

Spring 2015

## Banning the Bing: Why Extreme Solitary Confinement Is Cruel and Far Too Usual Punishment

Elizabeth Bennion

BYU Law School, [bennionb@law.byu.edu](mailto:bennionb@law.byu.edu)

Follow this and additional works at: <https://www.repository.law.indiana.edu/ilj>



Part of the [Constitutional Law Commons](#), and the [Law Enforcement and Corrections Commons](#)

### Recommended Citation

Bennion, Elizabeth (2015) "Banning the Bing: Why Extreme Solitary Confinement Is Cruel and Far Too Usual Punishment," *Indiana Law Journal*: Vol. 90 : Iss. 2 , Article 7.

Available at: <https://www.repository.law.indiana.edu/ilj/vol90/iss2/7>

This Article is brought to you for free and open access by the Law School Journals at Digital Repository @ Maurer Law. It has been accepted for inclusion in Indiana Law Journal by an authorized editor of Digital Repository @ Maurer Law. For more information, please contact [rvaughan@indiana.edu](mailto:rvaughan@indiana.edu).



**JEROME HALL LAW LIBRARY**

INDIANA UNIVERSITY  
Maurer School of Law  
Bloomington

# Banning the Bing: Why Extreme Solitary Confinement Is Cruel and Far Too Usual Punishment

ELIZABETH BENNION\*

*To be kept in solitude is to be kept in pain, and put on the road to madness.*

– E.O. Wilson<sup>1</sup>

*The United States engages in extreme practices of solitary confinement that maximize isolation and sensory deprivation of prisoners. The length is often indefinite and can stretch for weeks, months, years, or decades. Under these conditions, both healthy prisoners and those with preexisting mental-health issues often severely deteriorate both mentally and physically. New science and data provide increased insight into why and how human beings (and other social animals) deteriorate and suffer in such environments. The science establishes that meaningful social contacts and some level of opportunity for sensory enrichment are minimum human necessities. When those necessities are denied, the high risks of serious harm apply to all prisoners, no matter how seemingly resilient beforehand. Given these facts, this Article argues that solitary confinement, as commonly practiced in the United States, is cruel and unusual punishment—whether analyzed under current Supreme Court standards or an improved framework. Furthermore, recently released data on states implementing reforms shows that extreme solitary confinement tactics are counterproductive to numerous policy interests, including public safety, institutional safety, prisoner welfare, and cost efficiency. Both the scientific and the policy data suggest possible avenues for effective reform.*

INTRODUCTION .....	742
I. THE HISTORY OF SOLITARY CONFINEMENT .....	745
II. EFFECTS OF ISOLATION AND SENSORY DEPRIVATION ON THE BRAIN, BODY, AND BEHAVIOR.....	753
A. MODERN PRISONER STUDIES .....	756
B. BRAIN AND BEHAVIOR STUDIES OUTSIDE THE MODERN PRISON .....	759
III. CRUEL AND UNUSUAL PUNISHMENT IN THE CONTEXT OF PRISON CONDITIONS.....	763
A. SUPREME COURT JURISPRUDENCE .....	763
B. CRITICISMS OF SUPREME COURT ANALYSIS .....	770
C. AN IMPROVED PRISON-CONDITIONS EIGHTH AMENDMENT STANDARD ..	773
D. WHY SOLITARY CONFINEMENT IS “CRUEL AND UNUSUAL” DESPITE ITS FREQUENT USE IN THE UNITED STATES .....	775

---

† Copyright © 2015 Elizabeth Bennion.

\* Thank you to the many faculty members at BYU Law School who offered their feedback on this piece and to the tireless work of doctors and scholars such as Dr. Craig Haney, Dr. Stuart Grassian, and Dr. Terry Kupers, who have contributed so heavily to this field. Special thanks to Dr. Kupers for his thoughtful feedback and encouragement. Many thanks also to my research assistant, Michael Hinckley.

1. Edward O. Wilson, *Evolution and Our Inner Conflict*, N.Y. TIMES (June 24, 2012, 5:00 PM), [http://opinionator.blogs.nytimes.com/2012/06/24/evolution-and-our-inner-conflict/?\\_r=0](http://opinionator.blogs.nytimes.com/2012/06/24/evolution-and-our-inner-conflict/?_r=0).

IV. ALTERNATIVES .....	778
A. THE POLICY-GOAL DISCONNECT .....	778
B. SUCCESSFUL AND EXPERIMENTAL MODELS.....	780
CONCLUSION: PROPOSED CHANGES AND REAWAKENING TO REHABILITATION .....	783

#### INTRODUCTION

*When the door is locked against the prisoner, we do not think about what is behind it. . . .  
Were we to enter the hidden world of punishment, we should be startled by what we see.*

– Justice Anthony Kennedy<sup>2</sup>

The largest prisoner hunger strike in California’s history lasted sixty days and ended on September 5, 2013.<sup>3</sup> Involving approximately thirty thousand prisoners at its peak, the protest’s central demand was over the state’s use of indefinite solitary confinement that allows prisoners to be held for years, and even decades, in isolation.<sup>4</sup> As the strike stretched into its second month, dozens had been sent to hospitals and infirmaries.<sup>5</sup> By the final week, “nearly 10 protesters a day were collapsing or otherwise required medical care.”<sup>6</sup> The strikers won no major concessions regarding solitary confinement but did gain the promise of legislative hearings. At the end of the strike, protest leaders released a statement: “Our goal remains: Force the powers that be to end their torture policies and practices in which serious physical and psychological harm is inflicted on tens of thousands of prisoners, as well as our loved ones outside.”<sup>7</sup>

While the strikers failed to accomplish their central goals, the strike did focus national and international attention on the most troubling aspect of a deeply troubled penal system. Solitary confinement, as currently practiced in the United States, represents a serious miscalculation of the appropriate balance among prison security, public safety, cost efficiency, and prisoner welfare. Indeed, the extreme solitary confinement measures in this country promote none of those interests. The measures also violate the Eighth Amendment’s prohibition of cruel and unusual punishment because they deny prisoners what science indicates are minimum human necessities.

Conditions of solitary confinement vary throughout the United States. But it is not uncommon for prisoners to spend decades alone in windowless cement rooms with perimeters approximately the size of a parking space or a king-sized bed for twenty-three hours a day. Their meals may be pushed through slots of large, solid

2. Anthony M. Kennedy, Assoc. Justice, U.S. Supreme Court, Speech at the American Bar Association Annual Meeting 3 (Aug. 9, 2003), available at <http://apps.americanbar.org/irr/annual2003/kennedyspeech.pdf>.

3. Paige St. John, *California State Prisons Chief Says Inmates’ Hunger Strike Has Ended*, L.A. TIMES (Sept. 5, 2013), <http://www.latimes.com/local/political/la-me-ff-prisons-chief-says-hunger-strike-has-ended-20130905,0,345517.story>.

4. Paige St. John, *Outside Look at Prison Hunger Strike*, L.A. TIMES, July 27, 2013, at 1.

5. Sharon Bernstein, *California Grapples with Inmate Illness as Hunger Strike Drags On*, NBCNEWS.COM, Aug. 16, 2013, [http://usnews.nbcnews.com/\\_news/2013/08/16/20051427-california-grapples-with-inmate-illness-as-hunger-strike-drags-on?lite](http://usnews.nbcnews.com/_news/2013/08/16/20051427-california-grapples-with-inmate-illness-as-hunger-strike-drags-on?lite).

6. Paige St. John, *State Prison Hunger Strike Ends*, L.A. TIMES, Sept. 6, 2013, at 1.

7. *Id.*

metal doors—thus they eat, sleep, and defecate in spaces within a few feet of each other.<sup>8</sup> The one-hour “exercise” time might be in a cage on a concrete slab or in a small, barren, concrete-enclosed pen that prisoners call a “dog run.”<sup>9</sup> Prisoners may go years without seeing more of the outdoors than a small patch of sky and without being physically touched by another human being other than when placed in constraints, such as handcuffs and chains.<sup>10</sup> While they may hear echoing shouts of other prisoners, there is no opportunity for normal conversation or association with others from the confines of their cells.<sup>11</sup> They generally also have no access to rehabilitative programs.<sup>12</sup> It is important to note at the outset that when this Article speaks of “solitary confinement,” it is not simply referring to housing an inmate in his or her own single-occupancy cell—it is referring to all these associated types of extreme measures to provide isolation and sensory deprivation.

In this extreme environment, many prisoners suffer serious psychological and physical deterioration. Prisoners entering solitary confinement with mental-health issues often find those issues severely exacerbated. Prisoners entering without mental-health issues often acquire acute mental illness during their stay.<sup>13</sup> In California, 2% of the prison population is housed in isolation, and yet that 2% accounted for 42% of all prison suicides from 2006 to 2010.<sup>14</sup> Long-term isolation can also contribute to dramatically increased costs and increased “assaultive or anti-social behavior”; it can “result in negative outcomes for institutional safety, and increase the risk of recidivism after release.”<sup>15</sup>

Given the extremely negative effects of solitary confinement on prisoners themselves and on larger policy goals, there has been a growing groundswell for reform—spurred at least in part by a much smaller prisoner hunger strike in 2011.<sup>16</sup> For example, the U.S. Senate held its first congressional hearings on the issue in June 2012 and February 2014, with the lead senator calling for reforms.<sup>17</sup> The U.N. special

---

8. *Madrid v. Gomez*, 889 F. Supp. 1146, 1229 (N.D. Cal. 1995); *Reassessing Solitary Confinement: The Human Rights, Fiscal, and Public Safety Consequences: Hearing Before the Subcomm. on the Constitution, Civil Rights & Human Rights of the S. Comm. on the Judiciary*, 112th Cong. 20–21 (2012) [hereinafter *Solitary Confinement Hearing I*] (statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz).

9. Craig Haney, *Mental Health Issues in Long-Term Solitary and “Supermax” Confinement*, 49 CRIME & DELINQ. 126, 126 (2003).

10. *Solitary Confinement Hearing I*, *supra* note 8, at 20 (statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz).

11. Haney, *supra* note 9, at 127.

12. *Madrid*, 889 F. Supp. at 1262.

13. Stuart Grassian, *Psychiatric Effects of Solitary Confinement*, 22 WASH. U. J.L. POL’Y 325, 333 (2006) (“I have observed that, for many of the inmates so housed, incarceration in solitary caused either severe exacerbation or recurrence of preexisting illness, or the appearance of acute mental illness in individuals who had previously been free of any such illness.”).

14. Editorial, *Striking Against Solitude*, WASH. POST, Aug. 4, 2013, at A18.

15. *Solitary Confinement Hearing I*, *supra* note 8, at 712 (written statement of Michael Jacobson, President and Director, Vera Institute of Justice).

16. See *California Prison Hunger Strike: 30,000 Inmates Refuse Meals*, HUFFINGTON POST (July 10, 2013, 2:30 PM), [http://www.huffingtonpost.com/2013/07/09/california-prison-hunger-strike-30000\\_n\\_3567639.html](http://www.huffingtonpost.com/2013/07/09/california-prison-hunger-strike-30000_n_3567639.html).

17. *Solitary Confinement Hearing I*, *supra* note 8; *Reassessing Solitary Confinement II: The*

rappporteur on torture urged the United States to abolish prolonged solitary confinement (defined as anything more than fifteen days)—which he argued could amount to torture.<sup>18</sup> Other influential organizations voicing opposition to the current state of affairs include the American Bar Association, the American Civil Liberties Union (ACLU), Amnesty International, Human Rights Watch, the European Court for Human Rights, the American Academy of Child and Adolescent Psychiatry, the National Alliance of Mental Illness, the Vera Institute of Justice, and others.<sup>19</sup> Several states have begun reforms, but many resist the growing tide of change.<sup>20</sup>

Thus, at least parts of the nation seem presently poised for genuine reform efforts. But there are obstacles to those reform efforts as well: creating more humane conditions for prisoners is not generally seen as a popular position for politicians; among the general population, there is a lack of scientific understanding regarding the extent and severity of solitary confinement's potential effects; a culture of harsh punishment predominates in many modern prisons;<sup>21</sup> and there is a widespread legislative and judicial hesitancy to interfere with matters of prison security and administration—presumably over fear of unforeseen results. So, for example, one federal judge found that certain solitary-confinement conditions did “press the outer bounds of what most humans can psychologically tolerate,” and yet he refused to find the conditions cruel and unusual for all inmates.<sup>22</sup> It is this type of hesitancy that

*Human Rights, Fiscal, and Public Safety Consequences: Hearing Before the Subcomm. on the Constitution, Civil Rights & Human Rights of the S. Comm. on the Judiciary*, 113th Cong. (2014), available at <http://www.judiciary.senate.gov/meetings/reassessing-solitary-confinement-ii-the-human-rights-fiscal-and-public-safety-consequences>.

18. Press Release, Office of the High Comm'r for Human Rights, California Jails: “Solitary Confinement Can Amount to Cruel Punishment, Even Torture”—UN Rights Expert (Aug. 23, 2013), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=13655&LangID=E> (quoting Special Rapporteur Juan E. Mendez).

19. See, e.g., Brittany Glidden, *Necessary Suffering?: Weighing Government and Prisoner Interests in Determining What Is Cruel and Unusual*, 49 AM. CRIM. L. REV. 1815, 1825–26 (2012); see also *Solitary Confinement Hearing I*, *supra* note 8, at III–V.

20. See ACLU, STATE REFORMS TO LIMIT THE USE OF SOLITARY CONFINEMENT (2013), available at [http://www.aclu.org/files/assets/state\\_reforms\\_to\\_limit\\_the\\_use\\_of\\_solitary\\_confinement.pdf](http://www.aclu.org/files/assets/state_reforms_to_limit_the_use_of_solitary_confinement.pdf); Sal Rodriguez, *FAQ*, SOLITARY WATCH (2012), <http://solitarywatch.com/facts/faq/>.

