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Measuring Change: From Rates of Recidivism to Markers of Desistance

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MEASURING CHANGE: FROM RATES OF RECIDIVISM TO MARKERS OF DESISTANCE

CECELIA KLINGELE*

Reducing the incidence of crime is a primary task of the criminal justice system and one for which it rightly should be held accountable. The system's success is frequently judged by the recidivism rates of those who are subject to various criminal justice interventions, from treatment programs to imprisonment. This Article suggests that, however popular, recidivism alone is a poor metric for gauging the success of criminal justice interventions or of those who participate in them. This is true primarily because recidivism is a binary measure, and behavioral change is a multi-faceted process. Accepting recidivism as a valid, stand-alone metric imposes on the criminal justice system a responsibility beyond its capacity, demanding that its success turn on transforming even the most serious and intractable of offenders into fully law-abiding citizens. Instead of measuring success by simple rates of recidivism, policymakers should seek more nuanced metrics. One such alternative is readily available: markers of desistance. Desistance, which in this context means the process by which individuals move from a life that is crime-involved to one that is not, is evidenced not just by whether a person re-offends but also by whether there are increasing intervals between offenses and patterns of de-escalating behavior. These easily obtainable metrics, which are already widely relied on by criminologists, can yield more nuanced information about the degree to which criminal justice interventions correlate with positive (or negative) life changes. They also resemble more closely the ways in which other fields that address behavioral change such as education attempt to measure change over time. Measuring

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the success of criminal justice interventions by reference to their effects on desistance would mean seeking evidence of progress, not perfection. Such an approach would allow criminal justice agencies to be held accountable for promoting positive change without asking them to do the impossible, thereby creating new pathways by which the criminal justice system could be recognized for achieving real and measurable progress in crime reduction.

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INTRODUCTION

The U.S. criminal justice system operates on an estimated annual budget of more than 180 billion dollars.¹ At any given time, the system employs more than 870,000 police officers,² 32,800 prosecutors,³ an untallyable

¹ John F. Pfaff, *Criminal Punishment and the Politics of Place*, 45 *FORDHAM URB. L. J.* 571, 579 (2018); TRACEY KYCKELHAHN, U.S. BUREAU OF JUST. STAT., JUSTICE EXPENDITURE AND EMPLOYMENT EXTRACTS, 2012-PRELIMINARY (2015), <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5239> [<https://perma.cc/2T8H-ER4D>].

² DUREN BANKS ET AL., NATIONAL SOURCES OF LAW ENFORCEMENT EMPLOYMENT DATA, BUREAU OF JUST. STAT. 2, T.1 (2016), <https://www.bjs.gov/content/pub/pdf/nslead.pdf> [<https://perma.cc/EK8V-8742>] (reporting on number of sworn state law enforcement officers); BRIAN A. REAVES, FEDERAL LAW ENFORCEMENT OFFICERS, 2008, BUREAU OF JUST. STAT. 1 (2012), <https://www.bjs.gov/content/pub/pdf/fleo08.pdf> [<https://perma.cc/P62R-YKUX>] (reporting 120,000 full-time federal law enforcement officers in 2008).

³ STEVEN W. PERRY & DUREN BANKS, PROSECUTORS IN STATE COURTS, 2007—STATISTICAL TABLES, BUREAU OF JUST. STAT. 4, T. 3 (2011), <https://www.bjs.gov/content/pub/pdf/psc07st.pdf> [<https://perma.cc/ZFJ2-JKXC>] (reporting that 35% of the 77,927 people employed full-time by state prosecutors' offices were chief or assistant prosecuting attorneys); Daniel Richman, *Political Control of Federal Prosecutions: Looking Back and Looking Forward*, 58 *DUKE L.J.* 2087, 2088 (2009).

number of criminal defense attorneys,⁴ and over 502,000 correctional officials.⁵ It prosecutes more than fifteen million cases each year,⁶ and imprisons or supervises more than 6.6 million people.⁷ Given the size of the criminal justice infrastructure, it is not surprising that policymakers and the public at large have pressed for more transparency about the effectiveness—or ineffectiveness—of various criminal justice practices and programs.⁸ The

⁴ There is no direct estimate of the number of criminal defense lawyers in the United States, though the National Association of Criminal Defense Attorneys—a completely voluntary organization for private and public defense lawyers, and other interested stakeholders—boasts over 40,000 members. Nat'l Assoc. Crim. Def. Lawyers, *About NACDL*, <https://www.nacdl.org/about.aspx> [<https://perma.cc/22QX-8KYP>]. Estimates suggest that in 2008, state and county indigent defense agencies employed more than 15,000 criminal defense attorneys. LYNN LANGTON & DONALD FAROLE, STATE PUBLIC DEFENDER PROGRAMS, 2007, BUREAU OF JUST. STAT. 3 T.1 (2010), <https://www.bjs.gov/content/pub/pdf/spdp07.pdf> [<https://perma.cc/R9Q5-CSSZ>]. The nation's 94 federal judicial districts employ more than 12,000 panel attorneys under the Criminal Justice Act and maintain a combined lawyer and support staff of more than 3,700 people. DEFENDER SERVICES, U.S. COURTS, <http://www.uscourts.gov/services-forms/defender-services> [<https://perma.cc/4RPV-FUV4>].

⁵ BUREAU OF LABOR STATISTICS, CORRECTIONAL OFFICERS AND JAILERS, MAY 2018, [https://www.bls.gov/oes/current/oes333012.htm#\(1\)](https://www.bls.gov/oes/current/oes333012.htm#(1)) [<https://perma.cc/PY8L-WDTW>]; BUREAU OF LABOR STATISTICS, PROBATION OFFICERS AND CORRECTIONAL TREATMENT SPECIALISTS, MAY 2018, <https://www.bls.gov/oes/current/oes211092.htm#st> [<https://perma.cc/5K7D-EKWT>] (reporting 87,660 jobs in 2018).

⁶ *Federal Judicial Caseload Statistics 2018*, UNITED STATES COURTS, <https://www.uscourts.gov/statistics-reports/federal-judicial-caseload-statistics-2018> [<https://perma.cc/T8Q4-2XP4>] (last visited May 5, 2019) (showing 81,553 newly-filed criminal cases in 2018); R. Schaufli et al., ed., *Court Statistics Project DataViewer*, COURT STATISTICS PROJECT (Jan. 11, 2017), www.courtstatistics.org [<https://perma.cc/5EMT-CFUT>] (last visited May 5, 2019) (reporting 15,125,229 new criminal cases filed in 2017 in 40 states and the District of Columbia).

⁷ DANIELLE KAEBLE & MARY COWHIG, CORRECTIONAL POPULATIONS IN THE UNITED STATES, 2016, BUREAU OF JUST. STAT. 2 (2018), <https://www.bjs.gov/content/pub/pdf/cpus16.pdf> [<https://perma.cc/QWM5-3D3V>].

⁸ See, e.g., Josh Salman, 'A Game-Changer': Florida House Passes Criminal Justice Reform Bill: Newspaper Series on Sentencing Disparities Got Ball Rolling on Legislation, SARASOTA HERALD-TRIBUNE (Feb. 22, 2018), <http://www.heraldtribune.com/news/20180222/a-game-changer-florida-house-passes-criminal-justice-reform-bill> [<https://perma.cc/9SRB-CQKS>] (last visited May 5, 2019) (reporting on new law to make criminal justice data more transparent as a result of media reporting on data inaccuracies and racial disparities in sentencing); Mike Nerheim & Meg Reiss, *The Criminal Justice System Needs to Start Learning from Its Mistakes*, THE HILL (Nov. 18, 2017), <http://thehill.com/opinion/criminal-justice/360969-the-criminal-justice-system-needs-to-start-learning-from-its> [<https://perma.cc/YU2R-ZC93>] (last visited May 5, 2019) (“As democratically elected officials, prosecutors’ legitimacy is premised on public trust. Although they are tasked with holding people accountable, they are rarely held accountable In order to actively build public trust and foster public safety, prosecutors should scrutinize existing systems that allow any wrongdoing or practice to occur . . . and support implementing processes and procedures that enhance transparency of and accountability for their decisions.”); David A. Graham, *What Can the U.S.*

fundamental question is whether the system is worth its significant costs in both resources and human lives.

While demands for accountability are both prudent and fair, determining how to measure effectiveness is difficult. Whether the focus of evaluation is on the success of system actors (such as police, prosecutors, or judges), participants (such as arrestees, defendants, or prisoners), or specific interventions (such as drug courts, probation supervision, or restorative justice programs); it is not always clear how success should be defined or measured. If the goal of the criminal justice system is to advance public safety and promote proportional accountability for wrongdoing,⁹ then the best metrics would be those that reveal how well system actors prevent criminal harm or restore community confidence that justice has been served. Such outcomes are difficult to quantify, however, and policy analysts often default to measurements that are easier to gather: number of arrests made, amount of restitution collected, or number of convictions secured.¹⁰

Those within the criminal justice system and those outside it rely heavily on another measure of success: rates of recidivism. Recidivism rates are one of the primary ways that legislators, policymakers, grant funders, media outlets, and criminal justice system actors determine whether specific criminal justice interventions have succeeded or failed.¹¹ As Joan Petersilia wrote in her authoritative article on recidivism:

Do to Improve Police Accountability?, THE ATLANTIC (Mar. 8, 2016), <https://www.theatlantic.com/politics/archive/2016/03/police-accountability/472524/> [<https://perma.cc/96M8-R24G>] (last visited May 5, 2019) (“The lack of reliable information on policing has been a major hindrance to discussions.”).

⁹ There are, of course, many purposes to the criminal justice system. *See generally* H. L. A. HART, *Prolegomenon to the Principles of Punishment*, in PUNISHMENT AND RESPONSIBILITY: ESSAYS IN THE PHILOSOPHY OF LAW (1968). Some of these exist in tension with each other, and others co-exist more comfortably. *See, e.g.*, Kevin M. Carlsmith et al., *Why Do We Punish? Deterrence and Just Deserts as Motives for Punishment*, 83 J. PERSONALITY & SOC. PSYCH. 284 (2002) (discussing tensions between retributive and deterrent philosophies of punishment). Among the most traditionally recognized of these are the need for public protection and the desire to hold offenders morally accountable for their willful wrongdoing. *See generally* Michael Tonry, *Thinking About Punishment*, in WHY PUNISH? HOW MUCH? A READER ON PUNISHMENT (Michael Tonry ed., 2011).

¹⁰ *Cf.* Cecelia Klingele et al., *Reimagining Criminal Justice*, 2010 WIS. L. REV. 953, 995 (2010) (“Agencies like quantifiable statistics, and prevention is notoriously difficult to quantify.”).

¹¹ *See, e.g.*, CONN. GEN. STAT. ANN. § 18-81w(b) (2007) (“The success of the reentry strategy shall be measured by: (1) The rates of recidivism and community revictimization”); TEX. GOV’T CODE § 509.003(a)(3) (2015) (“The [Community Justice Assistance Division] shall propose and the board shall adopt reasonable rules establishing . . . methods for measuring the success of community supervision and corrections programs, including methods for measuring rates of diversion, program completion, and

Defining and measuring recidivism are . . . central to answering the question “How well are we doing?” It has been said that recidivism rates are to the criminologist what the Geiger counter is to the geologist. In other words, they are the most objective overall basis we have for evaluating the performance of justice agencies.¹²

While criminologists have developed nuanced ways of gathering and interpreting recidivism data, criminal justice agencies typically examine recidivism rates in isolation from other available measures of success.¹³ On its face, recidivism seems a sensible metric: re-offense is what recidivism rates purport to measure, and a reduction in crime is undeniably a primary goal of the criminal justice system. Moreover, when a convicted person does

recidivism.”); UTAH CODE ANN. 1953 § 64-13-25(4)(a) (2015) (“The department shall collaborate with the Division of Substance Abuse and Mental Health to develop and coordinate the performance goals and outcome measurements, including recidivism rates and treatment success and failure rates.”); Alana Saulniera & Diane Sivasubramaniam, *Restorative Justice: Underlying Mechanisms and Future Directions*, 18 NEW CRIM. L. REV. 510, 516 (2015) (“Rates of recidivism are perhaps considered the ultimate measure of success and are one of the most frequently compared outcomes of restorative and retributive procedures.”); Kevin Rector, *Justice Department Gives Baltimore Police \$750,000 Grant to Fight Recidivism*, BALTIMORE SUN, Sept. 28, 2017 <https://www.baltimoresun.com/news/crime/bs-md-ci-doj-recidivism-grant-20170928-story.html> [<https://perma.cc/CN3V-KC28>]; NAT’L REENTRY RESOURCE CENTER, SECOND CHANCE ACT STATEWIDE RECIDIVISM REDUCTION PROGRAM <https://csgjusticecenter.org/nrrc/second-chance-act-recidivism-reduction-grant-program/> [<https://perma.cc/74ZZ-SDXC>] (last visited May 5, 2019) (“Among the most critical priorities for . . . grant recipients is to implement evidence-based practices and core correctional practices States that receive SRR grants utilize the funds to pursue an intensive, collaborative process that brings the governor’s office, state policymakers, and corrections leaders together to set measurable recidivism-reduction goals and develop practical, data-driven plans to achieve them.”).

¹² Joan Petersilia, *Recidivism*, in *ENCYCLOPEDIA OF AMERICAN PRISONS* 382, 382 (Marilyn D. McShane & Frank P. Williams III eds., 1996) (citing Korn and McCorkle 24 (1966)); see also Janet L. Jackson et al., *A Critical Look at Research on Alternatives to Custody*, 59 FED. PROB. 43, 44–45 (1995) (“A considerable number of empirical studies comparing the effectiveness of different sanctions are to be found in the literature. . . . Although other aspects have been considered by some researchers, in general, recidivism has been the most important and frequently exclusive indicator of effectiveness.”).

¹³ See, e.g., CENTER FOR STATE GOVERNMENTS, *REDUCING RECIDIVISM: STATES DELIVER RESULTS* (2017) https://csgjusticecenter.org/wp-content/uploads/2017/06/6.12.17_Reducing-Recidivism_States-Deliver-Results.pdf [<https://perma.cc/BM43-ZDDV>] (reporting on cohort-based and revocation-based recidivism for seven states); NANCY LA VIGNE ET AL., *JUSTICE REINVESTMENT AT THE LOCAL LEVEL: PLANNING AND IMPLEMENTATION GUIDEBOOK*, URB. INST. (2010), <http://www.urban.org/UploadedPDF/412233-Justice-Reinvestment.pdf> [<https://perma.cc/78DH-SDK2>]; COUNCIL OF JUVENILE CORRECTIONAL ADMINISTRATORS, *DEFINING AND MEASURING RECIDIVISM* (2009), <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=259797> [<https://perma.cc/6XFP-QS7F>]; Martha Lyman & Stefan LoBuglio, ‘Whys’ and ‘Hows’ of Measuring Jail Recidivism, *AM. JAILS* 9 (Mar./Apr. 2007), https://www.montgomerycountymd.gov/COR/Resources/Files/PDF/jail_recidivism.pdf [<https://perma.cc/2A4H-FN7J>]

not offend again, that *is* a success. Even so, there is a difference between commending those who abandon crime entirely—whether by virtue of a criminal justice intervention or otherwise—and saying that the criminal justice system fails whenever it does not fully transform law-breakers into models of perfect compliance.

One problem with recidivism is that it is a binary measure: either a person commits a new crime, or he does not. Absent from data that measure rates of recidivism is an appreciation for the nuances of human behavioral change. The addict who stops selling drugs (but shoplifts a few canned goods) and the batterer who again assaults his wife are both “recidivists,” but there is a clear distinction between them. Recidivism as a metric is not sensitive to reductions in the severity or frequency of offending, even though such reductions often serve as markers of progress and indicate a reduction in harm caused to the community.¹⁴ By over-relying on recidivism rates to gauge success, policymakers and system actors alike risk underappreciating change by individual defendants and undervaluing the criminal justice interventions that move people forward. Moreover, by looking only at whether past offenders have recidivated, rather than at how often and in what ways they recidivate, system actors risk missing clues about escalating dangers or underestimating the harm inflicted by ill-conceived interventions.

So, how should success and failure be measured when it comes to the criminal justice system and those in it? Much of that depends on what we are trying to measure and what resources we have available to capture data. While there are many ways to gauge individual and programmatic success,¹⁵ this Article focuses on one particularly simple alternative to recidivism: markers of desistance.

Criminologists have long studied what makes people stop committing crimes. Studies have examined youth and adults at various life stages and have identified a myriad psychological, social, physical, and environmental factors that are correlated with desistance¹⁶—that is, the process by which people disentangle themselves from criminal behavior and connect to

¹⁴ See *infra* Section III.A.

¹⁵ These include examining individuals’ pre and post-intervention health, substance abuse rates, economic prosperity, community engagement, and self-reported satisfaction with programs and program staff. Cf. Brandy L. Blasko et al., *Performance Measures in Community Corrections: Measuring Effective Supervision Practices with Existing Agency Data*, 80 FED. PROB., 3, 26, 28 (2016) (advocating for an examination of factors such as supervisees’ program engagement, negative drug tests, speed of referral, and level of supervision as important markers of success and failure for community supervision agencies).

