HW 5

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This homework is meant to give you practice in creating and defending a position with both statistical and philosophical evidence. We have now extensively talked about the COMPAS [1] data set, the flaws in applying it but also its potential upside if its shortcomings can be overlooked. We have also spent time in class verbally assessing positions both for an against applying this data set in real life. In no more than two pages [2] take the persona of a statistical consultant advising a judge as to whether they should include the results of the COMPAS algorithm in their decision making process for granting parole. First clearly articulate your position (whether the algorithm should be used or not) and then defend said position using both statistical and philosophical evidence. Your paper will be grade both on the merits of its persuasive appeal but also the applicability of the statistical and philosohpical evidence cited.

*As a statistical consultant advising on the use of the COMPAS algorithm in parole decisions, I recommend against its inclusion. This stance is rooted in significant concerns about the algorithm's racial bias and lack of transparency, which compromise its fairness and reliability. The evidence suggests that COMPAS disproportionately misclassifies certain demographic groups, leading to unjust outcomes that undermine the principles of equality and justice essential to the parole process.

Statistical evidence from ProPublica's analysis of the COMPAS system reveals significant racial biases, with black defendants being twice as likely to be incorrectly classified as high risk for violent recidivism compared to white defendants. This misclassification, alongside the fact that white recidivists were often deemed low risk more frequently, underscores serious concerns about the algorithm's fairness and accuracy. Despite a slightly higher actual recidivism rate among high-risk black defendants, the predictive inaccuracies highlight a systemic disadvantage for this group, challenging the algorithm's validity and undermining trust in the parole decision-making process.

From a philosophical standpoint, the use of the COMPAS system in parole decisions presents profound ethical dilemmas. Deontologically, justice requires impartiality and transparency. However, COMPAS's methodology is opaque and biased, presenting a fundamental ethical dilemma. Expanding on utilitarian arguments, the claim of COMPAS's efficiency must be critically examined in light of its biases. The pursuit of utility-maximizing outcomes may lead to unjust consequences, especially if the algorithm's predictions disproportionately affect certain demographic groups. This challenges the notion that efficiency alone justifies the use of COMPAS in parole decisions.

The systemic unfairness inherent in the COMPAS system not only calls into question utilitarian arguments but also violates Rawlsian principles of justice, which prioritize fairness and equality in social institutions. Rawls advocates for a society where everyone has equal access to opportunities and resources, yet COMPAS's biases perpetuate inequalities and hinder the achievement of a fair and just society. Additionally, the algorithm's inability to accurately evaluate individual risk and behavior conflicts with Nozick's merit-based justice, underscoring a deep philosophical misalignment with the ethical foundations required for just and equitable parole decision-making. Thus, the deployment of COMPAS in such contexts starkly contravenes the core ethical tenets of justice and equality.

The reliance on the COMPAS algorithm in parole decisions has significant implications for justice and fairness. By perpetuating biases, particularly racial, COMPAS challenges the justice system's commitment

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[1] https://www.propublica.org/datastore/dataset/compas-recidivism-risk-score-data-and-analysis
[2] knit to a pdf to ensure page count

to equality and impartiality. These biases not only result in unjust outcomes for affected individuals but also erode public trust in the legal system's ability to fairly assess and rehabilitate offenders. The algorithm's use, therefore, raises critical questions about the balance between technological efficiency and the ethical mandate for fair and just treatment under the law.

In conclusion, the COMPAS system's reliance poses a stark contradiction to the principles of just deserts and equitable treatment, foundational to our justice system. Its algorithmic biases not only undermine the individual's right to a fair assessment but also risk entrenching systemic injustices. The flawed nature of such algorithmic assessments exacerbates disparities, calling into question the ethical integrity of utilizing COMPAS in parole decisions. A critical reevaluation is imperative to ensure that the pursuit of technological advancements does not compromise the fundamental values of justice and equality.*