21. Christopher Epps, Commissioner of Corrections for the State of Mississippi, has become a proponent of reform and was one of those called to testify before the Senate Hearing on Solitary Confinement in June 2012, but he admitted that at one time he did believe difficult inmates should be locked down as tightly as possible for as long as possible: “That was the culture, and I was part of it,” he said. Erica Goode, *Rethinking Solitary Confinement: States Ease Isolation, Saving Money, Lives and Inmate Sanity*, N.Y. TIMES, Mar. 11, 2012, at A1.

22. *Madrid v. Gomez*, 889 F. Supp. 1146, 1267 (N.D. Cal. 1995). The judge who refused to find the conditions cruel and unusual for all inmates housed in a particular prison's solitary confinement stressed that the opinion was

based on the current record and data before us. We can not begin to speculate on the impact that [these solitary] conditions may have on inmates confined . . . for periods of 10 or 20 years or more; the inmates studied in connection with this action had generally been confined . . . for three years or less.

*Id.*

At the time that opinion was written, the “record and data” were necessarily limited because

likely prompted Justice Kennedy's admonition that "[c]ourts may not allow constitutional violations to continue simply because a remedy would involve intrusion into the realm of prison administration."<sup>23</sup>

This Article addresses these obstacles by examining the increasing scientific evidence of the severely debilitating effects of isolation and sensory deprivation, explaining why the science requires finding the current practices cruel and unusual, and discussing the emerging data regarding the societal effects of reform. This is a particularly opportune time to make the analysis due to the explosive growth in neuroscientific research, the wealth of evidence produced from a variety of sources for the 2012 and 2014 Senate hearings, and the recent reform efforts of some states that provide new insight regarding societal effects of a change in course. The data also suggests what types of reforms could effectively redefine solitary-confinement policies within constitutional bounds.

This Article first examines the history of U.S. solitary confinement, including why a penal system that is desperately overcrowded and underfunded turned to a method that exacerbates both crowding and cost issues. Part III considers the effects of isolation and sensory deprivation, drawing on both studies of prisoners and studies of humans and animals in other contexts of isolation. It highlights that there is increasingly no clear line between physical and psychological harm. Part IV explains the jurisprudence surrounding the Eighth Amendment as it applies to prison conditions and some potential improvements. It then argues that under either the current or an improved standard, solitary confinement (as commonly currently practiced in the United States) is cruel and unusual. This argument is based on the scientific evidence that extreme isolation and sensory deprivation constitute a denial of minimum human necessities. Part V examines alternative solutions, including evidence from recent experiments with reforming solitary-confinement programs and the effect on different policy interests. The Article concludes with proposed changes that would appropriately balance prison-security needs with public safety, public funding, and prisoner-welfare obligations, while avoiding cruel and unusual punishment prohibitions.

## I. THE HISTORY OF SOLITARY CONFINEMENT

*I believe that very few men are capable of estimating the immense amount of torture and agony which this dreadful punishment, prolonged for years, inflicts upon the sufferers . . . . I*

---

the prison facility at issue had only existed for approximately five years. *Id.* at 1155. But by 2011, more than five hundred inmates in that same facility had spent over a decade in solitary confinement, more than two hundred had spent more than fifteen years there, and seventy-eight had been there more than twenty years. AMNESTY INT'L., USA: THE EDGE OF ENDURANCE: PRISON CONDITIONS IN CALIFORNIA'S SECURITY HOUSING UNITS 2 (2012), available at <http://www.amnestyusa.org/sites/default/files/edgeofendurancecaliforniareport.pdf>. Louisiana holds the record for the longest terms served in solitary confinement in the United States. Herman Wallace's forty-one years in isolation ended in October 2013 when his conviction was overturned—he died a few days later. His codefendant, Albert Woodfox, also had his conviction overturned but remains in solitary confinement pending the state's appeal. David Cole, *Decades in Solitary*, WASH. POST, Oct. 25, 2013, at A19.

23. *Brown v. Plata*, 131 S. Ct. 1910, 1928–29 (2011).

*hold this slow and daily tampering with the mysteries of the brain, to be immeasurably worse than any torture of the body . . .*

– Charles Dickens after an 1842 visit to the Cherry Hill prison, which was experimenting with extreme isolation techniques<sup>24</sup>

There are a host of names for it: the bing, the hole, the hotbox, the SHU (Secure Housing Unit), the block, the cooler, the pound, lockdown, 23/7, SCU (Solitary Confinement Unit), Administrative Segregation (AdSeg), isolation, separation, cellular, Supermax (Super-Maximum Security Confinement), communications-management unit, control unit, disciplinary-housing unit, intensive-management unit, special management, security housing, close management, high security, closed-cell restriction, etc.<sup>25</sup> The precise number of inmates housed at any one time in solitary confinement in the United States is unknown—but in 2005, it was a number well over 80,000.<sup>26</sup> That figure qualifies the United States as holding “far more prisoners in segregation or solitary than any other democratic nation.”<sup>27</sup>

It was not always thus. The first experiments with long-term isolation in the United States were associated with the idea that forcing an inmate into silence and moral reflection would aid in rehabilitation and reformation of the prisoner. Philadelphia opened Eastern State Penitentiary (or “Cherry Hill”) in 1826 using the “silent system,” where prisoners were forbidden to speak, kept alone in their cells, and required to wear hoods over their heads during exercise. The Cherry Hill model was an “international sensation”—inspiring similar models across the nation and around the globe.<sup>28</sup>

But the fad did not last long. First, the prisons were extremely expensive to maintain. Second, officials and visitors noted extensive mental-health issues among

24. CHARLES DICKENS, *AMERICAN NOTES FOR GENERAL CIRCULATION* 146–47 (John S. Whitley & Arnold Goldman eds., Penguin Books 1972) (1842).

25. See, e.g., *Solitary Confinement Hearing I*, supra note 8, at 83 (written statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz); U.N. Special Rapporteur, Interim Report of the Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, at 8–9, U.N. Doc. A/66/268 (Aug. 5, 2011); Ken Strutin, *Solitary Confinement*, LLRX.COM (Aug. 10, 2010), <http://www.llrx.com/features/solitaryconfinement.htm>.

26. According to a 2005 Bureau of Justice Statistics census (the most recent data available), the number of people held in solitary confinement was 81,622. But this number did not include detention centers, Immigration and Customs Enforcement facilities, Bureau of Indian Affairs facilities, U.S. Marshals Service facilities, military facilities, and facilities that house only juveniles. It included data from all federal facilities and forty-nine state facilities. See *Solitary Confinement Hearing I*, supra note 8, at 711 (written statement of Michael Jacobson, President and Director, Vera Institute of Justice); Angela Browne, Alissa Cambier & Suzanne Agha, *Prisons Within Prisons: The Use of Segregation in the United States*, 24 FED. SENT’G REP. 46 (2011).

27. *Solitary Confinement Hearing I*, supra note 8, at 2 (opening statement of Sen. Dick Durbin, Chairman, Subcomm. on the Constitution, Civil Rights & Human Rights).

28. Thomas L. Hafemeister & Jeff George, *The Ninth Circle of Hell: An Eighth Amendment Analysis of Imposing Prolonged Supermax Solitary Confinement on Inmates with a Mental Illness*, 90 DENV. U. L. REV. 1, 10 (2012) (quoting NORMAN JOHNSTON, *FORMS OF CONSTRAINT: A HISTORY OF PRISON ARCHITECTURE* 74 (2000)).

the populations of these new types of prisons. In the 1830s, there were reports of hallucinations, dementia, and monomania in Cherry Hill prisoners.<sup>29</sup> A prison that had adopted the Cherry Hill model in Britain reported that “a very extraordinary increase ha[d] taken place in the number of insane prisoners in the prison” and recommended that inmates “should be placed together and ‘have the privilege of conversation.’”<sup>30</sup> Following an 1831 visit to a New York prison experimenting with isolation, Alexis de Tocqueville wrote: “This absolute solitude, if nothing interrupts it, is beyond the strength of man. . . . It does not reform, it kills.”<sup>31</sup>

This combination of expense and disturbing mental health effects caused “every state that tried the Pennsylvania model between 1830 and 1880 [to] subsequently abandon[] it within a few years,”<sup>32</sup> except Cherry Hill itself, which continued its model until 1913. It seemed the United States had tried a failed experiment and would not repeat it. Indeed, in 1890 the Supreme Court observed that society had found prolonged solitary confinement to be “too severe.”<sup>33</sup> Speaking of several states’ experiments with isolation of prisoners, the Court explained:

But experience demonstrated that there were serious objections to it. A considerable number of the prisoners fell, after even a short confinement, into a semi-fatuous condition, from which it was next to impossible to arouse them, and others became violently insane, others, still, committed suicide, while those who stood the ordeal better were not generally reformed, and in most cases did not recover sufficient mental activity to be of any subsequent service to the community.<sup>34</sup>

Further evidence that made it seem prolonged solitary confinement was permanently in the nation’s past included a 1939 prison psychiatric report declaring the practice to be no longer adopted in any “civilized nation.”<sup>35</sup> And the American Correctional Association’s 1959 *Manual of Correctional Standards* instructed that solitary confinement should only be used as a last resort and never last more than fifteen days; usually, a much shorter period would be sufficient. It also stressed that even during these relatively short periods of isolation, prisoners must be provided with group or individual therapy to safeguard mental health.<sup>36</sup>

Given prolonged solitary confinement’s dismal record, why did the United States once again turn to its widespread use beginning in the 1980s? There were four important and interrelated precursors, the first being the explosive growth of the prisoner population beginning in the late 1970s. In 1978, there were 307,276 inmates

---

29. *Id.* at 11.

30. *Id.* (quoting Peter Scharff Smith, *The Effects of Solitary Confinement on Prison Inmates: A Brief History and Review of the Literature*, 34 CRIME & JUST. 441, 458 (2006)).

31. Ruth Marcus, *Why Are We Subjecting Our Youths to Solitary Confinement?*, WASH. POST (Oct. 16, 2012), [http://articles.washingtonpost.com/2012-10-16/opinions/35501106\\_1\\_solitary-confinement-new-york-prison-adult-facilities](http://articles.washingtonpost.com/2012-10-16/opinions/35501106_1_solitary-confinement-new-york-prison-adult-facilities) (quoting Alexis de Tocqueville).

32. Hafemeister & George, *supra* note 28, at 11–12.

33. *In re Medley*, 134 U.S. 160, 168 (1890).

34. *Id.*

35. Hafemeister & George, *supra* note 28, at 12.

36. *Id.*

in state and federal prisons<sup>37</sup>—a number that had held relatively stable for fifty years.<sup>38</sup> By the end of 2012, that number was 1,571,013—an increase of over 400 percent.<sup>39</sup> Add in the local-jail figures, and the number increases to over 2.3 million people.<sup>40</sup> Thus, although the United States has only 5% of the world’s population, it has 25% of the world’s prisoners. Those 2.3 million represent by far the most prisoners per capita of any democratic nation in the world.<sup>41</sup> In 2009, a study reported that one in every thirty-one adults in the United States was in prison, on probation, or on parole.<sup>42</sup>

Funding for larger prisons, more prisons, and more staff did not keep pace with this dramatic increase in population.<sup>43</sup> Prisons across the nation deal with severe overcrowding issues. A 2014 report stated that federal facilities in fiscal-year 2013 operated at 36% above capacity, and high- and medium-security facilities operated at 52% and 45% above capacity respectively.<sup>44</sup> States from coast to coast are also dealing with severe overcrowding—most notoriously California, which is currently being forced by the U.S. Supreme Court to reduce its population to 137.5 percent of capacity.<sup>45</sup>

Another important precursor to the resurrection of prolonged isolation was the widespread closing of mental-health hospitals that began around the 1960s and prompted the creation of a new term in the 1990s: “transinstitutionalization,” meaning the transfer of mentally ill patients from state hospitals to jails.<sup>46</sup> Currently,

---

37. Erica Goode, *U.S. Prison Populations Decline, Reflecting New Approach to Crime*, N.Y. TIMES, July 26, 2013, at A11.

38. See Hafemeister & George, *supra* note 28, at 13.

39. See E. ANN CARSON & DANIELA GOLINELLI, BUREAU OF JUSTICE STATISTICS, U.S. DEP’T OF JUSTICE, PRISONERS IN 2012—ADVANCE COUNTS (2013), available at <http://www.bjs.gov/content/pub/pdf/p12ac.pdf>. In 2009, that number reached a high of 1,615,487—the last several years have shown an overall decline. See *id.*

40. See TODD D. MINTON, BUREAU OF JUSTICE STATISTICS U.S. DEP’T OF JUSTICE, JAIL INMATES AT MIDYEAR 2012—STATISTICAL TABLES (2013), available at <http://www.bjs.gov/content/pub/pdf/jim12st.pdf>.

41. See *Solitary Confinement Hearing I*, *supra* note 8, at 30–31.

42. Solomon Moore, *Study Shows High Cost of Criminal Corrections*, N.Y. TIMES, Mar. 3, 2009, at A13.

43. See J.C. Oleson, Comment, *The Punitive Coma*, 90 CALIF. L. REV. 829, 832 (2002) (citing Eric Schlosser, *The Prison-Industrial Complex*, ATLANTIC MONTHLY, Dec. 1998, at 51).

44. NATHAN JAMES, CONG. RESEARCH SERV., R42937, THE FEDERAL PRISON POPULATION BUILDUP: OVERVIEW, POLICY CHANGES, ISSUES, AND OPTIONS (2014), available at <http://www.fas.org/sfp/crs/misc/R42937.pdf>. However, at the 2014 Senate hearing, the Director of the Federal Bureau of Prisons stated that currently the federal system operates at 32% above capacity generally and 51% above capacity in high-security prisons. *Reassessing Solitary Confinement II: The Human Rights, Fiscal, and Public Safety Consequences: Hearing Before the Subcomm. on the Constitution, Civil Rights & Human Rights of the S. Comm. on the Judiciary*, 113th Cong. (2014), available at <http://www.judiciary.senate.gov/imo/media/doc/02-25-14SamuelsTestimony.pdf> (statement of Charles E. Samuels, Jr., Director, Federal Bureau of Prisons).