¹⁶ See John H. Laub & Robert J. Sampson, *Understanding Desistance from Crime*, 28 CRIME & JUST. 1, 17–25 (2001) (reviewing studies of correlates of desistance).

prosocial activities and associates.¹⁷ While the path to desistance is not always a straight one,¹⁸ the data by which sociologists track behavior often focuses on the severity and frequency of an individual's criminal behavior.¹⁹ Serious "persisters" can be identified by their often frequent involvement in crime and sometimes by an escalation in their offense severity.²⁰ "Desisters," by contrast, can be identified by their sometimes instant, but more often gradual, termination of criminal behavior.²¹ This more nuanced, academic approach to gathering and analyzing crime data has, for the most part, not translated into changes in the way criminal justice administrators measure and report rates of recidivism.²²

When desistance is discussed in the legal criminal justice literature, it is often used as an antonym for recidivism, rather than as a description of the process by which one progresses toward the end-goal of complete compliance with the law.²³

17 Cf. *id.* at 11 ("Termination is the time at which criminal activity stops. Desistance, by contrast, is the causal process that supports the termination of offending."); Shawn D. Bushway et al., *An Empirical Framework for Studying Desistance as a Process*, 39 CRIMINOLOGY 491, 491–92 (2001) ("Most criminologists define desistance as the state of having 'terminated' offending. But recently, criminologists have begun to reexamine and expand the definition of desistance to include attention to the process by which people arrive at this state of nonoffending."); Shawn D. Bushway et al., *Desistance as a Developmental Process: A Comparison of Static and Dynamic Approaches*, 19 J. QUANT. CRIMINOLOGY 129, 133 (2003) (defining desistance "as the process of reduction in the rate of offending from a nonzero level to a stable rate empirically indistinguishable from zero. The key to this definition is that it views desistance as a process, not a state").

18 See generally Alex R. Piquero, *Somewhere Between Persistence and Desistance: The Intermittency of Criminal Careers*, in AFTER CRIME AND PUNISHMENT: PATHWAYS TO OFFENDER REINTEGRATION 102 (Shadd Maruna & Russ Immarigeon eds., 2004).

19 See Rolf Loeber & Marc LeBlanc, *Toward a Developmental Criminology*, 12 CRIME & JUST. 375, 409 (1990) ("[D]esistance concerns a slowing down in the frequency of offending (deceleration), a reduction in its variety (specialization), and a reduction in its seriousness (de-escalation).").

20 See Terrence P. Thornberry, *Explaining Multiple Patterns of Offending Across the Life Course and Across Generations*, 600 ANN. AM. ACADEMY POL. & SOC. SCI. 156, 159 (2005) ("[A]lthough some involvement in offending is common, relatively few offenders will have extensive criminal careers. Extensiveness includes such dimensions as frequency, duration, seriousness, and, especially, the co-occurrence of these dimensions.").

21 See Loeber & LeBlanc, *supra* note 19, at 409.

22 See RYAN KING & BRIAN ELDERBROOM, IMPROVING RECIDIVISM AS A PERFORMANCE MEASURE, URB. INST. 2–3 (2014), <https://www.bja.gov/Publications/UI-ImprovingRecidivism.pdf> [<https://perma.cc/2QDD-NSZC>] (advocating for the broader use by administrators of some of the metrics used by criminologists, including time-to-new-offense).

23 See, e.g., Laub & Sampson, *supra* note 16, at 5 (discussing "conceptual issues" in the definition of desistance).

Some of the metrics gathered by criminologists—particularly intervals between offenses and offense severity over time—are easily ascertainable by reference to the recidivism data already collected and analyzed by the criminal justice system. While such data remain an imperfect measure of change, utilizing these “markers of desistance” would enable policymakers and criminal justice stakeholders to develop a significantly more nuanced picture of offenders’ aggregate and individual behavioral change and of how criminal justice interventions positively and negatively affect that change. Rather than limiting the definition of “success” to those state interventions that (rather implausibly) claim to fully eradicate criminal behavior among some fraction of their participants, success should also be understood to include those programs that move people forward on the path of desistance. Similarly, by seeing desistance as a process, system actors might better discern both positive and negative behavioral changes in repeat offenders, allowing them to contextualize the statistical predictions of individual recidivism risk currently used by criminal justice agencies at all stages of the criminal process.

This Article speaks broadly to criminal justice scholars, administrators, and stakeholders but especially to those who lack specialized training in the statistical methods used by criminologists to study recidivism and desistance. It explains to a legal audience the limitations of relying on recidivism rates as a measure of systemic or individual “success” and encourages the adoption of desistance over time as an alternative measure. It does so for three reasons. First, it is relatively easy to do: markers of desistance can be easily derived from existing recidivism data. Second, focusing on markers of desistance increases the system’s ability to accurately discern which criminal justice programs are improving offender behavior and which are causing greater harm. Finally, training system stakeholders to see success in markers of desistance, and not just in the absence of recidivism, can shape the way judges, lawyers, and correctional administrators employ the recidivism risk prediction tools that are increasingly being adopted by criminal justice agencies.

Part I describes the many ways recidivism is currently used to measure and predict the success or failure of programs and people within the criminal justice system. Part II dissects the concept of recidivism, examining the many ways in which it has been defined and measured and translating for legal audiences the meanings of recidivism rates as they are reported by program analysts. Part III explores how criminology and analogous fields understand the phenomenon of behavioral change and measure the success of programmatic interventions. In light of the mechanisms of behavioral change discussed in Part III, Part IV examines the problems created directly

and indirectly by overreliance on recidivism data, including incentives for data gaming, the premature termination of otherwise promising programs for advancing public safety, and excessively risk-averse behavior by system actors. Part V concludes with a call for change in how policymakers and criminal justice system actors think about and measure success in the criminal justice system. It encourages administrators and policymakers to draw on markers of desistance to provide a significantly more nuanced picture of individual change over time, and of the role that criminal justice interventions may play in promoting or hindering that change process.

I. DEFINING SUCCESS IN CRIMINAL JUSTICE

It is easy to imagine any number of ways in which the effectiveness of the criminal justice system might be assessed. Efforts could be undertaken to quantify reductions in crime²⁴ or improvements in the degree to which people feel safe when going about their daily business.²⁵ Policymakers could assess metrics of community health²⁶ or the satisfaction of stakeholders, from crime victims to defendants.²⁷ We measure what we value, and for that reason any metric we select is likely to tell us as much about those who operate the criminal justice system as it is to tell us about the effectiveness of the system itself. While more robust metrics (like those listed above) are collected and analyzed in isolated instances, policymakers and criminal justice stakeholders tend to give minimal attention to measures beyond recidivism.²⁸

²⁴ Paul Ekbloma & Ken Pease, *Evaluating Crime Prevention*, 9 CRIME & JUST. 585, 643 (1995) (detailing the challenges of quantifying the effects of crime prevention efforts, including problems with “[b]ackground fluctuation in the variables of interest, uncertainties in the interpretation of cause and effect, and vagaries in how programs are implemented are among the recurring problems”).

²⁵ Wesley G. Skogan, *Measuring What Matters: Crime, Disorder, and Fear*, in MEASURING WHAT MATTERS: PROCEEDINGS FROM THE POLICING RESEARCH INSTITUTE MEETINGS, NAT’L INST. JUST. 37, 47–50 (Robert H. Langworthy, ed. 1999), <https://www.ncjrs.gov/pdffiles1/nij/170610.pdf> [<https://perma.cc/5G47-S28L>] (discussing ways to measure fear of crime).

²⁶ See, e.g., Susanne Mayer et al., *Health-Related Resource-Use Measurement Instruments for Intersectoral Costs and Benefits in the Education and Criminal Justice Sectors*, 35 PHARMACOECONOMICS 895 (2017).

²⁷ See JULIAN V. ROBERTS, UNDERSTANDING PUBLIC ATTITUDES TO CRIMINAL JUSTICE 32 (2005) (“Confidence or trust has been measured using a number of different questions. Pollsters have asked questions that address issues of fairness and integrity, and ones that address issues of competence or effectiveness.”).

²⁸ John J. DiIulio, *Rethinking the Criminal Justice System: Toward a New Paradigm*, in PERFORMANCE MEASURES FOR THE CRIMINAL JUSTICE SYSTEM, BUREAU OF JUST. STAT. 1 (1992) (“Rates of crime and recidivism have long served as critical measures for the performance of the Nation’s criminal justice system. These measures represent the basic goals

Recidivism data, both historic and predictive, are used to define success in multiple ways within the criminal justice system. Some focus on individual defendants, as when judges or probation officers use actuarial instruments to predict particular defendants' statistical risks of future recidivism.²⁹ Others use recidivism data as "a policy outcome" to report on the success (or failure) of "new correctional or reentry experiments."³⁰ Still others assess the effectiveness of the criminal justice system as a whole, such as reports by state and federal justice departments that quantify recidivism rates for those exiting correctional institutions.³¹

Governmental agencies are perhaps the largest consumers of recidivism data. The website of the National Institute of Justice (NIJ) proudly proclaims that "[r]ecidivism research is embedded throughout NIJ-sponsored research in sentencing, corrections and policy intervention evaluations. Many NIJ-funded studies of community supervision depend on recidivism measurement

of public safety to which all components of the criminal justice system contribute. At the same time, however, rates of crime and recidivism are not the only, or necessarily the best, measures of what criminal justice institutions do."). See Chris Cunneen & Garth Luke, *Recidivism and the Effectiveness of Criminal Justice Interventions: Juvenile Offenders and Post Release Support*, 19 CURRENT ISSUES IN CRIM. JUST. 198 (2007) ("[O]ur argument here is that [measures of recidivism] appear to now outweigh all other measures when considering the impact of particular criminal justice policies, programs and other types of interventions.").

²⁹ See, e.g., *J.S. v. State*, 928 N.E.2d 576, 579 (Ind. 2010) (explaining that the function of LSI-R "is to supplement and enhance a judge's evaluation, weighing, and application of the other sentencing evidence in the formulation of an individualized sentencing program appropriate for each defendant"); *Jones v. Com.*, No. 2000-CA-001746-MR, 2003 WL 21713776 (Ky. Ct. App. July 25, 2003) ("[S]exual-offender risk-assessment reports . . . are now conducted as part of a comprehensive pre-sentencing evaluation. The purpose of such reports [is] to provide the trial court with a recommendation assessing the defendant's risk of re-committing a sex crime, the threat which the defendant poses to public safety, the defendant's amenability to sex offender treatment, and the nature of the required treatment."); *State v. Loomis*, 881 N.W.2d 749 (Wis. 2016) (discussing use of COMPAS risk assessment results at sentencing).

³⁰ See Robert Weisberg, *Meanings and Measures of Recidivism*, 87 S. CAL. L. REV. 785, 788 (2014).

³¹ See, e.g., CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION 2017 OUTCOME EVALUATION REPORT: AN EXAMINATION OF OFFENDERS RELEASED IN FISCAL YEAR 2012-13 (2017), <https://sites.cdcr.ca.gov/research/wp-content/uploads/sites/9/2018/04/2017-Outcome-Evaluation-Report.pdf> [<https://perma.cc/CF2U-LKLZ>]; RICHARD L. WIENER, UNIV. OF NEBRASKA LAW & PSYCH. PROGRAM, RECIDIVISM RATES FOR NEBRASKA ADULT PROBATIONERS: 2006 TO 2012 (2017), <https://supremecourt.nebraska.gov/sites/default/files/recidivism-rates-adults-jan-2017.pdf> [<https://perma.cc/HU6K-GKG2>]; JOSEPH R. TATAR II & MEGAN JONES, RECIDIVISM AFTER RELEASE FROM PRISON, WIS. DEP'T OF CORRECTIONS. (2016).

to inform probation and parole policy.”³² The federal Second Chance Act, which authorizes millions of dollars in grants to state governments and non-profit service agencies assisting former prisoners, specifies that recipients must develop a “comprehensive strategic re-entry plan” that includes a measurable performance outcome of “reduc[ing] the rate of recidivism . . . by 50 percent over a 5-year period for offenders released from prison, jail, or a juvenile facility.”³³ (In likely recognition of the implausibility of achieving such dramatic reductions, grant applications encourage applicants “to establish reasonable recidivism reduction goals for their state based on current conditions and drivers.”³⁴) Interest in measuring recidivism rates extends to juvenile justice, where programmatic success is also measured by reference to reductions in recidivism rates.³⁵

Private charitable foundations have similarly embraced the idea of recidivism as a reliable indicator of the success of criminal justice interventions. The Bob Barker Company Foundation requires grant applicants’ work to “result in reducing recidivism.”³⁶ The D.C.-based Morris and Gwendolyn Cafritz Foundation declares that its grants “ai[m] to reduce the recidivism rate of incarcerated youth and adults.”³⁷ But private interest in reducing recidivism rates is not only philanthropic. Increasingly, private funding in the form of social impact bonds is being used to fund programs designed to reduce recidivism.³⁸ In this model, private investors agree to

³² NAT’L INST. JUST., WHY RECIDIVISM IS A CORE CRIMINAL JUSTICE CONCERN, <https://www.nij.gov/topics/corrections/recidivism/pages/core-concern.aspx> [<https://perma.cc/HX9J-2KD7>] (last visited May 5, 2019).

³³ SECOND CHANCE ACT OF 2007: COMMUNITY SAFETY THROUGH RECIDIVISM PREVENTION, PUB. L. No. 110-199, § 101, 122 Stat. 664 (2008).

³⁴ See BUREAU OF JUST. ASSISTANCE, *Second Chance Act Statewide Adult Recidivism Reduction Strategic Planning Program FY 2017 Competitive Grant Announcement*, 5–6, available at <https://www.bja.gov/funding/SRR17.pdf> [<https://perma.cc/LQR7-6JFG>].

³⁵ PHIL W. HARRIS ET AL., COUNCIL JUV. CORRECTION ADMIN., *DEFINING AND MEASURING RECIDIVISM* 1 (2009), <http://cjca.net/attachments/article/55/CJCA-Recidivism-White-Paper.pdf> [<https://perma.cc/CA42-GFGG>] (“It is uncommon to conduct a program impact evaluation in juvenile justice without measuring recidivism. Despite challenges posed by definitional ambiguity and misuse of recidivism data, a program’s recidivism rate is generally regarded as the most critical indicator of program success to the widest audience.”).

³⁶ *Eligibility and Grant Process*, Bob Barker Company Foundation, <http://www.bobbarkercompanyfoundation.org/grant-process/> [<https://perma.cc/HW9A-PBSU>] (last visited May 5, 2019).

³⁷ *Apply for a Grant*, Morris and Gwendolyn Cafritz Foundation, <http://www.cafritzfoundation.org/apply> [<https://perma.cc/P4A8-BMLA>] (last visited May 5, 2019).

³⁸ Richard A. Bierschbach & Stephanos Bibas, *Rationing Criminal Justice*, 116 MICH. L. REV. 187, 223 (2017); Kevin W. Humphries, Note, *Not Your Older Brother’s Bonds: The Use and Regulation of Social-Impact Bonds in the United States*, 76 L. & CONTEMP. PROBS. 433, 435 (2013).

fund programs that deliver quantifiable concrete public goods such as reduced rates of recidivism.³⁹ If the programs are effective, as measured by their ability to meet measurable targets, then the investors are reimbursed, often at a profit to investors.⁴⁰

These pay-for-success (PFS) models have been used with some success in the United Kingdom, and have begun to gain traction in the United States as well.⁴¹ In an attempt to reduce recidivism, Goldman Sachs in 2012 provided \$7.2 million to create a cognitive therapy program for young people incarcerated on Riker's Island in New York City.⁴² If the program succeeded in its goal of reducing recidivism by 10%, the city would reimburse the cost.⁴³ In that case, a follow-up study conducted by the Vera Institute of Justice in 2015 found that the program did not measurably decrease recidivism at all, and the program was therefore terminated.⁴⁴ In a different experiment with social impact bonding, New York State has partnered with private philanthropists at the Center for Employment Opportunities to provide job training and temporary employment for those leaving prison.⁴⁵ If that program meets its five-year goal of achieving an 8% reduction in recidivism rates and a 5% improvement in employment rates, the government will reimburse the program cost.⁴⁶ If the program exceeds its benchmark goals, investors will earn a profit.⁴⁷ In both these examples, the pressure to reduce recidivism is extremely high, since large sums of money turn on the ability of the interventions to achieve their stated goals.⁴⁸

³⁹ Jo Max Liang et al., *An Overview of Social Impact Bonds*, 13 J. INT'L BUS. & L. 267, 268 (2014).

⁴⁰ *Id.*

⁴¹ *Id.* at 268, 278, App. A.

⁴² JIM PARSONS ET AL., VERA INST. JUST., IMPACT EVALUATION OF THE ADOLESCENT BEHAVIORAL LEARNING EXPERIENCE (ABLE) PROGRAM 23 (2016); Eduardo Porter, *Wall St. Money Meets Social Policy at Rikers Island*, N.Y. TIMES (Jul. 28, 2015), <https://www.nytimes.com/2015/07/29/business/economy/wall-st-money-meets-social-policy-at-rikers-island.html> [<https://perma.cc/4W3V-7ZGE>].

⁴³ PARSONS ET AL., *supra* note 42, at 6.

⁴⁴ *Id.* at 23.

⁴⁵ Alana Semuels, *A New Investment Opportunity: Helping Ex-Convicts*, THE ATLANTIC, (Dec. 21, 2015), <https://www.theatlantic.com/business/archive/2015/12/reducing-recidivism/421323/> [<https://perma.cc/UY4P-L67U>].

