

# Federal Supervised Release and Actuarial Data (including Age, Race, and Gender): The Camel's Nose and the Use of Actuarial Data at Sentencing



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"If the camel once gets his nose in the tent, his body will soon follow." The camel's nose is a metaphor for a small act leading to a larger, undesirable action. Mixing metaphors, I intend to turn the tables on the anti-camel slur. I want to welcome our humped friend, particularly since the ruminant is already halfway into our tent. And, guess what? Like all beasts of burden, the camel has a lot to offer us.

In this piece, I will do three things. After I set out the context, I will first describe, albeit in an over-simplified manner, how the federal supervised release system presently uses actuarial data to supervise offenders once they are released from prison. Second, I will give examples of how certain types of actuarial data like age, race, and gender can properly influence the supervision of offenders. Third, I will propose that actuarial data of all types, including age, race, and gender, play an important role at sentencing and not only in the supervised release context.<sup>1</sup>

## 1. Attorney General Holder's Implicit Call to Reject Science

Attorney General Eric Holder, addressing criminal defense lawyers, recently expressed a concern about the use of actuarial data to sentence people. One assumes he has similar concerns about the use of such data to decide how offenders should be supervised when out on the streets after serving a prison sentence.

The *Wall Street Journal* wrote the following on August 1, 2014, detailing Holder's remarks:

Attorney General Eric Holder warned [recently] that a new generation of data-driven criminal justice programs could adversely affect poor and minority groups, saying such efforts need to be studied further before they are used to sentence suspects.

In a speech in Philadelphia to a gathering of the National Association of Criminal Defense Lawyers, Mr. Holder cautioned that while such data tools hold promise, they also pose potential dangers.

"By basing sentencing decisions on static factors and immutable characteristics—like the defendant's education level, socioeconomic background, or

neighborhood—they may exacerbate unwarranted and unjust disparities that are already far too common in our criminal justice system and in our society," Mr. Holder told the defense lawyers. Criminal sentences, he said, "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>2</sup>

Holder's remarks did not address hard data compiled by criminologists after many years of painstaking study and research. Consider the following.

Dr. J.C. Oleson was formerly a senior staff member of the Administrative Office of the U.S. Courts, and he is now a faculty member and Director of Research at the School of Social Sciences at the University of Auckland.<sup>3</sup> In an extremely detailed and well-researched paper, Dr. Oleson found that there are "seventeen discrete variables that appeared to be significantly associated with recidivism."<sup>4</sup> This conclusion was drawn from a meta-analysis (that is, examining individual studies for the purpose of integrating the findings of all the studies) of 131 different research papers that identified the static and dynamic variables that appear to be most predictive of reoffense. In descending order of strength of association, they are:

- (1) criminal companions, (2) criminogenic needs, (3) antisocial personality, (4) adult criminal history, (5) race, (6) pre-adult antisocial behavior, (7) family rearing practices, (8) social achievement, (9) interpersonal conflict, (10) current age, (11) substance abuse, (12) intellectual functioning, (13) family structure, (14) criminality, (15) gender, (16) socioeconomic status of origin, and (17) personal distress.<sup>5</sup>

Holder's speech brings to mind Oleson's introductory thoughts. We must ask ourselves whether we wish to follow science, understanding that it may open up "terrifying vistas of reality," or whether we will "flee from this deadly light into the peace and safety of a new dark age."<sup>6</sup> I vote (twice if I could) for science, even though the reality may, at times, be terrifying, especially for lawyers (like Holder) and judges (like me) who lack scientific training.

*Federal Sentencing Reporter*, Vol. 27, No. 4, pp. 207–215, ISSN 1053-9867, electronic ISSN 1533-8363.  
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## II. The Present State of Affairs: Predicting and Mitigating Risk in the Federal Supervised Release Context Through the Use of Evidence-Based Practices such as Actuarial Data<sup>7</sup>

Criminal justice agencies in the United States began using actuarial risk-assessment instruments for post-conviction supervision as early as 1923. The federal judiciary and the federal probation system got serious about using these scientific techniques to assist with post-prison supervision in 1974 and thereafter.<sup>8</sup>

### A. Background Principles: Risk, Need, and Responsivity

Social science research has consistently demonstrated that effective interventions for offenders under supervision adhere to the principles of *risk*, *need*, and *responsivity*.

According to the risk principle, the level of correctional intervention should match the offender's risk of recidivism. Higher-risk persons require more intensive services to reduce reoffending, whereas lower-risk persons need less intervention. The risk level is determined by the presence or absence of those factors likely to cause criminal behavior, and those are personal characteristics and circumstances statistically associated with an increased chance of recidivism.

When one speaks of "need" in this context, one is attempting to determine what interventions are necessary to change those factors that, when changed, lower the probability of recidivism. Empirical research has shown that the needs most associated with criminal activity include procriminal attitudes, procriminal associates, impulsivity, substance abuse, and deficits in educational, vocational, and employment skills. Although an assessment of overall risk suggests the level of correctional services that should be used, the assessment of need pertains to the human factors that should be changed to reduce recidivism. Though static factors such as criminal history are good predictors of offending, they do not identify what needs should be targeted to reduce the likelihood of future criminal behavior.