45. Adam Banner, *Stitching Up a Paper Cut: Eric Holder Is ‘Fixing’ a Federal Problem at the Expense of the States*, HUFFINGTON POST (Oct. 15, 2013, 5:12 AM), [http://www.huffingtonpost.com/adam-banner/eric-holder-drug-policy\\_b\\_3758421.html](http://www.huffingtonpost.com/adam-banner/eric-holder-drug-policy_b_3758421.html).

46. Elizabeth Bennion, *A Right To Remain Psychotic? A New Standard for Involuntary Treatment in Light of Current Science*, 47 LOY. L.A. L. REV. 251, 261 (2013).

the three largest inpatient psychiatric facilities in the country are not hospitals, but jails: Los Angeles County Jail, Rikers Island Jail in New York, and Cook County Jail in Illinois.<sup>47</sup> In 2012, one Chicago sheriff lamented that his jail housed two thousand mentally ill prisoners, while the largest state mental-health facility had only 582 beds—and he predicted the situation would soon worsen with the city’s imminent plan to shut down six of its twelve mental-health centers.<sup>48</sup> A mentally ill person is three times more likely to be incarcerated than hospitalized in the United States.<sup>49</sup> A 2006 Bureau of Justice Statistics report stated that 56% of state prisoners, 45% of federal prisoners, and 64% of local jail inmates had mental-health problems.<sup>50</sup> The rate of those with severe mental illness is lower—in 2000, the American Psychiatric Association estimated up to 20% of prisoners were severely mentally ill and up to 5% were “actively psychotic at any given moment.”<sup>51</sup>

A third precursor was the 1970s’ surprisingly swift abandonment of “the central justification for imprisonment—the pursuit of the rehabilitative ideal—that had been in place for nearly a century.”<sup>52</sup> During this period, there was a flurry of criticism of rehabilitation as a penal goal. Sociologist Robert Martinson was among the most influential critics. He stated that “[w]ith few and isolated exceptions, the rehabilitative efforts that have been reported so far have had no appreciable effect on recidivism.”<sup>53</sup>

Despite the fact that Martinson later recanted, concluding his own methodology had been flawed,<sup>54</sup> his initial criticism helped spawn a “nothing works” movement that “within a few short years, [convinced] many penologists and prison administrators across the country . . . [of] the stunning conclusion that any attempt to facilitate positive change inside prison was fundamentally flawed and doomed to fail.”<sup>55</sup> Many politicians, scholars, and judges also joined this bandwagon.<sup>56</sup> They supported abandoning rehabilitation not only because of the high rates of recidivism but also because of concerns that rehabilitation could lead to large discrepancies

---

47. *Nation’s Jails Struggle with Mentally Ill Prisoners*, NPR (Sept. 4, 2011, 2:53 PM), <http://www.npr.org/2011/09/04/140167676/nations-jails-struggle-with-mentally-ill-prisoners>.

48. Bridget O’Shea, *Psychiatric Patients with No Place To Go but Jail*, N.Y. TIMES, Feb. 19, 2012, at A25A.

49. Bennion, *supra* note 46, at 261.

50. DORIS J. JAMES & LAUREN E. GLAZE, BUREAU OF JUSTICE STATISTICS, U.S. DEP’T OF JUSTICE, MENTAL HEALTH PROBLEMS OF PRISON AND JAIL INMATES (2006), available at <http://www.bjs.gov/content/pub/pdf/mhppji.pdf>.

51. Peter Scharff Smith, *The Effects of Solitary Confinement on Prison Inmates: A Brief History and Review of the Literature*, 34 CRIME & JUST. 441, 453 (2006).

52. Craig Haney, *Demonizing the “Enemy”: The Role of “Science” in Declaring the “War on Prisoners,”* 9 CONN. PUB. INT. L.J. 185, 186 (2010).

53. *Id.* at 209 (quoting Robert Martinson, *What Works? Questions and Answers About Prison Reform*, PUB. INT., Spring 1974, at 22, 25 (1974)).

54. See JOSEPH T. HALLINAN, GOING UP THE RIVER: TRAVELS IN A PRISON NATION 36 (2001).

55. Haney, *supra* note 52, at 209–10. Some argue that wardens and commissioners were not suddenly convinced that rehabilitation did not work but that a wave of retirements allowed a new generation of leaders to assume control of prisons—leaders who had less understanding of prisoners and rehabilitation. See generally DANIEL GLASER, PREPARING CONVICTS FOR LAW-ABIDING LIVES (1995).

56. See Oleson, *supra* note 43, at 841.

among sentences or to indeterminate sentencing.<sup>57</sup> There was also the philosophical challenge of whether it was a defensible position to “lock[] people up until they become better people.”<sup>58</sup>

When rehabilitation was swept aside, the predominant penal theories that filled the void were incapacitation and retribution<sup>59</sup>—the latter renamed “just deserts” for easier public consumption.<sup>60</sup> “Prisons were no longer designed to cure; they were intended to be aversive and unpleasant.”<sup>61</sup> It was far easier to justify harsh conditions of solitary confinement if the predominant penal goal was punishment and incapacitation rather than rehabilitation. Also, the lack of rehabilitation programs created a void of meaningful and productive activities for the inmates and contributed to the final and most important precursor to the resurgence of solitary confinement.

That final precursor was violence. Overcrowding, combined with an extreme influx of mentally ill inmates (who often have trouble regimenting their behavior within the strict rules of a prison environment due to their illness) and an extreme decrease in any rehabilitative programs (creating large-scale and unprecedented idleness), provided for a dangerous dynamic in prisons.<sup>62</sup> Solitary confinement was the prison officials’ answer to an increasingly difficult-to-control, violent, and gang-dominated prison population.<sup>63</sup>

Dr. Terry Kupers, a prominent expert on the effects of solitary confinement, explained that

[i]nstead of arriving at the obvious correct conclusion . . . that the crowding and idleness caused serious damage and needed to be reversed . . . and educational and training programs needed to be reinstated and strengthened, corrections authorities instead opted to place the blame for the uncontrollable violence on a new breed of prisoners, “super-predators,” and proceeded to place a growing proportion of those they vilified as “the worst of the worst” in round-the-clock solitary confinement.<sup>64</sup>

The origin of the modern U.S. supermax facility—where “conditions typically include solitary confinement twenty-three hours each day in a barren environment”<sup>65</sup>—can be traced to particular events in October 1983. The location was the U.S. penitentiary in Marion, Illinois, a maximum-security prison that had replaced

---

57. See Graham Hughes, *The Decline of the Rehabilitative Ideal: Penal Policy and Social Purpose*, 73 J. CRIM. L. & CRIMINOLOGY 1322, 1322–23 (1982) (book review).

58. *Id.* at 1323.

59. Oleson, *supra* note 43, at 841.

60. Ernest van den Haag, *Punishment: Desert and Crime Control*, 85 MICH. L. REV. 1250, 1250 (1987) (reviewing ANDREW VON HIRSCH, *PAST OR FUTURE CRIMES: DESERVEDNESS AND DANGEROUSNESS IN THE SENTENCING OF CRIMINALS* (1985)).

61. Oleson, *supra* note 43, at 841.

62. See *Solitary Confinement Hearing I*, *supra* note 8, at 28–29.

63. See *Wilkinson v. Austin*, 545 U.S. 209, 213 (2005).

64. *Solitary Confinement Hearing I*, *supra* note 8, at 495–96 (written statement of Dr. Terry Kupers, Institute Professor, The Wright Institute).

65. Smith, *supra* note 51, at 443.

the controversial prison at Alcatraz.<sup>66</sup> Violence had been steadily rising at the prison in recent years and culminated in the murders of two prison guards in separate events on a single day.<sup>67</sup> Four days later, an inmate was also found murdered.<sup>68</sup> Shortly thereafter, the warden declared a state of emergency and put the entire prison on a twenty-three hour-a-day lockdown status. The lockdown was not lifted—and thus a maximum-security prison was transformed into the first “supermax.”<sup>69</sup>

Prolonged solitary confinement became known as the “Marion Model,” and both the federal government and many states built their own supermax facilities in the years that followed.<sup>70</sup> By 2004, a study reported that forty-four states had supermaxes housing approximately 25,000 inmates<sup>71</sup> (a sizable percentage of the 80,000-plus inmates in solitary confinement throughout the United States).<sup>72</sup> “Few, if any, rehabilitation or education programs exist in supermaxes.”<sup>73</sup>

Although conditions and definitions vary among supermax facilities, over 95% of state prison wardens agreed with the following definition: “A supermax is a stand-alone unit or part of another facility and is designated for violent or disruptive inmates. It typically involves up to 23-hour-per-day, single-cell confinement for an indefinite period of time. Inmates in supermax housing have minimal contact with staff and other inmates.”<sup>74</sup>

Again, over 95% of state wardens agreed that the primary goals of supermax prisons include “increasing safety, order, and control throughout prison systems and incapacitating violent or disruptive inmates.”<sup>75</sup> There was much less consensus on other potential goals.<sup>76</sup>

66. Craig Haney & Mona Lynch, *Regulating Prisons of the Future: A Psychological Analysis of Supermax and Solitary Confinement*, 23 N.Y.U. REV. L. & SOC. CHANGE 477, 489 (1997).

67. Scott N. Tachiki, *Indeterminate Sentences in Supermax Prisons Based upon Alleged Gang Affiliations: A Reexamination of Procedural Protection and a Proposal for Greater Procedural Requirements*, 83 CALIF. L. REV. 1115, 1122 (1995).

68. Gertrude Strassburger, *Judicial Inaction and Cruel and Unusual Punishment: Are Super-Maximum Walls Too High for the Eighth Amendment?*, 11 TEMP. POL. & CIV. RTS. L. REV. 199, 202 (2001).

69. Tachiki, *supra* note 67, at 1122–23. However, this particular institution no longer functions as a supermax facility. It was downgraded in 2006 to medium security. Justin Peters, *How a 1983 Murder Created America’s Terrible Supermax-Prison Culture*, SLATE (Oct. 23, 2013, 3:56 PM), [http://www.slate.com/blogs/crime/2013/10/23/marion\\_prison\\_lockdown\\_thomas\\_silverstein\\_how\\_a\\_1983\\_murder\\_created\\_america.html](http://www.slate.com/blogs/crime/2013/10/23/marion_prison_lockdown_thomas_silverstein_how_a_1983_murder_created_america.html).

70. Strassburger, *supra* note 68, at 202.

71. DANIEL P. MEARS, URBAN INST. JUSTICE POLICY CTR., EVALUATING THE EFFECTIVENESS OF SUPERMAX PRISONS, at ii (2006), available at [http://www.urban.org/uploadedPDF/411326\\_supermax\\_prisons.pdf](http://www.urban.org/uploadedPDF/411326_supermax_prisons.pdf).

72. See *Solitary Confinement Hearing I*, *supra* note 8, at 711 (written statement of Michael Jacobson, President and Director, Vera Institute of Justice).

73. Terry A. Kupers, *Isolated Confinement: Effective Method for Behavior Change or Punishment for Punishment’s Sake?*, in THE ROUTLEDGE HANDBOOK OF INTERNATIONAL CRIME AND JUSTICE STUDIES 213, 213 (Bruce A. Arrigo & Heather Y. Bersot eds., 2014).

74. MEARS, *supra* note 71, at ii.

75. *Id.*

76. See *id.* (“There is less agreement about whether they improve inmate behavior throughout prison systems; decrease riots, the influence of gangs, or escapes; successfully punish, reduce the

Supermax prisons can be two-to-three times more expensive to build and operate than traditional maximum-security prisons.<sup>77</sup> Each one represents “close to [a] \$1 billion investment over 30 to 40 years, the typical life span of a prison.”<sup>78</sup> A 2009 Pew study examining state and federal data found that criminal correction spending outpaced budget growth in all areas but Medicaid, which had quadrupled over the past two decades.<sup>79</sup>

While isolation units (whether in supermaxes or elsewhere) are often advertised as housing only the “worst of the worst,” the reality is quite different.<sup>80</sup> Prisoners in solitary confinement are generally housed there for one of three purposes: (1) to protect them from threats they would be subject to in the general population (children in adult prisons are among those who may fall in this category<sup>81</sup>); (2) to punish noncompliance with prison rules; or (3) to control individuals perceived as a current or future threat.<sup>82</sup> In most isolation units, those with serious records of violence in the prison itself “are the exception rather than the rule.”<sup>83</sup> Many are housed there for an unacceptable number of minor rule violations or for suspected gang membership. The allegation of gang membership may result in indefinite solitary confinement—even when “the prisoners in question may not have engaged in any overt rule violations other than their alleged connection to the gang, and may remain entirely free of disciplinary write-ups during the many years of their indefinite isolation.”<sup>84</sup>

A highly disproportionate number of those in solitary confinement are severely mentally ill. Many of the symptoms of severe mental illness can make it difficult to conform to the highly regimented rules and procedures of the prison environment. Thus, prison officials “often ‘treat disordered behavior as disorderly behavior.’”<sup>85</sup> This may happen even with minor infractions, for many of the state and federal policies regarding who may be placed in solitary are extremely vague and open ended—for example, one state’s policies allowed solitary confinement if the inmate was unpredictable or “difficult to manage in other prison settings.”<sup>86</sup> One former prisoner “recalled being put in solitary confinement for petty annoyances like

recidivism of, or rehabilitate violent or disruptive inmates; or deter crime in society.”).

77. See *infra* notes 247–49 and accompanying text.

78. MEARS, *supra* note 71, at 46.

79. Moore, *supra* note 42.

80. Hafemeister & George, *supra* note 28, at 45.

81. See HUMAN RIGHTS WATCH, GROWING UP LOCKED DOWN 20 (2012), available at <http://www.hrw.org/sites/default/files/reports/us1012ForUpload.pdf>.

82. HOPE METCALF, JAMELIA MORGAN, SAMUEL OLIKER-FRIEDLAND, JUDITH RESNIK, JULIA SPIEGEL, HARAN TAE, ALYSSA WORK & BRIAN HOLBROOK, ADMINISTRATIVE SEGREGATION, DEGREES OF ISOLATION, AND INCARCERATION: A NATIONAL OVERVIEW OF STATE AND FEDERAL CORRECTIONAL POLICIES 2 (2013), available at <https://www.aclu.org/files/assets/Administrative%20Segregation,%20Degrees%20of%20Isolation,%20and%20Incarceration.pdf>.

