

# Risk Assessment in Sentencing

*John Monahan\**

*One way to reduce mass incarceration and the fiscal and human sufferings intrinsic to it is to engage in a morally constrained form of risk assessment in sentencing offenders. The assessment of an offender's risk of recidivism was once a central component of criminal sentencing in the United States. In the mid-1970s, however, sentencing based on forward-looking assessments of offender risk was abolished in many jurisdictions in favor of set periods of confinement based solely on backward-looking appraisals of offender blameworthiness. This situation is rapidly changing, however. After a hiatus of 40 years, there has been a resurgence of interest in risk assessment in criminal sentencing. Across the political spectrum, advocates have proposed that mass incarceration can be shrunk without simultaneously jeopardizing the historically low crime rate if we put a morally constrained form of risk assessment back into sentencing.*

## INTRODUCTION

As the National Research Council recently concluded, the growth in incarceration in the United States since the early 1970s has been “historically unprecedented and internationally unique.”<sup>1</sup> The United States accounts for 5% of the world’s population and 25% of the world’s imprisoned population. Western European democracies have an incarceration rate one-seventh that of the United States. One percent of all American adults—2.3 million people—are currently incarcerated. Nearly 12 million admissions to local jails occur each year. The direct fiscal costs of what has come to be known as “mass incarceration” are widely estimated to be \$80 billion a year.<sup>2</sup>

---

\* John S. Shannon Distinguished Professor of Law, University of Virginia School of Law.

1. NATIONAL RESEARCH COUNCIL, *THE GROWTH OF INCARCERATION IN THE UNITED STATES: EXPLORING CAUSES AND CONSEQUENCES 2* (Jeremy Travis, Bruce Western & Steve Redburn eds., 2014).

2. See John Monahan & Jennifer Skeem, *Risk Assessment in Criminal Sentencing*, 12 ANN. REV. CLINICAL PSYCHOL. 489 (2016); COALITION FOR PUBLIC SAFETY, [www.coalitionforpublicsafety.org](http://www.coalitionforpublicsafety.org).

The broader human costs of mass incarceration, however, are incalculable. The “collateral consequences” of conviction and imprisonment in terms of lifelong restrictions on many forms of employment and housing are stark.<sup>3</sup> Even when a specific occupation is not barred to ex-prisoners by statute, the effects of having a criminal record on employability are dramatic. Former prison inmates have vastly higher unemployment rates than non-prisoners, and those who do manage to find employment face a 40% decrease in estimated annual earnings. The effects of a parent’s imprisonment on their children are profound and dire.<sup>4</sup>

I argue here that one way to reduce mass incarceration and the fiscal and human sufferings intrinsic to it is to engage in a morally constrained form of risk assessment in sentencing offenders. It proceeds in four parts. First, I briefly sketch the history of risk assessment in American sentencing and portray the role played by risk assessment in a mixed retributive/utilitarian system of sentencing. Second, I illustrate the uses of risk assessment in several jurisdictions and summarize the current state of the debate among scholars in both law and behavioral science on risk assessment in sentencing. Third, I appraise several different types of potential risk factors for recidivism frequently discussed in the context of sentencing: past crime, demographic characteristics, and psychosocial characteristics. Finally, I offer four specific recommendations regarding the use of risk assessment in sentencing as one means of reducing mass incarceration: (1) employ risk assessment to sentence low-risk offenders to community sanctions or to a shortened period of incarceration; (2) make judicial deference to an offender’s low-risk designation presumptive rather than advisory; (3) do *not* employ risk assessment to increase the time for which high-risk offenders are incarcerated; and (4) charge state sentencing commissions with conducting local empirical validations of any proposed risk-assessment instruments and with vigorously debating the moral and social implications of relying on the risk factors included in those instruments.

## I. DESCRIPTION OF EXISTING LAW AND POLICY

### A. A BRIEF HISTORY OF RISK ASSESSMENT IN SENTENCING

The most widely used definition of risk assessment describes it as “the process of using risk factors to estimate the likelihood (i.e., probability) of an

---

3. See Gabriel J. Chin, “Collateral Consequences,” in the present Volume.

4. See JAMES B. JACOBS, *THE ETERNAL CRIMINAL RECORD* (2015); COALITION FOR PUBLIC SAFETY, *supra* note 2; see generally Todd R. Clear & James Austin, “Mass Incarceration,” in the present Volume.

outcome occurring in a population.”<sup>5</sup> In the case of sentencing, the “population” consists of convicted offenders and the “outcome” is criminal recidivism. “Risk factors” are simply variables that (1) statistically correlate with recidivism, and (2) precede recidivism in time.