⁴⁶ *Id.*; *New York State Increasing Employment and Improving Public Safety*, NONPROFIT FINANCE FUND (Dec. 7, 2017), <http://www.payforsuccess.org/project/new-york-state-increasing-employment-and-improving-public-safety> [<https://perma.cc/SE4S-PXN6>] (last visited May 5, 2019).

⁴⁷ Semuels, *supra* note 45.

⁴⁸ See Jennifer Miller Oertel et. al., *Proving That They Are Doing Good: What Attorneys and Other Advisers Need to Know About Program Assessment*, 59 WAYNE L. REV. 693 (2013)

Recidivism reduction has attracted investors in more ways than one. Entirely apart from social impact bonds, private companies have begun to fill the growing demand for tools that can predict the risk that criminal defendants, probationers, prisoners, and parolees will commit future crimes.⁴⁹ Peddling proprietary algorithms that purport to predict risk and identify individual treatment needs, private companies like Equivant (formerly Northpointe) are finding a profitable market as criminal justice stakeholders seek data to guide sentencing, supervision, and release decisions.⁵⁰ Studies of these risk-and-needs tools vary in appraisals of their accuracy. Some studies claim that the tools outperform human judgment in their predictions of future offending,⁵¹ and others claim that the tools increase pre-existing racial and class disparities in punishment without accurately sorting minor offenders from serious ones.⁵² However good or bad these tools may prove to be, their popularity unquestionably entrenches the fear of avoiding recidivism in any form.⁵³

(“Because often millions of dollars will hinge upon whether or not social outcome goals have been met, it is imperative that all parties understand social outcome measurement.”).

⁴⁹ Michael Tonry, *Legal and Ethical Issues in the Prediction of Recidivism*, 26 FED. SENT’G REP. 167, 167 (2014) (noting “[u]nprecedented private sector involvement . . . in designing and marketing [risk prediction] instruments and providing services to government”); NATHAN JAMES, RISK AND NEEDS ASSESSMENT IN THE CRIMINAL JUSTICE SYSTEM, CONGRESS. RESEARCH SERV. 4 (2015), <https://fas.org/sgp/crs/misc/R44087.pdf> [<https://perma.cc/EE9X-MVCM>] (discussing the various points in the criminal justice system at which risk assessments can be utilized).

⁵⁰ The most widely used proprietary tool is the Correctional Offender Management Profiling for Alternative Sanctions, (COMPAS), sold by Equivant, and used by several states, including Florida, Michigan, and Wisconsin. See ELECTRONIC PRIVACY INFORMATION CENTER, ALGORITHMS IN THE CRIMINAL JUSTICE SYSTEM, <https://epic.org/algorithmic-transparency/crim-justice/> [<https://perma.cc/CW89-CQXU>] (last visited May 5, 2019).

⁵¹ See, e.g., Tim Brennan et al., *Evaluating the Predictive Validity of the COMPAS Risk and Needs Assessment System*, 36 CRIM. JUST. & BEHAV. 21 (2009) (reporting favorably on results of a company-produced study of COMPAS accuracy).

⁵² See, e.g., Julia Dressel & Hany Farid, *The Accuracy, Fairness, and Limits of Predicting Recidivism*, 4 SCI. ADVANCES 1 (2018), <http://advances.sciencemag.org/content/advances/4/1/eaao5580.full.pdf> [<https://perma.cc/JE93-MPNQ>] (asserting that both COMPAS was no better than a randomly selected group of non-specialists at predicting future risk of recidivism); see also Julia Angwin et al., *Machine Bias*, PRO PUBLICA (May 23, 2016), <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing> [<https://perma.cc/V7MH-W4CP>] (purporting to find evidence of inaccuracies and racial bias in COMPAS results). But see Anthony W. Flores et al., *False Positives, False Negatives, and False Analyses: A Rejoinder to “Machine Bias: There’s Software Used Across the Country to Predict Future Criminals. And It’s Biased Against Blacks,”* 80 FED. PROBATION 38, 44–45 (2016) (finding no evidence of racial bias in COMPAS results).

⁵³ Alyssa M. Carlson, Note, *The Need for Transparency in the Age of Predictive Sentencing Algorithms*, 103 IOWA L. REV. 303, 315–16 (2017) (discussing proprietary algorithm used in one such recidivism prediction tool, COMPAS).

The pressure to emphasize recidivism data has come from internal stakeholders, too. The Conference of Chief Justices has promoted greater use of risk assessment tools asserting that “the best research evidence has shown that use of validated offender risk and need assessment tools is critical in reducing recidivism.”⁵⁴ Taking an equally optimistic view, individual judges have also spoken in favor of greater attention to recidivism risks and rates. Judge Roger Warren, for example, has advocated nationally for greater consideration of recidivism risks at sentencing and for using evidence of recidivism to evaluate the effectiveness of criminal justice programs.⁵⁵ His position turns in large part on an assessment that, unlike in decades past, social scientists now know enough about drivers of recidivism to reduce risk of future offense:

Today . . . we know—based on meticulous meta-analyses of rigorously conducted scientific research—that unlike incarceration the right kinds of rehabilitation and treatment programs carefully targeted at specific crime-related risk factors among medium- to high-risk offenders can reduce offender recidivism by conservative estimates of 10 to 20 percent.⁵⁶

Judge Michael Marcus has similarly advocated for the broader use of recidivism risk assessment tools and greater attention to recidivism rates, optimistically asserting that properly-designed correctional programs “can hope to produce roughly a 30% reduction in recidivism among many common offenders.”⁵⁷ He argues that because “the public is concerned, most of all, with how successfully [the criminal justice system] prevent[s] recidivism,” attention to recidivism risks and rates is an essential component of modern sentencing.⁵⁸

At times, academics have also embraced recidivism as a metric for success in the criminal justice system, albeit with some caveats. Francis Cullen, Cheryl Jonson, and Daniel Mears recently suggested “recidivism reduction should be defined as the core goal of corrections, including community-based agencies. Wardens, prison staff, probation and parole

⁵⁴ *State v. Loomis*, 881 N.W.2d 749, 752 n.1 (Wis. 2016) (citing CONFERENCE OF CHIEF JUSTICES, CONFERENCE OF STATE COURT ADMINISTRATORS, NATIONAL CENTER FOR STATE COURTS, RESOLUTION 12: IN SUPPORT OF SENTENCING PRACTICES THAT PROMOTE PUBLIC SAFETY AND REDUCE RECIDIVISM (2007), <http://ccj.ncsc.org/~media/Microsites/Files/CCJ/Resolutions/08012007-Support-Sentencing-Public-Safety-Reduce-Recidivism.ashx> [https://perma.cc/UC99-WPAD] (last visited May 5, 2019)).

⁵⁵ Roger K. Warren, *The Most Promising Way Forward: Incorporating Evidence-Based Practice into State Sentencing and Corrections Policies*, 20 FED. SENT’G REP. 322, 324 (2008).

⁵⁶ *Id.* at 323.

⁵⁷ Michael Marcus, *MPC—the Root of the Problem: Just Deserts and Risk Assessment*, 61 FLA. L. REV. 751, 770 (2009).

⁵⁸ *Id.* at 765.

chiefs, and officers should all be judged on whether offenders who pass through their organizations return to crime.”⁵⁹ They argue that correctional officials should be held accountable for reducing recidivism in the same way “[s]ales managers each year are given goals, and profit margins are tracked carefully.”⁶⁰ Why should corrections shoulder this responsibility? Because, they assert, “[a]t some point, community corrections is going to have to demonstrate its efficacy in reducing recidivism, or lose legitimacy.”⁶¹

II. RECIDIVISM AS A SUCCESS METRIC

Given the wide variety of ways in which recidivism measures and predictions are used to assess the success of criminal justice programs and the people upon whom they intervene, it is important to understand exactly what recidivism means. Despite the criminal justice system’s heavy reliance on recidivism rates, there is surprising variation in how recidivism is defined and measured.⁶² Nevertheless, data purporting to track or predict recidivism is put to a myriad of uses, from deciding which treatment programs to fund to deciding what sentences to impose on individual defendants.⁶³ The following subsections discuss in greater detail how recidivism is defined and measured in today’s criminal justice system.

A. DEFINING RECIDIVISM

Recidivism data attempt to quantify whether a person who has committed a crime in the past has gone on to commit another crime in the future.⁶⁴ While the concept is simple, it is notoriously difficult to measure.⁶⁵

⁵⁹ *Id.*

⁶⁰ Francis T. Cullen et al., *Reinventing Community Corrections*, 46 *CRIME & JUST.* 27, 50 (2017).

⁶¹ *Id.* at 49. Although Cullen, Jonson, and Mears embrace the idea of gathering and analyzing recidivism data, they also acknowledge that there are risks associated with emphasizing recidivism reduction, including the very real risk of data gaming. *Id.* at 51 (“When accountability is heightened, strong incentives emerge to game the systems.”). For a full discussion on this point, see *infra* Section IV.A.

⁶² See NATHAN JAMES, CONG. RESEARCH SERV., RL34287, OFFENDER REENTRY: CORRECTIONAL STATISTICS, REINTEGRATION INTO THE COMMUNITY, AND RECIDIVISM 5–6 (2015); URBAN INSTITUTE, MEASURING RECIDIVISM AT THE LOCAL LEVEL: A QUICK GUIDE 1–3 (n.d.), available at https://www.urban.org/sites/default/files/recidivism-measures_final-for-website.pdf [<https://perma.cc/36KA-R37C>].

⁶³ See Weisberg, *supra* note 30, at 790–94.

⁶⁴ Petersilia, *supra* note 12, at 382.

⁶⁵ Weisberg, *supra* note 30, at 794–95 (“[T]here often are simply too many variables to account for, too many actors with too much and too many kinds of discretion, for us to confidently credit a deliberate program for a measured outcome.”).

The first challenge in quantifying recidivism is deciding what constitutes proof of a subsequent crime. Most people do not boldly proclaim their criminal exploits, and instead seek to hide—or at least downplay—their involvement in illegal activities. This basic fact makes formal detection (and therefore measurement) of criminal behavior difficult.

The most effective way to measure behavior is through longitudinal studies.⁶⁶ In such settings, researchers follow subjects over long periods of time—often decades—periodically surveying, interviewing, and gathering third party data about subjects' behavior.⁶⁷ Researchers conducting such studies provide participants with guarantees of confidentiality and other protections designed to reduce the risk that honest confessions about illegal behavior will result in consequences of any kind.⁶⁸ Longitudinal studies are expensive and time consuming, however. For these reasons, they are typically conducted by academic researchers, and not by criminal justice program analysts.

Analysts who work within the criminal justice system are limited in ways academics are not. They are frequently under pressure to produce assessment results in short periods of time and to satisfy funders, policymakers, and the public of the effectiveness of the programs they are assessing.⁶⁹ Moreover, as state agents, they are not always positioned to offer

⁶⁶ David P. Farrington, *Longitudinal and Experimental Research in Criminology*, 42 CRIME & JUST. 453, 454 (2013).

⁶⁷ *Id.* at 454–55; see also Loeb & Sampson, *supra* note 16, at 14 (analyzing evidence from the Glueck longitudinal study of delinquent youth conducted from 1939 onward); Mark Warr, *Life Course Transitions and Desistance from Crime*, 36 CRIMINOLOGY 183, 185–88 (1998) (discussing several longitudinal studies and analyzing data from the National Youth Survey, which collected data in 1976 and in nine subsequent waves thereafter, following participants from childhood through young adulthood).

⁶⁸ Institutional Review Boards (IRBs) are administrative bodies that are established to protect the rights and welfare of human research subjects. See Christine Tartaro & Marissa P. Levy, *Criminal Justice Professionals' Knowledge of Institutional Review Boards (IRBs) and Compliance with IRB Protocol*, 25 J. CRIM. JUST. EDUC. 321 (2014). IRBs ensure that research on human subjects conducted by academic institutions and their affiliates complies with applicable federal regulations, as well as local statutes and policies. A common protection study participants receive is that all information collected by researchers shall remain private and confidential. See, e.g., 42 U.S.C. § 241(d) (2012) (authorizing issuance of Certificates of Confidentiality, which allow researchers to refuse attempts to compel disclosure of participant information in legal proceedings); 45 CFR § 46.111(a)(7) (Health and Human Services policy requiring all federally funded proposed research to demonstrate adequate safeguards to “protect the privacy of subjects and to maintain the confidentiality of data”).

⁶⁹ See Megan C. Kurlycheck et al., *Long-Term Crime Desistance and Recidivism Patterns—Evidence from the Essex County Convicted Felon Study*, 50 CRIMINOLOGY 71, 79 (2012) (noting that in the majority of recidivism studies “follow-up periods are no more than a few years long”).

the same confidentiality protections researchers use to glean more accurate information about illegal behavior.⁷⁰ Not that anyone within the criminal justice system regularly asks convicted people to provide such incriminating information: the limited resources of most agencies and actors within the system assure that the only recidivism data typically collected by state agencies draws from formal court or law enforcement records, rather than individual self-reports.⁷¹ The result is that while the criminal justice system purports to measure recidivism, what recidivism data usually measure are rates of re-capture—outcomes that turn as much on luck and policing patterns as they do on deviant behavior.⁷²

If recidivism rates are not being calculated based on longitudinal studies, then from what records are they produced? Four types of documented

⁷⁰ For example, disclosures of past misconduct made by participants in sex offender programs operated by correctional facilities have sometimes served as the basis for later court proceedings against these program participants. Corey Rayburn Yung, *Sex Offender Exceptionalism and Preventive Detention*, 101 J. CRIM. L. & CRIMINOLOGY 969, 984 (2011). This stands in contrast to the confidentiality protections that academic researchers must afford research subjects under Institutional Research Board (IRB) protocols. *See generally* Leslie E. Wolf et al., *Certificates of Confidentiality: Protecting Human Subject Research Data in Law and Practice*, 43 J. LAW & MED. ETHICS 594 (2015). The tension between the role of correctional agencies as executive branch law enforcers and their role as publicly-accountable agencies can create ethical tensions in how they conduct research—and, consequently, in how forthcoming their subjects are likely to be.

⁷¹ *See* Farrington, *supra* note 66 at 463 (reporting on results of a longitudinal study of youthful offenders that “found that the prevalence, frequency, and duration of criminal careers were all greater for reported offending than for arrests and that the escalation from minor to more serious crimes was greater for reported offending than for arrests”); James L. Johnson, *Comparison of Recidivism Studies: AOUSC, USSC, and BJS*, 81 FED. PROBATION 52, 54 (2017) (“[A]ny definition will underestimate the ‘true’ recidivism rate, because rates are based on official criminal record data that only show crimes for which people have been arrested or convicted.”).

⁷² *See* Jaclyn Hovda, Note, *The Efficacy of Idaho’s Domestic Violence Courts: An Opportunity for the Court System to Effect Social Change*, 48 IDAHO L. REV. 587, 611 (2012) (“[W]hile a reduction in recidivism seems like an obvious metric by which the efficacy of D[omestic] V[iolence] courts could be measured, these rates can be deceiving because of chronic underreporting by victims.”). Because re-capture data are based solely on behavior detected by the criminal justice system, such data will necessarily be over-inclusive of the “failures” of heavily-policed communities and underinclusive of the failures of those whose behavior is not as closely surveilled. Given policing patterns in the United States, that suggests that recidivism rates may fail to reflect the behavior of under-policed members of society, who will be predominantly affluent and white. *See, e.g.*, Decio Coviello & Nicola Persico, *An Economic Analysis of Black-White Disparities in the New York Police Department’s Stop-and-Frisk Program*, 44 J. LEGAL STUD. 315, 317 (2015) (discussing racial disparities in New York City street stops); Charles R. Epp et al., *Beyond Profiling: The Institutional Sources of Racial Disparities in Policing*, 77 PUB. ADMIN. REV. 168 (2017) (discussing racial disparities in vehicular stops).

events can be used as proxies for recidivism: arrest, charge, conviction, and revocation from community supervision.⁷³ Some studies use only one of these measures, while others examine a combination of two or more.⁷⁴ Importantly, there is no national standard governing the choice of triggering events, and typically no standardization within a single state or county.⁷⁵ Comparing recidivism rates across programs or jurisdictions is therefore an often futile task, since each study provides a different measure of re-offense.⁷⁶ This lack of uniformity is particularly problematic given the different flaws inherent in each possible triggering event.

In some ways, arrest and charge data may get closer to capturing true recidivism data than conviction records can because they track events in which, at a minimum, the suspect behaved in a way that gave police or prosecutors probable cause to believe he had re-offended.⁷⁷ These records are less likely than conviction records to be underinclusive of criminal behavior, although they are less comprehensive than self-reported data gathered by third-party researchers because they rely on official detection of deviant behavior, which invariably will miss many instances of illegal conduct.

Arrest and charge data are not necessarily better than conviction data, since they risk being overinclusive. Police may arrest the wrong suspect or may arrest for behavior that turns out not to be criminal at all once a full

⁷³ Petersilia, *supra* note 12, at 383.

⁷⁴ See generally Johnson, *supra* note 71, at 52 (2017) (comparing recidivism studies that use different measures); see also Jessica M. Eaglin, *Constructing Recidivism*, 67 EMORY L.J. 59, 76–77 (2017) (reporting on the markers of recidivism used by a variety of recidivism risk prediction tools).