The responsivity principle calls for the identification of barriers that may frustrate the needs of the offender and the success of the treatment plan developed by the probation officer. After determining what barriers exist, the responsivity principle calls for a determination of the approach (treatment modality) most likely to remove the barrier and thereby increase the chance for success and reduce the risk of reoffense. For example, if one is impulsive, his or her responsivity to the need to avoid smoking crack is a barrier. In such a circumstance, the probation officer might require the offender to participate in cognitive behavioral therapy, an action-oriented therapeutic approach that can be tailored to provide the offender with specific strategies to help address impulsivity.

The most advanced assessment instruments incorporate the principles of risk, need, and responsivity by addressing all three components—that is, (1) whom to

target for significant correctional intervention, (2) what needs to address, and (3) how to remove barriers to successful implementation of a supervision and treatment plan.

### B. The Development of the PCRA

By 2009, the federal system began to develop a fourth-generation risk assessment tool. The Federal Post-Conviction Risk Assessment (PCRA) apparatus, a scientifically based instrument, was developed by the Administrative Office of the United States Courts (hereinafter, the Administrative Office) with the help of Christopher T. Lowenkamp, Ph.D., a nationally recognized expert in risk assessment and community corrections research.

Dr. Lowenkamp and other Administrative Office researchers constructed and validated the PCRA using data collected through the Probation/Pretrial Services Automated Case Tracking System (PACTS), existing risk assessments from the five federal districts with pilot risk-assessment programs, criminal history records, and presentence reports.<sup>9</sup>

There was a construction sample consisting of 51,428 federal cases, a first validation sample consisting of 51,643 cases, and a second validation sample that included 193,586 persons. Using a statistical standard as a measuring stick, the PCRA is one of the most accurate instruments in the field of criminology, producing "area under the curve" (AUC) values of .709 to .783. The AUC is a commonly used statistic that measures the strength of association between risk classification and recidivism. AUCs range from .000 to 1.000, with higher AUCs demonstrating higher predictive accuracy for assessing an offender's risk.<sup>10</sup> In other words, a perfect score is 1.0, while a score of .5 would be expected based on chance. The PCRA's predictive validity was confirmed for both short-term (6–12 months) and longer (up to 48 months) follow-up periods.

Bivariate and multivariate analyses were used to determine the most predictive elements for inclusion in the instrument. They included criminal history, education, employment, substance abuse, social networks, and cognition. Law enforcement records were used to identify any new arrests after the start of supervision.

Four risk categories were identified based on the statistical analysis: low, low/moderate, moderate, and high. In all three samples of offenders on federal supervised release, low- and low/moderate-risk persons accounted for at least 85 percent of the cases. Much smaller percentages were identified in each sample as moderate and high risk (approximately 12 percent and 1 percent, respectively). It is worth noting that this skewed distribution is unsurprising because the pool of persons under post-conviction supervision is presumably at lower risk than offenders in prison.

### C. Content of the PCRA

The PCRA consists of two sections. One section is completed by the probation officer (Officer Assessment), and the other section is completed by the person under

supervision (Offender Self-Assessment). The Officer Assessment includes both "scored items" and "unscored items." Scored items have been demonstrated by the Administrative Office's empirical research to be statistically significant predictors of recidivism, and they contribute to the PCRA's final conclusion regarding risk level and needs. Unscored items have been shown by other empirical research to be predictors of recidivism, but have not been studied by the Administrative Office in federal cases due to the lack of necessary data.

There are currently 15 scored items and 41 unscored items. Information for all scored items and the majority of unscored items is obtained as part of the Officer Assessment based on the interviews and a review of file documents. The Offender Self-Assessment is currently used only for 12 unscored items under the "cognitions" domain.

The PCRA includes information from the following seven domains: (1) Criminal History—6 scored items, 1 unscored item; (2) Education/Employment—3 scored items, 2 unscored items; (3) Substance Abuse—2 scored items, 4 unscored items; (4) Social Networks—3 scored items, 3 unscored items; (5) Cognitions—1 scored item, 13 unscored items; (6) Other (Housing, Finances, Recreation)—no scored items, 4 unscored items; and (7) Responsivity Factors—no scored items, 14 unscored items.

The criminal history domain is measured by whether the person was arrested at or under age 18, the number of prior misdemeanor and felony arrests, whether there are prior violent offenses, whether there is a varied (more than one offense type) offending pattern, whether there has been a revocation for new criminal behavior on supervision, whether there has been problematic institutional adjustment while imprisoned, and the person's age at the time of supervision.

The education and employment domain includes measures for the highest education level achieved. It also includes the degree of employment and number of jobs in the past 12 months. Drug and alcohol use is measured by whether there are disruptions at work, school, and home due to drug or alcohol use, whether the offender uses drugs or alcohol when it is physically hazardous, whether legal problems have occurred due to drug or alcohol use, whether the person continues to use drugs or alcohol despite social and interpersonal problems, and whether a current drug or alcohol problem exists.