The assessment of an offender’s risk of recidivism was once a central component of criminal sentencing in the United States. In California, for example, indeterminate sentencing—whereby an offender is given a relatively low minimum sentence and a relatively high maximum sentence and is released from prison when he or she is believed no longer to present an undue risk of committing a new crime—was introduced in 1917. In the mid-1970s, however, indeterminate sentencing based on forward-looking assessments of offender risk was abolished in California and in many other American jurisdictions in favor of set periods of confinement based on backward-looking appraisals of offender blameworthiness.<sup>6</sup>

This situation is rapidly changing, however. Remarkably, after a hiatus of 40 years, there has been a resurgence of interest in risk assessment in criminal sentencing in many American states. Across the political spectrum, advocates have proposed that one way to begin dialing down mass incarceration without simultaneously jeopardizing the historically low American crime rate is to put risk assessment back into sentencing. It has recently been estimated that courts in at least 20 states have begun to incorporate risk assessment into the sentencing process “in some or all cases.”<sup>7</sup>

### B. THE ROLE OF RISK ASSESSMENT IN A HYBRID SYSTEM OF SENTENCING

Almost all scholars of sentencing distinguish two broad and polar opposite approaches to the allocation of criminal punishment. One of these approaches is usually termed *retributive* and the other *utilitarian*. Adherents of the retributive approach believe that an offender’s moral culpability for crime committed in the past should be the sole consideration in determining his or

---

5. Helena Kraemer et al., *Coming to Terms with the Terms of Risk*, 54 ARCH. GEN. PSYCHIATRY 337, 340 (1997).

6. See Monahan & Skeem, *Risk Assessment*, *supra* note 2; John Monahan & Jennifer Skeem, *Risk Redux: The Resurgence of Risk Assessment in Criminal Sanctioning*, 26 FED. SENT’G. REP. 158 (2014); Michael Tonry, *Legal and Ethical Issues in the Prediction of Recidivism*, 26 FED. SENT’G. REP. 167 (2014). For discussions of determinate sentencing, see Douglas A. Berman, “Sentencing Guidelines,” in the present Volume; and Erik Luna, “Mandatory Minimums,” in the present Volume.

7. Sonja Starr, *Evidence-Based Sentencing and the Scientific Rationalization of Discrimination*, 66 STAN. L. REV. 803, 809 (2014).

her punishment. In the best known retributive theory, known as “just deserts,” offenders should be punished “because they deserve it, and the severity of their punishment should be proportional to their degree of blameworthiness”<sup>8</sup> for the crimes they have committed in the past, and to nothing else.

In stark contrast, advocates of the utilitarian approach believe that punishment is justified solely by its ability to decrease future criminal acts by the offender or by deterring other would-be offenders from committing—or continuing to commit—crimes.<sup>9</sup>

Many legal scholars have argued that any workable theory of sentencing must address *both* retributive *and* utilitarian concerns, rather than just one of them. The most influential hybrid theory of sentencing is that developed by Norval Morris,<sup>10</sup> which he called “limiting retributivism.” In Morris’s theory, retributive principles can only set an upper (and perhaps also a lower) limit on the severity of punishment, and within this range of what he called “not undeserved” punishment, utilitarian concerns—such as the offender’s risk of recidivism—can be taken into account. Kevin Reitz elaborates:

Here, proportionality in punishment is understood as an imprecise concept with a margin of error, not reducible to a specific sanction for each case. The “moral calipers” available to human beings are set wide, the theory asserts, producing a substantial range of justifiable sentences for most cases. At some upper boundary, we begin to feel that a penalty is clearly disproportionate in severity and, at a lower point, we intuit that it is clearly too lenient. Imagining a generous spread between the two, limiting retributivism would permit utilitarian purposes to determine sentences within the morally permissible range.<sup>11</sup>

The American Law Institute’s highly-influential Model Penal Code explicitly adopts the hybrid, limiting retributivism approach to criminal sentencing. In particular, a draft provision provides that state sentencing commissions:

shall develop actuarial instruments or processes to identify offenders who present an unusually low risk to public safety. ...

8. RICHARD S. FRASE, *JUST SENTENCING: PRINCIPLES AND PROCEDURES FOR A WORKABLE SYSTEM* 8 (2013). For a discussion of retributive theory, see Jeffrie G. Murphy, “Retribution,” in the present Volume.

9. See generally Daniel S. Nagin, “Deterrence,” in the present Volume; Shawn D. Bushway, “Incapacitation,” in the present Volume.

10. NORVAL MORRIS, *THE FUTURE OF IMPRISONMENT* (1977).

11. Kevin Reitz, *Sentencing, in CRIME AND PUBLIC POLICY* 472 (James Wilson & Joan Petersilia eds., 2011) (citations omitted).

When accurate identifications of this kind are reasonably feasible, for cases in which the offender is projected to be an unusually low-risk offender, the sentencing court shall have discretion to impose a community sanction rather than a prison term, or a shorter prison term than indicated in statute or guidelines.<sup>12</sup>

C. RISK ASSESSMENT IN TWO ILLUSTRATIVE STATES  
AND IN THE FEDERAL SYSTEM

In the words of the Model Penal Code, “On risk assessment as a prison-diversion tool, Virginia has been the leading innovator among American states.”<sup>13</sup> Pennsylvania is expected to attain similar status in the near future, as planned reforms promoting risk assessment go into effect. Both states’ risk-assessment procedures are summarized here, as well as the risk-assessment procedures currently applied to probationers in the federal system.

1. Virginia

In 1994, the Virginia Legislature required the state’s newly-formed Criminal Sentencing Commission to develop an empirically-based risk-assessment instrument for use in diverting 25% of the “lowest-risk, incarceration-bound, drug and property offenders” to non-jail or prison sanctions such as probation, community service, outpatient substance-abuse treatment, or electronic monitoring.<sup>14</sup> The risk factors included on the original assessment tool developed by the Commission consisted of six types of variables: offense type, whether the offender is currently charged with an additional offense, “offender characteristics” (i.e., gender, age, employment, and marital status), whether the offender had been arrested or confined within the past 18 months, prior felony convictions, and prior adult incarcerations. In 2012, the Commission re-validated its risk-assessment instruments on large samples of eligible drug and larceny/fraud offenders. In these samples, 63% of drug offenders scored in the low-risk group and 37% scored in a higher-risk group, while 43% of the larceny/fraud offenders scored in the low-risk group and 57% scored in a higher-risk group. Recidivism in this research was defined as reconviction

---

12. MODEL PENAL CODE: SENTENCING § 6B.09(3) (Am. Law Inst., Proposed Final Draft, approved May 24, 2017).

13. *Id.* at 375.

