment, known as "low negative emotionality" (Del Gaizo & Falkenbach, 2008). They are premeditative in their criminal behavior and exhibit normal-to-high levels of executive control function—one of the main characteristics that differentiate psychopathy from sociopathy. Another important variable in distinguishing between sociopathy and psychopathy is the expression of negative affect (emotionality), which is lower in psychopathy than in sociopathy. These characteristics all have neurocognitive substrates (Anderson & Kiehl, 2014; Ross et al., 2007).

Nature vs. Nurture

Psychopathy can also be differentiated from ASPD by the relative contributions of genetics and life experiences, which are difficult to parse but critical in evaluations and explications of psychopathy. Sociopathy is presumed to have lower heritability than psychopathy (i.e., it is less genetically determined). Individuals with sociopathy demonstrate less apparent cognitive or emotional dysfunction and seemingly develop the disorder due to early adversity or childhood trauma (Grabow & Becker-Blease, 2023). Sociopathy is posited to arise from parental abuse, neglect, or other childhood trauma, resulting in a disrupted conscience rather than a nonexistent conscience, as recognized in psychopathy (Vaughn et al., 2009).

Sociopathy also has genetic and neurocognitive underpinnings, which are expressed as executive dysfunction, neuroticism, impulsiveness, anxiousness, recklessness, irritability, aggression, and risk-seeking behavior (Hicks & Drislane, 2018; Ross et al., 2007). Individuals with sociopathy are emotionally reactive and at greater risk of drug use, selfdestructive behavior, and suicidal ideation than those with psychopathy. These traits are referred to as "high negative emotionality" in sociopathy. The opposite traits, or low negative emotionality, are found in psychopathy, which is characterized by low anxiousness and high assertiveness or aggression.

Psychopathic offenders who commit instrumental violence lack emotional and affective arousal while perpetrating crimes and show little empathy and remorse for their victims in the aftermath. Instrumental violence is correlated more highly with psychopathic traits, whereas reactive violence is correlated more highly with sociopathic traits (Grabow & Becker-Blease, 2023). In short, sociopathy is less likely to be heritable and more likely to be determined by external factors than psychopathy (Dhingra & Boduszek, 2013). Few studies have associated psychopathy with environmental influences or factors (Kiehl & Hoffman, 2011).

Neuropsychological Processes and Psychopathy

Emotional Awareness

and Brain Imagery

The psychopath's ability to control and manipulate people without compunction is thought to lie in their lack of empathy and willingness to exploit others (Viding & McCrory, 2019). Psychopaths can recognize the wrongness of their behaviors and the harm they inflict on others but care little or nothing about those consequences (Drayton et al., 2018). Functional magnetic resonance imaging techniques have revealed that the brains of psychopaths are underactive in the areas that specialize in processing the distress and pain of others and registering empathy and guilt (i.e., amygdala, anterior cingulate cortex, and inferior frontal gyrus; Seara-Cardoso & Viding, 2015). Interestingly, psychopaths can compute moral judgments but cannot process the distressing emotions that would inhibit them from harming others (Blair et al., 2018; Brazil et al., 2011).

Psychopaths seem to readily discount the deleterious consequences of their harmful behaviors. They cannot foresee the detrimental outcomes of their actions, particularly when their behavior benefits them, as self-aggrandizement is their persistent overarching motivation (Hosking et al., 2017). "Poorer ability to predict likely punishments can help explain why individuals with psychopathy keep on making poor decisions, even when such decisions have resulted in undesirable outcomes in the past" (Viding, 2019, p. 46). This likely stems from disruptive connectivity within the brain's ventromedial prefrontal cortex-striatal network, which involves emotional processing, decision-making, social cognition, and memory (Sherman & Lynam, 2017).

Executive Functioning and the Frontal Lobe

Executive cognitive functioning (ECF) comprises a subset of neuropsychological abilities such as planning, self-control, and time management (Lyon & Krasnegor, 1999). Insufficiencies in ECF are presumed to be responsible for the poor decision-making ability, aggression, insensitivity to punishment, impulsivity, and inability to regulate the emotional responses found among psychopaths and other offenders who engage in persistent, serious misconduct (Dawes et al., 2000). Psychopathy is correlated with frontal lobe hypoactivity, cognitive shortcomings, and emotional dysregulation (Ross et al., 2007). These altered brain processes could also explain the impulsive and violent predilections that are common in psychopathy. The combination of antisocial traits and impulsivity in psychopathy can also lead to violent crimes during emotional outbursts (i.e., affective violence; Yildirim, 2016).

