

Topic: The use of algorithms in judicial sentencing

Background:

In the US Federal Court system, the Federal Sentencing Guidelines (FSG) are non-binding rules that attempt to use a “uniform sentencing policy” for convicted persons in the US federal court system. The FSG purports to have a very “precise calibration of sentence” taking into account multiple criteria about the defendant, the crime, and facts of the case. The use of the FSG is not mandatory and judges may deviate from them based on their discretion. However, any sentence may be appealed and the FSG is used as the benchmark from which all variances are reconsidered for legal reasonableness.

Algorithm-based risk assessment tools produce either a numerical risk-score that measures probability of recidivism or a qualitative scale that uses high, medium or low risk assessment. Theoretically, a sentencing algorithm should be designed to be able to parse all conditions for consideration, and subsequently produce a precise decision which the judge may then utilize to render a sentence. An ideal algorithm would indicate a reliable probability of recidivism.

The ultimate decision maker is a human — the judge – who will consider multiple criteria, of which the weight of the algorithmic application of the FSG will vary. In this context, the use of the algorithm is not any different from the judge consulting multiple experts, legal theory, legal precedent, and outright cerebral or visceral sense.

Many experts argue that the use of algorithm-based risk assessment tools poses the issue of a violation of the Fifth and Fourteenth Amendments which guarantees protection from deprivation of “life, liberty, or property, without due process of law” and includes “procedural due process” when it involves curtailment of enjoyment of life, liberty, or property.

Advantages:

- According to the [Marshall Project](#), a well-regarded online organization concerned with studying the criminal justice system in the United States, these algorithms are tools that judges can use to predict recidivism using factors such as age, employment history and criminal history
- These algorithms take the guesswork out of sentencing and do not leave sentencing to possible biases by individual judges, probation officers and police officers
- These algorithms have been used for years in other stages of criminal proceedings such as setting bail and terms for parole and probation
- Former Attorney General under Barack Obama, Eric Holder said that these algorithms can be effective at shortening prison terms and directing people towards rehabilitation programs
 - Although he did have some criticism on basing sentencing on characteristics like the neighborhood where someone lives and/or their educational level which in some cases can create disparities in those individuals who are incarcerated
- While there are flaws in the system, algorithms are currently 10% more effective at prediction than the track record of judges
- In some places Judges do have liberty to combine thoughtful consideration with the results of the **Correctional Offender Management Profiling for Alternative Sanctions (COMPAS)**
- [The UCLA Law Review](#) does acknowledge that while there are disparities in sentencing amongst marginalized groups, we could as a society decide to study algorithms to stamp out factors that seem to lead to racial biases and minimize them in the algorithms that programs such as COMPAS design

Disadvantages:

- A survey of literature on the disadvantage of using algorithmic-based risk assessment points to a common culprit — human error and failure to understand how algorithms work!
- Human-in-the-loop v. algorithms-in-the-loop decision making: the latter is preferred because decision making is centered on human decision making. When this fails, the tool becomes the dominant factor, and any flaws in the algorithm transfers into the decision-making.
- Experimental studies have uncovered numerous limits in people's ability to make appropriate and effective use of algorithmic advice. Several studies have found that

algorithmic advice can improve the accuracy of human predictions, but people's decisions about when and how to diverge from algorithmic recommendations are typically incorrect. This results in human error on the judges part and not an algorithmic error.

- There is empirical evidence that “people struggle to evaluate the quality of algorithmic advice, often discount accurate algorithmic recommendations, and exhibit racial biases in their responses to risk assessments”.
- There is experimental evidence that “ demonstrates that incorrect predictions reduce the quality of expert judgments and that experts make less effective use of algorithmic forecasts than laypeople”
- Several studies found that “judges disproportionately override release recommendations to detain defendants, leading to much higher than expected pretrial detention rates “
- Bias overcomes algorithm. Several studies have shown that risk assessments exacerbate rather than diminish racial disparities in pretrial detention, in part because judges often make more punitive decisions about Black defendants than similar white defendants.
- “You will not replace us”! expert-syndrome. Furthermore, ethnographic work has found that judges often resist using risk assessments because they dislike the idea of these tools replacing or surveilling them.
- It was reported in the [Atlantic](#) that black people are twice as likely to be flagged as likely to reoffend than other groups. They also reported that algorithms are often incorrect in predicting who will reoffend in the future

Works Cited / Consulted:

<https://www.brookings.edu/blog/techtank/2019/03/21/algorithms-and-sentencing-what-does-due-process-require/>

https://www.law.cornell.edu/wex/federal_sentencing_guidelines

<https://www.benzevgreen.com/wp-content/uploads/2021/08/21-cscw.pdf>