14. Richard P. Kern & Meredith Farrar-Owens, *Sentencing Guidelines with Integrated Offender Risk Assessment*, 16 FED. SENT’G. REP. 165, 165 (2004); Meredith Farrar-Owens, *The Evolution of Sentencing Guidelines in Virginia: An Example of the Importance of Standardized and Automated Felony Sentencing Data*, 25 FED. SENT’G. REP. 168, 170 (2013). For a discussion such sanctions, see Michael Tonry, “Community Punishments,” in the present Volume.

for a felony offense within three years of release from incarceration. Of drug offenders designated as low risk, 12% recidivated; by comparison, 44% of higher-risk drug offenders recidivated. Of larceny/fraud offenders designated as low risk, 19% recidivated; by comparison, 38% of higher-risk larceny/fraud offenders recidivated.<sup>15</sup>

The instruments are administered only to offenders for whom the state's sentencing guidelines recommend incarceration in prison or jail. In addition, offenders must meet certain eligibility criteria (e.g., a criminal history of only nonviolent offenses). If the offender's total score on the instrument is below a given cut-off, he or she is recommended for an alternative, community-based sanction; if the offender's score on the instrument is above that cut-off, the prison or jail term recommended by the sentencing guidelines remains in effect.<sup>16</sup> In fiscal year 2015, among the eligible offenders for whom a risk assessment was conducted, almost half (49%) were assessed as "low risk," and therefore recommended for an alternative community-based sanction. Over one-third (41%) of these jail- or prison-bound offenders who were recommended for an alternative sanction were in fact sentenced to a community-based program by the judge.<sup>17</sup> One reason that a judge would fail to sentence a low-risk offender to a community-based program rather than to incarceration is that a program appropriate for the offender's needs (e.g., drug treatment) does not exist in the offender's home community.

---

15. VIRGINIA CRIMINAL SENTENCING COMMISSION, 2012 ANNUAL REPORT (2012), <http://www.vcsc.virginia.gov/2012VCSCAnnualReport.pdf>. I am grateful to Meredith Farrar-Owens, the Commission's Director, for her help in obtaining and understanding these data.

16. In 1999, the Virginia Legislature required the Commission to develop a second empirically based instrument, this time in order to identify the *highest* risk rather than the *lowest* risk offenders. More specifically, the Commission developed two largely similar risk assessment instruments for sexually violent offenders, one for rape and one for other types of sexual assault. If the sex offender's score on the instrument exceeds a specified cut-off, the offender's maximum recommended sentence can be increased by as much as a factor of three. I believe that this use of risk assessment to raise sentences clearly violates the limits imposed by the "limiting retributivism" theory of punishment. See *infra* text accompanying note 52.

17. VIRGINIA CRIMINAL SENTENCING COMMISSION, 2015 ANNUAL REPORT (2016), <http://www.vcsc.virginia.gov/2015AnnualReport.pdf>.

## 2. Pennsylvania

In 2010, the Pennsylvania Legislature enacted a statute that read:

The Commission [on Sentencing] shall adopt a sentence risk assessment instrument for the sentencing court to use to help determine the appropriate sentence within the limits established by law. . . . The risk assessment instrument may be used as an aide in evaluating the relative risk that an offender will reoffend.<sup>18</sup>

In response, the Commission on Sentencing developed a risk scale for offenders convicted of offenses of medium severity. The initial scale consisted of eight risk factors: gender, age, county, total number of prior arrests, prior property arrests, prior drug arrests, current property offender, and gravity of the current offense. The Commission validated the risk scale on large samples of offenders. In these samples, 12% of offenders scored in the low-risk group, and 88% scored as higher risk. Recidivism was defined as rearrest for any crime within three years of release from prison. Of offenders designated by the risk scale as low risk, 22% recidivated; by comparison, 56% of higher-risk offenders recidivated. The Commission is now revising its risk scale (e.g., removing “county” as a risk factor) and developing separate risk scales for offenders with differing degrees of offense severity. The formal incorporation of risk assessment in criminal sentencing in Pennsylvania is still pending.<sup>19</sup>

## 3. The federal system

Risk assessment is *not* used to inform sentencing decisions in the federal system. Rather, the Post Conviction Risk Assessment instrument (“PCRA”) is used to inform probation decisions designed to reduce risk—i.e., to identify *whom* to provide with relatively intensive services (namely, higher-risk offenders) and *what* factors to target in those services (e.g., substance abuse, mental illness). When federal probationers are found to violate conditions of probation—including treatment conditions—judges may “revoke a term of supervised release, and require the defendant to serve in prison all or part of the term of supervised release . . . without credit for time previously served on postrelease supervision.”<sup>20</sup>

---

18. 42 PA. CONS. STAT. § 2154.7(a) (2010).

