**Experimental Stimuli for Moral Intuitions Regarding NIBS Interventions in Criminal Offenders**

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**1. No Understanding / No Suffering (NU NS): See below for other conditions**

Robert Jones, a 25-year-old construction worker, has been tried and found guilty of assault and battery. According to several witnesses, a co-worker called Jones a derogatory name, and Jones then attacked the co-worker with a metal pipe, breaking the man’s jaw and several ribs. The assault required that the victim have several surgeries. After being found guilty, Jones stated: “This is bullshit. He had it coming, and I shouldn’t be punished just because he can’t defend himself.” Jones has one prior arrest and conviction for a less serious assault and battery charge.

1. In your opinion, how much time should Robert Jones be sentenced to prison? [New sentencing scale maxing at 10 years?]

New Page

Now imagine that Robert Jones’ crime actually occurred in the year 2060. By that time scientists have developed “neuro-intervention” technology to make specific changes to people’s neural processes. It targets the brain’s **motivational system** so that convicted criminals lose any desires to commit crimes, though **it does not change anything else about their beliefs or attitudes**. This neuro-intervention has proven to be extremely successful. Over a decade, more than a thousand criminals have had this treatment and **none of them has committed further crimes**.

After Jones was found guilty of assault and battery, the prosecutor, the victim, and Jones all agreed to a sentence that included 21 two-hour sessions of neuro-intervention over three weeks. These sessions targeted a part of the brain (the dorsal posterior insula) responsible for motivation. The neuro-intervention **causes no pain or suffering**, and there are no other negative effects.

As expected, the neuro-intervention **did not change Jones’ beliefs or attitudes, but he completely lost any desires to commit crimes.** During his post-treatment evaluation, he stated: “I still think that guy had it coming. I don’t get why I’m to blame just because he was so weak!” But, given the success of the neuro-intervention in altering his motivations, Jones would not commit further crimes once he is released.

Main questions (on same page with scenario)

1. Initially, you recommended a sentence of X years in prison for Robert Jones. Following this neuro-intervention, you now have the opportunity to change your initial recommendation or keep it the same. How much time, in total, should Jones be sentenced to prison?

**For the following questions, suppose that Robert Jones was released immediately after his three-week neuro-intervention (he did not serve a prison term), and that he did not commit any more crimes.**

2. I feel satisfied with neuro-intervention as Robert Jones' only sentence.

3. Robert Jones' neuro-intervention was... [less/more than he deserved]

4. Robert Jones suffered... [too little/too much for his crime]

5. I would be angry [disappointed?] if I heard that the neuro-intervention was all that happened to Robert Jones for his crime.

Manipulation checks:

6. This technology caused Robert Jones significant physical pain.

7. This technology caused Robert Jones significant psychological pain.

8. The neuro-intervention caused Jones to suffer.

9. The neuro-intervention caused Jones to understand that his crime was wrong.

10. Following neuro-intervention, Jones has no further desires nor motivations to commit future crimes.

Additional Questions

11. It is possible that this neuro-intervention technology could exist in the future and work to prevent crime in the way described in the scenario.

12. If this technology were in fact developed, it should be used for at least some serious crimes.

13. Robert Jones will never commit crimes after he is released.

14. Robert Jones now understands that what he did was morally wrong.

15. How harmful was Robert Jones’ crime in terms of physical, emotional, and financial harm?

16. How morally wrong was Robert Jones’ crime?

17. How morally responsible is Robert Jones for his crime?

Choose the statement you agree with most.

18. "Convicted criminals should be punished because..."

 - Convicted criminals should be punished because by punishing them, we make them suffer the appropriate amount for the harm they caused.

 - Convicted criminals should be punished because by punishing them, we discourage them and others from committing more crimes.

 - Convicted criminals should be punished because by punishing them, we communicate that what they did is wrong and that they should make up for the harm they caused.

**2. No Understanding / Suffering (NU S)**

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**3. Understanding / No Suffering (U NS)**

Now imagine that Robert Jones’ crime actually occurred in the year 2060. By that time scientists have developed “neuro-intervention” technology to make specific changes to people’s neural processes. Ittargets the brain’s **perspective taking system** so that convicted criminals come to **experience deep regret and guilt** about what they did, **fully understanding how such crimes hurt other people**. As a result, they lose any desires to commit crimes.This neuro-intervention has proven to be extremely successful. Over a decade, more than a thousand criminals have had this treatment and **none of them has committed further crimes**.

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As expected, the neuro-interventions **changed Jones’ thinking and emotions, so that he fully understood why such crimes are wrong, felt deep regret and guilt for what he did, and completely lost any desires to commit crimes.** During his post-treatment evaluation, he stated: “I cannot believe that I did that… Now I see how cruel my actions were.” Given the success of the neuro-intervention, Jones would not commit further crimes once he is released.

**4. Understanding / Suffering (U S)**

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