83. *Solitary Confinement Hearing I*, *supra* note 8, at 78 (written statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz).

84. *Id.*

85. Hafemeister & George, *supra* note 28, at 48–49 (quoting *Developments in the Law: The Law of Mental Illness*, 121 HARV. L. REV. 1114, 1145 (2008)).

86. *Id.* at 48 (quoting David Lovell, Kristin Cloyes, David Allen & Lorna Rhodes, *Who Lives in Super-Maximum Custody? A Washington State Study*, FED. PROBATION, Dec. 2000, at 33, 37); see also METCALF ET AL., *supra* note 82, at 5–11.

refusing to get out of the shower quickly enough.”<sup>87</sup> Thus, imposition of solitary confinement is ultimately at the discretion of prison administrators and may last for days, weeks, months, years, or decades—and is often simply indefinite.

While it is difficult to provide a precise definition of modern solitary confinement in the United States because of the varying conditions across the nation, there are some general trends. Inmates are generally confined alone in cells that range in dimension from sixty to eighty square feet for approximately twenty-three hours a day.<sup>88</sup> The cells generally contain a bunk, a toilet, and a sink, and ventilation is often substandard.<sup>89</sup> Exercise is usually limited to one hour a day alone in often small, barren exercise rooms. Prisoners “are kept under constant surveillance with ‘computerized locking and tracking systems [used to] allow their movement to be regulated with a minimum of human interaction.’”<sup>90</sup> Contact visits are generally prohibited as are all work, rehabilitation, or other activities and programs.<sup>91</sup> If mental-health treatment is provided, it may be through the small portal at their cell front.<sup>92</sup> “The norm is to impose, to the fullest extent possible, complete sensory deprivation and social isolation.”<sup>93</sup>

## II. EFFECTS OF ISOLATION AND SENSORY DEPRIVATION ON THE BRAIN, BODY, AND BEHAVIOR

*It’s an awful thing, solitary . . . It crushes your spirit and weakens your resistance more effectively than any other form of mistreatment.*

– Senator John McCain, who spent more than two years in isolation in a fifteen-by-fifteen cell during his five and a half years as a prisoner of war in Vietnam<sup>94</sup>

Senator John McCain’s assertion that solitary is the worst form of mistreatment came “from a man who was beaten regularly; denied adequate medical treatment for two broken arms, a broken leg, and chronic dysentery; and tortured to the point of having an arm broken again.”<sup>95</sup> A study of one group of former Vietnam War prisoners also “reported that they found social isolation to be as torturous and agonizing as any physical abuse they suffered”—and many had suffered worse physical abuse than Senator McCain.<sup>96</sup>

Terry Anderson, an Associated Press reporter who was held hostage for seven years by Hezbollah in Lebanon, explained that when he was housed with other

87. Atul Gawande, *Hellhole*, NEW YORKER, Mar. 30, 2009, at 36, 39.

88. *Solitary Confinement Hearing I*, *supra* note 8, at 75 (written statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz).

89. *Id.* at 75–76.

90. Hafemeister & George, *supra* note 28, at 16 (alteration in original) (quoting Haney, *supra* note 9, at 126).

91. *Id.* at 17; *see also Solitary Confinement Hearing I*, *supra* note 8, at 21 (statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz).

92. Hafemeister & George, *supra* note 28, at 17.

93. *Id.*

94. Gawande, *supra* note 87, at 38.

95. *Id.*

96. *Id.* at 38–39.

hostages his ability to concentrate, to read, to avoid hallucinations, and to control his emotions all improved. But when he was imprisoned for indefinite periods alone, he could feel his mind disintegrating: his sleep patterns changed; he became neurotically possessive and emotionally unstable; and his abilities to concentrate, remember, and process information were all severely limited. He would sometimes physically tremble without cause and begin to fear that he would lose his mind and all control. After three years of captivity he did lose control and began beating his head against a wall—his head was smashed and bleeding by the time guards stopped his sudden self-violence.<sup>97</sup>

Another hostage who had been a private-school director was placed in solitary confinement for four months before being housed with Anderson. The director had become severely withdrawn—lying for hours facing a wall in a semicatatonic state. He seemed unable to follow even simple instructions from the guards, which resulted in the guards often becoming abusive with him. Upon his release after three and a half years, he had to be placed in a psychiatric hospital.<sup>98</sup>

These examples illustrate what studies show—that solitary confinement is dangerous to the mental health of all individuals, whether they previously experienced mental-health issues or not (though previous vulnerabilities increase the risk).<sup>99</sup> “[W]hen inmates are subjected to extensive cell confinement and deprivation of activities and stimulation, a majority can be expected to report moderate to serious psychological symptoms.”<sup>100</sup> Add isolation to the mix, and the prevalence rates grow even higher.<sup>101</sup>

Why would simply leaving someone alone in a confined space for a prolonged period equate to a form of torture for these prisoners?

The answer at least partially lies in the nature of the human brain. When compared to the brains of other animals, humans have a much larger brain relative to body size. The best predictor of brain size in the animal kingdom is the size of a species’ social group. In other words, “[w]e have big brains in order to socialize.”<sup>102</sup>

Neuroscientists have discovered that when the brain is not involved in an active task, it automatically falls into a neural configuration named the “default network,” which is almost identical to the brain configuration used for social thinking. One neuroscientist explained that the primary purpose of the brain seems to be social

---

97. *Id.* at 38 (citing TERRY ANDERSON, DEN OF LIONS (1993)).

98. *Id.*

99. Hafemeister & George, *supra* note 28, at 25.

100. Haney, *supra* note 9, at 135 (quoting Stanley L. Brodsky & Forrest R. Scogin, *Inmates in Protective Custody: First Data on Emotional Effects*, 1 FORENSIC REP. 267, 279 (1988)).

101. *See id.* at 135–37 (observing that prisoners in isolation had an average of 14.5 percent higher prevalence of damaging psychological symptoms than the already high rates for those in protective housing who had limited access to activities and stimulation). One scholar surveying the associated literature wrote: “Research suggests that between one-third and more than 90 percent experience adverse symptoms in solitary confinement, and a significant amount of this suffering is caused or worsened by solitary confinement.” Smith, *supra* note 51, at 502 (2006).

102. Emily Esfahani Smith, *Social Connection Makes a Better Brain*, ATLANTIC (Oct. 29, 2013, 1:00 PM) [http://www.theatlantic.com/health/archive/2013/10/social-connection-makes-a-better-brain/280934/?single\\_page=true](http://www.theatlantic.com/health/archive/2013/10/social-connection-makes-a-better-brain/280934/?single_page=true).

thinking: “Evolution has made a bet . . . that the best thing for our brain to do in any spare moment is to get ready for what comes next in social terms.”<sup>103</sup>

Neuropsychologists have also called the brain an “infovore,” as it constantly craves new information through the senses. The natural world to which the brain is accustomed is one of rich sensory stimulation. One theory is that it is human nature to love learning because novel, interpretable stimuli cause significant neural activity in the temporal lobe, producing greater quantities of endorphins.<sup>104</sup>

Thus, social thinking and sensory interpretation are fundamental brain activities on which a healthy brain thrives. But what exactly happens to brain, body, and behavior when a person is deprived of opportunities to have meaningful social connections or a sensory-rich environment? Scientists are currently seeking answers to those questions. For example, recent studies have noted that perceived social isolation (loneliness) is associated with decreased activity in regions of the brain associated with empathy, learning, and rewards;<sup>105</sup> is linked to an increased risk of dementia in later life;<sup>106</sup> may impact sleep patterns;<sup>107</sup> and is associated with lower rates of physical and mental health.<sup>108</sup> It has also long been established that if all sight, sound, and tactile sensations are eliminated, people may enter a hallucinatory state in as little as forty-eight hours.<sup>109</sup>

Social isolation is as strong a risk factor for morbidity and mortality as are smoking, obesity, a sedentary lifestyle, and high blood pressure. When this was first discovered, it spawned the “social control hypothesis”—the assumption that the link between isolation and adverse health effects was due to external pressures from the social network to have better health behaviors. However, more recent studies have

---

103. *Id.*

104. See DIANA ARIAS & CHRISTIAN OTTO, NASA, DEFINING THE SCOPE OF SENSORY DEPRIVATION FOR LONG DURATION SPACE MISSIONS 20 (2011) [hereinafter NASA REPORT]; C.A. OTTO, SOUTH POLE STATION: AN ANALOGUE FOR HUMAN PERFORMANCE DURING LONG DURATION MISSIONS TO ISOLATED AND CONFINED ENVIRONMENTS (2007) (abstract available at <http://www.dsls.usra.edu/meetings/hrp2008/pdf/BehavHealth/1150Otto.pdf>); Irving Biederman & Edward A. Vessel, *Perceptual Pleasure and the Brain*, 94 AM. SCIENTIST 249 (2006).

105. See John T. Cacioppo, Catherine J. Norris, Jean Decety, George Monteleone & Howard Nusbaum, *In the Eye of the Beholder: Individual Differences in Perceived Social Isolation Predict Regional Brain Activation to Social Stimuli*, 21 J. COGNITIVE NEUROSCIENCE 83, 83–84 (2009).

106. See Tjalling Jan Holwerda, Dorly J. H. Deeg, Aartjan T. F. Beekman, Theo G. van Tilburg, Max L. Stek, Cees Jonker & Robert A. Schoevers, *Feelings of Loneliness, but Not Social Isolation, Predict Dementia Onset: Results from the Amsterdam Study of the Elderly (AMSTEL)*, 85 J. NEUROLOGY NEUROSURGERY & PSYCHIATRY 135 (2014).

107. See Lianne M. Kurina, Kristen L. Knutson, Louise C. Hawkey, John T. Cacioppo, Diane S. Lauderdale & Carole Ober, *Loneliness Is Associated with Sleep Fragmentation in a Communal Society*, 34 SLEEP 1519 (2011).

108. See Erin York Cornwell & Linda J. Waite, *Social Disconnectedness, Perceived Isolation, and Health Among Older Adults*, 50 J. HEALTH & SOC. BEHAV. 31 (2009).

109. Jeffrey Smith McLeod, Note, *Anxiety, Despair, and the Maddening Isolation of Solitary Confinement: Invoking the First Amendment’s Protection Against State Action That Invades the Sphere of the Intellect and Spirit*, 70 U. PITT. L. REV. 647, 653 (2009).

caused scientists to reject this theory as insufficient to explain the wide variety of harms that occur in an isolation environment.<sup>110</sup>

This Part examines the evidence regarding social isolation and sensory deprivation's effects by surveying modern prisoner studies and studies of such deprivations in other contexts.

#### *A. Modern Prisoner Studies*

There are inherent difficulties with performing studies on prisoner populations, especially those housed in solitary confinement. Most obviously, there is the problem of access. But even if that hurdle is surmounted, if one is studying the effects of isolation on brain, body, and behavior, then the very contact with the prisoner is changing the condition (isolation) whose effect one is trying to measure. This phenomenon of modified behavior due to being the subject of a study is commonly known as the "Hawthorne Effect." Researchers in one prisoner isolation study renamed it the "Alysha Effect" after the attractive young woman who interviewed the prisoners—two of whom were dropped from the study because of sexual advances.<sup>111</sup>

Other problems can include how to make certain your population is representative when the sample size is often necessarily small (due to access issues) and how to provide for a control group. Some experts believe the vulnerability and lack of freedom of prisoners makes them incapable of giving truly informed consent. Thus, studies of prisoners are often subject to heightened scrutiny from institutional review boards. The vulnerable position of prisoners may also make them hesitant to share any information that might be used against them in critical decisions, such as parole or whether solitary confinement should be prolonged.<sup>112</sup>

However, even with these challenges, the bulk of the modern research on prisoners in solitary confinement is remarkably consistent in its findings of deleterious psychological effects.<sup>113</sup> This subpart presents insights drawn from various studies.

---

110. John T. Cacioppo, Louise C. Hawkley, Greg J. Norman & Gary G. Berntson, *Social Isolation*, 1231 ANNALS N.Y. ACAD. SCI. 17, 17 (2011).

111. See Susan Greene, *Inmate Study Brings No Easy Answer*, DENV. POST, Nov. 7, 2010, at B01. The study itself was funded by the National Institute of Justice. See MAUREEN L. O'KEEFE, KELLI J. KLEBE, ALYSHA STUCKER, KRISTIN STRUM & WILLIAM LEGGETT, ONE YEAR LONGITUDINAL STUDY OF THE PSYCHOLOGICAL EFFECTS OF ADMINISTRATIVE SEGREGATION (2010), available at <https://www.ncjrs.gov/pdffiles1/nij/grants/232973.pdf>.

112. See Philip Bulman, *The Psychological Effects of Solitary Confinement*, CORRECTIONS TODAY, June/July 2012, at 58, 58.

113. There is, however, one relatively recent study out of Colorado that concluded solitary confinement may not be harmful to prisoners. But that study has been severely criticized on multiple grounds. For example, it was the study that had the "Alysha Effect," see *supra* note 111 and accompanying text; it was made in preparation for potential litigation against the prison system; and it relied on self-reporting—there was no independent analysis of clinical records or examination by a professional psychiatrist and thus there was no check on prisoner motives to not reveal information that could harm their own status. Critics questioned whether the study used a proper measure (adaptation), objected to how the study population was chosen, and charged that the researchers ignored vital data even after flaws were pointed out to them. There were records available that documented incidents of emergency psychiatric

In the United States, nearly half of prison suicides occur in solitary confinement, even though estimates of the percentage of those in solitary confinement range between 2–8%.<sup>114</sup>

“Strikingly consistent” psychiatric symptoms among inmates in isolation include hyperresponsivity to external stimuli; perceptual distortions, illusions, and hallucinations; severe panic attacks; difficulty with thinking, concentration, and memory; intrusive obsessional (and often violent) thoughts that prisoners resist but cannot block out; overt paranoia; and problems with impulse control.<sup>115</sup> One study of prisoners in Pelican Bay’s isolation units found 91% suffering from heightened anxiety, 86% having hyperresponsivity to external stimuli, 84% having difficulty with concentration and memory, 84% having confused thought processes, 71%

contact such as suicidal and self-destructive behavior and emergence of psychotic symptoms. Critics explained that

[a]mong the group of inmates with mental illness in Ad Seg (N = 59) there were 37 such episodes during the course of the study (an average of .62 episodes per inmate—almost two for every three inmates). Among the group of inmates with mental illness in [the general population] (N = 33), on the other hand, there were only three (0.9 per inmate—less than one for every 10 inmates). . . . [T]his objective data *squarely* contradicts the authors’ conclusion that Ad Seg does not produce significantly more psychiatric difficulties than does [general population] housing. The authors simply declined to perform this straightforward statistical analysis of data they actually reported, even after the oversight in their early public reports was explicitly pointed out by Dr. Grassian.