19. Progress reports are available. See *Risk Assessment Project*, PENNSYLVANIA COMMISSION ON SENTENCING, <http://pcs.la.psu.edu/publications-and-research/research-and-evaluation-reports/risk-assessment/>. I thank Mark Bergstrom, Executive Director of the Commission, for his help in understanding these data.

20. 18 U.S.C. § 3583(e)(3).

The PCRA is a statistical prediction instrument that was constructed and validated on large, independent samples of federal offenders. Fifteen items are included on the instrument. Each of the items is nested in one of five domains—criminal history (e.g., prior violent arrests), education/employment (e.g., highest level of education, employed at the time of arrest), social networks (e.g., marital status, criminal peers), substance abuse (e.g., current alcohol or drug problem), and attitudes (e.g., antisocial attitudes/values). While under a term of supervision averaging three to four years, 11% of offenders scored by the PCRA as low risk were rearrested for a new crime, while offenders scored by the PCRA as high risk had a rearrest rate of 83% (with offenders scored at intermediate risk being rearrested at rates between these extremes).<sup>21</sup>

## II. THE CURRENT STATE OF THE DEBATE ON RISK ASSESSMENT IN SENTENCING

### A. *THE LEGAL DEBATE*

Debates among legal scholars and practitioners on the role of risk assessment in sentencing revolve around two issues. The first relates to sentencing theory. Most sentencing systems and the Model Penal Code ground their prescriptions in the “limiting retributivism” model described above, in which retributive principles set outer limits on the severity of punishment, and within these limits, an offender’s risk of recidivism can be taken into account.

Some prominent legal scholars, however, favor a more unalloyed version of retributivism. There is no role for forward-looking assessments of offenders’ risk of future crime in a purely backward-looking retributive model of sentencing based solely on blameworthiness for crimes already committed. Sonja Starr, for example, refers to the incorporation of risk assessment into sentencing as “evidence-based sentencing” (EBS):

EBS provides sentencing judges with risk scores for each defendant based on variables that, in addition to criminal history, often include gender, age, marital status, and socioeconomic factors such as employment and education. [T]his trend is being pushed by progressive reform advocates who hope it will reduce incarceration

---

21. Christopher Lowenkamp et al., *The Federal Post Conviction Risk Assessment (PCRA): A Construction and Validation Study*, 10 *PSYCHOL. SERV.* 87 (2013).

rates by enabling courts to identify low-risk offenders. [These advocates] are making a mistake. As currently practiced, EBS should be seen neither as progressive nor as especially scientific—and it is almost surely unconstitutional.<sup>22</sup>

The second issue of legal contention regarding the role of risk assessment in sentencing has to do with whether the risk factors used to assess violence risk are merely “proxies” for race or poverty. Former Attorney General Eric Holder, for example, expressed hesitation about using risk assessment to inform sentencing decisions:

By basing sentencing decisions on static factors and immutable characteristics—like the defendant’s education level, socioeconomic background, or neighborhood—[risk assessments] may exacerbate unwarranted and unjust disparities that are already far too common in our criminal justice system and in our society. Criminal sentences must be based on the facts, the law, the actual crimes committed, the circumstances surrounding each individual case, and the defendant’s history of criminal conduct. They should not be based on unchangeable factors that a person cannot control, or on the possibility of a future crime that has not taken place.<sup>23</sup>

Whether evidence-based risk assessment exacerbates, ameliorates, or has no effect on racial or socioeconomic disparities is sentencing, however, is a relative inquiry: risk assessment *compared to what*? If evidence-based risk assessment is compared to judges’ intuitive and subjective consideration of an offender’s likelihood of recidivism in sentencing, then evidence-based risk assessment will emerge as more transparent, more consistent, and more accurate than judicial hunch.<sup>24</sup> If evidence-based risk assessment is compared to the use of

---

22. Starr, *supra* note 7, at 805. See generally John Monahan, *A Jurisprudence of Risk Assessment: Forecasting Harm among Prisoners, Predators, and Patients*, 92 VA. L. REV. 391 (2006); Christopher Slobogin, *Risk Assessment*, in *THE OXFORD HANDBOOK OF SENTENCING AND CORRECTIONS* (Joan Petersilia & Kevin Reitz eds., 2012).

23. Eric Holder, Attorney General Eric Holder Speaks at the National Association of Criminal Defense Lawyers 57th Annual Meeting (2014), U.S. DEP’T OF JUSTICE, <http://www.justice.gov/opa/speech/attorney-general-eric-holder-speaks-national-association-criminal-defense-lawyers-57th>. See generally BERNARD E. HARCOURT, *AGAINST PREDICTION: PROFILING, POLICING, AND PUNISHING IN AN ACTUARIAL AGE* (2007). The “proxy” issue has become much more contentious since the recent publication of Julia Angwin et al., *Machine Bias: There’s Software Used Across the County to Predict Future Criminals. And It’s Biased Against Blacks*, *PROPUBLICA* (May 23, 2016), <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>. In response, see Anthony Flores et al., *False Positives, False Negatives, and False Analyses: A Rejoinder*, 80 *FED. PROB.* 38 (2016).

24. Monahan & Skeem, *Risk Assessment*, *supra* note 2.

sentencing guidelines that heavily rely on criminal history—the single variable that accounts most dramatically for racial disparity in imprisonment rates<sup>25</sup>—then the comparative virtues of relying on evidence-based risk assessment begin to become apparent.