Under the social networks category, the officer assesses marital status, whether the person lives with a spouse or children, whether there is a lack of family support, whether there is an unstable family situation, the nature of the person's relationship with peers, and whether the person lacks positive prosocial support.

Regarding the cognitions domain, the officer is directed to assess whether the person has antisocial attitudes and values and whether he is motivated toward supervision and change. The offender also takes part in an 80-question self-assessment, which is discussed further below. This

assessment helps the probation officer get at the question of the offender's thinking style.

The housing, finances, and recreation domain assesses the level of home stability, whether there are criminal risks at home, the financial situation, and the level of engagement in healthy social activities.

For the responsivity category, the officer is directed to check for the following areas of concern: low intelligence, physical handicap, reading and writing limitations, mental health issues, no desire to change or participate in programs, homelessness, transportation, child care, language, ethnic or cultural barriers, history of abuse/neglect, and interpersonal anxiety.

#### **D. Criminal Thinking as a Part of the PCRA**

As noted above, the probation officer is directed to assess the degree to which the offender exhibits antisocial thinking styles. That effort is aided by the Offender Self-Assessment. That assessment is based on the Psychological Inventory of Criminal Thinking Styles (PICTS), which was developed by Glenn Walters, Ph.D., using data collected on Federal Bureau of Prisons inmates.<sup>11</sup>

The PICTS is a quantifiable instrument that provides a reliable and valid method to assess criminal thinking styles. It is an 80-item self-report measure of criminal thinking styles created to provide the probation officer with information about how an offender thinks, which can be valuable for treatment and supervision purposes. It is designed to assess eight thinking styles that support and maintain criminal activity.

The PICTS also includes a General Criminal Thinking score, which is the sum of the raw scores for the items in the self-assessment that make up the eight PICTS thinking style scales. The PICTS also includes the Proactive Criminal Thinking composite scale and the Reactive Criminal Thinking composite scale, which identify the mode of criminal thinking an individual endorses. Proactive thinking is goal-directed. Persons who are proactive tend to expect positive things to come from their criminal behavior, such as money, status, and power. Others may describe them as devious, callous, calculating, and cold-blooded. Reactive thinking involves reacting to a situation rather than planned behavior. Persons who are reactive view the world suspiciously and misinterpret others as hostile. Others may describe them as impulsive, emotional, and hot-blooded.

#### **E. Output from the PCRA**

After the Officer Section and the Offender Self-Assessment are completed, an output page is produced that lists the person's risk category, needs, and responsivity factors. The total risk score is determined by adding the points for each of the scored items in the seven domains. The score is then used to classify the person into one of four risk categories: low, low/moderate, moderate, and high. The Administrative Office's research indicates that, with each increase in

risk category, the probability of failure (re-arrest and revocation) increases.

The majority of the persons under federal supervision fall into the low or low/moderate categories. In the low-risk category, 8 percent of offenders have their supervision revoked, and 9 percent are re-arrested within the first 190 days from their initial assessment. Intensive interventions with this population have little impact and may increase the risk of recidivism. Typically, a low level of supervision is appropriate. The probation officer should consider low-intensity supervision and eventual early termination.

In the low/moderate category, 11 percent of offenders have their supervision revoked, and 15 percent are re-arrested within the 498 to 810 days from their initial assessment. If appropriate risk factors are effectively addressed, these failure rates decline in subsequent time periods.

In the moderate category, 47 percent of offenders have their supervision revoked, and 30 percent are re-arrested within the first 190 days from their initial assessment. If appropriate risk factors are effectively addressed, these failure rates decline in subsequent time periods.

In the high-risk category, 74 percent of offenders have their supervision revoked, and 42 percent are re-arrested within the first 190 days from their initial assessment. If appropriate risk factors are effectively addressed, these failure rates decline in subsequent time periods.

Here is an example of an output page for an actual offender, which has been "scrubbed" to make it impossible to determine the identity of the person:

*Risk Category*

*Federal Risk Screening Instrument Score: Moderate*

In this category, 47% of offenders have their supervision revoked and 30% are re-arrested within the first 190 days from their initial assessment. If appropriate risk factors are effectively addressed, these failure rates decline in subsequent time periods.

*Dynamic Risk Factors*

*Federal Needs Screening Instrument Indications:*

#1 Cognitions

#2 Education/Employment

*Offender Self-Report Results:*

Valid Profile: Yes

Exhibits General Criminal Thinking: Modest (55-59)

Proactive: None (<55)

Reactive: Moderate (55-69)

Predominant Style: Reactive

Profile Differentiated: Yes

Elevated Offender Thinking Styles

Cognitive Indolence (Ci)—Lazy Thinking

Mollification (Mo)—Making Excuses

Power Orientation (Po)—Asserting Power Over Others<sup>12</sup>

**F. Override of the PCRA**

Probation officers can deviate from the PCRA risk category through a "policy override" for the following categories if

officers believe that the PCRA risk score is not appropriate: sex offenders, persistently violent offenders, offenders with severe mental illness, and youthful offenders with extensive criminal histories. Officers are also permitted to deviate from the PCRA risk level for other reasons through a "professional override." These require a comprehensive justification. Any type of override requires the approval of a supervising officer.