ECF deficiencies are antecedents for antisocial behavior, such as early and persistent aggression, as well as for substance use, conduct, and attention deficit hyperactivity disorders (Fishbein, 2000; Giancola et al., 1996, 1998; Paschall & Fishbein, 2002; Tarter et al., 1999). Neuropsychological dysfunction can be severe among psychopathic offenders (Raine, 1993; Reiss et al., 1994; Rogers & Robbins, 2001; Volavka, 1995). ECF deficits are corollaries of psychopathic behaviors and traits (e.g., impaired goal-directed behavior, history of conduct disorder, sensation seeking, attention deficits, and poor problem solving; Barratt et al., 1997; Mirsky & Siegel, 1994; Moffitt & Henry, 1989; Schonfeld et al., 1988). Impairments in the facility to assess consequences and act on those assessments (i.e., impulsivity) are primary psychopathic traits (Barratt & Patton, 1983; Gray, 1983; Gray & McNaughton, 1983; Newman, 1987; Shapiro et al., 1988).

Impaired ECF diminishes the ability to interpret social cues during interpersonal interactions, leading to misperceptions of threat or hostility (Sherman & Lynam, 2017; Viding & McCrory, 2019). Consequently, socially adaptive behaviors and responses to eschew aggressive or stressful interactions might be challenging for psychopaths. Furthermore, compromised cognitive control over behavior fosters hostility, negative affective states, and other maladaptive responses that dominate psychopaths' interactions with others (Giancola, 1995).

The cognitive impairments that underlie antisocial behavior appear to originate in the prefrontal cortex (PFC; Bryant et al., 1984; Elliott, 1992; Moffitt & Henry, 1989), which is responsible for higher-level cognitive operations (e.g., reasoning, problem-solving, and weighing consequences). Hence, the neuropsychological functions executed by the PFC, such as forethought, moral reasoning, behavioral inhibition, and learning from experience, are disrupted in psychopathy (Bechara et al., 1994; Damasio et al., 1990). Some studies have implicated the brain's paralimbic regions, including the amygdala, cingulate, and insula (Harenski et al., 2010). In summary, "[t]he psychopathic brain is markedly deficient in neutral areas critical for three aspects of moral judgment: recognizing moral issues, inhibiting a response pending resolution of the moral issue, and deciding the moral issue" (Kiehl & Hoffman, 2011, pp. 380-381).

Psychopathy, Crime, and Recidivism

Psychopathic offenders commit a wider variety of crimes and begin offending at younger ages than nonpsychopathic offenders. They are also likelier to engage in instrumental violent crimes and use weapons and threaten violence when committing crimes (e.g., armed robbery). A diagnosis of psychopathy is related to a 15-25 percent higher risk of imprisonment (Kiehl & Hoffman, 2011). Moreover, psychopathic offenders are likelier to violate rules when incarcerated (Cornell et al., 1996) and to reoffend when released. Thus, "[psychopathy] is a powerful predictor of institutional misconduct and the potential for reoffending" (Douglas et al., 2018, p. 545). Adult psychopaths released from prison recidivate at significantly higher rates and within significantly shorter periods than nonpsychopaths (Kiehl & Hoffman, 2011). Similarly, psychopathic adolescent offenders are likelier than those without the disorder to

be aggressive, commit violent offenses (both instrumental and reactive), and have numerous encounters with the police (Dhingra & Boduszek, 2013). They are also likelier than nonpsychopathic adolescent offenders to engage in coercive and violent sexual attacks against adults (Harris et al., 2007; Lalumière et al., 2001; Vachon et al., 2012).

Psychopathy is related to protracted criminality. For example, higher PCL-R scores correlate with higher conviction rates from ages 16 to 40 (Dhingra & Boduszek, 2013). Although conviction rates drop dramatically with age in the general population, in persons with high PCL-R scores, these rates persist, suggesting that psychopaths have a sustained facility to commit crimes and supporting the notion of psychopathy as a lifelong affliction (Dhingra & Boduszek, 2013). Psychopathic offenders have up to four- or five-times higher recidivism rates than nonpsychopathic offenders, and psychopathy predicts higher recidivism rates for crimes in general, as well as higher recidivism rates for violent and sexual crimes in particular (Dhingra & Boduszek, 2013).

In a forensic study of psychopaths, data showed that 80 percent of the sample committed violent crimes within a year of their release from a maximum-security psychiatric hospital (Harris et al., 1991). Psychopathy was a stronger predictor of recidivism among those offenders than the combined effects of 16 other background, demographic, and criminal history factors included in the analyses, including childhood and adult criminal histories, index offenses, and institutional and program variables. Psychopaths offend repeatedly at high rates and are not deterred by the prospect of (re)incarceration (Harris et al., 1991). Despite having consistently higher rates of arrest and recidivism than nonpsychopathic offenders, they are two-and-a-half times likelier to be granted parole than other prisoner populations (Palmen et al., 2020). This may be due to their capacity to deceive and manipulate others, enabling them to argue more persuasively for release to the parole board than nonpsychopathic prisoners.

