

Ethics

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Ethics isn't a single TODO
or TODON'T list

Questions to Ask yourself

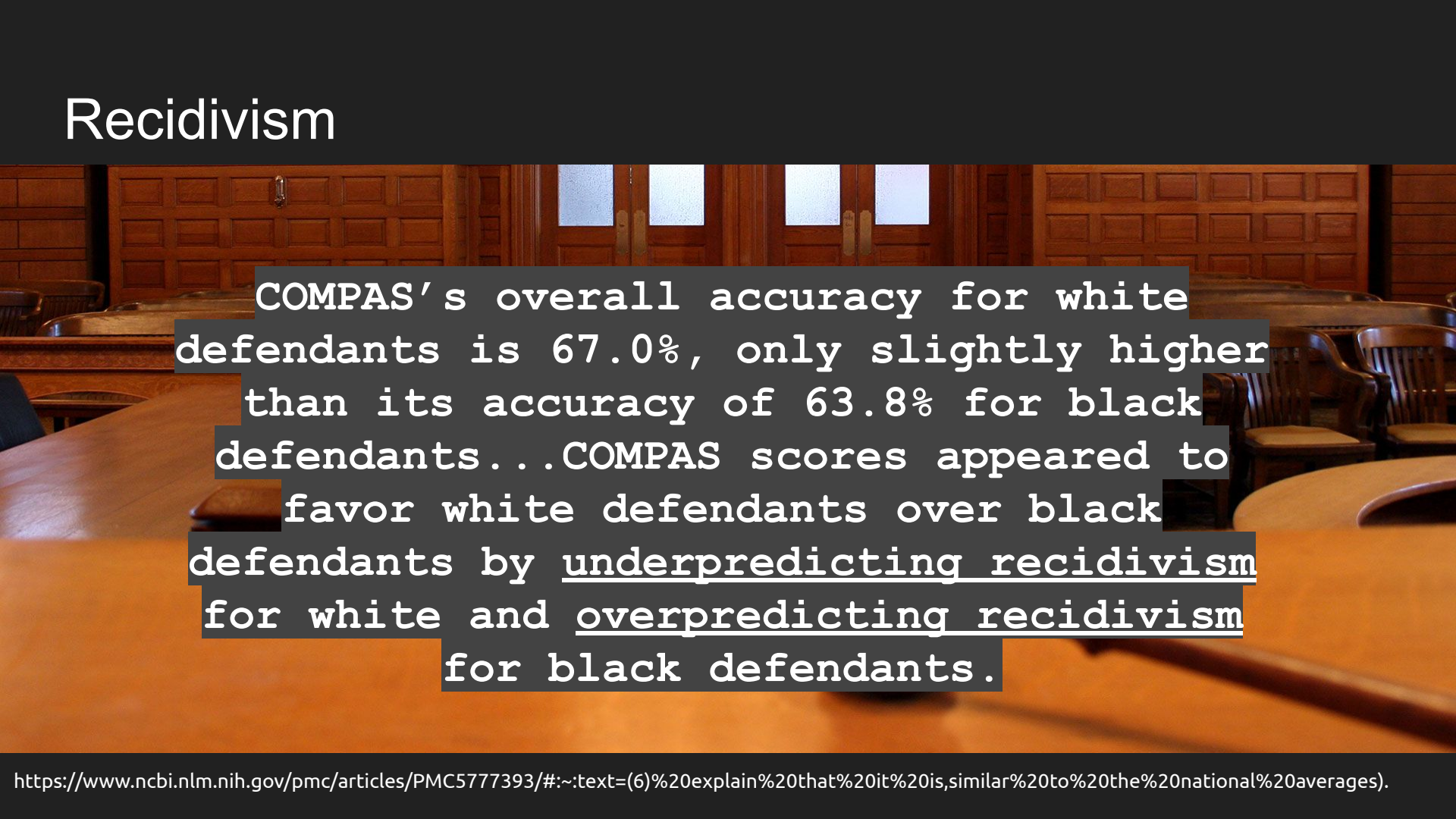
- What are you really **measuring**?
- How could the data you're working with be **misused**? Or to hurt people?
- Who will be **impacted** by the analysis you're doing?
- Is the model you're building "**fair**"? What will happen if it is not?
- Was this data **collected ethically**?
- **How** is my model wrong?
- Is your data **biased**?

2020 GCSE

- Particular criticism was made of the disparate effect the grading algorithm had in **downgrading the results of those who attended state schools, and upgrading the results of pupils at privately funded independent schools** and thus **disadvantaging pupils of a lower socio-economic background**, in part due to the algorithm's behaviour around small cohort sizes



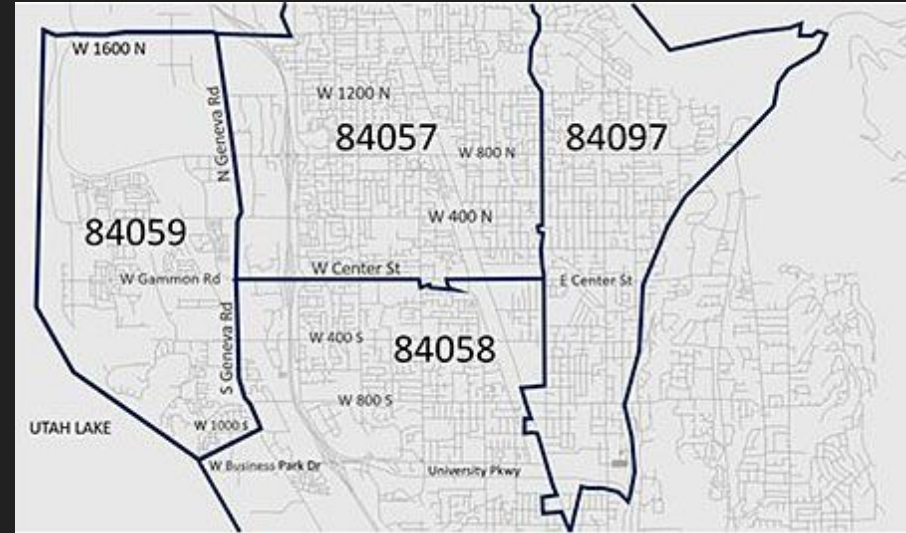
Recidivism

A photograph of a courtroom interior. In the foreground, a large, curved wooden table is visible. In the background, there are wooden paneling and a set of double doors with small windows. The text is overlaid on the image.