⁷⁵ See, e.g. Letter from Kamala Harris, Cal. Atty. Gen., to Public Safety Partners 1–2 (Oct. 16, 2014), https://oag.ca.gov/system/files/attachments/press_releases/Recidivism%20Definiton%20Letter%2C%20AG%20Harris.pdf [<https://perma.cc/55U9-Z6CG>] (observing that “California lacks any uniform or standard way to measure the rate of individuals who re-commit crimes” and proposing a statewide definition of recidivism as “[a]n arrest resulting in a charge within three years of an individual’s release from incarceration or placement on supervision for a previous criminal conviction”); see also Phil W. Harris et al., *Defining and Measuring Recidivism* 1 COUNCIL JUV. CORRECTIONAL ADMIN. (2009) (observing that “using the average of state juvenile recidivism rates for a small number of states, the national juvenile rate could be anywhere between 25% and 55% depending on what measure of recidivism is used to comprise the measure”).

⁷⁶ Petersilia, *supra* note 12, at 382 (observing that “recidivism data in one study are seldom comparable to the data in another”).

⁷⁷ See *Gerstein v. Pugh*, 420 U.S. 103, 122 (1975) (probable cause required to bring criminal charges); *Draper v. United States*, 358 U.S. 307, 314 (1959) (probable cause required for lawful arrest).

investigation has been completed.⁷⁸ Charges may be brought against the wrong defendant or may not align with the actual behavior in which the defendant engaged.⁷⁹ The fact that many of these cases do not proceed to conviction gives rise to doubt about whether a crime occurred at all or whether an error was made by system actors themselves.⁸⁰

Conviction data have the advantage of being the least overinclusive because they require that a defendant either admit to the charged conduct or be found guilty beyond a reasonable doubt at trial. Nonetheless, conviction data have the distinct disadvantage of being underinclusive in many cases. Criminal cases may be disposed of pre-conviction for many reasons that have nothing to do with innocence. Police error, prosecutorial resource constraints, policy choices, and difficulty developing evidence all can lead to dismissal of charges (or later acquittal at trial), even in cases when a defendant has actually committed a crime.⁸¹ As a result, while conviction data generate the fewest false positives among potential events suggestive of recidivism, they include an unknown and potentially significant rate of false negatives.⁸²

In addition to conviction, arrest, or charging data, many studies of recidivism also count revocation from probation or any form of post-release supervision as a triggering event.⁸³ While incarceration is an important event to capture in recidivism data, individuals who are revoked from community supervision have not always committed a new crime.⁸⁴ New criminal behavior can certainly trigger revocation (and often will) but so can so-called

⁷⁸ Alfred Blumstein & Richard C. Larson, *Problems in Modeling and Measuring Recidivism*, 8 J. RESEARCH CRIME & DELINQUENCY 124, 125 (1971) (“Whatever the choice [of recidivism metric], there are two types of errors: the Type I error of commission involves the erroneous counting as recidivists those who are improperly charged with recidivism The Type I error includes erroneous arrests, convictions, and sentences.”).

⁷⁹ Surell Brady, *Arrests Without Prosecution and the Fourth Amendment*, 59 MD. L. REV. 1, 41–42 (2000) (“Among the most commonly cited factors [for non-prosecution] are victim and/or witness reluctance, unavailability of prosecution or defense witnesses, and writs of extradition filed by other states. State prosecutors also report dismissals by courts due, in part, to ‘search or seizure problems,’ and legal issues relating to self-incrimination, speedy trial time restrictions, and the right to counsel.”).

⁸⁰ *Id.*

⁸¹ Tayler Ruggero et al., *Measuring Recidivism: Definitions, Errors, and Data Sources* 3–4, (Ctr. for Pub. Safety Initiatives, Working Paper No. 2015-03) (“The problem with using only reconviction rates is that not everyone is convicted for all crimes they have committed; authorities may not have become aware of the crime, or there may not have been enough evidence to prosecute.”).

⁸² *Id.*

⁸³ Fiona Doherty, *Obey All Laws and Be Good: Probation and the Meaning of Recidivism*, 104 GEO. L. J. 291, 295 (2016).

⁸⁴ *Id.*

non-criminal violations, including absconding (that is, running away or persistently avoiding required supervision meetings), failing to attend mandated treatment programs, or failing to abide by restraint conditions, such as curfews, no-contact orders, and abstention from alcohol or other drugs.⁸⁵

Settling on what evidence proves recidivism is just the beginning of the ambiguity surrounding what it means to “recidivate.” The next challenge is defining a follow-up period that meaningfully captures the effect of a given program on recidivism rates. Due to system resource constraints and a desire for rapid feedback on the effect of various interventions, most studies on recidivism follow convicted individuals for only two or three years from conviction or from the completion of a sentence.⁸⁶ A few employ a five year follow-up window.⁸⁷ As a result, data currently gathered on recidivism provides a time-limited snapshot into the most recent behavior of convicted persons following sentencing or imprisonment,⁸⁸ not a full picture of how convicted individuals go on to live their lives.

To determine whether a person subject to a criminal justice intervention goes on to re-offend, perfect data would capture that person’s behavior for the remainder of his life—or at least until enough time has passed that he no longer remains at an elevated risk of committing future offenses. Although individuals with prior records—like those without them—can commit

⁸⁵ See generally Cecelia Klingele, *Rethinking the Use of Community Supervision*, 103 J. CRIM. L. & CRIMINOLOGY 1015, 1032–35 (2013).

⁸⁶ See Kurlycheck et al., *supra* note 69, at 73 (noting that in the majority of recidivism studies “follow-up periods are no more than a few years long.”); see also David P. Farrington, *Age and Crime*, 7 CRIME & JUST. 189, 222 (1986) (“Unfortunately, it is difficult to draw conclusions about termination [of offending] from information about recidivism because those who do not recidivate within two years include true desisters, undetected offenders, and those who will persist later.”).

⁸⁷ Shawn D. Bushway et al., *Connecting Desistance and Recidivism: Measuring Changes in Criminality Over the Lifespan*, in AFTER CRIME AND PUNISHMENT: PATHWAYS TO OFFENDER REINTEGRATION 85, 86 (Shadd Maruna & Russ Immarigeon eds., 2004); Laura M. Baber & Mark Motivans, *Extending Our Knowledge About Recidivism of Persons on Federal Supervision*, 77 FED. PROB. 23 (2013) (reporting on a five-year recidivism study of people released from federal prison).

⁸⁸ Recidivism data vary not only in definitions of recidivism and length of follow-up windows, but also in the start and end times of follow-up window. In order to assess whether people’s behavior has been altered by criminal justice interventions, it is necessary to study them when they are “at hazard” of detection and punishment. See Kurlycheck et al., *supra* note 69, at 72–79 (discussing methods of conducting long-term studies). While people commit crime in jails and prisons, as well as in the community, fewer opportunities exist in such closely-monitored environments. Consequently, follow-up studies for prisoners commence typically upon release from custody and not immediately following sentencing. See, e.g., Mariel Alper et al., *2018 Update on Prisoner Recidivism: A 9-Year Follow-up Period (2005-2014)* BUREAU OF JUST. STAT. (2018), <https://www.bjs.gov/content/pub/pdf/18upr9yfup0514.pdf> [<https://perma.cc/Y5X9-8D7G>].

criminal offenses spontaneously at any point in life, research suggests that as time without re-offense lengthens, the odds of recidivism diminish significantly. Al Blumstein and Kiminori Nakamura's work on redemption has examined how long a person convicted of a crime must go without re-offending before he or she obtains a predicted risk of future arrest no higher than that of a similarly-aged person in the general population.⁸⁹ While the exact window varies based on the age of the convicted person and the type of crimes the person has committed, their research suggests that the average "redemption time" was between ten and thirteen years after conviction.⁹⁰

Blumstein and Nakamura's findings suggest that a ten to fifteen year follow-up period would provide a thorough picture of the effect of criminal justice programs on long-term recidivism; however, a follow-up window of that length is beyond the capacity of most criminal justice agencies.⁹¹ The good news is that Blumstein and Nakamura's work confirms what other studies have repeatedly found: the vast majority of those who recidivate do so within the first few years following release from custody.⁹² As time without re-offense lengthens, fewer people go on to recidivate at later points in time.⁹³ For this reason, shorter follow-up windows will yield useful, albeit incomplete, information that can meaningfully capture the majority of those who recidivate following any given intervention. That fact, coupled with the observation that the effects of any criminal justice intervention, are likely to fade over time, means that data about former offenders' behavior in the years that immediately follow sanction are not only the easiest data to obtain but are also likely to be the most relevant for determining whether system interventions are having a widespread effect on recidivism rates.

⁸⁹ Alfred Blumstein & Kiminori Nakamura, *Redemption in the Presence of Widespread Criminal Background Checks*, 47 *CRIMINOLOGY* 327 (2009).

⁹⁰ Alfred Blumstein & Kiminori Nakamura, *Paying a Price, Long After the Crime*, N.Y. *TIMES*, Jan. 9, 2012, at A23.

⁹¹ A recent, rare nine-year follow-up study by Mariel Alper, Matthew R. Durose, and Joshua Markman of the Bureau of Justice Statistics provides a refreshing counter-example to the overall tendency of state and government agencies to focus only on the time immediately following release. See Alper et al., *supra* note 88, at 4. Importantly, the BJS study concludes that recidivism rates, while reduced over time, persisted at higher levels than a three-year snapshot would suggest. *Id.*

⁹² Blumstein & Nakamura, *supra* note 89, at 331 ("Studies on recidivism consistently demonstrate that those who have offended in the past will have the highest probability of reoffending within several years, and the probability will decline steadily afterward."); MATTHEW R. DUROSE ET AL., BUREAU OF JUST. STAT., *RECIDIVISM PATTERNS OF PRISONERS RELEASED IN 30 STATES IN 2005: PATTERNS FROM 2005 TO 2010 1* (2014) ("More than a third (36.8%) of all prisoners who were arrested within 5 years of release were arrested within the first 6 months after release, with more than half (56.7%) arrested by the end of the first year.")

⁹³ Blumstein & Nakamura, *supra* note 89, at 331.

B. REPORTING RECIDIVISM

Despite wide variations in how recidivism is defined and measured, it remains a key metric used by criminal justice stakeholders to gauge the effectiveness of criminal justice interventions. The following section examines how recidivism data are reported and what those reports mean.

Typically, recidivism studies compare the performance of a defined cohort to that of a baseline population over an equal period of time.⁹⁴ For example, a study of participants in a prison education program might report how program graduates fared during the three years following their release from custody, as compared to a similar cohort of released prisoners who did not participate in the educational program.⁹⁵ Once variables other than the intervention are controlled for, the difference between the performance of the two groups is then attributed to the intervention itself.⁹⁶

The results of recidivism studies are often used to determine whether specific criminal justice interventions “reduce recidivism.” What that means is not necessarily self-evident. When a program is found to reduce recidivism by, 10%, that does not mean that *each individual* who completes the program will, on average, go on to commit 10% less crime than the person otherwise would have committed. Instead, it means that an aggregate group of people who complete the program will have 10% fewer members of their cohort recidivate than a comparable group of people who did not complete the program. This is an important distinction for several reasons.

First, it reminds us that no retrospective study, or even any predictive tool, can tell us what any individual person will do in the future. It is impossible to know from a person’s characteristics and past behavior whether the person’s most recent conviction will be the last or whether the person will go on to commit serious violations.⁹⁷ The very best risk prediction instruments currently available can tell us which factors, on average, drive recidivism, and what people with histories and characteristics similar to a particular offender are statistically likely to do in the future.⁹⁸ However, given the variation of human behavior,⁹⁹ no instrument can reliably predict

⁹⁴ See, e.g., Ryang Hui Kim & David Clark, *The Effect of Prison-Based College Education Programs on Recidivism: Propensity Score Matching Approach*, 41 J. CRIM. JUST. 196, 196–97 (2013).

⁹⁵ *Id.*

⁹⁶ *Id.* at 198–203.

⁹⁷ See Blumstein & Nakamura, *supra* note 89, at 332–33.

⁹⁸ See Sonja B. Starr, *Evidence-Based Sentencing and the Scientific Rationalization of Discrimination*, 66 STAN. L. REV. 803, 806 (2014).

⁹⁹ There has been a resurgence in determinism among some neuroscientists and punishment theorists. See, e.g., Luis E. Chiesa, *Punishing Without Free Will*, 2011 UTAH L.

whether any particular person will go on to re-offend or what specific form any future re-offense will take.¹⁰⁰

This observation has particular salience for the proper use of increasingly popular recidivism risk prediction instruments, presently used

REV. 1403, 1406 (2011) (“[T]here are good moral reasons to conclude that the scientific plausibility of determinism ought to lead us to *abandon* the notion of free will.”); Joshua Greene & Jonathan Cohen, *For the Law, Neuroscience Changes Nothing and Everything*, 359 PHIL. TRANSACTIONS ROYAL SOC’Y LONDON B: BIOLOGICAL SCI. 1775, 1781 (2004) (arguing that many of the traditional focuses of criminal law “will lose their grip in an age when the mechanical nature of human decision-making is fully appreciated”). Nevertheless, the criminal justice system (and the public at large) continues to embrace the traditional view that variations in human behavior are best explained by free will and human agency—a factor life course criminologists have found to be a meaningful component of desistance from crime. See, e.g., Ros Burnett, *To Reoffend or Not To Reoffend? The Ambivalence of Convicted Property Offenders*, in AFTER CRIME AND PUNISHMENT: PATHWAYS TO OFFENDER REINTEGRATION 174 (Shadd Maruna & Russ Immarigeon eds., 2004) (stating research shows “an important characteristic of desistance narratives [is] the theme of being in control . . . an ex-offender may need to experience some level of personal success in the straight world before they realise that they do not need to offend to regain a sense of personal agency”) (internal citations omitted); Laub & Sampson, *supra*, note 16, at 55 (“[G]iven the role of human agency in the desistance process, we need to find a way to measure individual motivation, free will, and ultimately the decision to initiate and embrace the process of change.”).

¹⁰⁰ See Starr, *supra* note 98, at 806 (explaining that instruments designed to predict recidivism employ “underlying regression models [that] may provide reasonably precise estimates of the average recidivism rates for the group of offenders sharing the defendant’s characteristics, but the uncertainty about what an individual offender will do is much greater, and when it comes to predicting individual behavior, the models offer fairly modest improvements over chance”). Attempts have been made to develop instruments that can differentiate between a person’s risk of committing any offense versus his risk of committing a violent offense. Melissa Hamilton, *Adventures in Risk: Predicting Violent and Sexual Recidivism in Sentencing Law*, 47 ARIZ. ST. L.J. 1, 24–25 (2015). In the main, actuarial tools are poor at predicting future violence, in large part because (happily) violent behavior is statistically aberrant. *Id.* at 20 (“violent and sexual recidivism are, contrary to popular belief, low rate events, except in extraordinarily high risk populations”); see also Henriette Haas & Maurice Cusson, *Comparing Theories’ Performance in Predicting Violence*, 38 INT’L J. L. & PSYCH. 75, 82 (2015) (“Each single theory that we operationalized was quite good at predicting non-violence (95.0% to 99%), but none of them could recognize more than thirty percent of the violent cases. The interdisciplinary model however did raise the prediction of true hits considerably to 36% compared to the theory driven models.”); Daryl G. Kroner et al., *A Coffee Can, Factor Analysis, and Prediction of Antisocial Behavior: The Structure of Criminal Risk*, 28 INT’L J. L. & PSYCH. 360 (2005) (testing violent prediction abilities of the Violence Risk Appraisal Guide (VRAG), General Statistical Information on Recidivism (GSIR), Level of Service Inventory-Revised (LSI-R), and Psychopathy Checklist-Revised (PCL-R) against several random, non-structured measures of criminal risk (the “coffee can” measures) and finding no statistical difference in the accuracy of their predictions of recidivism).

at bail hearings,¹⁰¹ sentencing hearings,¹⁰² and in correctional decision-making.¹⁰³ Despite the de-personalized nature of risk predictions, reports of predicted future risk can affect defendants' access to bond, the nature and length of a sentence, and the level of supervision and number of conditions to which those serving community-based sentences will be subjected.¹⁰⁴

Second, the aggregate nature of the data contained in recidivism studies means that it is impossible to predict from recidivism rates alone which specific people will benefit from any particular intervention. For example, if a program claims to reduce recidivism by 25%, policymakers cannot assume that all program graduates will leave the program 25% less likely to re-offend. Rather, if the baseline re-offense rate for those who do not participate in the program is 50%, then policymakers can predict that 37.5% of those who do complete the program will go on to recidivate while the remainder will not.¹⁰⁵ From recidivism data alone, however, they cannot predict who the recidivists will be or what characteristics they may share in common.

Finally, properly interpreting recidivism study outcomes is important because it helps explain why those within the criminal justice system often consider interventions successful even when they achieve very small reductions in recidivism. To a layperson, it seems strange to say that a program can be "successful" if it reduces a cohort's (often high) risk of future offending by a mere 10% or 15%. However, for many criminal justice programs, a reduction of even 10% in baseline offending is considered a

¹⁰¹ See Crystal S. Yang, *Toward an Optimal Bail System*, 92 N.Y.U. L. REV. 1399, 1484–85 (2017) (discussing bail risk prediction instruments, including the Arnold Foundation's Public Safety Assessment (PSA)).

¹⁰² See Dawinder S. Sidhu, *Moneyball Sentencing*, 56 B.C. L. REV. 671, 673 (2015) ("More and more, courts today are adopting the use of risk-assessment tools in sentencing.").