### B. THE SCIENTIFIC DEBATE

Only one scientific issue generates much controversy in the field of risk assessment: can accurate inferences about an individual person—in this case, about a convicted offender—be drawn from data derived from groups of people (in this case, from groups of convicted offenders)? Some scholars have taken the position that “on the basis of empirical findings, statistical theory, and logic, it is clear that predictions of future offending cannot be achieved, with any degree of confidence, in the individual case.”<sup>26</sup>

Many other scholars have taken the contrary view, however, arguing that group-based data can be highly informative when making decisions about individual cases. Consider three examples from other forms of risk assessment. In the insurance industry, “until an individual insured is treated as a member of a group, it is impossible to know his expected loss, because for practical purposes that concept is a statistical one based on group probabilities. Without relying on such probabilities, it would be impossible to set a price for insurance coverage at all.”<sup>27</sup> In weather forecasting, a wealth of data are available on given events occurring under specified conditions. Therefore, when meteorologists “predict a 70 percent chance of rain, there is measurable precipitation just about 70 percent of the time.”<sup>28</sup> Finally, consider the medical analogy: “Suppose a 50-year-old man learns that half of people with his diagnosis die in five years. He would find this information very useful in deciding whether to purchase an annuity that would begin payouts only after he reached his 65th birthday.”<sup>29</sup>

25. Richard S. Frase, *What Explains Persistent Racial Disproportionality in Minnesota's Prison and Jail Populations?*, 38 CRIME & JUST. 201 (2009).

26. David J. Cooke & Christine Michie, *Limitations of Diagnostic Precision and Predictive Utility in the Individual Case: A Challenge for Forensic Practice*, 34 LAW & HUM. BEHAV. 259, 259 (2010).

27. KENNETH ABRAHAM, *DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY* 79 (1986). Several Supreme Court cases have held that insurers that provide employer-based group insurance may not use sex as a group-based risk factor. “These holdings do not, however, apply to insurance sold in individual markets outside of employment, where sex-based discrimination is generally permitted, especially in the context of life insurance.” KENNETH ABRAHAM & DANIEL SCHWARCZ, *INSURANCE LAW AND REGULATION* 142 (7th ed. 2015).

28. NATIONAL RESEARCH COUNCIL, *IMPROVING RISK COMMUNICATION* 46 (1989).

29. Douglas Mossman, *From Group Data to Useful Probabilities: The Relevance of Actuarial Risk Assessment in Individual Instances*, 43 J. AM. ACAD. PSYCHIATRY & L. 93, 99 (2015).

The debate among scientists on the legitimacy of making individual inferences from group data appears to be subsiding. In the words of two eminent statisticians:

If groups of individuals with high and low propensities for violence recidivism can be distinguished, and courts act upon such distinctions, recidivism will decline to the extent that groups most prone to violence are incapacitated, and infringements upon those least so prone are minimized. And both society and offenders will be better served even if we cannot be sure, based on tight statistical intervals, from precisely which individual offenders this betterment derives.<sup>30</sup>

### III. THE PROCRUSTEAN QUANDARY: WHICH PREDICTIVELY VALID RISK FACTORS TO USE IN SENTENCING?

Abstract jurisprudential debates about the use of risk assessment in sentencing quickly run into a highly practical issue: from a pool of risk factors found to validly predict recidivism, which risk factors are acceptable to include on an assessment instrument? Risk assessment without risk factors would be an incoherent enterprise. The scientific concerns here are straightforward: statistical procedures to establish whether a valid correlation exists between a given risk factor and a given measure of recidivism are uncontroversial, and which comes first—the risk factor or the recidivism—is obvious. Legal, moral, and political concerns are the ones that dominate in choosing, among a set of scientifically valid risk factors, the ones to use in sentencing. More specifically, attributions of blameworthiness not only impose overall limits on *sentence severity*, they also serve as moral constraints on the *type of risk factors* that can be used to assess an offender's likelihood of recidivism.<sup>31</sup> Consider first the use of prior crime as a risk factor for use in sentencing, then the use of demographic characteristics, and finally the use of psychosocial characteristics.

#### A. PAST CRIME AS A RISK FACTOR FOR RECIDIVISM

It has long been axiomatic in the field of risk assessment that past crime is the best predictor of future crime. All actuarial risk assessment instruments reflect

30. Peter B. Imrey & A. Philip Dawid, *A Commentary on Statistical Assessment of Violence Recidivism Risk*, 2 *STAT. & PUB. POL'Y* 25, 40 (2015); see also David L. Faigman, John Monahan & Christopher Slobogin, *Group to Individual (G2i) Inference in Scientific Expert Testimony*, 81 *U. CHI. L. REV.* 417 (2014); David L. Faigman, Christopher Slobogin & John Monahan, *Gatekeeping Science: Using the Structure of Scientific Research to Distinguish Between Admissibility and Weight in Expert Testimony*, 110 *NW. U. L. REV.* 859 (2016).