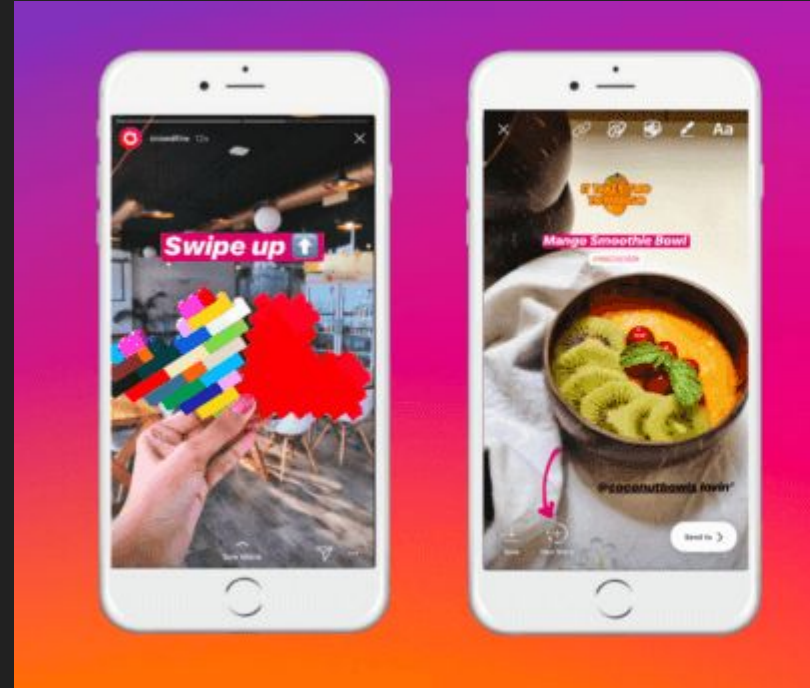
COMPAS's overall accuracy for white defendants is 67.0%, only slightly higher than its accuracy of 63.8% for black defendants...COMPAS scores appeared to favor white defendants over black defendants by underpredicting recidivism for white and overpredicting recidivism for black defendants.

Homelessness

- Predict how long a family might stay within the public services system.
- Race Data was available, but they made the decision not to include it in the model, even though it could improve prediction.
- But what about ZIP code?



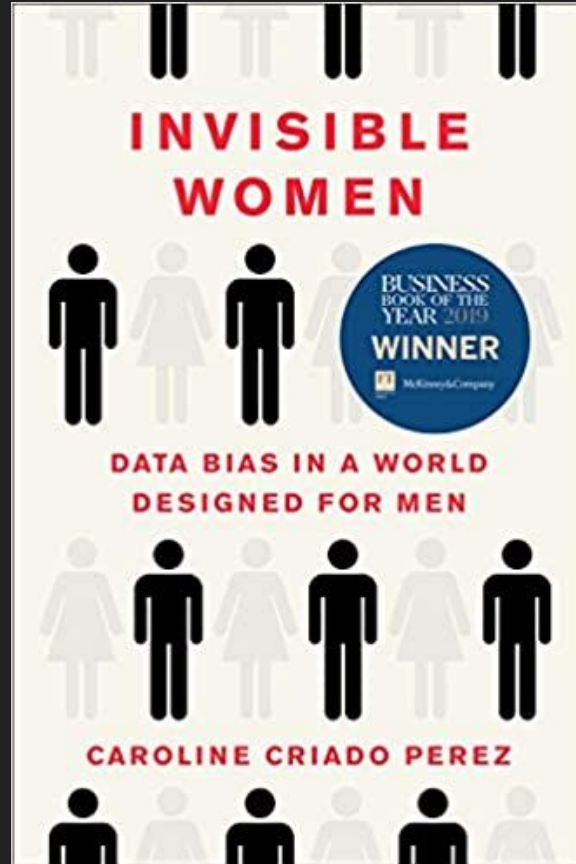
Microtargeting Ads



The “Pale Male” Problem

- Facial Recognition
- Medical Trials

“medicine persisted with the belief that all other organs and functions would operate the same in men and women, so there was no need to study women. Conversely, researchers said that the menstrual cycle, and varied release of hormones throughout the cycle in rodents, introduced too many variables into a study, therefore females could not be studied.”



A...a *white* man?!
No!



The “Pale Male” Problem

The Baltimore Longitudinal Study of Aging, which began in 1958 and purported to explore ‘normal human ageing’, didn’t enrol any women for the first 20 years it ran.

The Physicians’ Health Study, which had recently concluded that taking a daily aspirin may reduce the risk of heart disease? Conducted in 22,071 men and zero women.

The 1982 Multiple Risk Factor Intervention Trial – known, aptly enough, as MRFIT – which looked at whether dietary change and exercise could help prevent heart disease: just 13,000 men.”

Being ethical is a process,
not a qualification.