¹⁰³ See J. C. Oleson et al., *Training to See Risk: Measuring the Accuracy of Clinical and Actuarial Risk Assessments Among Federal Probation Officers*, 75 FED. PROB. 52, 53 (2011); Amy Robinson-Oost, *Evaluation As the Proper Function of the Parole Board: An Analysis of New York State's Proposed Safe Parole Act*, 16 CUNY L. REV. 129, 136 (2012) (discussing the use of risk instruments at parole release).

¹⁰⁴ An entire body of literature has begun to address the philosophical, legal, and sociological implications of relying on actuarial risk prediction instruments at stages throughout the criminal justice process. See, e.g., BERNARD E. HARCOURT, *AGAINST PREDICTION* (2007); Eaglin, *supra* note 74; Melissa Hamilton, *Risk-Needs Assessment: Constitutional and Ethical Challenges*, 52 AM. CRIM. L. REV. 231, 232 (2015); Cecelia Klingele, *The Promises and Perils of Evidence Based Corrections*, 91 N.D. L. REV. 537 (2015); Starr, *supra*, note 98.

¹⁰⁵ Cf. Francis T. Cullen, *Rehabilitation: Beyond Nothing Works*, 42 CRIME & JUST. 299, 338 (2013) (describing various ways of reporting and computing recidivism reduction rates, including as percentages).

respectable result.¹⁰⁶ The modest recidivism reduction demonstrated by many popular correctional interventions is one of the reasons why a sizeable number of policymakers and correctional administrators view penal rehabilitation with skepticism.¹⁰⁷ With treatment outcomes that reduce recidivism by such modest percentages, it is not hard to see why the claim that “nothing works” to reform repeat offenders has been a recurring mantra since Robert Martinson’s now-infamous article was first published.¹⁰⁸

When one looks harder at what is being measured, however, low-impact rates are not surprising. A multitude of complex factors drive criminal activity¹⁰⁹ and influence behavioral change.¹¹⁰ No single criminal justice program significantly eliminates criminal behavior in any sizable percentage of participants.¹¹¹ Such programs may reduce harm by reducing offense rates and offense severity among participants and by improving participants’ lives on any number of different measures.¹¹² But recidivism data provide only

¹⁰⁶ See Jeffrey A. Butts & John Roman, *Better Research for Better Policies*, in JUVENILE JUSTICE: ADVANCING RESEARCH, POLICY, AND PRACTICE 513 (Francine Sherman & Francine Jacobs eds., 2011). Larger effects sizes are sometimes claimed, often in the context of assessments conducted by program administrators themselves. Such studies have “indicate[d] that demonstration projects, managed by an involved evaluator or program designer, produce larger treatment effects than the same programs implemented in a ‘real world’ setting.” Christopher T. Lowenkamp et al., *A Quasi-Experimental Evaluation of Thinking for a Change*, 36 CRIM. JUST. & BEHAV. 137, 139 (2009).

¹⁰⁷ Michelle S. Phelps, *Rehabilitation in the Punitive Era: The Gap Between Rhetoric and Reality in U.S. Prison Programs*, 45 L. SOC’ S REV. 33, 33–35, 37–40 (2011); see also Christopher Ingraham, *Even Violent Crime Victims Say our Prisons are Making Crime Worse*, WASH. POST: WONKBLOG (Aug. 5, 2016), https://www.washingtonpost.com/news/wonk/wp/2016/08/05/even-violent-crime-victims-say-our-prisons-are-making-crime-worse/?utm_term=.1e639db07ff0 [https://perma.cc/RW77-UN5N].

¹⁰⁸ Robert Martinson, *What Works? Questions and Answers About Prison Reform*, 35 PUB. INT. 22 (1974).

¹⁰⁹ Studies have suggested that multiple factors predict re-engagement in criminal behavior, including antisocial attitudes and friends, relationship conflicts, substance abuse, past criminal behavior, low educational and vocational attainment, marital status, poverty, age and gender (young men are the most prolific offenders), challenges in family of origin, including familial criminality and exposure to abuse or neglect, cognitive deficiencies, and stress. Mandeep K. Dhami et. al., *Prisoners’ Positive Illusions of Their Post-Release Success*, 30 LAW & HUM. BEHAV. 631, 633 (2006) (citing Paul Gendreau et al., *A Meta-analysis of the Predictors of Adult Offender Recidivism: What Works!*, 34 CRIMINOLOGY 575 (1996)).

¹¹⁰ See *infra* Section III.A.

¹¹¹ Weisberg, *supra* note 30, at 795.

¹¹² Programs can succeed in assisting people even when they fail to reduce or eliminate criminal behavior. Helping participants conquer addictions, obtain an education, treat unmet mental health needs, and improve job and parenting skills are all programmatic results that may be achieved with or without a commensurate reduction in recidivism. It is important to notice that neither recidivism rates nor the “markers of desistance” I advocate measuring in

one measure of success: whether people who complete a program go on to commit *any* offense within the follow-up window. Recidivism data, as typically reported, omit a host of important contextual information, including whether the individuals being followed were first-time or chronic offenders;¹¹³ whether the new offenses were minor or serious; or whether program participants changed their rates of offending after having completed the program. In short, pure recidivism data do not provide us with any sense of whether a program or other intervention reduces harm but rather how often it produces perfection. Not surprisingly, for many offenders, perfect outcomes are difficult to achieve.

III. BEHAVIORAL CHANGE AND DESISTANCE FROM CRIME

The preceding sections have discussed the challenge of measuring recidivism in a way that provides policymakers with a clear and accurate picture of how criminal justice interventions affect subsequent behavior. These challenges include detecting recidivism over time and discerning which portions of recidivism data are related to the behavior of former offenders and which are better attributed to the behavior of system actors. Theoretically, with adequate resources and effort, many of these methodological challenges could be overcome—or at least mitigated. But even if policymakers are able to bring greater standardization to the measurement of recidivism, larger problems remain.

A. UNDERSTANDING CHANGE

Although policymakers rarely articulate the assumptions that support using recidivism as the primary measure of success, doing so has value, if only to focus attention on how implausible many of those assumptions are. Recidivism, as it is currently framed, is a binary metric: either a person engages in behavior indicative of new criminal activity within the window of time the person's post-intervention behavior is being measured or the person does not. If the person does, he or she is labeled a recidivist and is considered a failure. If the person does not commit a new crime, then he or she is successful. On a larger scale, the same evaluation applies to criminal justice programs: if the programs reduce aggregate recidivism, they succeed. If they do not, they have failed.

this Article capture the full range of positive ways in which the criminal justice system may affect the lives of the people with whom it intervenes.

¹¹³ Richard Rosenfeld, *Recidivism and its Discontents*, 7 CRIMINOLOGY & PUB. POL'Y 311, 314 (2008) (noting “[t]he distinction between correctional veterans and first-timers has all but disappeared in contemporary recidivism research”).

To probe the plausibility of this approach for measuring success, it is helpful to review what is known about the dynamics of human behavioral change, of which the cessation of crime is but one variation. The commission of crime is, after all, a subset of the much larger category of antisocial behavior, which is combatted in various contexts not only by police and correctional personnel but also by parents, teachers, doctors, industrial engineers, and employers.¹¹⁴ The study and practice of motivating prosocial behavioral change is a common human enterprise, and consequently, a wide variety of fields offer examples of alternative ways in which change can be documented and quantified.

Through education and conditioning, humans are socialized from infancy to behave in ways that are culturally acceptable within their milieu.¹¹⁵ The process of acculturation is ongoing, and as environments and expectations change throughout the life course, behaviors that were adaptive in one environment or acceptable in one life stage must be discarded and new

¹¹⁴ See, e.g., MEME HIENEMAN ET AL., *PARENTING WITH POSITIVE BEHAVIOR SUPPORT: A PRACTICAL GUIDE TO RESOLVING YOUR CHILD'S DIFFICULT BEHAVIOR* (2006) (providing parenting tips for effectively re-directing problematic childhood behavior); MARILYN PINCUS, *MANAGING DIFFICULT PEOPLE: A SURVIVAL GUIDE FOR HANDLING ANY EMPLOYEE* (2004) (offering management tips for redirecting antisocial workplace behavior); Elizabeth E. Stewart & Chester Fox, *Encouraging Patients to Change Unhealthy Behaviors with Motivational Interviewing*, *FAM. PRACT. MANAGEMENT* 22 (2011), <http://www.aafp.org/fpm/2011/0500/p21.html> [<https://perma.cc/LPD2-PCJV>] (describing cognitive behavioral techniques for motivating behavioral change in medical patients); Melissa Stormont & Wendy Reinke, *The Importance of Precorrective Strategies and Behavior-Specific Praise and Strategies to Increase Their Use*, 18 *BEYOND BEHAV.* 26, 26 (2009) (observing that since “many young children demonstrate behavior that teachers find challenging,” it is incumbent on educators to “support children’s social development and use effective practices so that children will be less likely to develop or sustain behavioral problems”); Edward C. Tomlinson & Jerald Greenberg, *Discouraging Employee Theft by Managing Social Norms and Promoting Organizational Justice*, in *MANAGING ORGANIZATIONAL DEVIANCE* 211 (Roland E. Kidwell & Christopher L. Martin, eds. 2012) (describing industrial engineering interventions for preventing employee crime).

¹¹⁵ Evidence suggests that the intellectual and psychological functions that control learning are present from birth and do not change tremendously across the lifespan. See, e.g., Lewis P. Lipsitt, *Learning Processes of Human Newborns*, 12 *MERILL-PALMER QUART. BEHAV. & DEV.* 45, 64 (1966) (presenting evidence of learning in early infancy and pointing out that “perhaps not so strangely, the parameters and experimental techniques which seem to have most promise at present [in promoting infant learning] are very similar to those known for some time to be effective in manipulating animal behavior and adult behavior”). Recognition of social norms—and deviation from them—also emerges very early in human development. See Marco F. H. Schmidt & Michael Tomasello, *Young Children Enforce Social Norms*, 21 *CURRENT DIRECTIONS PSYCH. SCI.* 232, 234 (2012) (finding that children as young as two enforce moral and behavioral norms as part of self-identifying as members of a distinctive cultural group).

habits acquired.¹¹⁶ Each discipline, from public health to education to criminology, has its own paradigm for explaining how behavioral change occurs, but all share one feature in common: they see behavior change as a process and not as an event.

In public health, the popular “transtheoretical model” identifies six specific stages of change relevant to the abandonment of any maladaptive behavior.¹¹⁷ These stages, which follow one another in roughly sequential (though sometimes overlapping) order are pre-contemplation, contemplation, preparation, action, maintenance, and termination.¹¹⁸ In the pre-contemplation stage people deny or ignore the behaviors in need of change, with no intention of altering their current behavior.¹¹⁹ In the contemplation stage, they wrestle with ambivalence about whether they think change is possible or desirable.¹²⁰ In the preparation stage, they begin to muster the skills and the will to break old habits and build new ones, thus developing a plan for how they will make needed changes.¹²¹ In the action stage, they begin to change behavior.¹²² Importantly, the change that occurs in this stage is not always complete. In the context of smoking cessation, action may involve reducing the number of daily cigarettes smoked: for weight loss, it may involve calorie reduction.¹²³ The change must be a significant alteration from the pre-action behavior, but it need not be perfected. As the new behaviors become more consistent and habitual, and the old fade away, people move into the maintenance stage, which may last from six months to five years.¹²⁴ Termination is the final stage, one that may be more ideal than real for most people:

Termination is the stage in which individuals have zero temptation and 100% self-efficacy. No matter whether they are depressed, anxious, bored, lonely, angry, or stressed, they are sure they will not return to their old unhealthy habit as a way of coping.¹²⁵

¹¹⁶ See generally James E. Thornton, *Life-Span Learning: A Developmental Perspective*, 57 INT. J. AGING & HUM. DEV. 55 (2003) (discussing social learning across the lifespan).

¹¹⁷ James O. Prochaska & Wayne F. Velicer, *The Transtheoretical Model of Health Behavior Change*, 12 AM. J. HEALTH PROMOTION 38, 38 (1997).

¹¹⁸ *Id.* at 39.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.* In its requirement of perfect abstinence from maladaptive behavior, termination sounds a lot like recidivism: black and white with no margins of error.

As people move through each stage, back-sliding—or relapse—is not uncommon. In fact, “relapse tends to be the rule when action is taken for most health behavior problems,” though it often precipitates a fresh effort at positive change.¹²⁶

The key insight from the transtheoretical model is that “[b]ehavior change is a process that unfolds over time through a sequence of stages.”¹²⁷ The transtheoretical model has been tested across a wide range of behaviors, ranging from addiction to overeating to smoking to delinquency to substance abuse.¹²⁸ Regardless of the behaviors studied, the model appears fairly descriptive of the internal and behavioral processes that underlie change.¹²⁹

In education, behavior change, in the form of social learning, is typically explained as the acquisition and mastery of skills over time.¹³⁰ In order to move from maladaptive behaviors to more mature, prosocial behaviors, students must be taught the correct way to behave. That is, they must see the desired behavior modeled, must be given opportunities to practice the skill with corrective and formative feedback, and must have opportunities for continued practice in multiple settings, both formal and informal.¹³¹ The

¹²⁶ *Id.*

¹²⁷ *Id.* at 41.

¹²⁸ See, e.g., Ana Andrés et al., *The Transtheoretical Model and Obesity: A Bibliometric Study*, 73 SCIENTOMETRICS 289 (2007); Fabiana Andrioni De Biaze Vilela et al., *The Transtheoretical Model and Substance Dependence: Theoretical and Practical Aspects*, 31 REVISTA BRASILEIRA DE PSIQUIATRIA, 362 (2009), <https://dx.doi.org/10.1590/S1516-44462009005000010> [<https://perma.cc/PWH9-GLBK>]; Russell C. Callaghan et al., *Does Stage-of-Change Predict Dropout in a Culturally Diverse Sample of Adolescents Admitted to Inpatient Substance-Abuse Treatment? A Test of the Transtheoretical Model*, 30 ADDICTIVE BEHAV. 1834 (2005); Christine F. Lerner, *The Transtheoretical Model of Change: Self-change in Adolescent Delinquent Behaviors*, Dissertation Abstracts Int’l, 51(12-B, Pt 1), 6111; James O. Prochaska et al., *Stages of Change and Decisional Balance for 12 Problem Behaviors*, 13 HEALTH PSYCH. 39 (1994) (summarizing research on change across multiple problem behaviors including smoking cessation, quitting cocaine, weight control, high-fat diets, adolescent delinquent behaviors, safer sex, condom use, sunscreen use, radon gas exposure, exercise acquisition, mammography screening, and physicians’ preventive practices with smokers).

¹²⁹ Prochaska, *supra* note 128, at 39.

¹³⁰ See, e.g., Pedro Gil-Madrona et al., *Acquisition and Transfer of Values and Social Skills through a Physical Education Program Focused in the Affective Domain*, 12 MORTICIDADE 32 (2016) (reporting on effects of social behavior training on student behavior in the context of physical education courses); David J. Hansen et al., *Enhancing the Effectiveness of Social Skills Interventions with Adolescents*, 21 EDUC. & TREATMENT CHILD. 489 (1998); Paulo N. Lopes & Peter Salovey, *Toward a Broader Education: Social, Emotional, and Practical Skills*, in BUILDING ACADEMIC SUCCESS ON SOCIAL AND EMOTIONAL LEARNING: WHAT DOES THE RESEARCH SAY? (Joseph E. Zins et al., eds. 2004).

¹³¹ Rosemary Battalio & J. Todd Stephens, *Social Skills Training: Teacher Practices and Perceptions*, 14 BEYOND BEHAV. 15, 15 (2015); see also Michael Bullis et al., *A Promise*

Positive Behavioral Support model, which has gained traction in many American public schools as a model for advancing behavioral change,¹³² posits that:

[A]lthough learning and teaching processes are complex and continuous, and some behavior initially is not learned (e.g., biobehavioral), key messages from this science are that much of human behavior is learned, comes under the control of environmental factors, and can be changed. The strength of the science is that problem behaviors become more understandable, and, as our understanding grows, so does our ability to teach more socially appropriate and functional behavior.¹³³

In this model, the mechanisms for preventing antisocial behavior and the mechanisms for responding to it are the same: prevention and early intervention efforts; a “culture that provides multiple opportunities to display and receive positive reinforcement for prosocial behavior;” a range of strategies and responses that can be calibrated to the specific problem behavior and to the needs of the learner; and a reliance on evidence-based programs.¹³⁴

While much of the literature on behavioral education is focused on teaching children and young adult learners, the principles on which they rest transfer readily to adult learners. Prosocial education is by no means limited to the formation of children; adult learners can also manifest disruptive behaviors that require intervention by educators, ranging from inattention to threats of violence.¹³⁵ Notably, the correctional programs that appear to be most effective in reducing recidivism are those that utilize a cognitive-based therapy (CBT) approach.¹³⁶ The “goal of CBT is to help offenders develop

Unfulfilled: Social Skills Training with At-Risk and Antisocial Children and Youth, 9 EXCEPTIONALITY 67 (2001).

¹³² U.S. DEPT. OF ED., 22D ANNUAL REPORT TO CONGRESS ON THE IMPLEMENTATION OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT, III-10-III-22 (2000).