31. Monahan & Skeem, *Risk Assessment*, *supra* note 2.

this empirical truism. The California Static Risk Assessment Instrument, for example, contains 22 risk factors for criminal recidivism, fully 20 of which—all but gender and age—are indices of past crime.<sup>32</sup>

The use of past crime is the least controversial risk factor used in sentencing. This is because an offender's prior involvement in crime is taken by many<sup>33</sup> to indicate not only an increased risk that the offender will commit crime in the future, it also aggravates the perception that the offender is blameworthy for the crime for which he or she is being sentenced. That is, "a record of prior offenses bears *both* on the offender's deserts *and* on the likelihood of recidivism."<sup>34</sup>

The existence of a criminal record is not the only risk factor that reflects an offender's prior involvement in crime. Committing crime while under the influence of drugs, being a member of a criminal gang, or being convicted of the current crime while on legal restraint (i.e., probation, parole, or pre-trial release) all reflect the depth of an offender's engagement in crime and are often used simultaneously to aggravate perceptions of blame for past crime and to increase assessed risk for future crime.<sup>35</sup>

However, one crucial issue looms over the use of past crime as a risk factor for recidivism. A record of prior criminal arrests and convictions can reflect the differential *involvement* of the members of given groups in criminal behavior, and it can also reflect the differential *selection* of the members of given groups by police to arrest, by prosecutors to indict, and by judges and juries to convict.<sup>36</sup> The extent to which the presence of a criminal record signifies differential selection by the criminal justice system rather than differential involvement in criminal behavior is highly contested in debates on risk assessment in sentencing.<sup>37</sup> It is noteworthy in this regard that the recently approved Model Penal Code recommends that state sentencing commissions

32. SUSAN TURNER, JAMES HESS & JESSE JANNETTA, DEVELOPMENT OF THE CALIFORNIA STATIC RISK ASSESSMENT INSTRUMENT (CSRA) (UCI Center for Evidence-Based Corrections, Nov. 2009), <http://ucicorrections.seweb.uci.edu/files/2009/11/CSRA-Working-Paper.pdf>.

33. Although not by all academics. See Julian V. Roberts, *Punishing Persistence: Explaining the Enduring Appeal of the Recidivist Sentencing Premium*, 48 BRIT. J. CRIMINOLOGY 468, 469 (2008) ("a plausible retributive justification for the recidivist sentencing premium has proved as elusive as the legendary resident of Loch Ness").

34. ANDREW VON HIRSCH, *DOING JUSTICE: THE CHOICE OF PUNISHMENTS* 87 (1976) (emphases added).

35. Monahan & Skeem, *Risk Assessment*, *supra* note 2; Tonry, *supra* note 6.

36. Alfred Blumstein, *On the Racial Disproportionality of United States' Prison Populations*, 73 J. CRIM. L. & CRIMINOLOGY 1259 (1982); Michael Tonry & Matthew Melewski, *The Malign Effects of Drug and Crime Control Policies on Black Americans*, 37 CRIME & JUST. 1 (2008).

37. Jennifer L. Skeem & Christopher T. Lowenkamp, *Risk, Race, and Recidivism: Predictive Bias and Disparate Impact*, 54 CRIMINOLOGY 680 (2016).

“shall give due consideration to the danger that the use of criminal-history provisions to increase the severity of sentences may have disparate impacts on racial or ethnic minorities, or other disadvantaged groups.”<sup>38</sup>

*B. DEMOGRAPHIC CHARACTERISTICS AS  
RISK FACTORS FOR RECIDIVISM*

Three demographic variables are most often discussed as risk factors for recidivism: age, gender, and race.<sup>39</sup>

1. Age

Few would dispute the conclusion offered by Robert Sampson and Janet Lauritsen to the National Research Council’s Panel on the Understanding and Control of Violent Behavior: “Age is one of the major individual-level correlates of violent offending. In general, arrests for violent crime peak around age 18 and decline gradually thereafter.”<sup>40</sup> Researchers at the Bureau of Justice Statistics studied the recidivism rates of offenders released from prisons in 30 U.S. states. Eighty-four percent of state prisoners age 24 and younger at release were rearrested for non-traffic offenses within five years, compared with 69% of state prisoners age 40 and older at release.<sup>41</sup>

---

38. MODEL PENAL CODE: SENTENCING § 6B.07 (1)(c) (Am. Law Inst., Proposed Final Draft, approved May 24, 2017).

39. A recent nationally representative survey of the general public on the use of gender, age, and race as risk factors in sentencing concluded, “[w]hile over three-quarters of participants were against using race to determine prison sentences, almost half were open to the possibility of using gender and over three-quarters of the participants were open to the possibility of using age to determine prison sentences.” Nicholas Scurich & John Monahan, *Evidence-Based Sentencing: Public Openness and Opposition to Using Gender, Age, and Race as Risk Factors for Recidivism*, 40 LAW & HUM. BEHAV. 36 (2016).

40. Robert J. Sampson & Janet L. Lauritsen, *Violent Victimization and Offending: Individual-, Situational-, and Community-Level Risk Factors*, in 3 UNDERSTANDING AND PREVENTING VIOLENCE: SOCIAL INFLUENCES 18 (Albert J. Reiss, Jr. & Jeffrey A. Roth eds., 1994) (citations omitted).

41. MATTHEW R. DUROSE, ALEXIA D. COOPER & HOWARD N. SNYDER, BUREAU OF JUSTICE STATISTICS, U.S. DEP’T OF JUSTICE, RECIDIVISM OF PRISONERS RELEASED IN 30 STATES IN 2005: PATTERNS FROM 2005 TO 2010, at 12 (2014), <https://www.bjs.gov/content/pub/pdf/rprts05p0510.pdf>.