Stuart Grassian & Terry Kupers, *The Colorado Study Vs. the Reality of Supermax Confinement*, 13 CORRECTIONAL MENTAL HEALTH REP. 1, 10 (2011) (emphasis in original). As critics of the Colorado study, Drs. Grassian and Kupers, explain, the statistical probability of this difference being entirely random is approximately one in 5000, whereas statistical significance in research generally requires only a probability of randomness of .05, or one in twenty. *Id.* Dr. Grassian also suggested that the researchers refer to the self-reported psychiatric rating during the period of the psychiatric emergency to evaluate whether they were indeed getting trustworthy reports from the inmates, but the authors declined. *Id.* One of the inmates under the study committed suicide, and researchers did examine that inmate’s most recent self-report. They found it revealed no evidence of any psychological distress. *Id.*

114. *See id.* at 11; Editorial, *Escaping Solitary*, WASH. POST, Sept. 12, 2013, at A20. According to a recent Government Accountability Office study, the federal government houses 7% of its 217,000 inmates in segregated housing units twenty-three hours a day. U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-13-429, BUREAU OF PRISONS: IMPROVEMENTS NEEDED IN BUREAU OF PRISONS’ MONITORING AND EVALUATION OF IMPACT OF SEGREGATED HOUSING 2 (2013), available at <http://www.gao.gov/assets/660/654349.pdf>. This is a 17% increase from 2008 to 2013, despite the fact that the total inmate population grew by only 6% during the same period. *Id.* at 14.

115. Grassian, *supra* note 13, at 335–36; *see also* HANS TOCH, MOSAIC OF DESPAIR: HUMAN BREAKDOWNS IN PRISONS 48–54 (1992) (noting broad scale “isolation panic” that included rage, panic, loss of control, breakdowns, psychological regression, and physiological and psychic tension leading to self-mutilation); Bruno M. Cormier & Paul J. Williams, *Excessive Deprivation of Liberty*, 11 CAN. PSYCHIATRIC ASS’N J. 470 (1966) (finding three consistent patterns of behavior among isolated inmates: verbal aggression, physical destruction of surroundings, and development of an inner fantasy world including paranoid psychosis—also general uncontrolled rage and an increase in homicidal and suicidal impulses).

experiencing wide mood and emotional swings, 61% having aggressive fantasies, 44% suffering visual distortions, and 41% experiencing hallucinations. More than half (56%) of prisoners experienced at least five of these symptoms, and 34% experienced all eight.<sup>116</sup>

Participants in another study of solitary confinement developed psychopathologies at a rate of 28%, versus 15% in the general population.<sup>117</sup> A study of Danish prisoners found that prisoners who remained in solitary confinement for longer than four weeks had a “probability of being admitted to the prison hospital for a psychiatric reason [that] was about 20 times as high as for a person” in the general population.<sup>118</sup>

A week of voluntary solitary confinement by prisoners resulted in decreased electroencephalogram (EEG) activity, which is indicative of increased theta activity, which, in turn, is related to stress, tension, and anxiety.<sup>119</sup> “Indeed, even a few days of solitary confinement will predictably shift the [EEG] pattern toward an abnormal pattern characteristic of stupor and delirium.”<sup>120</sup>

Prisoners in solitary confinement engage in higher rates of self-mutilation than those in the general population.<sup>121</sup>

For some prisoners, prolonged isolation interferes with social identity causing them to experience a profound “ontological insecurity,” or doubts about their own existence.<sup>122</sup>

While some of the acute symptoms tend to subside after release from isolation, there are long-term effects that may persist for decades.

These not only include persistent symptoms of post traumatic stress (such as flashbacks, chronic hypervigilance, and a pervasive sense of

116. Haney, *supra* note 9, at 137.

117. H. S. Andersen, D. Sestoft, T. Lillebæk, G. Gabrielsen, R. Hemmingsen & P. Kramp, *A Longitudinal Study of Prisoners on Remand: Psychiatric Prevalence, Incidence and Psychopathology in Solitary Vs. Non-Solitary Confinement*, 102 ACTA PSYCHIATRICA SCANDINAVICA 19, 19 (2000).

118. Haney, *supra* note 9, at 144 (quoting Dorte Maria Sestoft, Henrik Steen Andersen, Tommy Lillebæk & Gorm Gabrielsen, *Impact of Solitary Confinement on Hospitalization Among Danish Prisoners in Custody*, 21 INT’L J.L. & PSYCHIATRY 99, 103 (1998)).

119. Paul Gendreau, N. L. Freedman, G. J. S. Wilde & G. D. Scott, *Changes in EEG Alpha Frequency and Evoked Response Latency During Solitary Confinement*, 79 J. ABNORMAL PSYCHOL. 54, 57–58 (1972).

120. Grassian, *supra* note 13, at 331.

121. Haney & Lynch, *supra* note 66, at 525.

122. As one scholar testified before a Senate hearing in 2012:

The emptiness and idleness that pervade most solitary confinement units are profound and enveloping. The prison typically provides the prisoners in these units with literally nothing meaningful to do. *That emptiness, when combined with the total lack of meaningful social contact*, has led some prisoners into a profound level of what might be called “ontological insecurity”—*they are not sure that they exist and, if they do, exactly who they are*. A number of prisoners have told me over the years that they actually have *precipitated confrontations with prison staff members (that sometimes result in brutal “cell extractions”)* in order to reaffirm their existence.

*Solitary Confinement Hearing I*, *supra* note 8, at 77 (emphases added) (written statement of Craig Haney, Professor of Psychology, University of California, Santa Cruz).

hopelessness), but also lasting personality changes—especially including a continuing pattern of intolerance of social interaction, leaving the individual socially impoverished and withdrawn, subtly angry and fearful when forced into social interaction.<sup>123</sup>

### *B. Brain and Behavior Studies Outside the Modern Prison*

Isolation and sensory deprivation are serious issues for several groups outside the modern domestic-prison context—including pilots, astronauts, Arctic and Antarctic explorers, prisoners of war, and shipwrecked sailors. These groups have reported “deterioration in the ability to think and reason, perceptual distortions, gross disturbances in feeling states, and vivid imagery in the form of hallucinations and delusions.”<sup>124</sup> Studies of other social animals placed in isolation or sensory-deprivation environments also support the thesis that these conditions themselves are a cause of severe psychological and physical harm. Examples are explored in more detail below.

#### 1. Extreme Exploration

A recent report for NASA on sensory deprivation concluded that “[t]he prolonged stress consequences of [sensory deprivation] lead to detrimental neurological changes in the human brain, which can manifest in maladaptive behavior disorders.”<sup>125</sup> And “increased duration increases the intensity and likelihood” of such behaviors.<sup>126</sup>

The report explains that substituting an unchanging monotonous environment (such as a spacecraft or a prison cell) for Earth’s natural environment deprives the sensory organs of normal levels of stimulation. The brain interprets the sensory deprivation as stress, and one of the body’s responses is to elevate cortisol levels. If sensory deprivation is prolonged, chronic stress may occur.<sup>127</sup> “Under chronic stress, spatial and verbal memory and cognitive processes suffer. Excessive levels of cortisol interfere with memory formation and retrieval . . . Behavioral effects include an increase in anxiety, paranoia, withdrawal and territorial behavior.”<sup>128</sup> Sensory deprivation also “reduces brain activity and weakens neuromodulatory control. This results in negative brain plasticity processes, which create a self-reinforcing downward spiral of degraded brain function.”<sup>129</sup>

Prolonged stress exposure of this type may place a person “at a significant risk for future psychiatric deterioration, possibly including the development of irreversible psychiatric symptoms.”<sup>130</sup> The NASA report cites examples of prisoners of war who, even forty years after release, may continue to suffer “symptoms of anxiety, confusion, depression, suspiciousness and detachment from social

---

123. Grassian, *supra* note 13, at 353.

124. NASA REPORT, *supra* note 104, at 8.

125. *Id.* at 6.

126. *Id.* at 11.

127. *See id.* at 35.

128. *Id.* at 38.

129. *Id.* at 40 (internal quotation marks omitted).

130. *Id.* at 41.

interactions.”<sup>131</sup> People who have been in prolonged isolation and confined environments often suffer from symptoms that resemble posttraumatic stress disorder—including “anxiety, nervousness, frequent nightmares, depression, difficulty sleeping, inability to work, and difficulty trusting people, as well as difficulties adapting to the world outside of confinement.”<sup>132</sup>

A study of British Royal Air Force pilots who had experienced restricted auditory and visual stimulation in flight found that all had become significantly anxious, “many suffered full-blown panic attacks,” and some described “feelings of detachment from reality, and perceptual distortions.”<sup>133</sup> A similar study of U.S. Navy pilots found that “over one third experienced frightening feelings of unreality and became severely anxious” when flying alone at high altitude where there is a lack of visual and sensory stimulation.<sup>134</sup>

A study of astronauts revealed that “[m]onotonous surroundings were found to lead to boredom, fatigue and reduction in job interest, physical anesthetization, as well as the emergence of psychic disorders and altered behavior.”<sup>135</sup> In response to such concerns, the former Soviet Union was among those that placed astronauts in “psychological relief rooms” for ten-minute sessions where they were surrounded by natural sounds and music, film, and odors that mimicked the effect of being immersed in nature and provided “relief for visual fatigue and nervous emotional loads.”<sup>136</sup> Ground-based studies found that use of these rooms increased work production by 1.5 times, and errors were reduced by 25%.<sup>137</sup>

Individual reactions to isolation and sensory deprivation can vary widely. A recent experiment conducted by the Russian Academy of Science in conjunction with the European and Chinese space agencies placed a six-man crew in a simulated space ship for 520 days. Even with participants who were heavily screened for strong physical and mental strength and stamina, there were significant issues. One of the scientists involved explained that “[o]ur major finding was that there were really large individual differences with how the crew responded to the [small group] isolation . . . . Four of them showed at least one issue that could have exploded or led to a severe adverse effect during a Mars mission.”<sup>138</sup> Reactions included trouble sleeping, lethargy, problems with mental tasks, mood swings, and depression.

---

131. *Id.* at 43.

132. *Id.* at 42.

133. Grassian, *supra* note 13, app. A at 356.

134. *Id.* at 357.

135. NASA REPORT, *supra* note 104, at 23.

136. *Id.* at 24.

137. *Id.*

138. Adam Mann, *Future Mars Astronauts May Be Sleepy, Bored, and Crabby*, WIRED (Jan. 7, 2013, 3:00 PM), <http://www.wired.com/2013/01/sleep-problems-mars-500/> (quoting University of Pennsylvania School of Medicine psychiatrist Mathias Basner); *see also* Mathias Basner, David F. Dinges, Daniel Mollicone, Adrian Ecker, Christopher W. Jones, Eric C. Hyder, Adrian Di Antonio, Igor Savelev, Kevin Kan, Namni Goel, Boris V. Morukov & Jeffrey P. Sutton, *Mars 520-d Mission Simulation Reveals Protracted Crew Hypokinesia and Alterations of Sleep Duration and Timing*, 110 PROC. NAT’L ACAD. SCI. U.S. 2635 (2013), available at <http://www.pnas.org/content/110/7/2635.full.pdf>.

For explorers and workers in the Arctic and Antarctic, the extremely harsh conditions can cause small groups to be isolated and confined over long periods. Winters last up to nine months, with temperatures so cold that venturing outside is dangerous. Because of the prevalence of psychological disturbances during these months, rigorous psychological screening is given beforehand. But significant levels of psychiatric disturbances continue despite these preventive efforts. Common issues include interpersonal tension and hostility, progressively worsening depression, sleep disturbance, impaired cognitive functioning, and paranoia.<sup>139</sup>

Thus, isolation and sensory deprivation can have serious consequences in a variety of settings, and detrimental psychiatric consequences may persist even when small groups are confined together. It is also very difficult to determine in advance who will fare best under such conditions—even those that seem strongest (screened astronauts and Arctic explorers, for instance) may suffer severe psychiatric deterioration.

## 2. Effects of Isolation on Other Social Animals

“Animal studies of social isolation are an important complement to human studies because randomization and experimental manipulations of isolation in humans is limited in intensity and duration due to the risk of deleterious effects.”<sup>140</sup> Many studies of other social animals confirm the negative harmful effects of social isolation across species.