¹³³ *Id.*; see also Anthony Biglan, *Translating What We Know About the Context of Antisocial Behavior into a Lower Prevalence of Such Behavior*, 28 J. APPLIED BEHAV. ANALYSIS 479 (1995).

¹³⁴ Mack D. Burke et al., *Preventing School-Based Antisocial Behaviors with School-Wide Positive Behavioral Support*, 1 J. EARLY & INTENSIVE BEHAV. INTERVENTION 65, 66 (2004).

¹³⁵ See Robert Dobmeier & Joseph Moran, *Dealing with Disruptive Behavior of Adult Learners*, 22 NEW HORIZONS ADULT ED. & HUM. RESOURCE DEV. 29, 39–41 (2008); Gerard M. Schippers et al., *Social Skills Training, Prosocial Behavior, and Aggressiveness in Adult Incarcerated Offenders*, 45 INT’L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 244, 246 (2001) (finding positive results in study of Dutch prison program that teaches social skills through “techniques as modeling, feedback, role playing, imitation, coaching, and social reinforcement”).

¹³⁶ See Cullen et al., *supra* note 60, at 50; Nana A. Landenberger & Mark W. Lipsey, *The Positive Effects of Cognitive–Behavioral Programs for Offenders: A Meta-Analysis of Factors Associated with Effective Treatment*, 1 J. EXPERIMENTAL CRIMINOLOGY 451, 472 (2005).

a new way of thinking by providing them with a chance to model, role-play, and practice pro-social skills.”¹³⁷ That model, which employs the same tools advocated by educators, has repeatedly outperformed other models of correctional intervention in terms of its effect on recidivism rates.¹³⁸ That fact bolsters the key insight educators offer: the mastery of skills occurs over time and comes only with repeated practice.¹³⁹

The subfields of sociology known as developmental and life course criminology embrace paradigms of behavioral change that complement those used by educators and public health providers in many ways. Through longitudinal studies of the kind discussed above, criminologists have examined the ways in which antisocial behavior, both criminal and non-criminal, manifests at different life stages.¹⁴⁰ In doing so, they have focused on identifying the factors that correlate not only with commencement of crime but with its termination. The term used most often to describe this disentanglement from criminal behavior is desistance.¹⁴¹

While desistance is sometimes used as a synonym for termination of offending, it is not a singular event.¹⁴² Rather, as Sampson and Laub explain in their seminal work on the subject, desistance “is a social transition that entails identity transformation, as from a smoker to a nonsmoker, from a married or coupled person to a divorced or uncoupled person, or from an offender to a nonoffender.”¹⁴³ In other words, “just like quitting smoking or uncoupling, desistance is best viewed as a process rather than a discrete event.”¹⁴⁴

Across an individual’s lifespan, engagement with crime varies according to a wide number of variables, the most powerful being age.¹⁴⁵ In youth, crime is so statistically prevalent that it is considered sociologically

¹³⁷ JASLENE LIZAMA ET AL., CTR. FOR PUB. POL’Y, WHAT WORKS? SHORT-TERM IN-CUSTODY TREATMENT PROGRAMS 7 (2014), <http://cpp.fullerton.edu/pdf/What%20Works.pdf> [<https://perma.cc/4G8V-8U9N>].

¹³⁸ See Brandon A. Gaudiano, *Cognitive-Behavioral Therapies: Achievements and Challenges*, 11 EVIDENCE BASED MENTAL HEALTH 5, 5–7 (2008).

¹³⁹ See Susan H. Spence, *Social Skills Training with Children and Young People: Theory, Evidence and Practice*, 8 CHILD & ADOLESCENT MENTAL HEALTH 84, 90 (2003) (“The practice of target responses is essential for skill acquisition and improvement.”).

¹⁴⁰ See discussion *supra* Section I.A.

¹⁴¹ Laub & Sampson, *supra* note 16, at 11.

¹⁴² *Id.*

¹⁴³ *Id.* at 12.

¹⁴⁴ *Id.*

¹⁴⁵ Jeffrey T. Ulmer & Darrell Steffensmeier, *The Age and Crime Relationship: Social Variation, Social Explanations*, in THE NURTURE VERSUS BIOSOCIAL DEBATE IN CRIMINOLOGY 378 (K. Beaver, B. Boutwell, and J.C. Barnes eds., 2014) (“It is a truism that age is one of the strongest factors associated with criminal behavior.”).

normative,¹⁴⁶ particularly among males—a fact that explains why most crimes are committed by men between the ages of fifteen and twenty-five.¹⁴⁷ With age usually (and gradually) comes wisdom, lower energy, more peer restraints, and, typically, desistance from crime.¹⁴⁸ Although the pathways into and out of criminal behavior vary from person to person, there are some factors that repeatedly have been found to affect desistance:

[D]esistance stems from a variety of complex processes—developmental, psychological, and sociological—and thus there are several factors associated with it. The key elements seem to be aging; a good marriage; securing legal, stable work; and deciding to “go straight,” including a reorientation of the costs and benefits of crime. Processes of desistance from crime in general, specific types of crime, and multiple forms of problem behavior seem to be quite similar.¹⁴⁹

What is it about these elements that promotes desistance? Most scholars conclude that it is not the events per se, but rather the moral and emotional “turning points” they provide that create opportunities for people to redefine their identities and accordingly reshape their behavior.¹⁵⁰ No single turning point can be guaranteed to change behavior, but each offers an opportunity for re-orientation. In this model, criminal sanctions, educational attainments, drug treatment, or a new relationship all serve a similar function with respect to behavioral change: they provide a new chapter in a person’s life narrative that may reinforce a negative self-identity or offer a chance to change one’s

¹⁴⁶ Christopher Uggen & Michael Massoglia, *Desistance from Crime and Deviance as a Turning Point in the Life Course*, in HANDBOOK OF THE LIFE COURSE 312 (Jeylan T. Mortimer & Michael J. Shanahan eds., 2002) (“[A] long line of self-report research has demonstrated that almost every adolescent admits to some form of delinquency.”); Ulmer & Steffensmeier, *supra*, note 145, at 378 (“[A] significant portion of U.S. national crime rate trends over time can be explained by fluctuations in the proportion of the population in the crime-prone age group of fifteen- to twenty-four-year-olds.”).

¹⁴⁷ Ulmer & Steffensmeier, *supra* note 145, at 377–78.

¹⁴⁸ See MICHAEL GOTTFREDSON & TRAVIS HIRSCHI, A GENERAL THEORY OF CRIME 124–26 (1990); ROBERT J. SAMPSON & JOHN H. LAUB, CRIME IN THE MAKING: PATHWAYS AND TURNING POINTS THROUGH LIFE 6 (1993); Travis Hirschi & Michael Gottfredson, *Age and the Explanation of Crime*, 89 AM. J. SOC. 552 (1983).

¹⁴⁹ Laub & Sampson, *supra* note 16, at 3.

¹⁵⁰ Robert J. Sampson & John H. Laub, *A Life-Course Theory of Cumulative Disadvantage and the Stability of Delinquency*, in DEVELOPMENTAL THEORIES OF CRIME AND DELINQ. 1133, 1143 (Terence P. Thornberry ed., 1997) (quoting MICHAEL RUTTER & MARJORIE RUTTER, DEVELOPING MINDS: CHALLENGE AND CONTINUITY ACROSS THE LIFESPAN 244 (1993) (“In our theoretical model, turning points may be positive or negative because they represent ‘times of decision or opportunity when life trajectories may be directed on to more adaptive or maladaptive paths.’”)).

story.¹⁵¹ Although there are documented cases in which a singular, salient event precipitated the decision to “go straight,” a more common story is that multiple opportunities for change combine, leading to a gradual diminishment in criminal behavior. Whether this is understood as a change in identity,¹⁵² a change in social role,¹⁵³ or a re-interpretation of a life narrative,¹⁵⁴ the result is the same: through a process of reflection and socialization, a person disentangles herself from crime.

B. MEASURING PROGRESS

If change is a process rather than an event, using a binary metric like recidivism is too one-dimensional. While recidivism data tell us whether those exposed to various interventions re-offended during the follow-up window, they tell us nothing about the nature of the re-offense or whether the trajectory of a person’s subsequent contacts with the law suggest a move toward desistance or away from it. But what alternatives exist? Not surprisingly, answers can be found by again considering how fields related to criminal justice respond to the challenge of measuring change over time.

Education is a good place to start. Like criminal justice, American primary education is a local enterprise with significant variation among states in the contents and methods of teaching.¹⁵⁵ Also like criminal justice, education involves the outlay of significant public funds: in 2013–2014, states and the federal government spent \$634 billion on K–12 education.¹⁵⁶ With that investment comes a demand for public accountability.

In recent years, there have been numerous attempts at the federal and state levels to standardize curricula and require the generation and analysis of metrics, such as standardized test scores, to hold teachers accountable for

¹⁵¹ See generally SHADD MARUNA, *MAKING GOOD: HOW EX-CONVICTS REFORM AND REBUILD THEIR LIVES* (2001) (discussing differences in the autobiographical narratives of “persisters” and “desisters”); Uggen & Massoglia, *supra* note 146, at 311.

¹⁵² Ray Paternoster & Shawn Bushway, *Desistance and the “Feared Self”: Toward an Identity Theory of Criminal Desistance*, 99 J. CRIM. L. & CRIMINOLOGY 1103, 1105 (2009).

¹⁵³ See generally ROBERT J. SAMPSON & JOHN H. LAUB, *CRIME IN THE MAKING: PATHWAYS AND TURNING POINTS THROUGH LIFE* (1993); David Best, *Social Identity, Social Networks and Social Capital in Desistance and Recovery*, in *MOVING ON FROM CRIME AND SUBSTANCE USE: TRANSFORMING IDENTITIES* (Anne Robinson & Paula Hamilton eds., 2016).

¹⁵⁴ MARUNA, *supra* note 151.

¹⁵⁵ See Ralph D. Mawdsley & Paul Williams, *Teacher Assessment and Credentialing: The Role of the Federal Government in a State Function*, 262 ED. L. REP. 735, 736 (2011) (discussing federal legislation responding to “a lack of consistency among the states”).

¹⁵⁶ U.S. DEPT. ED., NAT’L CTR. ED. STAT., *THE CONDITION OF EDUCATION* (2017).

student learning.¹⁵⁷ Standardized tests, which students across the country are required to take at periodic intervals,¹⁵⁸ are the educational analogs to recidivism rates. They measure educational achievement in tested subject matter and nothing more. When high percentages of students make adequate yearly progress on grade level expectations, state and local education systems are often lauded as successes, and when large numbers fail to make such progress, schools and teachers are labeled as “failing.”¹⁵⁹

A difference between education and criminal justice is that while criminal justice administrators have largely accepted recidivism as a valid metric of their own success, educators and educational administrators have heavily resisted such simplistic measures of achievement.¹⁶⁰ Recognizing the wide variety of factors that affect student learning—many of which lie outside educators’ control—teachers across the country have fought efforts to define educational success by reference only to test scores.¹⁶¹ Through unions lobbying, media campaigns, and grassroots coalition building, educators have fought against what they assert has been an over-emphasis on tests scores alone as a metric of student and teacher achievement.¹⁶²

In response, some districts have introduced “value-added” assessments to better capture the role of teachers in student growth over time. The goal

¹⁵⁷ See, e.g., Jessica E. Ozalp & Rachel E. Snyder, *School Accountability After “No Child Left Behind,”* 89 WIS. LAW 28, 28 (July/Aug. 2016) (explaining that both the Every Student Succeeds Act and its predecessor legislation, No Child Left Behind, “leverage student standardized test scores to pressure underachieving schools to improve on measures of student progress” by “holding states, schools, and teachers accountable to test and report the performance and progress of disadvantaged subgroups of students”).

¹⁵⁸ ESSA ASSESSMENT NFR SUMMARY FACT SHEET FOR FINAL REG. TITLE I PART A AND B, Dec. 7, 2017, <https://www2.ed.gov/policy/elsec/leg/essa/essaassessmentfactsheet1207.pdf> [<https://perma.cc/4JM7-AY3V>].

¹⁵⁹ See Monica Teixeira de Sousa, *A Race to the Bottom? President Obama’s Incomplete and Conservative Strategy for Reforming Education in Struggling Schools or the Perils of Ignoring Poverty*, 39 STETSON L. REV. 629, 656 (2010); James E. Ryan, *The Perverse Incentives of the No Child Left Behind Act*, 79 N.Y.U L. REV. 932, 940 (2004);.

¹⁶⁰ See, e.g., Noel K. Gallagher, *Teachers Balk at New Performance Evaluation Standard’s Reliance on Test Scores*, PORTLAND HERALD PRESS (Jan. 28, 2013), https://www.centralmaine.com/2013/01/28/teachers-resist-evaluation-proposal_2013-01-28/ [<https://perma.cc/TV8B-HNNA>]; Kathleen Megan, *State Eliminates Test Scores From Teacher Evaluations*, HARTFORD COURANT (Apr. 5, 2017), <https://www.courant.com/education/hc-stat-e-board-education-teacher-evaluations-20170405-story.html> [<https://perma.cc/U59U-8SCL>].

¹⁶¹ Preston C. Green et al., *The Legal and Policy Implications of Value-Added Teacher Assessment Policies*, 2012 B.Y.U. EDUC. & L.J. 1, 5–15 (2012).

¹⁶² See, e.g., Kate Taylor & Motoko Rich, *Teachers’ Unions Fight Standardized Testing, and Find Diverse Allies*, N.Y. TIMES (Apr. 20, 2015), <https://www.nytimes.com/2015/04/21/education/teachers-unions-reasserting-themselves-with-push-against-standardized-testing.html> [<https://perma.cc/2VMP-GCYK>].

of these tools is to control for “exogenous factors” such as poverty, friends, and familial stability, “focus[ing] on achievement gains over time for the same individual or groups of students.”¹⁶³ Although such assessments theoretically offer a more nuanced way of measuring student growth—and the role of teachers in fostering it—they too have been met with pushback from educators.¹⁶⁴ Their objections are grounded in part on the difficulty of “isolat[ing] one specific teacher’s contribution to students’ learning, leading to situations where a teacher might be identified as a bad teacher simply because her colleagues are ineffective.”¹⁶⁵

Educators have argued instead that because “learning is a complex process,” assessments of learning

should . . . emplo[y] a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving . . . students’ educational experience.¹⁶⁶

In other words, without rejecting the role that data can play in assessing the success of the educational enterprise, teachers and school administrators have required that data be used to trace the learning process itself, looking for multiple forms of evidence of growth over time rather than simple snapshots of isolated performance.

Of course, there are key differences between education and corrections. Failure to learn can reduce the quality of students’ lives, but it does not imperil the lives of others. Crime sometimes does endanger others, and it nearly always reduces the quality of life for those affected by it. In light of that difference, it might seem fair to hold the criminal justice system to a higher standard. The problem is that overreliance on recidivism provides only one-dimensional data that masks important information about the degree to which criminal justice interventions are, in the words of educational assessment, “adding value”—or reducing it. Examining more nuanced data about individual and aggregate behavioral change over time could yield much more revealing information about not just whether, but in what ways

¹⁶³ Ryan, *supra* note 159, at 981.

¹⁶⁴ See, e.g., Valerie Strauss, *Principals Reject ‘Value-Added’ Assessment that Links Test Scores to Educators’ Jobs*, WASH. POST (Dec. 4, 2014), <https://www.washingtonpost.com/news/answer-sheet/wp/2014/12/04/principals-reject-value-added-assessment-that-links-test-scores-to-educators-jobs/> [https://perma.cc/NH6D-RY4S].

¹⁶⁵ Green et al., *supra* note 161, at 10. This challenge is not dissimilar from the difficulty of isolating the effects of any given prison program from other confounding factors that might affect long-term desistance.

¹⁶⁶ ALEXANDER ASTIN ET. AL., AMERICAN ASSOCIATION FOR HIGHER LEARNING: FORUM, NINE PRINCIPLES OF GOOD PRACTICE FOR ASSESSING STUDENT LEARNING I(1992).

people recidivate and the degree to which criminal justice programs move them away from criminal behavior or propel them toward it.

So, what relevance does the experience of educators have for attempts to measure success in the criminal justice system? First, like educators, criminal justice system actors should demand an acknowledgement by policymakers and the public that recidivism is affected by a host of interacting, exogenous factors, many of which the criminal justice system can do little to affect. Second, like educators, criminal justice system actors should resist efforts to oversimplify the effectiveness or ineffectiveness of interventions by reference to a measure as insensitive as pure recidivism rates.

But what is the alternative to relying on recidivism? The answer to that question can be found in the way criminologists measure change over time. Although criminologists gather data on recidivism, they do not examine it in isolation. Rather, in identifying “what works” to promote desistance, criminologists look not at isolated recidivism rates but rather at how those rates of offense change over time for individual offenders and among readily-identifiable subgroups of offenders (“youth” or “burglars” for example) as well as how those changes connect to other key contextual events.¹⁶⁷ The richest studies meld qualitative and quantitative data to create a three-dimensional view of the effects of various life events and interventions.

