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NAVIGATING THE ECOSYSTEM OF BIG DATA AND ALGORITHMS AFTER INCARCERATION

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Background

Returning citizens struggle when reentering society as their criminal record follows them around. In the age of big data and algorithms, finding information about someone's criminal past is often as simple as typing their name into a google search. An estimated 40-70 million Americans have criminal records (Lageson & Maruna, 2018), showing just how important it is to research people's lives after incarceration. In this study, I ask: In what ways does the visibility of information about returning citizens' criminal record as it appears on search engines impact their lives? What strategies (if any) do they use to manage their criminal record in search?

We need research focused on understanding how people live with algorithms and big data systems, and what impacts they have in people's everyday lives (Bucher, 2017; Christin, 2017; Eubanks, 2018). This study looks at the consequences of big data and algorithmic decisions for everyday people by studying the "experiences and practices of people subject to these systems" (Ziewitz & Singh, 2021, p. 11). Moreover, returning citizens are a particularly vulnerable population that need more attention and support within communication scholarship (Reisdorf & Rikard, 2018; Ogbonnaya-Ogburu et al., 2019).

As algorithmic and big data systems continually classify and order our lives (Fourcade & Healy, 2013; Zuboff, 2019), we need to examine how technologies may act as a form of "social control" (Gurusami, 2019, p. 449). The impacts of incarceration have long extended beyond a prisoner's sentence, with Michelle Alexander (2010) deeming mass incarceration the "New Jim Crow". Upon reentering society, returning citizens face stigma associated with their sentence, along with challenges in gaining employment, access to public assistance, and disenfranchisement, among other effects. The long-standing impacts of systemic racism have led to racial differences in the criminal legal

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system and we must recognize the racism embedded within digital technology (Benjamin, 2019; Ogbonnaya-Ogburu et al., 2020).

Method

In-depth qualitative interviews were conducted, lasting between 30 minutes and 1.5 hours, which were audio recorded and transcribed. One challenge was gaining access to this population, especially given returning citizens can have less digital literacy and can avoid technology (Lageson, 2020). Recruitment occurred through previous contacts, along with snowball sampling. Given the ongoing Covid-19 pandemic, interviews have been majority conducted over the phone, which has the advantage of enabling discussion with participants in different parts of the US, yet at the same time, inevitably, doing phone interviews posed challenges especially given the lack of phone and internet familiarity some people in this population have.

I used a thematic analysis approach (Braun & Clarke, 2012), developing a coding scheme that reflected all relevant topics, with a particular focus on visibility of one's criminal record online. This method allowed me to answer my specific research questions and better understand participants' experiences and how they think about their experiences with digital technology. Moreover, to protect the privacy of this particularly vulnerable group, all participants were given pseudonyms and treated with full anonymity. Lastly, it is important to point out that this project is framed withing the US criminal legal system context. Future work should focus on people's experiences with criminal records in other countries.

Findings

Returning citizens struggle when re-entering society into a technologically driven world which they do not necessarily know how to navigate, which leads to embarrassing and frustrating experiences, especially for those who have been incarcerated for long periods of time. Moreover, returning citizens' presence in google search results impacts them in various ways, such as in their search for economic opportunities, social relationships, and housing. Returning citizens cope with uncertainty in not knowing where exactly their criminal record is showing up, how its impacting them, who its impacting, and who is seeing it. Their presence in Google's algorithms had an immense impact over participants lives, yet they weren't always sure how that power was being enacted, or what to do about it.

While past research has shown how people can prefer to reveal sensitive or potentially stigmatizing information subtly, and over time (Andalibi et al., 2018), returning citizens are not able to do this. Instead, they adapt by being very upfront about their criminal record. An implicit assumption of much digital divide work is that people can and should be online. Yet some returning citizens outright reject the use of online systems, concluding these systems are not made for them.

Our findings add to critiques about the prison-industrial complex and how our reliance on big data and algorithmic systems can perpetuate unequal and colonial power dynamics. This work emphasizes the importance of studying marginalized experiences

with technology, and the everyday experiences of users who live with digital systems that rank and order their lives.

References

Alexander, M. (2010). *The new Jim Crow: Mass incarceration in the age of colorblindness*. The New Press.

Andalibi, N., Morris, M. E., & Forte, A. (2018). Testing waters, sending clues: Indirect disclosures of socially stigmatized experiences on social media. *Proceedings of the ACM on Human-Computer Interaction*, *2*(CSCW), 1-23.

Benjamin, R. (2019). Race After Technology: Abolitionist Tools for the New Jim Code. Cambridge, UK: Polity

Braun V., Clarke V. (2012). Thematic analysis. In Cooper H., Camic P. M., Long D. L., Panter A. T., Rindskopf D., Sher K. J. (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association.

Bucher, T. (2017). The algorithmic imaginary: exploring the ordinary affects of Facebook algorithms. *Information, communication & society*, *20*(1), 30-44.

Christin, A. (2017). Algorithms in practice: Comparing web journalism and criminal justice. *Big Data & Society*, *4*(2), 2053951717718855. https://doi.org/10.1177/2053951717718855

Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press.

Fourcade, M., & Healy, K. (2013). Classification situations: Life-chances in the neoliberal era. *Accounting, Organizations and Society*, *38*(8), 559-572.

Gurusami, S. (2019). The Carceral Web we weave: Carceral citizens' experiences of digital punishment and solidarity. *Punishment & Society*, *21*(4), 435–453. https://doi.org/10.1177/1462474518790237

Lageson, S. E. (2020). *Digital punishment: Privacy, stigma, and the harms of data-driven criminal justice*. Oxford University Press.

Lageson, S. E., & Maruna, S. (2018). Digital degradation: Stigma management in the internet age. *Punishment & Society*, *20*(1), 113–133. https://doi.org/10.1177/1462474517737050

Ogbonnaya-Ogburu, I. F., Smith, A. D., To, A., & Toyama, K. (2020, April). Critical race theory for HCI. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-16).

Ogbonnaya-Ogburu, I. F., Toyama, K., & Dillahunt, T. R. (2019). Towards an Effective Digital Literacy Intervention to Assist Returning Citizens with Job Search. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems - CHI '19*, 1–12. https://doi.org/10.1145/3290605.3300315

Reisdorf, B. C., & Rikard, R. V. (2018). Digital Rehabilitation: A Model of Reentry Into the Digital Age. *American Behavioral Scientist*, *62*(9), 1273–1290. https://doi.org/10.1177/0002764218773817

Ziewitz, M., & Singh, R. (2021). Critical companionship: Some sensibilities for studying the lived experience of data subjects. *Big Data & Society*, *8*(2), 20539517211061122.

Zuboff, S. (2019). The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. New York, NY: Public Affairs.