The Pennsylvania Commission on Sentencing recently examined what would happen if age was eliminated from the risk scale it had developed: “[O]ur analyses found that age was the most important demographic factor in predicting recidivism and the removal of that factor would have the most impact on recidivism prediction and scale accuracy.”<sup>42</sup>

## 2. Gender

That women commit acts of criminal violence at a much lower rate than men is a staple in criminology and has been known for as long as official records have been kept. The earliest major review of this topic concluded that “sex difference in aggression has been observed in all cultures in which the relevant behavior has been observed. Boys are more aggressive both physically and verbally. ... The sex difference is found as early as social play begins—at age 2 or 2½.”<sup>43</sup> Another review concluded that “sex is one of the strongest demographic correlates of violent offending. ... [M]ales are far more likely than females to be arrested for all crimes of violence, including homicide, rape, robbery, and assault.”<sup>44</sup> Of the persons arrested for committing a violent crime in the United States in 2015, 80% were men and 20% were women.<sup>45</sup> In terms of recidivism rates, 72% of male state prisoners released in 2005 were rearrested for a violent offense within five years, compared with 61% of female state prisoners.<sup>46</sup>

---

42. PENNSYLVANIA COMMISSION ON SENTENCING, SPECIAL REPORT: IMPACT OF REMOVING DEMOGRAPHIC FACTORS (2015), <http://pcs.la.psu.edu/publications-and-research/research-and-evaluation-reports/risk-assessment/phase-ii-reports/special-report-impact-of-removing-demographic-factors/view>; see also John Monahan, Jennifer Skeem & Christopher Lowenkamp, *Age, Risk Assessment, and Sanctioning: Overestimating the Old, Underestimating the Young*, 41 LAW & HUM. BEHAV. 191 (2017).

43. ELEANOR E. MACCOBY & CAROL N. JACKLIN, *THE PSYCHOLOGY OF SEX DIFFERENCES* 352 (1974).

44. Sampson & Lauritsen, *supra* note 40, at 19.

45. *Preliminary Semiannual Uniform Crime Report, January-June 2016*, FEDERAL BUREAU OF INVESTIGATION, <https://ucr.fbi.gov/crime-in-the-u.s/2016/preliminary-semiannual-uniform-crime-report-january-june-2016>.

46. Durose et al., *supra* note 41, at 11. The rearrest rates for any non-traffic offense within five years after release were 78% for male prisoners and 68% for female prisoners. *Id.*

Regarding violence, it is hard to contest the conclusion of Michael Gottfredson and Travis Hirschi's classic, *A General Theory of Crime*: "gender differences appear to be invariant over time and space."<sup>47</sup>

### 3. Race

The Bureau of Justice Statistics has reported that "[b]y the end of the fifth year after release from prison, white (73.1%) and Hispanic (75.3%) offenders had lower recidivism rates than black offenders (80.8%)."<sup>48</sup> However, as Richard Frase has articulated, settled law has taken race off the table for use as a risk factor in sentencing:

Race is really in a class by itself. The history of de jure racial discrimination in the United States, and continuing de facto discrimination, make race a highly "suspect" criterion, especially when it is used to support policies that disfavor minorities and favor whites (which is the most likely scenario in the sentencing

---

47. MICHAEL R. GOTTFREDSON & TRAVIS HIRSCHI, *A GENERAL THEORY OF CRIME* 145 (1990); see also Jennifer Skeem, John Monahan & Christopher Lowenkamp, *Gender, Risk Assessment, and Sanctioning: The Cost of Treating Women Like Men*, 40 *LAW & HUM. BEHAV.* 580 (2016). A recent decision of the Wisconsin Supreme Court, *State v. Loomis*, 881 N.W.2d 749 (Wis. 2016), allowed the consideration at the time of sentencing of an actuarial risk assessment instrument—the Correctional Offender Management Profiling for Alternative Sanctions ("COMPAS")—that includes gender, provided that several "cautions" were given:

Specifically, any PSI [Presentence Investigation Report] containing a COMPAS risk assessment must inform the sentencing court about the following cautions regarding a COMPAS risk assessment's accuracy: (1) the proprietary nature of COMPAS has been invoked to prevent disclosure of information relating to how factors are weighed or how risk scores are to be determined; (2) risk assessment compares defendants to a national sample, but no cross-validation study for a Wisconsin population has yet been completed; (3) some studies of COMPAS risk assessment scores have raised questions about whether they disproportionately classify minority offenders as having a higher risk of recidivism; and (4) risk assessment tools must be constantly monitored and re-normed for accuracy due to changing populations and subpopulations.

*Id.* at 763–64.

48. Durose et al., *supra* note 41, at 13. These recidivism rates refer to rearrest for any non-traffic offense.

context) .... [R]ace can never be given any formal role in issues of sentencing severity *even if it is found to be correlated with and predictive of risk*.<sup>49</sup>

### C. PSYCHOSOCIAL CHARACTERISTICS AS RISK FACTORS FOR RECIDIVISM

In preparation for the development of its own risk scale to be used in sentencing, the Pennsylvania Commission on Sentencing reviewed 29 existing risk-assessment instruments—containing a total of 125 different risk factors. The five risk factors that the Commission categorized as “psychosocial” that were found most frequently on these existing instruments were: whether the offender was currently employed, his or her highest level of education, whether the offender had criminal friends, the degree of social or marital support available to the offender, and whether the offender had a stable residence.<sup>50</sup> None of these variables is without controversy, since none bears on an offender’s blameworthiness for having committed crime in the past. Michael Tonry has argued that the use of any of these as risk factors for recidivism in sentencing both “systematically disadvantages minority defendants” and “in effect punish[es] lawful life-style choices that in a free society people are

49. Richard S. Frase, *Recurring Policy Issues of Guidelines (and non-Guidelines) Sentencing: Risk Assessments, Criminal History Enhancements, and the Enforcement of Release Conditions*, 26 FED. SENT’G REP. 145, 149 (2014) (emphasis added). Were there any doubts that race is “in a class by itself,” Chief Justice Roberts’ majority opinion in *Buck v. Davis*, 137 S. Ct. 759, 776, 778 (2017), should dispel them: “It would be patently unconstitutional for a state to argue that a defendant is liable to be a future danger because of his race ... [Buck’s case] is a disturbing departure from a basic premise of our criminal justice system: Our law punishes people for what they do, not who they are.”