Some of the most dramatic studies on the isolation of animals have been conducted with rhesus monkeys. Monkeys raised in isolation were “profoundly disturbed, given to staring blankly and rocking in place for long periods, circling their cages repetitively, and mutilating themselves.”<sup>141</sup> If released into a group, they seemed to enter a state of emotional shock and would engage in self-clutching and rocking. One refused to eat and died within five days. Some of those that had been isolated for shorter periods were eventually able to adjust, but “[t]welve months of isolation almost obliterated the animals socially.”<sup>142</sup> Such animals were permanently withdrawn and often abused by the larger group.<sup>143</sup> More recent studies on other animal groups have confirmed that the workings of the brain seem to be particularly vulnerable to permanent alteration if animals are socially isolated in early life.<sup>144</sup>

This insight extends to humans. Juveniles are currently often placed in isolation in adult jails for their own protection. But the destructive nature of isolation on a young brain is evidenced in the suicide rates. In juvenile facilities, over 50% of suicides occur in solitary confinement. In adult jails, the statistics are much higher. “Suicides of youth in isolation occur nineteen times more often than in the general

---

139. Grassian, *supra* note 13, at 358–60. These symptoms have been named the “winter-over syndrome.” *Id.* at 359.

140. Cacioppo et al., *supra* note 110, at 18.

141. Gawande, *supra* note 87, at 36.

142. *Id.*

143. *Id.*

144. See, e.g., J. L. Lukkes, C. H. Summers, J. L. Scholl, K. J. Renner & G. L. Forster, *Early Life Social Isolation Alters Corticotropin-Releasing Factor Responses in Adult Rats*, 158 NEUROSCIENCE 845, 845 (2009).

population; youth suicide rates are thirty-six times higher in adult jails than in juvenile detention facilities.”<sup>145</sup>

Other studies have shown multiple physically and psychologically damaging effects from isolation of animals more generally. For example, chronic social isolation of Wistar rats caused anxiety-like and depression-like behavior that paralleled molecular changes in the limbic brain.<sup>146</sup> Social isolation (1) decreased the lifespan of fruit flies because of oxidative stress, (2) decreased survival after experimentally induced strokes in mice, (3) increased obesity and type-two diabetes in mice, (4) increased the growth of cancerous tumors in rats, (5) increased stress-hormone levels and oxidative stress in rabbits, and (6) caused an elevated morning rise in cortisol in squirrel monkeys.<sup>147</sup>

Commenting on the relationship between such animal studies and the human experience, John Cacioppo, the director of the University of Chicago’s Center for Cognitive and Social Neuroscience, explained:

The effects of isolation in humans have much in common with the effects of isolation found in nonhuman social species. Researchers found increased activation of the brain’s stress systems, vascular resistance, and blood pressure, as well as decreased inflammatory control, immunity, sleep salubrity, and expression of genes regulating glucocorticoid responses and oxidative stress. In sum, the health, life, and genetic legacy of members of most social species are threatened when they find themselves on the social perimeter.<sup>148</sup>

One of Cacioppo’s most influential insights is that these types of effects are more strongly linked to perceived isolation than actual isolation. One of his explanations for the great diversity we see in people’s responses to isolation is that different people have different levels of tolerance for social disconnection—some feel the pain of such disconnection more intensely than others. He argues that people such as Arctic explorers are self-selected to be those who have higher thresholds for social disconnection.<sup>149</sup>

Cacioppo also claims one’s susceptibility to loneliness is approximately 50% hereditary. He bases the hereditary theory partially on an experiment that was conducted with rat pups—selectively bred for twenty-five generations dependent on the strength of their maternal cry. The descendants of those with the strongest cry (who seemed to feel the pain of deprivation from their mothers most greatly) had greater cortisol, more depressive behavior, more withdrawal, and more anxiety than

---

145. *Solitary Confinement Hearing I*, supra note 8, at 128 (written statement of the American Civil Liberties Union).

146. J. Djordjevic, A. Djordjevic, M. Adzic & M. B. Radojic *Effects of Chronic Isolation on Wistar Rat Behavior and Brain Plasticity Markers*, 66 *NEUROPSYCHOBIOLOGY* 112 (2012).

147. John T. Cacioppo & Stephanie Ortigue, *Social Neuroscience: How a Multidisciplinary Field Is Uncovering the Biology of Human Interactions*, *CEREBRUM*, Dec. 2011, at 1, 7.

148. *Id.* at 7–8 (footnote omitted).

149. John T. Cacioppo, Nat’l Inst. of Health, *The Matilda White Riley Lecture: Social Isolation and Health*, YOUTUBE (June 2, 2012), <http://www.youtube.com/watch?v=xULDuo7wv3k>.

the descendants of the softer-crying pups. All these attributes and behaviors are mimicked in people who have high levels of perceived isolation.<sup>150</sup>

Thus the evidence regarding reactions to isolation and sensory deprivation among the general populace, prisoners, extreme explorers, and animals all points in one direction: it is clear these deprivations can cause severe harms. The lesson of the emerging field of social neuroscience is that the behavioral deteriorations witnessed are linked to physical alterations occurring in the brain and body that are in turn caused by the social and sensory deprivations. These physical alterations have implications beyond the immediately visible behaviors—and can lead to a wide variety of types of physical and mental disability and disease.

It is difficult (if not presently impossible) to determine precisely which harms will befall which people with what level of severity and how soon. Severely debilitating harms befall significant portions of the population even among those that have been heavily screened for resilience. While not every person may feel the pain of social disconnection and sensory deprivation to the same degree, all are at risk of serious health consequences when so deprived. As explained previously, recent discoveries have clarified that human brains are uniquely designed for social interaction. The many examples of deterioration examined above illustrate that social interaction and sensory stimulation are human necessities for health and well-being.

With this understanding of the threatened harms, the Article turns to how to analyze such risks of harm under an Eighth Amendment framework.

### III. CRUEL AND UNUSUAL PUNISHMENT IN THE CONTEXT OF PRISON CONDITIONS

*Public apathy and the political powerlessness of inmates have contributed to the pervasive neglect of the prisons. . . . Under these circumstances, the courts have emerged as a critical force behind efforts to ameliorate inhumane conditions.*

– Justice Brennan<sup>151</sup>

#### *A. Supreme Court Jurisprudence*

Although the Supreme Court has never considered a case in which a party argued that solitary confinement as generally practiced in the United States is per se cruel and unusual, the Court has acknowledged that “[c]onfinement in . . . an isolation cell is a form of punishment subject to scrutiny under Eighth Amendment standards.”<sup>152</sup>

This baseline assumption was not always clear. Until 1976, the Court had not considered whether the Eighth Amendment’s prohibition on “cruel and unusual punishments” was applicable to prison conditions. Some had argued, as Justice Thomas does today, that “judges or juries—but not jailers—impose ‘punishment.’”<sup>153</sup> But others argued that at least some (if not all) conditions of imprisonment could represent “punishment” within the meaning of the Amendment.

---

150. *Id.*

151. *Rhodes v. Chapman*, 452 U.S. 337, 358–59 (1981) (Brennan, J., concurring in the judgment).

152. *Hutto v. Finney*, 437 U.S. 678, 685 (1978).

153. *Helling v. McKinney*, 509 U.S. 25, 40 (1993) (Thomas, J., dissenting).

*Estelle v. Gamble*<sup>154</sup> was the first case in which the Supreme Court applied the Punishments Clause to a condition of confinement. (Some do not characterize *Estelle* as a prison-condition case—but I use the term broadly, as has the Supreme Court.)<sup>155</sup> *Estelle* held that “deliberate indifference to serious medical needs of prisoners constitutes the ‘unnecessary and wanton infliction of pain’ proscribed by the Eighth Amendment.”<sup>156</sup>

That case explained the history of the Punishments Clause in broad strokes (and, as will be discussed in the next Part of this Article, in strokes not all scholars would agree are correct). According to *Estelle*, the drafters’ primary concern was “to proscribe tortures and other barbarous methods of punishment.”<sup>157</sup> And the first Supreme Court cases addressing this constitutional provision confined themselves to such concerns. But in later cases, the Punishments Clause was interpreted to have a broader scope. While *Estelle* recognized that in worst-case scenarios failure to provide medical treatment might result in “‘torture or a lingering death,’ the evils of most immediate concern to the drafters of the Amendment,”<sup>158</sup> it was under this broader interpretation of the Punishments Clause that the Court found a government obligation to provide medical care for those it incarcerated.<sup>159</sup>

Landmark cases that had provided a broadened definition of Eighth Amendment protection include *Weems v. United States*<sup>160</sup>—an early twentieth-century case that rejected the idea that “cruel and unusual punishments” could refer only to punishments on par with disembowelment, burning alive, physical torture, or methods causing a lingering death.<sup>161</sup> Instead, *Weems* examined the Punishments Clause in the context of the rest of the Amendment, which prohibits excessive bail or fines, and found that the Amendment proscribes “all punishments which by their excessive length or severity are greatly disproportioned to the offenses charged. . . . The whole inhibition is against that which is excessive in the bail required or fine imposed, or punishment inflicted.”<sup>162</sup> Thus, the Court overturned a sentence that included fifteen years of “hard and painful labor” in chains at the ankle and wrist night and day for the offense of falsifying a public document.<sup>163</sup> The case also

---

154. 429 U.S. 97 (1976).

155. See, e.g., *Wilson v. Seiter*, 501 U.S. 294, 303 (1991) (“Whether one characterizes the treatment received by [the prisoner] as inhuman conditions of confinement, failure to attend to his medical needs, or a combination of both, it is appropriate to apply the ‘deliberate indifference’ standard articulated in *Estelle*.” (alteration in original) (quoting *LaFaut v. Smith*, 834 F.2d 389, 391–92 (4th Cir. 1987))).

156. *Estelle*, 429 U.S. at 104 (citation omitted) (quoting *Gregg v. Georgia*, 428 U.S. 153, 173 (1976)).

157. *Id.* at 102 (internal quotation marks and alterations omitted).

158. *Id.* at 103 (citation omitted).

159. *Id.*

160. 217 U.S. 349 (1910).

161. *Id.* at 370–71.

162. *Id.* at 371 (quoting *O’Neil v. Vermont*, 144 U.S. 323, 339–40 (1892) (Field, J., dissenting)). For a fuller discussion of this case, see also Elizabeth Bennion, *Death Is Different No Longer: Abolishing the Insanity Defense Is Cruel and Unusual Under Graham v. Florida*, 61 DEPAUL L. REV. 1, 4–5 (2011).

163. *Weems*, 217 U.S. at 358, 364.

observed that the Punishments Clause was not static but progressive and could “acquire meaning as public opinion becomes enlightened by a humane justice.”<sup>164</sup>

In 1958, *Trop v. Dulles* most famously picked up this latter theme, declaring in a plurality opinion that the Eighth Amendment “must draw its meaning from the evolving standards of decency that mark the progress of a maturing society.”<sup>165</sup> In a footnote, the case seemed to dismiss the idea that the language “cruel and unusual” should be translated in its most literal sense—though a close reading shows the Court taking no particular stand on that issue. The Court explained:

Whether the word “unusual” has any qualitative meaning different from “cruel” is not clear. On the few occasions this Court has had to consider the meaning of the phrase, precise distinctions between cruelty and unusualness do not seem to have been drawn. [Our] cases indicate that the Court simply examines the particular punishment involved in light of the basic prohibition against inhuman treatment, without regard to any subtleties of meaning that might be latent in the word “unusual.”<sup>166</sup>

The footnote went on to explain that if “unusual” had any separate meaning from “cruel” (an issue on which the Court took no position), it should simply be “the ordinary one, signifying something different from that which is generally done.”<sup>167</sup> And the Court explained that denationalization, the punishment at issue in the case, would meet such a test since it was first explicitly sanctioned by the government only in 1940 and had never been “tested against the Constitution until this day,”<sup>168</sup> even though “this day” was eighteen years later—meaning it had been in use for nearly two decades.

But in the main body of the opinion, the Court did not spend space or energy in defining “cruel and unusual” in such literal terms. Instead the Court asserted that “[t]he basic concept underlying the Eighth Amendment is nothing less than the dignity of man.”<sup>169</sup> While the State had the “power to punish, the Amendment stands to assure that this power be exercised within the limits of civilized standards.”<sup>170</sup> And the Court found that denationalization violated those civilized standards by “the total destruction of the individual’s status in organized society.”<sup>171</sup> Interestingly, the opinion also refers to the “virtual unanimity” of “civilized nations of the world” for moral authority that statelessness should not be an available criminal punishment.<sup>172</sup>

---

164. *Id.* at 378.

165. 356 U.S. 86, 101 (1958).

166. *Id.* at 100 n.32 (citation omitted).

167. *Id.*

168. *Id.*

169. *Id.* at 100.

170. *Id.*

171. *Id.* at 101.

172. *Id.* at 102. Thus confirming what other scholars have noted—that Justice Kennedy is far from the first Supreme Court Justice to use international sources. “It takes no more than a glance at the earliest volumes of *U.S. Reports* to confirm that the practice of drawing upon international sources is nothing new to the Supreme Court. Beginning with its earliest opinions in the 1790s, the Court has often referred to international law and non-American materials.” Stephen C. McCaffrey, *There’s a Whole World Out There: Justice Kennedy’s Use of International Sources*, 44 MCGEORGE L. REV. 201, 201 (2013).

Such international comparisons and the position that what is “cruel and unusual” should be defined by contemporary evolving standards could be interpreted as an effort to determine what is and is not sufficiently “unusual” under the Amendment, but the *Trop* footnote discussed above suggests that is not how the Court envisioned it. Instead, the international comparisons and efforts to determine contemporary standards seem to simply provide further authority for making the normative moral judgment of what should be considered excessively cruel or inhumane.<sup>173</sup>

Another case upon which *Estelle* drew extensively was one that had been decided earlier that same year, *Gregg v. Georgia*.<sup>174</sup> As recognized in *Estelle*, *Gregg* explained that under the oft-quoted *Trop* decision, punishments indeed needed to comport with public perceptions of standards of decency.<sup>175</sup> But beyond that, punishments must accord with “the dignity of man,” which meant “at least” that excessive punishments were prohibited.<sup>176</sup> Excessive punishments in the abstract (as opposed to challenges of specific punishments for a specific defendant for specific crimes) were defined as ones that either involved the “unnecessary and wanton infliction of pain” or were “grossly out of proportion to the severity of the crime.”<sup>177</sup> Expounding on “unnecessary and wanton infliction of pain,” the Court explained that a “sanction imposed cannot be so totally without penological justification that it results in the gratuitous infliction of suffering.”<sup>178</sup>

In *Estelle*, withholding medications for a serious injury was found to be just such an unnecessary infliction of pain without penal justification. By finding that the Eighth Amendment “embodies ‘broad and idealistic concepts of dignity, civilized standards, humanity, and decency,’” the Court established the government’s obligation to care for prisoners who could not care for themselves due to their incarceration.<sup>179</sup> The Court stated that

[t]he infliction of such unnecessary suffering is inconsistent with contemporary standards of decency as manifested in modern legislation codifying the common-law view that “it is but just that the public be required to care for the prisoner, who cannot by reason of the deprivation of his liberty, care for himself.”<sup>180</sup>

---

173. See Sharon Dolovich, *Cruelty, Prison Conditions, and the Eighth Amendment*, 84 N.Y.U. L. REV. 881, 883 n.3 (2009) (“But the concern with ‘evolving standards of decency’ that motivates the dueling census-taking of state practices found in the Court’s recent death penalty decisions stems from the Clause’s prohibition on *cruelty*, and reflects a rejection of the originalist position that Eighth Amendment cruelty should be interpreted to mean what it meant when the Bill of Rights was adopted.” (emphasis in original)).