Those in the criminal justice system do not typically have the resources to extend follow-up windows or conduct surveys or interviews. That does not mean, however, that they must settle for pure recidivism rates. In recent years, policy-engaged criminologists have suggested that criminal justice administrators should look beyond recidivism rates to identify the patterns of behavior those rates can reveal over time. In a notable policy brief, Ryan King and Brian Elderbroom of the Urban Institute urged state program administrators to think more broadly about measuring programmatic success.¹⁶⁸ They explained, “Though failure rates should serve as the foundation of recidivism research, it is critical to move beyond them to improving recidivism as a performance measure.”¹⁶⁹ Specifically, they urged states to include in reports measures such as “time to failure, crime severity, and behavior changes as indicators of success.”¹⁷⁰ More recently, in a white paper arising out of the Harvard Kennedy School Executive Session on

¹⁶⁷ See, e.g., MARUNA, *supra* note 151.

¹⁶⁸ RYAN KING & BRIAN ELDERBROOM, IMPROVING RECIDIVISM AS A PERFORMANCE MEASURE, URB. INST. 2 (2014), <https://www.bja.gov/Publications/UI-ImprovingRecidivism.pdf> [<https://perma.cc/G4XD-KCAA>].

¹⁶⁹ *Id.*

¹⁷⁰ *Id.* at 3.

Community Corrections, Jeffrey Butts and Vincent Schiraldi argued that “[j]ustice policy should reduce the importance of recidivism and focus on desistance.”¹⁷¹ They suggest that doing so might involve not only the analysis of existing data but also the collection of additional information about the changing “attitudes, perceptions, and beliefs” of people who have been the subject of criminal justice intervention.¹⁷²

Replete throughout the desistance literature are references to indicators that signal desistance or its absence.¹⁷³ Some of these, such as attitudes about the law, are best captured through qualitative research. Several, however—particularly changes in offense severity over time and alterations in the frequency of offending—are easily derived from existing recidivism data by calculating changes in crime severity over time, and the time between new criminal incidents. Rarely, however, do these markers of desistance make their way into reports assessing the effectiveness of any particular criminal justice program.

To illustrate this point, imagine that you are a program analyst who has decided to conduct a five-year recidivism study examining re-arrest rates of all graduates of a prison-based anger management course. To assess recidivism rates, you will need to collect arrest records for program graduates and for members of a control group of prisoners who did not take the class but are otherwise similar to those who did. With just those records, you could report not just on recidivism but on a great deal more. The official record that tells you John Doe was re-arrested within five years of release will also tell you for what he was arrested and how long after his release the arrest occurred. Moreover, if John Doe is arrested three times more, those arrest records, when viewed together and compared against John’s criminal history, will tell you whether he is slowing down or speeding up in terms of his criminal productivity and whether his behavior is escalating, diminishing, or holding steady in terms of severity. That kind of information, averaged out across the larger population of graduates and controls, can also tell you whether a study group is, in the main, offending more or less the same or differently than they historically have done in addition to how their offending

¹⁷¹ JEFFREY A. BUTTS & VINCENT SCHIRALDI, *RECIDIVISM RECONSIDERED: PRESERVING THE COMMUNITY JUSTICE MISSION OF COMMUNITY CORRECTIONS*, HARVARD KENNEDY SCHOOL PROGRAM IN CRIMINAL JUST. POL’Y MANAGEMENT 13 (2018), https://www.hks.harvard.edu/sites/default/files/centers/wiener/programs/pcj/files/recidivism_reconsidered.pdf [<https://perma.cc/QV7W-5ATX>].

¹⁷² *Id.*

¹⁷³ See Ros Burnett & Fergus McNeill, *The Place of the Officer-Offender Relationship in Assisting Offenders to Desist from Crime*, 52 PROB. J. 221, 247–68 (2005); John H. Laub et al., *Trajectories of Change in Criminal Offending: Good Marriages and the Desistance Process*, 63 AM. SOC. REV. 225 (1998).

patterns compare to those of the control group. This information would allow a picture to emerge of change over time—a picture that is less focused on whether former offenders have fully terminated their criminal careers (though it could reveal that as well) and more interested in whether they are desisting from or persisting in criminal behavior as a result of their engagement with a specific intervention. Although this data would be subject to all of the limitations of data on recidivism generally (inconsistent definitions, over and under-inclusion of criminal behavior through reliance on official court records, etc.)¹⁷⁴, it would be far superior to current reliance on recidivism rates alone.

It would be inaccurate to say that the methods described above, so commonplace in academic criminological research, are never reflected in evaluations by professionals within the criminal justice system. Periodically, system analysts will issue a study or white paper demonstrating the ability to use recidivism data to produce more nuanced information (reporting on the age of recidivists or classifying the nature of their re-arrest, for example)¹⁷⁵, but these are the exception and not the rule. Far too often, recidivism continues to be reported—and therefore understood—as a binary event rather than as the dynamic process it is. As the following section explains, that is a missed opportunity.

IV. THE LIMITS OF RECIDIVISM DATA

In light of the mechanisms of change discussed above, it is clear that using markers of desistance to measure and report on the effectiveness of criminal justice programs would have significant benefits. It may be less clear, however, how the failure to utilize these more nuanced markers is actively harmful to the criminal justice system and those affected by it. The following section discusses three problems that can be created when the binary metric of recidivism is used to measure the success of the criminal justice system. These include data gaming, risk-averse behavior by system actors, and the premature termination of otherwise-promising programs for advancing public safety.

¹⁷⁴ See *supra* Section II; *infra* Section IV.

¹⁷⁵ See, e.g., U.S. SENT'G COMM'N, THE EFFECTS OF AGING ON RECIDIVISM AMONG FEDERAL OFFENDERS 24–25 (2017), https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2017/20171207_Recidivism-Age.pdf [<https://perma.cc/Q89X-9C4G>].

A. DATA GAMING

Criminal justice programs are under tremendous pressure to produce data that demonstrates significant “good” outcomes, and that pressure can—in ways both conscious and subconscious—affect the validity of the data they generate.¹⁷⁶ Scandals in education related to the falsification of standardized test results are an analogous example;¹⁷⁷ making criminal justice system actors accountable for reducing recidivism incentivizes gaming the underlying data. Placing a high premium on recidivism rates encourages program administrators not to reduce re-offending so much as to reduce statistical rates of recidivism.¹⁷⁸ As a result, improvements in recidivism rates often tell us more about the behavior of system actors than of individuals with prior criminal records. Two examples help illustrate this point.

First, consider recent efforts across the country to reduce failure rates for individuals on community supervision. In states from California to North Carolina, large numbers of people have, at times, been re-incarcerated while serving sentences of probation or parole.¹⁷⁹ Sometimes, the triggering event for re-incarceration is the commission of a new crime.¹⁸⁰ Other times, incarceration is triggered by the violation of non-criminal rule, ranging from

¹⁷⁶ See Mia Bird & Ryken Grattet, *Realignment and Recidivism*, 664 ANN. AM. ACAD. POL'Y & SOC. SCI. 176, 192 (2016) (“[A]n observed change in a particular measure of recidivism may reflect a change in offender behavior; it can also be inadvertently affected by criminal justice process changes or even intentionally manipulated to produce indications of success.”); Anthony Petrosino & Haluk Soydan, *The Impact of Program Developers as Evaluators on Criminal Recidivism: Results from Meta-Analyses of Experimental and Quasi-Experimental Research*, 1 J. EXPERIMENTAL CRIMINOLOGY 435, 444 (2005) (finding “consistent with prior meta-analyses in offender rehabilitation, . . . that studies in which evaluators were greatly influential in the design and implementation of treatment report consistently and substantially larger effect sizes than other types of evaluators.”).

¹⁷⁷ Motoko Rich, *Scandal in Atlanta Reignites Debate Over Tests' Role*, N.Y. TIMES (Apr. 2, 2013), <https://www.nytimes.com/2013/04/03/education/atlanta-cheating-scandal-reignites-testing-debate.html> [<https://perma.cc/Q4V3-LLNK>]; THOMAS S. DEE ET AL., THE CAUSES AND CONSEQUENCES OF TEST SCORE MANIPULATION: EVIDENCE FROM THE NEW YORK REGENTS EXAMINATIONS, NAT'L BUREAU ECON. RES. (2016), <http://www.nber.org/papers/w22165.pdf> [<https://perma.cc/76JF-HB5T>].

¹⁷⁸ Cullen et al., *supra* note 60, at 51 (“Another challenge is to ensure that correctional personnel cannot influence outcome measures.”).

¹⁷⁹ Klingele, *supra* note 85, at 1019, 1030–31.

¹⁸⁰ PEW CTR. ON STATES, STATE OF RECIDIVISM: THE REVOLVING DOOR OF AMERICA'S PRISONS 7, 9 (2011).

minor infractions to more serious violations.¹⁸¹ As discussed earlier, many times these returns to custody are coded as instances of recidivism.¹⁸²

Recognizing the political, fiscal, and human costs associated with such community supervision “failure,” many states have undertaken efforts to reduce their revocation rates.¹⁸³ They have often done so not by changing the behavior of those being supervised but rather by changing the behavior of those doing the supervising. California offers a prime example. Prior to the United States Supreme Court’s ruling in *Brown v. Plata*,¹⁸⁴ California had one of the highest parole revocation rates in the nation at more than 66% in 2005.¹⁸⁵ In *Plata*, the Court held that as a result of ongoing Constitutional violations in the conditions of its prisons, California was required to reduce its overall prison population by 37,000 people.¹⁸⁶ Recognizing the enormity of this reduction, the Court offered suggestions for how such a change could be safely accomplished, including by diverting “technical parole violators to community-based programs.”¹⁸⁷

That is, in fact, exactly what California did (among other things). Following *Plata*, parolee arrest and revocation rates plummeted, falling from 44.6% in 2011¹⁸⁸ to 7% twelve months later.¹⁸⁹ What drove this dramatic change? Bird & Grattet report:

There is anecdotal evidence that arrest decisions are shifting from a lesser reliance on arrests for supervision violations to a greater reliance on arrests for felonies These shifting patterns will directly impact reported rates of recidivism, and it will be

¹⁸¹ Klingele, *supra* note 85, at 1030–31 (“One study followed individuals released from prison in 2004 and found that in thirteen states, 25% or more of those released were reincarcerated for purely ‘technical’ violations of community supervision within three years.”).

¹⁸² See PEW CTR. ON STATES, *supra* note 180, at 33–37; discussion *supra* Section II.A, at 9.

¹⁸³ See, e.g., PEW CHARITABLE TRUSTS, REDUCING INCARCERATION FOR TECHNICAL VIOLATIONS IN LOUISIANA (2014), <http://www.pewtrusts.org/~media/assets/2014/11/pspreducingincarcerationfortechnicalviolationsinlouisiana.pdf> [<https://perma.cc/6PRU-FUY6>].

¹⁸⁴ *Brown v. Plata*, 563 U.S. 493, 502 (2011) (ordering California prisons to reduce overcrowding following years of Constitutional violations brought about by deficient conditions).

¹⁸⁵ Ryken Grattet et al., *Parole Violations and Revocations in California: Analysis and Suggestions for Action*, 73 FED. PROBATION 2, 2 (2009).

¹⁸⁶ *Plata*, 563 U.S. at 501.

¹⁸⁷ *Id.*

¹⁸⁸ CAL. DEP’T. OF CORRS. & REHAB., 2015 OUTCOME EVALUATION REPORT: AN EXAMINATION OF OFFENDERS RELEASED IN FISCAL YEAR 2010–11 1 (2016), <https://dev-multi.site.mystagingwebsite.com/research/wp-content/uploads/sites/9/2018/04/2015-Outcome-Evaluation-Report.pdf> [<https://perma.cc/69BV-FU38>].

¹⁸⁹ Bird & Grattet, *supra* note 176, at 186 (“In one year’s time, California went from having one of the highest return-to-custody rates in the nation to one of the lowest.”).

challenging to separate changes in discretionary decision-making from changes in underlying offender behavior.¹⁹⁰

A similar phenomenon can be seen in Arizona. In 2008, 6,800 people were revoked from supervision in the state.¹⁹¹ That same year, the state legislature passed the Safe Communities Act, which, among other things, shortened periods of supervision for people who were in compliance with the terms of supervision (thereby reducing the time they were “at hazard” of revocation) and “[c]reated incentives for county probation agencies to reduce revocations.”¹⁹² The effort was met with modest success: while the supervision population held steady, the number of annual revocations had decreased to 4,800 by 2016.¹⁹³

In a short period of time, both California and Arizona saw notable reductions in recidivism-defined-as-revocation rates for those on community supervision.¹⁹⁴ In both cases, however, there is no reason to think that these improvements in recidivism-as-revocation rates were driven by changes in the behavior of people on supervision.¹⁹⁵ Instead, the reductions appear to reflect a conscious decision by the agencies overseeing probationers and parolees to take a less punitive approach to violations of supervision rules, either by choice (Arizona) or legal necessity (California).¹⁹⁶ While such

¹⁹⁰ *Id.* at 193.

¹⁹¹ COUNCIL OF STATE GOV'TS, REDUCING RECIDIVISM: STATES DELIVER RESULTS 3 (2017), https://csgjusticecenter.org/wp-content/uploads/2017/12/12.15.17_Reducing-Recidivism.pdf [<https://perma.cc/8NQ6-APU4>].

¹⁹² *Id.* at 4.

¹⁹³ *Id.* at 3.

¹⁹⁴ *Id.* at 4 (showing 29% decline between 2008 and 2016 in Arizona in people admitted to prison due to probation violations); Bird & Grattet, *supra* note 176, 186–87 (describing California's plummeting revocation rate).

¹⁹⁵ See MIA BIRD ET AL., REALIGNMENT AND RECIDIVISM IN CALIFORNIA, PUB. POL'Y INST. OF CAL. 9 (2017) (“[W]hen comparing the reconviction rates of individuals released before and after realignment, it is important to consider how realignment changed the likelihood that criminal justice systems would pursue formal convictions Under realignment, most offenders can only be sent to prison following conviction on a new, prison-eligible offense—meaning that correctional systems may be shifting away from revocations and toward more formal rearrests and reconvictions. Therefore, if we were to see increases in reconviction rates after realignment, we should not necessarily assume these differences were driven by an increase in reoffending behavior.”).

¹⁹⁶ Cf. ARIZONA ADULT PROBATION FY 2016 ANNUAL REPORT, AZ SUP. CT. ADMIN. OFF. OF THE CTS. 5-6 (2016), https://www.azcourts.gov/Portals/25/AnnRepPop/FY2016_%20REPORT.pdf [<https://perma.cc/55AN-98BW>] (quoting the Director of Adult Probation Services: “We have moved low risk offenders to a very different level of supervision that requires accountability but not the usual resources utilized and required by higher risk offenders to be successful. Based on the research, our focus is now on the higher risk individuals which are the offenders with the higher priority on the caseloads for supervision [W]e continue to

outcomes may reflect wise public policy decisions, they do not suggest that those on supervision desisted. Instead, they suggest that system actors changed their response. These examples illustrate the ways in which recidivism data can be altered in ways that reflect external, political factors as much individual, behavioral ones.

Probation supervision is not the only place where overreliance on recidivism rates can alter the behavior of system actors in unintended ways. Specialty courts, such as drug courts, provide another example of how the behavior of system actors—rather than offenders—sometimes changes in order to improve reported recidivism rates for program participants. Drug courts are popular specialty programs that developed out of concern about the over-criminalization of addiction.¹⁹⁷ Drug courts offer a more collaborative model of decision-making, with a judge and lawyers as members of a larger “treatment team.”¹⁹⁸ Participants are given access to drug treatment and other needed resources in lieu of traditional adversarial adjudication.¹⁹⁹ Graduates typically see their original charges dismissed or reduced, while those terminated for non-compliance are sentenced traditionally.²⁰⁰ Program success (and in turn, continued funding) is ordinarily determined by the recidivism rates of program graduates as compared to traditionally-prosecuted defendants.²⁰¹

focus on supervising, engaging, coaching and supporting successful completions of probation as we have since the adoption of Evidence Based Practice.”).

¹⁹⁷ See Peggy Fulton Hora & Theodore Stalcup, *Drug Treatment Courts in the Twenty-First Century: The Evolution of the Revolution in Problem-Solving Courts*, 42 GA. L. REV. 717, 725 (2008); see also *Drug Courts*, NAT’L INST. JUST., <https://www.nij.gov/topics/courts/drug-courts/Pages/welcome.aspx> [<https://perma.cc/ZC9K-3N74>].

¹⁹⁸ See Eric J. Miller, *Embracing Addiction: Drug Courts and the False Promise of Judicial Interventionism*, 65 OHIO ST. L.J. 1479, 1492 (2004).

¹⁹⁹ Estimates suggest that in 2012, there were more than 1,300 drug courts operating in the United States. SUZANNE M. STRONG ET AL., CENSUS OF PROBLEM-SOLVING COURTS, 2012, BUREAU OF JUST. STAT. 3 (2016), <https://www.bjs.gov/content/pub/pdf/cpsc12.pdf> [<https://perma.cc/6VYC-S6DA>]. The popularity of treatment courts expands to other social problems as well, including mental illness, domestic violence, veterans’ issues, and drunken driving: estimates suggest there are currently over 1,700 problem-solving courts addressing issues other than drug use. *Id.* Most of these, like drug courts, are required by their funding agencies to track recidivism among program graduates.

²⁰⁰ Josh Bowers, *Contraindicated Drug Courts*, 55 UCLA L. REV. 783, 788 (2008).