**G. Value of the PCRA**

The PCRA is based on a dataset of unprecedented size that is representative of the population of federal offenders under supervision. It is also consistent with contemporary scientific research since it adheres to the principles of risk, need, and responsivity. Assessment information is used not only to measure risk to determine the appropriate supervision level, but to reduce risk going forward. Because it includes dynamic risk factors, the PCRA allows officers to identify needs that should be targeted for change and responsivity barriers to change. Simply put, the PCRA is a data-driven approach, and utilization of it results in the rational and equitable supervision of offenders.

**III. Examples of the Proper Use of Age, Race, and Gender under the PCRA**

It is helpful to look at how the PCRA utilizes age, race, and gender with respect to scored and unscored items.

Remember that scored items have been demonstrated by the Administrative Office's empirical research to be statistically significant predictors of recidivism. Unscored items have been shown by other empirical research to be predictors of recidivism, but have not been studied by the Administrative Office in federal cases.

**A. Age as a Scored Item**

Using the PCRA, age is specifically taken into consideration when scoring an offender's criminal history for purposes of the assessment of risk. Presumably, age is one of those immutable characteristics that Attorney General Holder was concerned about.

Age is used in two ways when assessing criminal history under the PCRA. That is, the probation officer determines (1) whether the offender was first arrested by any jurisdiction before the age of 18, and (2) the age of the offender at the time of federal supervision.

If the offender was arrested before the age of 18, that behavior increases the total criminal history score by 1 point (Item 1.1 of the PCRA). If the age at intake is between 26 to 40, 1 point is added to the total criminal history score (Item 1.7). If the age at intake is 25 years or younger, that fact increases the criminal history score by 2 points (Item 1.7). If the age of intake is 41 or above, no criminal history points are assessed for that category (Item 1.7).

That it is sensible to concentrate on age for criminal history purposes should surprise no one. That younger persons are seen as more likely to be at risk for reoffending

should not surprise anyone either. That the Administrative Office's empirical research on age was consistent with the conclusions of many other studies is also not surprising. Based upon a meta-data analysis of the research in this area, J.C. Oleson writes, "Those between the ages of about fifteen or sixteen and twenty-four or twenty-five appear to be at greatest risk of offending, but after that period, for a variety of possible reasons, adults gradually 'age out' of crime."<sup>13</sup> Indeed, "the highest rates of violent crime occur[] at age eighteen."<sup>14</sup> It is also worth noting that persons who started earlier in the commission of crime are more likely to have a greater risk of re-offense later in life as compared to persons of the same age whose criminal record did not start so early.

### B. Age, Race, and Gender as Unsourced Items

With respect to race and gender, the PCRA does not score such characteristics,<sup>15</sup> but the PCRA does call for the analysis of race and gender. These characteristics come into play when the probation officer determines "responsivity" or the barriers that preclude successful satisfaction of the offender's needs. Except as noted above for criminal history purposes, age is likewise not scored, but it too is an important data point when considering barriers to correctional treatment.

Data on age, race, and gender can be used to assist the probation officer in overcoming barriers to the success of offenders. Recently, a study<sup>16</sup> was completed of 19,753 federal offenders with an initial assessment upon commencement of supervised release occurring from November 2013 through March 2014. Of these offenders, race and ethnicity information was available for 97 percent, gender data was available for 98 percent, and age information was available for 98 percent.

By closely examining data from this large pool of federal offenders, these three "immutable characteristics"—age, race, and gender—stood out as especially relevant. From an examination of these characteristics, federal probation officers learned much about the barriers that certain offenders were facing. As it turns out, those barriers were not shared equally, but were distributed differentially according to discrete demographic characteristics.

Although barriers to effective correctional treatment impacted 28 percent of all offenders, American Indians or Alaska Natives clearly faced the greatest hurdle of all demographic groups. One half (50 percent) of this population was found to have responsivity issues that stood in the way of meeting the needs of these offenders. Women were clearly more likely to face barriers to effective correctional treatment than men. Very young federal offenders (20 or younger) and older federal offenders (55 or older) were particularly likely to confront barriers to effective correctional treatment.

When the researchers drilled down even further, they found that particular barriers to effective correctional treatment were, once again, distributed unequally according to discrete demographic characteristics.

**Table 1. Presence of responsivity issues for federally supervised offenders at initial assessment, by offender demographic characteristics, November 2013–March 2014.**

Offender demographics	Number of offenders	Percent with responsivity issues
Any offender	19,753	28%
<b>Race/ethnicity</b>		
American Indian or Alaska Native	557	50
Hispanic, any race	4,623	31
White, not Hispanic	6,916	27
Black or African American	6,576	26
Asian or Pacific Islander	518	24
<b>Gender</b>		
Female	3,644	31
Male	15,698	27
<b>Age</b>		
20 or younger	254	34
21–24	1,301	30
25–34	6,137	27
35–44	5,732	26
45–54	3,534	30
55 or older	2,383	32

Source: Cohen and Wetzel, note 16, at 15 and tbl. 2 (note omitted).