174. 428 U.S. 153 (1976) (plurality opinion).

175. *Estelle v. Gamble*, 429 U.S. 97, 103 (1976) (citing *Gregg*, 428 U.S. at 182–83).

176. *Id.* at 173 (quoting *Trop*, 356 U.S. at 100).

177. *Id.* at 173.

178. *Id.* at 173, 183; see also *Rhodes v. Chapman*, 452 U.S. 337, 346 (1981).

179. *Estelle*, 429 U.S. at 102 (quoting *Jackson v. Bishop*, 404 F. 2d 571, 579 (8th Cir. 1968)).

180. *Id.* at 103–04 (footnote omitted) (quoting *Spicer v. Williamson*, 132 S.E. 291, 293 (N.C. 1926)).

But, in a move that has been heavily criticized by some scholars,<sup>181</sup> the Court did not go so far as to say that any failure or even any negligent failure to provide adequate medical care for serious illness or injury would qualify as a violation of the Eighth Amendment. The key words were “deliberate indifference.” Negligence might result in the unnecessary infliction of pain—but only when there was deliberate indifference would it also be “wanton” or sufficiently “repugnant to the conscience of mankind” to “offend ‘evolving standards of decency’ in violation of the Eighth Amendment.”<sup>182</sup>

Several cases following *Estelle* indicated that the Supreme Court would be willing to consider prison conditions generally (beyond issues of medical attention) under the Eighth Amendment. For example, *Ingraham v. Wright* stated in dicta that “[p]rison brutality . . . is ‘part of the total punishment to which the individual is being subjected for his crime and, as such, is a proper subject for Eighth Amendment scrutiny.’”<sup>183</sup> *Hutto v. Finney* was the first case to actually require an analysis of the Eighth Amendment’s relation to prison conditions beyond medical care. The parties did not dispute that the Punishments Clause applied to prison conditions generally—and the Court observed that “[c]onfinement in a prison or in an isolation cell is a form of punishment subject to scrutiny under Eighth Amendment standards.”<sup>184</sup> Prison officials challenged only two aspects of relief granted by the district court. In upholding the district court’s remedy regarding limitations on solitary confinement, the Supreme Court considered only objective conditions of confinement and stated there was “no error in the [district court’s] conclusion that, taken as a whole, conditions in the isolation cells continued to violate the prohibition against cruel and unusual punishment.”<sup>185</sup>

*Rhodes v. Chapman* was the first case in which the disputed issue before the Court was the limitations that the Eighth Amendment imposes on conditions of confinement in prison beyond medical care. Unsurprisingly, given the language in cases like *Estelle*, *Ingraham*, and *Hutto*, the Court held unequivocally that the Punishments Clause did apply to prison conditions generally.<sup>186</sup> Although *Rhodes* repeated much of *Estelle*’s language, it refused to recognize any “static ‘test’” that could determine an Eighth Amendment violation, since a court would have to evaluate “evolving standards of decency that mark the progress of a maturing society.”<sup>187</sup> Most significantly, it did not employ any analysis of whether the challenged conditions were the result of “deliberate indifference.” Instead, it made an objective analysis of whether the prison conditions resulted in deprivation of “the minimal civilized measure of life’s necessities,” including food, medical care, sanitation, and whether violence was increased or other conditions were created that would be “intolerable for prison confinement.”<sup>188</sup> The Constitution, *Rhodes* declared,

---

181. See, e.g., Dolovich, *supra* note 173.

182. *Estelle*, 429 U.S. at 105–06.

183. 430 U.S. 651, 669 (1977) (quoting *Ingraham v. Wright*, 525 F.2d 909, 915 (5th Cir. 1976)).

184. 437 U.S. 678, 685 (1978).

185. *Id.* at 687.

186. *Rhodes v. Chapman*, 452 U.S. 337, 345 (1981).

187. *Id.* at 346 (quoting *Trop v. Dulles*, 356 U.S. 86, 101 (1958) (plurality opinion)).

188. *Id.* at 347–48.

“does not mandate comfortable prisons.”<sup>189</sup> But the Court also provided for the possibility of a cumulative effect of substandard conditions—explaining that prison conditions “alone or in combination” might unconstitutionally deprive a prisoner of minimum necessities.<sup>190</sup>

Thus, following *Rhodes* and *Estelle*, the Court had provided two separate modes of analysis—one involving merely an objective inquiry into whether a deprivation was sufficiently serious, and the other requiring the additional element of a culpable state of mind. *Rhodes*’s seeming rejection of the idea that deliberate indifference was always necessary in an Eighth Amendment prison-conditions case was reiterated in a concurrence that emphasized: “The touchstone of the Eighth Amendment inquiry is the effect upon the imprisoned.”<sup>191</sup>

Recognizing the tension between such divergent modes of analysis, *Wilson v. Seiter* sought to harmonize *Estelle* and *Rhodes*. Reasoning that “punishment” must inherently be a deliberate act, as opposed to, for example, accidentally stepping on a prisoner’s toe, *Wilson* held that prison conditions could not violate the Eighth Amendment without a showing of deliberate indifference *and* a showing that the deprivation was objectively serious enough to constitute a minimal life necessity.<sup>192</sup> *Wilson* characterized *Rhodes* as a case in which it had simply not been necessary to reach the subjective component of the test for a Punishments Clause violation, because the objective prong had not been met.<sup>193</sup>

A concurrence of four Justices took issue with this characterization, arguing that a subjective test would often be unworkable in the context of conditions created by “cumulative actions and inactions by numerous officials inside and outside a prison, sometimes over a long period of time. . . . In truth, intent simply is not very meaningful when considering a challenge to an institution . . . .”<sup>194</sup> Further, the concurrence argued that the approach was unwise, as it left open the possibility for prison officials to defeat challenges of clearly inhumane conditions by showing there was some other cause than deliberate indifference—insufficient funding, for instance. “The ultimate result of today’s decision, [the concurring Justices feared], is that serious deprivations of basic human needs will go unredressed due to an unnecessary and meaningless search for deliberate indifference.”<sup>195</sup>

Cases that followed further defined the boundaries of the subjective and objective tests. *Helling v. McKinney* provided that a risk of serious injury could be enough to constitute cruel and unusual punishment.<sup>196</sup> “[A] remedy for unsafe conditions need

189. *Id.* at 349.

190. *Id.* at 347.

191. *Id.* at 366 (Brennan, J., concurring in the judgment) (internal quotation marks omitted).

192. *Wilson v. Seiter*, 501 U.S. 294, 299–304 (1991).

193. *Id.* at 298.

194. *Id.* at 310 (White, J., concurring in the judgment).

195. *Id.* at 311 (citation omitted) (internal quotation marks omitted).

196. *See* 509 U.S. 25, 36 (1993) (considering whether risk of injury from second-hand smoke could constitute cruel and unusual punishment).

[W]hether McKinney’s conditions of confinement violate the Eighth Amendment requires more than a scientific and statistical inquiry into the seriousness of the potential harm and the likelihood that such injury to health will actually be caused by exposure to [environmental tobacco smoke]. It also

not await a tragic event.”<sup>197</sup> The fact that the risked injury may never occur or is not imminent is dispositive for neither the objective nor the subjective prongs.<sup>198</sup>

*Farmer v. Brennan* undertook a lengthy analysis of the meaning of “deliberate indifference.”<sup>199</sup> It concluded that it was “more than mere negligence” and “less than acts or omissions for the very purpose of causing harm or with knowledge that harm will result.”<sup>200</sup> The Court landed on a standard comparable to what is required in criminal rather than civil contexts for recklessness: the prison official must recklessly disregard an excessive risk to inmate health or safety of which he or she was aware, not simply one of which the official should have been aware.<sup>201</sup>

Although the standard requires actual awareness, that awareness may be inferred from circumstantial evidence—such as that the risk was obvious.<sup>202</sup> “Nor may a prison official escape liability for deliberate indifference by showing that, while he was aware of an obvious, substantial risk to inmate safety, he did not know that the complainant was especially likely to be assaulted by the specific prisoner who eventually committed the assault.”<sup>203</sup> Awareness of the general risk would be enough to allay the Court’s concerns that the action, or inaction, constituted punishment.<sup>204</sup>

The most recent case to address prison conditions and the Eighth Amendment is *Brown v. Plata*. The Supreme Court affirmed a three-judge court ruling requiring California to dramatically reduce overcrowding in its prisons to 137.5% of design capacity.<sup>205</sup> The Court agreed that “[t]he medical and mental health care provided by California’s prisons falls below the standard of decency that inheres in the Eighth Amendment. This extensive and ongoing constitutional violation requires a remedy, and a remedy will not be achieved without a reduction in overcrowding.”<sup>206</sup> It reiterated the core of the Eighth Amendment as the “dignity of man”<sup>207</sup> and refused to call the remedy overbroad, because any prisoners in the system who became sick or mentally ill would become the “system’s next potential victims.”<sup>208</sup>

Thus, through twists and turns, the modern Supreme Court jurisprudence regarding prison conditions that violate the Eighth Amendment requires both an

---

requires a court to assess whether society considers the risk that the prisoner complains of to be so grave that it violates contemporary standards of decency to expose *anyone* unwillingly to such a risk. In other words, the prisoner must show that the risk of which he complains is not one that today’s society chooses to tolerate.

*Id.* (emphasis in original).

197. *Id.* at 33.

198. *See id.*

199. 511 U.S. 825 (1994).

200. *Id.* at 835.

201. *See id.* at 836–38.

202. *Id.* at 842.

203. *Id.* at 843.

204. *Cf. id.* at 838 (“But an official’s failure to alleviate a significant risk that he should have perceived but did not, while no cause for commendation, cannot under our cases be condemned as the infliction of punishment.”).

205. *Brown v. Plata*, 131 S. Ct. 1910, 1923 (2011).

206. *Id.* at 1947.

207. *Id.* at 1928 (internal quotation marks omitted).

208. *Id.* at 1940.

objective showing of at least a substantial risk of serious harm and a subjective showing of recklessness on the part of the government. The objective showing must be sensitive to the evolving mores of society. And the subjective component must show actual awareness on the part of the government before the condition or risk will qualify as “punishment” at all.

*B. Criticisms of Supreme Court Analysis*

The current two-part test for determining whether prison conditions violate the Eighth Amendment has received limited scholarly attention when compared to other aspects of Eighth Amendment jurisprudence, such as sentencing.<sup>209</sup> But that is not because the test is so well constructed that it is immune from criticism. Indeed, there are multiple problems with the current framework.

The Supreme Court’s decision to include a “deliberate indifference” requirement in the Eighth Amendment analysis is fundamentally flawed. First, it places undue emphasis on the subjective intent of prison authorities, instead of focusing on the effect of conditions upon the imprisoned.<sup>210</sup> The text of the Amendment restricts punishments based on the nature of those punishments, not the nature of the inflictors.

Second, the deliberate-indifference standard creates perverse incentives for authorities to turn a blind eye to severe human suffering. So long as they do not notice an inhumane condition, they will not be held responsible for failing to change it—even if they reasonably should have noticed it, and “despite the fact that when prison officials do not pay attention, prisoners may be exposed to the worst forms of suffering and abuse.”<sup>211</sup>

Third, by requiring deliberate indifference to classify a prison condition as a “punishment,” the standard may cause “courts [to] be too deferential because of the difficulty in policing the line between prison conditions that reflect management

---

209. See Glidden, *supra* note 19, at 1816.

210. See Rhodes v. Chapman, 452 U.S. 337, 366 (1981) (Brennan, J., concurring in the judgment); see also Jeffrey M. Lipman, *Eighth Amendment and Deliberate Indifference Standard for Prisoners: Eighth Circuit Outlook*, 31 CREIGHTON L. REV. 435 (1998); Katherine L. Smith, Comment, *Lost Souls: Constitutional Implications for the Deficiencies in Treatment for Persons with Mental Illness in Custody*, 42 GOLDEN GATE U. L. REV. 497 (2012); Richard D. Vetstein, Note, *Rape and AIDS in Prison: On a Collision Course to a New Death Penalty*, 30 SUFFOLK U. L. REV. 863 (1997).

211. Dolovich, *supra* note 173, at 892; see also Mary McLean Jordan, Comment, *Care To Prevent HIV Infection in Prison: A Moral Right Recognized by Canada, While the United States Lags Behind*, 37 U. MIAMI INTER-AM. L. REV. 319 (2006); Heather M. Kinney, Note, *The “Deliberate Indifference” Test Defined: Mere Lip Service to the Protection of Prisoners’ Civil Rights*, 5 TEMP. POL. & CIV. RTS. L. REV. 121 (1995); Matt Lloyd, Note, *Dormant Data: Why and How To Make Good Use of Deaths in Custody Reporting*, 39 AM. J. CRIM. L. 301 (2012); Jeffrey Smith McLeod, Note, *Anxiety, Despair, and the Maddening Isolation of Solitary Confinement: Invoking the First Amendment’s Protection Against State Action That Invades the Sphere of the Intellect and Spirit*, 70 U. PITT. L. REV. 647 (2009); Christine Peek, Comment, *Breaking out of the Prison Hierarchy: Transgender Prisoners, Rape, and the Eighth Amendment*, 44 SANTA CLARA L. REV. 1211, 1244 (2004); Christine Rebman, Comment, *The Eighth Amendment and Solitary Confinement: The Gap in Protection from Psychological Consequences*, 49 DEPAUL L. REV. 567 (1999).

principles and prison conditions that are punitive in nature.”<sup>212</sup> The subjective prong can be too easily defeated by showing concerns over cost or other motivations aside from deliberate indifference, even if prison conditions are extremely inhumane.<sup>213</sup>

Fourth, difficulties in employing the present standard include the problem of how to determine institutional intent or an institutional state of mind where there are multiple actors with multiple mental states.<sup>214</sup> This difficulty will often result in the factor simply being a proxy for the fact finder’s biases about the institution.<sup>215</sup>

There are also problems with the objective component of the Supreme Court test regarding the sufficient severity of the condition at issue—usually meaning whether there was a deprivation of a minimal life necessity or an imposition of unnecessary suffering so severe that it offends contemporary societal values.