²⁰¹ In New Mexico, for example, the Legislative Finance Committee’s Program Evaluation Unit presented findings to the state legislature on the performance of drug courts statewide, making recommendations for certification that include “performance measures such as graduation, recidivism, and costs . . . to ensure courts are meeting meaningful performance targets.” N.M. LEG. FIN. COMM., PROGRAM EVALUATION: UPDATE ON NEW MEXICO DRUG COURTS, 53rd Sess., at 26 (2017). Similarly, funding for adult drug courts from the U.S. Department of Justice requires grant applicants to “[b]riefly describe the data collection mechanism that the applicant will use to collect and report in-program progress as

Placing such significance on graduates' recidivism rates creates two well-documented problems in data generation. First, drug courts are incentivized to limit entry to individuals with the highest prospect of successfully completing the program and going on to avoid re-offense. In many cases, this means that drug courts limit participation to first-time, non-violent offenders with no co-occurring conditions²⁰²—the very people who are least likely to need any intervention at all. For many of these individuals, the program is likely to make no difference; they were already unlikely to commit new crimes.

In addition to limiting entry to low-risk candidates, over emphasis on recidivism rates also pressures drug courts to quickly terminate from the program any participants who are having difficulty remaining sober—a difficulty those with serious substance abuse problems would be expected to have. Because these addicts are predictably less likely than their less-addicted counterparts to avoid future reconviction, drug court administrators have an incentive to exclude them from the cohort of graduates whose performance will drive future funding of the program.²⁰³ This disincentive to continue working with more serious drug offenders undercuts the very purpose for which drug courts exist (i.e., to assist people in overcoming addiction and related criminal behavior). It also leads to harsher punishment for serious addicts. Research has consistently found that individuals sentenced after being terminated from drug court programs face punishment many times harsher than traditionally-sentenced drug offenders.²⁰⁴

well as post-program recidivism information.” BUREAU OF JUST. ASSISTANCE, *Adult Drug Court Discretionary Grant Program FY 2018 Competitive Grant Announcement*, 20 (2018) <https://www.bja.gov/funding/DrugCourts18.pdf> [<https://perma.cc/ZRA4-9LVD>].

²⁰² AVINASH SINGH BHATI ET AL., URB. INST. JUST. POL'Y CTR., TO TREAT OR NOT TO TREAT: EVIDENCE ON THE PROSPECTS OF EXPANDING TREATMENT TO DRUG-INVOLVED OFFENDERS 7–8 (2008), <https://www.urban.org/sites/default/files/publication/31621/411645-To-Treat-or-Not-to-Treat.PDF> [<https://perma.cc/4X8Z-8EBY>].

²⁰³ Cf. John A. Bozza, *Benevolent Behavior Modification: Understanding the Nature and Limitations of Problem-Solving Courts*, 17 WIDENER L. J. 97, 118–19 (2007) (“Drug courts, and probably mental health courts, are by definition dealing with a special population of offenders. They are selective. Certain offenders, because of bad criminal histories or because they have committed certain crimes, cannot participate. Moreover, of those who are eligible, only those amenable to treatment are chosen and they are not necessarily individuals who are addicted to drugs.”).

²⁰⁴ See Bowers, *supra* note 200. It is also true, however, that due to the length of drug court interventions, even “defendants who progress through the entire treatment court regime and who upon ‘graduation’ have their charges dismissed ultimately may have received ‘a more onerous disposition in terms of the length of time [they are] subject to court control than they would have received if the charges had been resolved through standard plea negotiations or trial.” Richard C. Boldt, *Rehabilitative Punishment and the Drug Court Treatment Court Movement*, 76 WASH. U. L. Q. 1205, 1256 (1998).

Overreliance on recidivism rates as a success metric encourages drug court programs to reject the very people who are most likely to benefit from the extra resources the drug court offers. The irony is acute because substance abuse treatment providers have long embraced the mantra that “relapse is a part of recovery” and that the road to sobriety almost always includes set-backs²⁰⁵—many of which would qualify as “recidivism” if detected and punished.

The pressure to create good outcome statistics by limiting access to programs is not limited to the drug court context. All criminal justice programs that are assessed based on their reported reductions in recidivism rates find themselves in a similar bind: admit those who most need help and who are therefore at highest risk of recidivating, or admit those with lower risks and needs who will be less likely to recidivate. When funding turns on recidivism reductions, the pressure to game the data is particularly acute.²⁰⁶ If you admit those in most need of help, you increase your reported failure rates; if you admit those who do not need your help, your programs success rates skyrocket. Discussing this problem in the context of juvenile justice, one foundation director explained; “One way to have low recidivism rates is to sweep up kids who are low risk and formally handle them in the systemIf the system concentrates only on very high-risk kids you’ll probably have higher recidivism rates.”²⁰⁷

How would these outcomes be different if desistance were the measure of success rather than recidivism? While there are opportunities for data gaming in any system, the incentives to game decrease as emphasis shifts away from demonstrating perfect outcomes and toward demonstrating realistic, measurable progress. If programs were deemed successful when

²⁰⁵ See, e.g., Lisa Lightman & Francine Byrne, *Addressing the Co-occurrence of Domestic Violence and Substance Abuse: Lessons from Problem-Solving Courts*, 6 J. CTR FOR FAM., CHILD. & CTS. 53, 65 (2005) (“Relapse . . . is generally considered a common element in the process of recovery from substance abuse.”); see also David Sack, *Why Relapse Isn’t a Sign of Failure*, PSYCH. TODAY (Oct. 19, 2012), <https://www.psychologytoday.com/blog/where-science-meets-the-steps/201210/why-relapse-isnt-sign-failure> [<https://perma.cc/7JCR-FXFN>].

²⁰⁶ See, e.g., CTR. FOR STATE GOV’TS, REDUCING RECIDIVISM 12 (2014) https://csgjusticecenter.org/wp-content/uploads/2014/06/ReducingRecidivism_StatesDeliverResults.pdf [<https://perma.cc/Y4E3-DAHV>] (describing a Pennsylvania “performance incentive funding model in which contractors work with [the department of corrections] establish baseline recidivism rates and then to review their recidivism rates every six months. Contractors can receive additional funds if they reduce recidivism below the baseline, or are at risk of having their contracts revoked if recidivism is above the baseline.”).

²⁰⁷ Sanya Mansoor, *Different Ways of Measuring Recidivism Leads to Incomplete Data, Report Says*, JUV. JUST. INFO. EXCHANGE (Sep. 11, 2014), <https://jjie.org/2014/09/11/different-ways-of-measuring-recidivism-leads-to-incomplete-data-report-says/> [<https://perma.cc/5JYN-JJGU>] (quoting MacArthur Foundation program officer quoting Patrick Griffin).

their participants improved and not just when they achieved perfection, program administrators might become willing to treat more serious offenders than they currently do. These more serious or prolific criminals might go on to recidivate in some way but if the treatment they receive were to yield a measurable decrease in later offense severity and frequency, public safety would improve much more than if a minor offender is treated with a perfect result. By removing the incentive for program administrators to focus their efforts on those least likely to recidivate, policymakers could encourage the development and expansion of programs that promote measurable desistance among those with whom they intervene.

B. PREMATURE TERMINATION OF PROMISING PROGRAMS

A second problem created by overreliance on recidivism rates is the risk that promising interventions may be prematurely declared failures. If the only meaningful measure of a program's success is the rate at which it reduces recidivism, programs that demonstrably promote desistance, but do not in themselves change recidivism rates, are at risk of termination.

As an initial matter, it is important to recognize that a sizeable percentage of people who undergo any criminal justice intervention will not recidivate. This is not because the criminal justice system exerts a pervasive ameliorative influence, but rather because without intervention, most people who come into contact with the criminal justice system once will not do so again.²⁰⁸ As with any antisocial or maladaptive human behavior, crime can be habitual, periodic, or anomalous. If the behavior is truly anomalous, then desistance is not necessary: the offender moves directly from crime to termination. The behavior will not repeat, and no intervention is needed.²⁰⁹

For those whose behavior is not anomalous, however, the process of desistance “resides somewhere in the interfaces between developing personal maturity, changing social bonds associated with certain life transitions, and the individual subjective narrative constructions which offenders build

²⁰⁸ By one estimate, approximately two-thirds of first-time state prisoners will not return to prison. Rosenfeld, *supra* note 113, at 313 (citing MICHAEL TONRY, THINKING ABOUT CRIME: SENSE AND SENSIBILITY IN AMERICAN PENAL CULTURE 186–89 (2004)). A full 70% of juvenile arrestees will never be re-arrested. DAVID MACALLAIR & TIM ROCHE, WIDENING THE NET IN JUVENILE JUSTICE AND THE DANGERS OF PREVENTION AND EARLY INTERVENTION, JUST. POL'Y INST. 5 (2001) <http://www.cjcj.org/uploads/cjcj/documents/widening.pdf> [<https://perma.cc/P7QE-RW7D>] (“In other words, by doing nothing the state can achieve a 70 percent success rate—meaning no subsequent arrests—with first time offenders.”).

²⁰⁹ In fact, a developing body of literature suggests that formal criminal justice intervention in such cases may actually increase the risk of future criminal behavior. See D. A. Andrews et al., *Does Correctional Treatment Work? A Clinically Relevant and Psychologically Informed Meta-Analysis*, 28 CRIMINOLOGY 369 (1990).

around these key events and changes.”²¹⁰ In light of the complex interplay between all of these factors, it is implausible to suggest that any one program or intervention—however well-conceived or delivered—can reliably transform persistent offenders into law-abiding citizens who will never again run afoul of the law.

In reality, when a program claims to work dramatic changes in the recidivism rates of its program graduates, it is likely that those individuals did not need the program at all.²¹¹ A far more likely inference is that they were already far along the path of desistance because their criminal behavior was either anomalous or situational.

But while dramatic claims of recidivism reduction should always be a cause for skepticism, the opposite is not always true. If a program does not demonstrate its ability to significantly reduce recidivism rates, it is not necessarily a poor investment. First, many programs have independent humanitarian value. By providing convicted individuals with education, emotional support, skill development, or treatment for addiction and other challenges, the state recognizes the inherent dignity of those over whom it exercises control.²¹² Second, at least some of these programs likely play an important foundational role in fostering desistance.

Consider the transtheoretical model of change. Contemplation and preparation are necessary prerequisites to action in that model, but those early stages do not in themselves yield evidence of behavior change.²¹³ Criminal justice programs that provide opportunities for individuals to imagine change where they previously could not or that assist individuals in devising plans for how to make needed changes will not always result in reduced rates of recidivism. But by laying a foundation for later change, such programs may provide the necessary groundwork on which later progress will rest. To identify such programs, it will be necessary to look for metrics more nuanced than pure recidivism: metrics that better reflect the realities of behavioral change and the influence that criminal justice interventions can have on promoting that change over time.

Markers of desistance are a good start. By examining the pattern of offending behavior that an individual displays over time, it is possible to discern whether a person’s criminal behavior is escalating or diminishing and whether it is gaining momentum or losing speed. Each alteration provides

²¹⁰ Fergus McNeill, *A Desistance Paradigm for Offender Management*, 6 *CRIMINOLOGY & CRIM. JUST.* 39, 47 (2006).

²¹¹ Cullen et al, *supra*, note 105.

²¹² FRANCIS T. CULLEN & KAREN E. GILBERT, *REAFFIRMING REHABILITATION* 247–53 (1982).

²¹³ See Prochaska & Velicer, *supra* note 117, at 38–39.

an opportunity for intervention, whether by connecting a freshly-desisting young person with employment (a known pathway to long-term desistance²¹⁴) or by offering a cognitive-behavioral intervention to a person whose behavior evinces a pattern of increasing entanglement with crime.

C. RISK AVERSION

Finally, overreliance on recidivism rates encourages risk averse behavior by system actors, thus exacerbating mass incarceration and limiting opportunities for convicted individuals to master the skills that will ultimately lead to long-term desistance.

The modern criminal justice system is risk averse by any measure. Over the past half century, despite falling crime rates, criminal charges have increased.²¹⁵ Sentences have lengthened.²¹⁶ Parole and other forms of back-end release have been significantly restricted.²¹⁷ Revocations from community supervision have risen.²¹⁸ Criminal justice bureaucrats are haunted by the fear that, on their watch, a released defendant, probationer, or parolee will commit a crime and wind up as front page news.²¹⁹ The result is a paralyzed system.

The emphasis that has been placed on recidivism rates and their reduction psychologically reinforces the idea that the job of the criminal justice system is to prevent crime at all costs, even if that means confining behind bars people whose conduct does not pose a serious risk of harm to others and those who have demonstrated that they are engaged in the process of behavioral change. To the worried parole board member or probation officer, a system that rises and falls on recidivism rates alone is one in which any infraction, however small, counts as failure. In such a world, it will always be easier to lock up the technical violator or never parole the model

²¹⁴ See generally Christopher Uggen, *Work as a Turning Point in the Life Course of Criminals: A Duration Model of Age, Employment, and Recidivism*, 65 AM. SOC. REV. 529 (2000).

²¹⁵ See JOHN PFAFF, *LOCKED IN: THE TRUE CAUSES OF MASS INCARCERATION* 130 (2018) (describing proliferation of criminal charges leveled by prosecutors).

²¹⁶ Janice Williams, *Serving Time: Average Prison Sentence in the U.S. is Getting Even Longer*, NEWSWEEK (July 22, 2017), <http://www.newsweek.com/prison-sentences-increased-2017-jail-639952> [archive] [<https://perma.cc/TY4D-LFSA>].

²¹⁷ See NAZGOL GHANDNOOSH, THE SENTENCING PROJECT, *DELAYING A SECOND CHANCE: THE DECLINING PROSPECTS FOR PAROLE ON LIFE SENTENCES* (2017); Cecelia Klingele, *The Early Demise of Early Release*, 114 W. VA. L. REV. 1, 19 (2011).

²¹⁸ See generally Klingele, *supra* note 81.

²¹⁹ See, e.g., Jacob Rosenberg, *Will Another High Profile Crime Derail Parole Reform?*, ARK. TIMES (July 27, 2017), <https://csgjusticecenter.org/jr/arkansas/media-clips/will-another-high-profile-crime-derail-parole-reform/> [<https://perma.cc/2AXU-UCUF>].

inmate because such behaviors will always protect the political interests of agencies and administrators.

If, instead, success were gauged by more holistic metrics—including markers of desistance—incentives would shift. A chronic offender’s minor violation, coming after a long period of good behavior, would be a cause for attention but not necessarily alarm. Relapse by a chronic drug offender would not be reason to declare treatment a failure if it reduced use and associated new crime. Opportunities to celebrate success would increase for both individuals in the system and the criminal justice system itself. Judges and prosecutors, too, might begin to ask more critical questions about defendants’ predicted risk of recidivism. Instead of reflexively balking at a medium or high predicted risk of re-offense, system actors might ask important interpretive questions such as, “*What* is this offender at risk of doing?” and “Does the evidence suggest that this person is on a path of persistence or desistance?” The answers to those questions would guide the use of predictive risk tools, placing recidivism risks into a larger, more holistic context that is likely to yield sentences that would better advance fairness and public safety.

CONCLUSION: TOWARD MARKERS OF DESISTANCE

In an article on recidivism, Robert Weisberg mused:

Perhaps we should not be asking whether a criminal recidivates or not, or whether recidivist acts occur or not. Perhaps we should not even be focusing on the frequency of recidivism for a person or a society . . . [P]erhaps a better measure—or rough guide to a better measure—is to ask whether as a result of a state intervention the offender reoffends less frequently or less harmfully than he otherwise might, especially by comparison to the likely downward arc of criminality due to aging.²²⁰

Indeed, given all that is known about how behavior change occurs and what the criminal justice system can do to help or hinder that change process, the present focus on recidivism rates misses the mark. It is only by looking at the pattern of behavior revealed by recidivism data that those within and outside the criminal justice system can begin to see the ways in which criminal justice interventions may be promoting desistance and ways the in which they may be hindering it.

Changing metrics of success from rates of recidivism to markers of desistance will leave many problems unresolved. Like the simple recidivism data on which they draw, markers of desistance can reveal only what behavior has come to law enforcement attention, not what behavior is

²²⁰ Robert Weisberg, *Meanings and Measures of Recidivism*, 87 S. CAL. L. REV. 785, 804 (2014).

occurring on the streets and within homes. The underlying data will still be skewed by inconsistencies in policing, charging, and correctional supervision practices, as is the case with recidivism data more generally.²²¹ Moreover, and perhaps most importantly, markers of desistance will still fail to capture many of the more holistic ways in which the pro-social progress of those entangled in the criminal justice system might be measured. Markers of desistance will not tell whether people are creating meaningful and healthy relationships; or whether they are gainfully employed and able to meet their basic human needs; whether they feel connected to their communities.²²² These markers of well-being are not easily quantifiable, but they are no less important measures of the ways in which criminal justice interventions may be improving—or worsening—the condition of those with whom they intervene.

Nevertheless, in a world committed to measurement, there are better measurements than recidivism. By attending to markers of desistance, policymakers and criminal justice system actors and administrators can begin to develop a significantly more nuanced picture of individual change over time and of the role that criminal justice interventions play in promoting or hindering that change.

²²¹ See discussion *supra* Section I.A.

²²² Cf. Michael M. O’Hear, *The Second Chance Act and the Future of Reentry Reform*, 20 FED. SENT’G REP. 75, 76 (2007) (expressing concern that “the tendency to frame and evaluate reentry initiatives as solely, or even primarily, recidivism reduction measures” ignores “many important social welfare and social justice concerns implicated in the treatment of returning prisoners”).