American Indians, Alaska Natives, and women were more likely than other groups to confront mental health barriers to effective correctional treatment. The same was true for American Indians, Alaska Natives, and women when it came to a history of abuse and neglect. Moreover, as a demographic group, Native Americans and Alaska Natives were more likely to face more numerous barriers to effective correctional treatment than other racial or ethnic groups. Asian and Pacific Islanders were more likely to face language barriers to effective correctional treatment when compared to other racial or ethnic groups.

### C. The Use of Age, Race, and Gender under the PCRA is Appropriate

The PCRA is not a blunt instrument. Nor is the approach it dictates. It would be difficult for a reasonable person to conclude that the utilization of the PCRA is in any way discriminatory. Although age, race, and gender are part of the PCRA approach to supervision, the use of those characteristics is carefully and narrowly tailored to further the government's compelling interest in seeing to it that offenders do not reoffend and instead are provided with the most effective correctional treatment. Indeed, it is hard to imagine an alternative that would serve the compelling governmental interest nearly as well.

### IV. All Statistically Significant Actuarial Data Regarding Risk to Reoffend, including Age, Race, and Gender, Should be Used at Sentencing

Having shown that actuarial data has been a boon to the rational and nondiscriminatory supervision of federal offenders once they leave prison, it is not a great leap to suggest, as I do, that statistically significant actuarial data regarding the risk to reoffend should become a salient part

**Table 2. Types of responsivity issues identified for federally supervised offenders at initial assessment, by offender demographic characteristics, November 2013–March 2014.**

Type of responsivity issues	Percent of offenders with responsivity issues						
	Offender race and ethnicity					Offender gender	
	American Indian or Alaska Native	Asian/Pacific Islander	Black/African American	Hispanic, any race	White, not Hispanic	Female	Male
Transportation	26%	3%	10%	7%	9%	9%	9%
Mental health	11	2	6	6	10	12	7
Physical handicap	5	2	4	2	5	4	4
Homeless or unstable housing	7	1	4	3	4	3	4
No desire to participate in programs	7	1	4	3	3	2	4
History of abuse or neglect	7	2	3	3	4	8	2
Reading and writing limitations	5	6	3	5	2	2	3
Low intelligence	5	2	4	3	2	2	3
Language	1	13	–	9	1	2	3
Interpersonal anxiety	3	–	1	1	2	2	1
Ethnic or cultural issues	8	3	–	1	–	1	1
Child care	2	0	–	1	1	2	–
Number of offenders	557	518	6576	4623	6916	3644	15,698

Source: Cohen and Wetzel, note 16, at 16 & tbl. 3 (note omitted).

of federal sentencing. Relying on Dr. Oleson once again, I describe how that could be done. After that, I address Attorney General Holder’s concerns.

#### A. Actuarial Software

Dr. Oleson has proposed the use of software that could capture both the risk to reoffend and retribution-related concerns.<sup>17</sup> Although I remain agnostic about the specific design and whether this software would replace, or serve as an adjunct to, the Federal Sentencing Guidelines, it is clear to me that Oleson’s proposal has much merit. In very general terms, here is how it would work.

Let us assume that we want to compare the offender standing before the judge at sentencing with past offenders who have committed similar crimes and who have similar characteristics. By comparing the present offender with like past offenders, we should be able to predict risk based upon the past performance of similarly situated offenders. In other words, the object of our comparison is to predict the risk that the offender standing before the judge will engage in further criminal behavior by examining how other similar past offenders have fared.

There is a huge amount of actuarial data available to the Sentencing Commission and the federal courts about federal offenders. We now have access to that data through the federal court’s Case Management and Electronic Case Filing (CM/ECF) system and otherwise. With that in mind, one can imagine software that would tap into that data and generate a scatter plot.

The severity of the sentence, showing the entire spectrum of imprisonment and supervised release available under the statute, would be plotted on the horizontal axis of a pictogram that would appear on the judge’s computer. The duration without a new arrest (easily obtainable from such sources as NCIC, National Crime Information Center) for similarly situated past offenders would be plotted on the

vertical axis. Each point in the scatter plot would represent a previous federal case matched to the offense of conviction, offender characteristics, and arrest records following conviction.<sup>18</sup>

Offender characteristics could include all or some<sup>19</sup> of the 17 offender characteristics found statistically probative of reoffense by the meta-analysis of 131 different studies discussed earlier. (As a reminder, the characteristics are criminal companions, criminogenic needs, antisocial personality, adult criminal history, race, pre-adult antisocial behavior, family rearing practices, social achievement, interpersonal conflict, current age, substance abuse, intellectual functioning, family structure, criminality, gender, socio-economic status of origin, and personal distress.)

The judge would then “click on” a point within the scatter plot to compare the offender described on the scatter plot with the offender facing the judge. The judge could pull up the specifics of that prior offender’s case: the name and photo of the offender, the offense of conviction, the characteristics of the offender, and the particulars of the sentence imposed. The judge would be able to review any educational, vocational, or treatment programs that successful offenders had completed while serving their sentences, and to search online for available, equivalent programs. If desired, the underlying documents associated with any of the previous cases could be retrieved through the judge’s computer.