Treatment of Psychopathy

No specific treatment has yet been developed to alleviate the signs and symptoms of psychopathy. Indeed, the treatment of psychopathy has long been believed to be a "fruitless endeavor," as Cleckley (1941) wrote in *The Mask of Sanity*, which concluded that psychopaths would benefit little from psychotherapy. Nonetheless, the latest clinical thinking suggests that psychopaths could be amenable to treatment, especially in programs tailored to specific patterns of symptoms (DeAngelis, 2022). A deeper clinical understanding of psychopathy could lead to improved therapies for the disorder (Del Gaizo & Falkenbach, 2008). Overall, little evidence suggests that psychopaths are fundamentally untreatable (Viding, 2019); nonetheless, in therapy, they can acquire knowledge and skills to manipulate others and further their own interests and gains (Hare, 1993).

Cognitive behavioral therapy (CBT) is one of the more effective types of treatment for psychopathy, with a success rate of 62 percent, as revealed in a meta-analysis of five studies with 246 participants. Success was measured by comparing pre-and post-treatment measures of psychopathy and recidivism rates (treated versus untreated men with psychopathy). CBT works well because such treatment entails controlling behavior and reducing recidivism rates (Salekin, 2002). The core of CBT techniques involves addressing cognitive distortions, providing social skills and resocialization training, teaching coping skills, and correcting maladaptive behaviors, all of which are potentially effective treatments for psychopaths (Hecht et al., 2018).

Psychopaths who express emotionality through violence and substance use would likely benefit from CBT's cognitive restructuring techniques, the behavioral change components of CBT, and the reexperiencing of emotional triggering scenarios in a safe therapeutic environment. Individuals high in psychopathic traits who are less likely to be unresponsive to talk therapy and cognitive restructuring could be amenable to other forms of CBT. Strictly controlled skill-building programs that focus on recidivism reduction are likely to be more effective approaches to altering the callous and manipulative behaviors of psychopaths than standard talk therapies (Viding, 2019).

As an offshoot of CBT, schema therapy (ST) has been effective in reducing the symptoms of psychopathy and other personality disorders in a population of violent inmates (Bernstein et al., 2023). ST underscores unmet emotional needs from childhood (e.g., attachment issues) and uses techniques to modulate emotional states and build better coping and social skills (Young et al., 2003). Childhood interventions with high-risk children (i.e., those with conduct disorders) show that the most effective techniques reinforce prosocial behaviors to increase them rather than punish such behaviors to extinguish them (Hawes & Dadds, 2005).

Shifting the emphasis from alleviating the symptoms of psychopaths to managing their criminogenic needs could prove to be a practical approach to reducing recidivism in this high-risk group. Programs incorporating the RNR model of criminal rehabilitation have shown promise in reducing recidivism overall (Taxman et al., 2006). The effectiveness of such programs for psychopaths is low; however, RNR has been effective in reducing recidivism in the general offender population (Polachek & Skeem, 2018).

Therapeutic programs adhering to RNR principles, including cognitive restructuring and relapse prevention techniques, could effectively reduce recidivism among offenders with mental illnesses, including personality disorders (Skeem et al., 2009). In the RNR model, more intensive psychiatric interventions for higher risk offenders would involve individual and group treatment as well as anger management sessions. CBT programs with RNR principles are more effective when they target the criminogenic needs of offenders with behavioral health problems. According to Skeem et al. (2009), these programs can reduce recidivism by 25–50 percent.

RNR-based rehabilitation programs for offenders should examine further whether this model can also work for psychopaths. Studies on the treatment of psychopathy should address three key points: whether offenders with psychopathy can benefit from treatment programs for high-risk offenders, whether certain features of psychopathy mediate or moderate treatment, and whether treatments aimed at reducing antisocial behaviors have any effect on the symptoms of psychopathy (Polachek et al., 2018).

The best hope for treatment progress lies in juveniles with psychopathy. Studies using a method known as decompression therapy have shown promising results in reducing recidivism among juveniles with high scores on the PCL-YV (youth version) (Forth et al., 2003). This type of therapy is highly intensive and longer-term (six months to one year). In one study of the intervention, offenders with no treatment were seven times more likely to recidivate (i.e., rearrests in two years) than those in decompression therapy (Caldwell et al., 2001). In a five-year follow-up, the recidivism rates were 56 percent rearrested for the treated group and 78 percent rearrested for the untreated group. The untreated juveniles were

twice as likely to commit violent crimes in the follow-up period than those who received treatment, at 36 percent rearrest and 18 percent rearrest, respectively (Caldwell et al., 2005).

Conclusions

Psychopathy is a personality disorder that should be considered in community corrections models and practices. Outside of prison, the prevalence of psychopathy in correctional populations has been grossly understudied. Evidence suggests that rates are likely to be elevated in such populations and should be investigated using the PCL-R or one of its derivations, such as the psychopathic personality traits scale, which can be adopted for self-administration (Boduszek et al., 2018). The conceptualization of psychopathy as a personality spectrum disorder is a reasonable approach toward its adoption into RNR-based assessment, supervision, and treatment strategies for offenders, especially considering the significant risk of recidivism and violence associated with psychopathic features. Measuring degrees of psychopathy could be advantageous for developing more effective programming based on modified and tested CBT, ST, and decompression models for probationers and parolees at the higher end of the psychopathy scale.

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