50. PENNSYLVANIA COMMISSION ON SENTENCING, INTERIM REPORT 1: REVIEW OF FACTORS USED IN RISK ASSESSMENT INSTRUMENTS (2011), <http://pcs.la.psu.edu/publications-and-research/research-and-evaluation-reports/risk-assessment/phase-i-reports/interim-report-1-review-of-factors-used-in-risk-assessment-instruments/view>; see also Sarah L. Desmarais, Kiersten L. Johnson & Jay P. Singh, *Performance of Recidivism Risk Assessment Instruments in U.S. Correctional Settings*, 13 PSYCHOL. SCI. 206 (2016). Similarly, a remarkable recent study of over 47,000 released prisoners in Sweden assessed the risk of conviction for a violent felony during the first two years after release. Among the risk factors that emerged in the final validated model were “male sex, younger age, ... violent index (or most recent) offence, previous violent crime, being never married, fewer years of formal education, being unemployed before prison, low disposable income, living in an area of higher neighbourhood deprivation, and diagnoses of alcohol use disorder, drug use disorder, any mental disorder, and any severe mental disorder.” Seena Fazel et al., *Prediction of Violent Reoffending on Release from Prison: Derivation and External Validation of a Scalable Tool*, 3 LANCET PSYCHIATRY 535, 538 (2016).

entitled to make. ... Free citizens are entitled to decide to be married or not ... even if statistical analyses show that being unmarried is correlated with higher rates of offending and reoffending.”<sup>51</sup>

## RECOMMENDATIONS

I am led to four recommendations regarding the use of risk assessment in sentencing:

1. **Employ risk assessment to sentence nonviolent offenders at low risk of recidivism to community sanctions or to a shortened period of incarceration.** Within the widely-accepted “limiting retributivism” theory, retributive principles can only set outer limits on the severity of punishment, and within the range set by these limits, utilitarian concerns, such as an offender’s low risk of recidivism, can—and I believe should—be taken into account.<sup>52</sup>
2. **Make judicial deference to a finding of low-risk on a validated assessment instrument presumptive rather than advisory for nonviolent offenders.** The sentencing judge should be required to state on the record a cogent reason whenever he or she disregards the sentence-lowering implications of a low-risk designation. State sentencing commissions should periodically review the “cogency” of these deviations from presumptive deference to empirical findings of low risk.
3. **Do *not* employ risk assessment to lengthen the period for which high-risk violent offenders are incarcerated beyond the range set by retributive considerations.** Procedures such as those in Virginia by which a finding of high risk alone—without any finding of heightened culpability—can triple the sentence otherwise given to those convicted of sex crimes clearly violates the limits imposed by the “limiting retributivism” theory of punishment.
4. **Charge state sentencing commissions with conducting local empirical validations of any proposed risk-assessment instrument and with vigorously debating the moral and social implications of relying on the specific risk factors to be included on the instrument.** In the words of the Model Penal Code, state sentencing commissions “shall develop actuarial instruments or processes to identify offenders who present an

51. Tonry, *supra* note 6, at 171, 173.

52. *Cf. supra* note 16.

unusually low risk to public safety.”<sup>53</sup> The moral and social implications of incorporating demographic and psychosocial risk factors on those actuarial instruments should be subject to thorough public deliberation, particularly in terms of any potentially disparate racial or socioeconomic impact. In order for it to be useful in sentencing, “risk assessment must be both empirically valid and perceived as morally fair across groups.”<sup>54</sup>

The use of risk assessment to identify offenders at the low risk of recidivism and to sentence them either to community sanctions or to a shortened period of institutional confinement is hardly a panacea for mass incarceration. Yet as Richard Frase has argued, “with respect to low-risk assessments, can we afford to renounce any major sources of mitigation, given our inflated American penalty scales and overbroad criminal laws?”<sup>55</sup>

---

53. MODEL PENAL CODE, *supra* note 12, § 6B.09(3). See Francis T. Cullen, Cheryl L. Jonson & Daniel S. Nagin, *Prisons Do Not Reduce Recidivism: The High Cost of Ignoring Science*, 91 PRISON J. 48S (2011):

*Although the evidence is very limited, it is likely that low-risk offenders are most likely to experience increased recidivism due to incarceration.* From a policy perspective, it is essential to screen offenders for their risk level and to be cautious about imprisoning those not deeply entrenched in a criminal career or manifesting attitudes, relationships, and traits associated with recidivism.

*Id.* at 60S (emphasis in original).

54. Skeem, Monahan & Lowenkamp, *supra* note 47, at 582.

55. Frase, *Recurring Policy Issues*, *supra* note 49, at 151.