Dr. Oleson writes:

By concentrating on points near the top of the vertical axis (individuals who went long periods of time without a new arrest), the judge could engage in actuarial sentencing and impose a sentence that was effective in reducing recidivism among similar defendants convicted of similar crimes. A judge could divert correctional resources from low-risk offenders (who actually become *more* likely to reoffend if oversupervised)

to high-risk offenders in greater need of intensive services. Defendants who are statistically most likely to recidivate could be sentenced to longer sentences (within the statutory range), while those who present little risk of recidivism could be sentenced to brief terms of incarceration or noncustodial sentences.<sup>20</sup>

The foregoing approach would also be useful if a judge was concerned with retribution. The software could be written to address retribution-related concerns by having a part of the horizontal axis of the plot in a different color, say red. "The red band would reflect the recommended sentencing range in terms of proportionality and just desserts. . . . [A]s a general rule, the red band would serve as an anchoring point for the moral wrongness of the offense, and suggest appropriately retributive penalties."<sup>21</sup>

### B. Immutable Characteristics

Attorney General Holder was concerned about sentencing people on the basis of "immutable characteristics" that those people could not control. When subjected to a clear-eyed analysis, his arguments about "immutable characteristics" are not persuasive.

Initially, for the public that must bear the risk of the offender committing another crime, and considering the explicit command of 18 U.S.C. § 3553(a)(2)(C) requiring the judge to protect the public from further crimes of the defendant, differentiating between "immutable characteristics" and other characteristics of risk makes no sense. If a sociopath, for example, is more likely to offend again, why should the judge ignore that unchangeable characteristic for purposes of sentencing? The victim of the new offense will find no solace whatever in such ignorant behavior.

It is likely that Holder was worried only about certain highly sensitive "immutable" characteristics like age, race, or gender. There are (at least) two responses to such a concern—one relates to the legal justification for considering age, race, and gender, and the other to the question of luck.

While it is beyond the scope of this piece to fully articulate a legal rationale for consideration of age, race, or gender as a part of an actuarial sentencing scheme, a sentencing system based upon a robust actuarial data set consisting of *all* factors statistically correlated with risk would arguably pass constitutional muster, even under strict scrutiny.<sup>22</sup> Quickly put, and concentrating on race as an example, the argument goes something like this:

First, "The 'legitimate and compelling state interest' in protecting the community from crime cannot be doubted."<sup>23</sup> Second, "Highly relevant—if not essential—to [a judge's] selection of an appropriate sentence is the possession of the *fullest* information possible concerning the defendant's life and characteristics."<sup>24</sup> Third, like the admission policy at the University of Michigan Law School that considered race as one of several factors and that survived strict scrutiny in *Grutter v. Bollinger*,<sup>25</sup> utilization of race as part of a statistical model at sentencing, together

with a host of other empirically validated characteristics, does not violate the Constitution. This is because the use of actuarial risk data serves the compelling governmental interest of protecting the public from further crime and because it is narrowly tailored to take into consideration only those factors that are statistically correlated with recidivism. Additionally, since research has shown that excluding race from mathematical models of recidivism degrades the predictive power of the model, no less restrictive means will satisfy the compelling governmental interest.<sup>26</sup>

Furthermore, no matter how we might wish that it were otherwise, luck plays an important part in every person's life. Some people are born smart, and others are born not so smart. Some are born rich, and others born poor. Some have had good parents, and others virtually no parents at all. Some are born male, while others are born female. Some are born black, and some are born white. Some offenders are young, and some are old. All of these, and many more, are attributes that the offender cannot be expected to change.

If protection of the public is central to the act of sentencing, carving out special classes of offenders with "bad" luck for relatively benign treatment, while simultaneously ignoring the "bad" luck of other offenders, make no sense at all, especially if we are about protecting the public. On the contrary, considering all statistically valid predictors of risk seems far more fair and consistent with our obligation to protect the public than picking winners and losers based upon our uneven sympathy for certain classes of offenders who have had "bad" luck.<sup>27</sup>

### C. Correlation is Not Causation

It should not be necessary, but one thing needs to be stated clearly: A black man is not inherently more likely to be a criminal than a white man. Age, race, and gender do not cause crime. Correlation is not causation.

None of the criminologists who painstakingly derived actuarial data to study crime did so because they believed that a statistical correlation between race (or some other variable) and crime proved causation. Rather, they relied upon statistical correlations to better help them understand crime. Although it may be true that race, for example, can be a proxy for past or present discrimination, it is also true that all statistically correlated variables are proxies for something else. In the case of race (or age or gender), one cannot reasonably argue that such a classification is inevitably a proxy for one thing and one thing only—that is, discrimination. Since that is so, and race is likely to be a proxy for a wide variety of potentially relevant variables that cannot be easily untangled from race, then, from the utilitarian perspective of 18 U.S.C. § 3553(a)(2)(C), the protection of the public from future crime demands that the sentencing judge be well informed of *all* actuarial data that helps him or her assess the risk of reoffense.

