

Implementation of Brain Stimulation in Criminal Justice

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THE PROBLEM

Rearrest rates in the United States, 2018

An estimated **68%** of released prisoners were arrested within 3 years



An estimated **79%** of released prisoners were arrested within 6 years



An estimated **83%** of released prisoners were arrested within 9 years

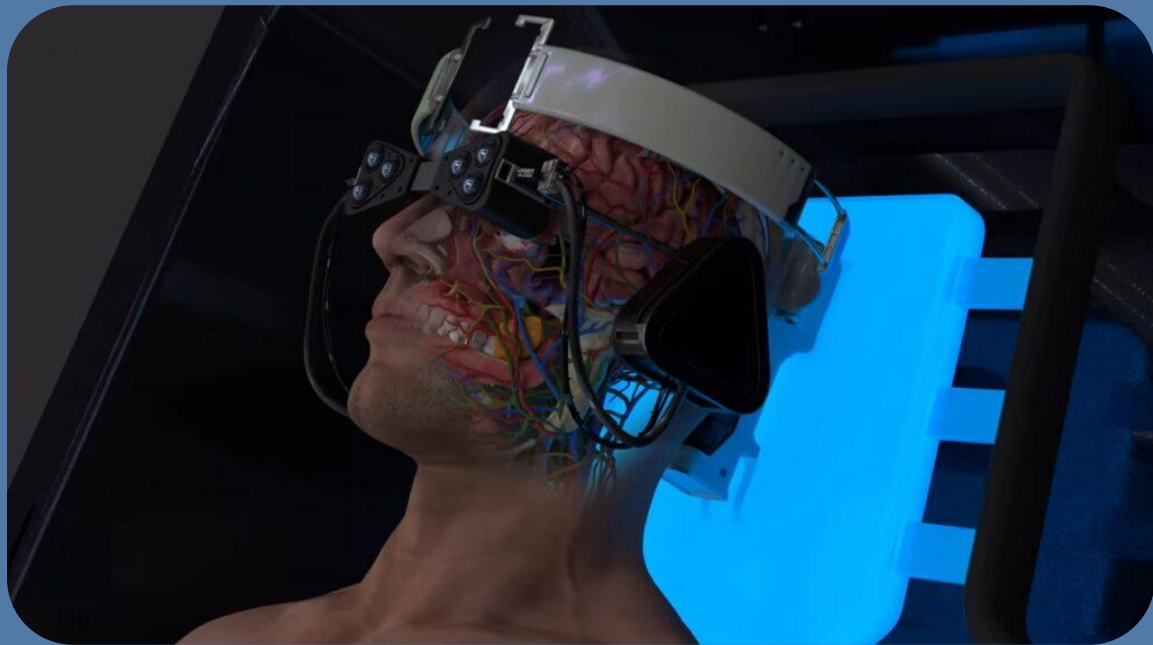


Figure 1: Rearrest rates in the United States in 2018 (Cruz, 2022)



WHY THIS MATTERS

- Crime has mental, physical, and financial impacts.
- High recidivism rates = repeated criminal behavior.



RESEARCH QUESTION

How can the criminal justice system integrate successful neurorehabilitation technologies while ensuring compliance with established human rights and emerging neurorights principles?

METHODOLOGIES

- Reviewed recidivism-reduction programs through coding
- Analyzed legal case law & ethical issues

[illegible]

FINDINGS

- Psychological interventions work—but costly
- tDCS and DBS show promise in reducing aggression, improving decision-making
- AI implementation = higher reintegration potential
- Legal protections around consent are essential



IMPLEMENTATION STRATEGY

- Use evidence-based methods
- Prioritize ethical + equitable access
- Align with human rights frameworks
- Collaborate with stakeholders



THE USE CASE

NEXT STEPS

- Long-term impact studies
- Stronger consent protocols
- AI-assisted tracking & adjustment
- Policy development & public education

FINAL THOUGHTS

- Brain stimulation shows promise for reducing crime
- Must be used ethically and equitably
- Potential to transform rehabilitation, not just punishment



REFLECTION



advanced
authentic
Research



PALTO ALTO
UNIVERSITY DISTRICT



THANK YOU