In summary, an actuarial data set that includes all of the 17 variables statistically correlated with crime—including

age, race, and gender—would materially assist the federal judge when selecting a sentence. Those variables need not, and should not, drive the sentence. But they are worthy of careful and cautious consideration. In short, it is worth remembering that the blind cannot see.

#### D. A Few Words about Unwarranted Sentencing Disparity

Citing 18 U.S.C. § 3553(a)(6), which cautions against unwarranted sentencing disparity, a canny critic would argue that using actuarial data will cause sentencing disparity. But that is not true. The more closely the risk factors for the offender pending sentencing are matched with like risk factors for a past offender, the closer the judge will get to the ideal of sentencing like offenders in a like manner on a ground (risk to reoffend) that is indisputably proper. And, to the extent that an actuarial sentencing scheme also contains retributive considerations like proportionality and just desserts, “unwarranted” sentencing disparity becomes even less likely.

#### E. Punishment for a Crime Not Yet Committed

Attorney General Holder was concerned about punishing an offender for a crime that the offender had not (yet) committed. Implicit in this assertion is the belief that sentencing should not as a normative matter address utilitarian concerns. While Holder is, of course, free to express his views about the proper goals of sentencing, the decision about what concerns should be addressed at sentencing has already been made by Congress. Specifically, 18 U.S.C. § 3553(a)(2)(C) commands that the “court, in determining the particular sentence to be imposed, shall consider . . . the need for the sentence imposed . . . to protect the public from further crimes of the defendant. . . .” In short, Holder’s argument—against punishing someone for a crime they have not yet committed—should not be taken seriously.

#### V. Conclusion

The more a judge knows about offenders and the risk they pose to reoffend, the better the judge can sentence offenders for their crimes and supervise them when they leave prison. Actuarial data—including age, race, and gender—materially assists the judge in such an effort. With that, I warmly invite the camel into our tent.

#### Notes

- <sup>1</sup> The nine-page “PCRA Officer Section,” which is discussed later, is reproduced and is available at [www.ned.uscourts.gov](http://www.ned.uscourts.gov). Click on “Attorney,” “Judges’ Information,” and “Richard G. Kopf”; scroll down to “Other Items of Interest” and “Federal Sentencing Reporter 2014–15.” Likewise, the 80-question “PCRA Offender Section” discussed later is reproduced there, too. Finally, the articles cited in these endnotes are reproduced in this archive. When retrieving these documents, be patient. Some documents are large, and it takes time for the server to retrieve them.
- <sup>2</sup> Devlin Barrett, *Holder Cautions on Risk of Bias in Big Data Use in Criminal Justice*, Wall St. J., Aug. 1, 2014, available at [http://](http://online.wsj.com/articles/u-s-attorney-general-cautions-on-risk-of-bias-in-big-data-use-in-criminal-justice-1406916606)

- <sup>3</sup> [online.wsj.com/articles/u-s-attorney-general-cautions-on-risk-of-bias-in-big-data-use-in-criminal-justice-1406916606](http://online.wsj.com/articles/u-s-attorney-general-cautions-on-risk-of-bias-in-big-data-use-in-criminal-justice-1406916606).
  - <sup>4</sup> Oleson received his Ph.D. in criminology from the University of Cambridge, and his J.D. from the law school at the University of California, Berkeley (Boalt Hall).
  - <sup>5</sup> J.C. Oleson, *Risk in Sentencing: Constitutionally Suspect Variables and Evidence-Based Sentencing*, 64 S.M.U. L. Rev. 1329, 1367 (2011) [hereinafter *Risk in Sentencing*].
  - <sup>6</sup> *Id.* Oleson discusses in detail each of the seventeen factors. *Id.* at 1353–68. Although all the other factors are relatively self-evident, “criminogenic needs” requires explanation. Essentially, it means “holding criminal values,” such as the rejection of lawful work and the adoption of crime as a lifestyle. *Id.* at 1354.
  - <sup>7</sup> *Id.* at 1330.
  - <sup>8</sup> An “evidence-based practice” is one that is not primarily based on intuition or personal experience, but rests on verifiable data. “Actuarial data” is a subset and refers to statistics about groups rather than stereotypical or other assumptions. As many philosophers of science and others have observed, there are limits to “common sense.”
  - <sup>9</sup> Most of the information contained in Part II is drawn from two excellent and heavily footnoted sources: (1) Administrative Office of the United States Courts, *An Overview of the Federal Post Conviction Risk Assessment* (Sept. 2011) and (2) James L. Johnson, Christopher T. Lowenkamp, Scott W. VanBenschoten & Charles R. Robinson, *The Construction and Validation of the Federal Post Conviction Risk Assessment (PCRA)*, 75(2) Federal Probation (Sept. 2011), available at <http://www.uscourts.gov/uscourts/FederalCourts/PPS/Fedprob/2011-09/index.html>.
  - <sup>10</sup> *Id.* at 4–8.
  - <sup>11</sup> “For a frame of reference, it is helpful to consider the risk factors for a heart attack (e.g., high levels of bad cholesterol, smoking, and hypertension). These risk factors were identified in a study, which followed approximately 5,000 people over a 12-year period. When the risk factors are combined, the AUC falls between .74 and .77. See [D.A. Andrews & James Bonta, *The Psychology of Criminal Conduct* 276 (4th ed. 2007)] (citing W.F. Wilson et al., *Prediction of Coronary Heart Disease Using Risk Factor Categories*, 97 Circulation Journal of the American Heart Association 1837 (1998)). While perfect prediction is an impossibility in both the medical and criminal justice fields, the knowledge of risk has practical value. *Id.*” Administrative Office of the United States Courts, *supra* note 8, at 9 n.35.
  - <sup>12</sup> Since 1992, Doctor Walters has been employed as a clinical psychologist by the Federal Bureau of Prisons (Federal Correctional Institution—Schuylkill). The original PICTS instrument was developed in 1989 and then updated in 2001. Glenn D. Walters, *The Psychological Inventory of Criminal Thinking Styles (PICTS): A Review and Meta-Analysis*, 9(3) Assessment 278–91 (September 2002).
- The output page in the text was provided by Supervising United States Probation Officer Doug Steensma from the District of Nebraska. When SUSPO Steensma supplied this to me, he wrote: “I have shared the PICTS results with offenders along with the PCRA results. By doing so, it can create change talk which helps officers to guide offenders towards services or programs aimed at addressing identified needs.” He added, “I reviewed these results with the offender, and the offender admitted to having the thinking styles listed. As an officer, the information was beneficial for the purpose of developing strategies for programming and supervision.” I take this opportunity to thank SUSPO Steensma and Senior Probation Officer Todd Enger for their able assistance and patient teaching. In that same vein, I also compliment the Chief United States Probation Officer for the District of Nebraska, Mary Lee Ranheim, and her Chief Deputy, Kit Lemon, for running one of the best federal probation offices in the country.

- <sup>13</sup> *Risk in Sentencing*, *supra* note 4, at 1362 (footnote omitted).
- <sup>14</sup> *Id.*
- <sup>15</sup> Although “race” and “gender” are not scored in the federal supervised release system for purposes of “risk” assessment, those factors are clearly predictors of reoffense. Criminologists have found that “race” is a statistically significant predictor of recidivism, although the reasons why this is so are disputed. *Risk in Sentencing*, *supra* note 4, at 1356–59. Male gender is another significant predictor of reoffense, especially for serious crime. *Id.* at 1365–66.
- <sup>16</sup> The data and much of the analysis discussed in this section are derived from Thomas H. Cohen & Jay Whetzel, *The Neglected “R”—Responsivity and the Federal Offender*, *Federal Probation*, 78(2) *Federal Probation* 11 (Sept. 2014), available at <http://www.uscourts.gov/uscourts/FederalCourts/PPS/Fedprob/2014-09/federal-offender.html>.
- <sup>17</sup> J.C. Oleson, *Blowing Out All the Candles: A Few Thoughts on the Twenty-Fifth Birthday of the Sentencing Reform Act of 1984*, 45 *U. Rich. L. Rev.* 693 (2011).
- <sup>18</sup> *Id.* at 744–47.
- <sup>19</sup> For example, one could exclude race. But remember that for every omission, there is a consequent drop in the ability of the software to match the offender pending sentencing with other like past offenders. In short, the more personal characteristics that are omitted, the weaker the scatter plot becomes in terms of predicting risk of recidivism. *Id.* at 755–56.
- <sup>20</sup> *Id.* at 746–47 (footnotes omitted).
- <sup>21</sup> *Id.* at 748–49.
- <sup>22</sup> *Risk in Sentencing*, *supra* note 4, at 1372–88.
- <sup>23</sup> *Schall v. Martin*, 467 U.S. 253, 264 (1984) (quoting *De Veau v. Braisted*, 363 U.S. 144, 155 (1960)) (authorizing pretrial detention of an accused juvenile delinquent based on finding that there was “serious risk” that the juvenile “may before the return date commit an act which if committed by an adult would constitute a crime” and holding that such practice did not violate the Due Process Clause).
- <sup>24</sup> *Williams v. New York*, 337 U.S. 241, 247 (1949) (emphasis added) (New York judge, who was charged with the responsibility of sentencing under New York statute setting wide limits for maximum and minimum sentences, is not restricted by the Due Process Clause to information received in open court).
- <sup>25</sup> *Grutter*, 539 U.S. 306 (2003).
- <sup>26</sup> “Once the constitutional door is open to race, all other sentencing factors can pass through: gender, age, marital status, education, class, and so forth.” *Risk in Sentencing*, *supra* note 4, at 1387.
- <sup>27</sup> By the way, it is not true that the examination of race will always adversely impact groups that have been historically discriminated against. Take child pornography as an example. The Sentencing Commission has found that white males comprise as much as 93 percent of offenders who do not manufacture child pornography. U.S. Sentencing Commission, *Report to the Congress: Federal Child Pornography Offenses*, ch. 11 at 304 & tbl. 11-2 (Dec. 2012) (Chapter 11 deals with recidivism). Indeed, the Commission has stated that such offenders are “overwhelmingly white.” *Id.* at 308 n.56.