First—and this criticism applies to Punishments Clause jurisprudence generally, not just the prison-conditions test—the dependence on contemporary evolving societal values raises numerous difficulties.<sup>216</sup> For example, whose values count in

---

212. Alexander A. Reinert, *Eighth Amendment Gaps: Can Conditions of Confinement Litigation Benefit from Proportionality Theory?*, 36 *FORDHAM URB. L.J.* 53, 75–76 (2009).

213. See *Wilson v. Seiter*, 501 U.S. 294, 311 (1991) (White, J., concurring in the judgment).

214. See Glidden, *supra* note 19, at 1836; Will A. Smith, Comment, *Civil Liability for Sexual Assault in Prison: A Challenge to the “Deliberate Indifference” Standard*, 34 *CUMB. L. REV.* 289 (2004).

215. Glidden *supra* note 19, at 1837; see also Lisa DiBartolomeo, Case Comment, *Constitutional Law—Subjective Awareness Governs the Deliberate Indifference Standard in Cruel and Unusual Punishment Claims—Farmer v. Brennan*, 114 *S. Ct. 1970 (1994)*, 29 *SUFFOLK U. L. REV.* 294 (1995); Richard Siever, Note, *HMOs Behind Bars: Constitutional Implications of Managed Health Care in the Prison System*, 58 *VAND. L. REV.* 1365 (2005).

216. See, e.g., Jennifer Carter, *Capital Punishment: A Struggle To Satisfy Evolving Standards of Decency—Reviewing the Debate in the United States and Canada*, 17 *SW. J. INT’L L.* 237, 254 (2011); Samuel J.M. Donnelly, *Capital Punishment: A Critique of the Political and Philosophical Thought Supporting the Justices’ Positions*, 24 *ST. MARY’S L.J.* 1, 33–34 (1992); James B. Johnston, *Executing Capital Punishment via Case Study: A Socratic Chat About New Jersey’s Abolition of the Death Penalty and Convincing Other States To Follow Suit*, 34 *J. LEGIS.* 1, 6 (2008); Mary Kate Kearney, *Substantive Due Process and Parental Corporal Punishment: Democracy and the Excluded Child*, 32 *SAN DIEGO L. REV.* 1, 4 (1995); Corinna Barrett Lain, *Lessons Learned from the Evolution of “Evolving Standards,”* 4 *CHARLESTON L. REV.* 661, 663–64 (2010); Susan M. Raeker-Jordan, *Parsing Personal Predilections: A Fresh Look at the Supreme Court’s Cruel and Unusual Death Penalty Jurisprudence*, 58 *ME. L. REV.* 100, 104–06 (2006); Douglas L. Simon, *Making Sense of Cruel and Unusual Punishment: A New Approach to Reconciling Military and Civilian Eighth Amendment Law*, 184 *MIL. L. REV.* 66, 69 (2005); John F. Stinneford, *The Original Meaning of “Unusual”: The Eighth Amendment as a Bar to Cruel Innovation*, 102 *NW. U. L. REV.* 1739, 1751–53 (2008); Courtney Butler, Comment, *Baze v. Rees: Lethal Injection as a Constitutional Method of Execution*, 86 *DENV. U. L. REV.* 509, 520–22 (2009); Michael D. Dean, Comment, *State Legislation and the “Evolving Standards of Decency”: Flaws in the Constitutional Review of Death Penalty Statutes*, 35 *U. DAYTON L. REV.* 379, 381–82 (2010); Etta J. Mullin, Case Note, *At What Age Should They Die? The United States Supreme Court Decision with Respect to Juvenile Offenders and the Death Penalty: Stanford v. Kentucky and Wilkins v. Missouri*, 109 *S. Ct. 2969 (1990)*, 16 *T. MARSHALL L. REV.* 161, 183 (1990); Michael J. O’Connor, Note, *What Would Darwin Say?: The Mis-Evolution of the Eighth Amendment*, 78 *NOTRE DAME L. REV.* 1389, 1414 (2003); Bethany Siena, Note, *Kennedy v.*

that analysis, and how do you measure them? Are international sources relevant? Which domestic sources are relevant? What are the time constraints on the analysis—do we look at what has been accepted over the last ten, twenty, fifty years or more, or are we only concerned with current whims? Where there seem to be differences in societal viewpoints on a matter, what should tip the balance? Does it make sense for the cruel and unusual status of a punishment to turn on how long it takes certain elements of our own or others' societies to recognize the inhumanity in our legislative systems (a measure often used by the Supreme Court)?

On issues particular to a prison-conditions analysis, there are further ambiguities. What should qualify as basic life necessities? What about exercise, sunlight, or a prisoner who cannot sleep because lights are on all night? How cold must it be before lack of heating or adequate blankets become cruel and unusual? Should psychological as well as physical harm be considered? Should it matter why any particular deprivation occurred?<sup>217</sup>

These types of ambiguities contribute to the fear that the “objective prong” of the test will again simply be a proxy for preexisting subjective views of what should or should not be an acceptable condition of imprisonment. Inconsistent lower court judgments on this prong serve to bolster the theory that “[l]ower court decisions on what constitutes ‘sufficiently serious’ have been largely dictated by the sentiments of the judge and the quality of the advocacy.”<sup>218</sup>

Many scholars also see Eighth Amendment jurisprudence as having departed too far afield from the requirements of the text. They advocate either a return to an analysis of what is cruel<sup>219</sup> or an analysis of both what is cruel and what is unusual.<sup>220</sup> However, their interpretations of what those terms should mean in any context, not just that of prison conditions, are far from uniform.<sup>221</sup> Nor do scholars agree on the relation of those two words—that is, whether “unusual” should be considered separately at all, and if so, whether it has an entirely independent meaning or equal force in a proper interpretation.<sup>222</sup>

---

Louisiana Reaffirms the Necessity of Revising the Eighth Amendment's Evolving Standards of Decency Analysis, 22 REGENT U. L. REV. 259, 270 (2009).

217. See Glidden, *supra* note 19, at 1828.

218. *Id.* at 1823.

219. See, e.g., Dolovich, *supra* note 173, at 886–89.

220. See, e.g., MICHAEL J. PERRY, TOWARD A THEORY OF HUMAN RIGHTS: RELIGION, LAW, COURTS 124 (2007); Meghan J. Ryan, *Does the Eighth Amendment Punishments Clause Prohibit Only Punishments That Are Both Cruel and Unusual?*, 87 WASH. U. L. REV. 567 (2010) [hereinafter Ryan, *Both Cruel and Unusual*]; Meghan J. Ryan, *Judging Cruelty*, 44 U.C. DAVIS L. REV. 81 (2010); Joshua L. Shapiro, *And Unusual: Examining the Forgotten Prong of the Eighth Amendment*, 38 U. MEM. L. REV. 465, 487 (2008); Stinneford, *supra* note 216.

221. For example, Michael Perry would interpret “unusual” to mean “not commonly used” presently on a global scale, see Michael J. Perry, *Is Capital Punishment Unconstitutional? And Even If We Think It Is, Should We Want the Supreme Court To So Rule?*, 41 GA. L. REV. 867, 881 (2007); conversely, John Stinneford would define “unusual” as “contrary to long usage,” see Stinneford, *supra* note 216, at 1767.

222. See, e.g., HUGO ADAM BEDAU, THE COURTS, THE CONSTITUTION, AND CAPITAL PUNISHMENT 37 (1977); Ryan, *Both Cruel and Unusual*, *supra* note 220; Shapiro, *supra* note 220, at 470.

The one idea for which there is general consensus is that we should not simply look at which specific punishments were considered cruel and unusual at the time of the founding.<sup>223</sup> Thus, even an ardent originalist like Justice Scalia has said that “in a crunch I may prove a faint-hearted originalist. I cannot imagine myself, any more than any other federal judge, upholding a statute that imposes the punishment of flogging.”<sup>224</sup>

### C. An Improved Prison-Conditions Eighth Amendment Standard

Because of the multiple problems with the current standard explained above, an analysis of prison conditions under the Eighth Amendment should not require a finding of deliberate indifference. Such intent is not logically required for an inhumane prison condition to qualify as a “punishment.” There was intent in imprisoning the inmate—thereby taking on the “carceral burden” of providing for that person’s health and safety. Thus all state-created conditions of confinement could be interpreted as punishments regardless of whether any particular official manifested deliberate indifference regarding particular prison conditions.<sup>225</sup> To try to disconnect the meaning of punishment from the means by which a sentence is carried out would far too easily circumvent constitutional protections.<sup>226</sup>

---

223. *Penry v. Lynaugh*, 492 U.S. 302, 330 (1989) (“At a minimum, the Eighth Amendment prohibits punishment considered cruel and unusual at the time the Bill of Rights was adopted. The prohibitions of the Eighth Amendment are not limited, however, to those practices condemned by the common law in 1789.” (citation omitted)), *abrogated on other grounds by Atkins v. Virginia*, 536 U.S. 304 (2002).

224. Antonin Scalia, Address, *Originalism: The Lesser Evil*, 57 U. CIN. L. REV. 849, 864 (1989). Though whether Justice Scalia would find a flogging that occurred in a prison at the hands of a wayward guard to be cruel and unusual punishment is more debatable. Justice Scalia apparently supports the *Whitley* standard for judging whether a prison official’s act in response to a disturbance constitutes cruel and unusual punishment. See *Whitley v. Albers*, 475 U.S. 312 (1986), *abrogated by Wilkins v. Gaddy*, 559 U.S. 34 (2010) (per curiam). Although such use of force could be considered a prison condition, it has been cordoned off in a separate category of its own. In *Whitley*, the Court considered whether an official applied force “in a good faith effort to maintain or restore discipline or maliciously and sadistically for the very purpose of causing harm.” *Id.* at 320–21 (quoting *Johnson v. Glick*, 481 F.2d 1028, 1033 (2d Cir. 1973), *rejected by Graham v. Connor*, 490 U.S. 386 (1989)). The Court in *Whitley* required this malice standard for wantonness because, as Scalia explained in *Wilson v. Seiter*, “Where (as in *Whitley*) officials act in response to a prison disturbance, their actions are necessarily taken ‘in haste, under pressure,’ and balanced against ‘competing institutional concerns for the safety of prison staff or other inmates.’” 501 U.S. 294, 302 (1991) (quoting *Whitley*, 475 U.S. at 320).

225. See Dolovich, *supra* note 173, at 890–91 (2009); see also Melvin Gutterman, *The Contours of Eighth Amendment Prison Jurisprudence: Conditions of Confinement*, 48 SMUL. REV. 373, 395 (1995); Thomas K. Landry, “Punishment” and the Eighth Amendment, 57 OHIO ST. L.J. 1607, 1638 n.176 (1996); Jason D. Sanabria, Note, *Farmer v. Brennan: Do Prisoners Have Any Rights Left Under the Eighth Amendment?*, 16 WHITTIER L. REV. 1113 (1995).

226. For example, Justice Thomas would only recognize as “punishment” conditions imposed by a judge or jury rather than a jailer. *Helling v. McKinney*, 509 U.S. 25, 40 (1993) (Thomas, J., dissenting). Some scholars also argue that even if “deliberate indifference” is shown, this does not necessarily mean the condition was imposed for the purpose of chastising or deterring the prisoner—features they argue are necessary for a condition to qualify as

While all state-created conditions of imprisonment should be thus considered part and parcel of a “punishments” definition, this does not mean that every cruel condition of imprisonment violates the Eighth Amendment. Prison is an inherently cruel environment in that society willfully inflicts pain and suffering. Severely restricting liberty of a person for months or years is a cruel act. But it is not necessarily excessively cruel, nor is it unusual to, for example, imprison someone convicted of an intentional violent crime.

The words “cruel and unusual” should be interpreted to encompass any prison condition that is inhumane or excessively cruel. Scholars have disagreed over the original intent regarding whether “cruel and unusual” was to be translated literally or whether the words were used as a term of art for excessive punishments of any kind regardless of their frequency.<sup>227</sup> But interpreting the Punishments Clause as a simple popularity test leads to untenable results. Disembowelment, for example, should not cease to violate the Eighth Amendment simply because many states or countries suddenly revive the practice.

The Supreme Court’s insight that the Eighth Amendment seems to be directed at preventing that which is excessive—in terms of both fines imposed and punishments inflicted—is correct. Any punishment that denies a minimum human necessity is excessively cruel and inhumane regardless of how frequently it may be employed. Minimum human necessities should be defined to include (though not be limited to) any condition that imposes an unnecessary and high risk of severe harm—regardless of how imminent the risk and regardless of whether the harm ever materializes.

---

“punishment” under the Amendment. *See, e.g.*, Sara L. Rose, “Cruel and Unusual Punishment” *Need Not Be Cruel, Unusual, or Punishment*, 24 CAP. U. L. REV. 827, 829 (1995).

227. *See, e.g.*, LARRY CHARLES BERKSON, *THE CONCEPT OF CRUEL AND UNUSUAL PUNISHMENT* 3–8 (1975); John D. Castiglione, *Qualitative and Quantitative Proportionality: A Specific Critique of Retributivism*, 71 OHIO ST. L.J. 71, 89–98 (2010); Erwin Chemerinsky, *The Constitution and Punishment*, 56 STAN. L. REV. 1049, 1063–65 (2004); Laurence Claus, *Methodology, Proportionality, Equality: Which Moral Question Does the Eighth Amendment Pose?*, 31 HARV. J.L. & PUB. POL’Y 35, 45 (2008); Richard S. Frase, *Excessive Prison Sentences, Punishment Goals, and the Eighth Amendment: “Proportionality” Relative to What?*, 89 MINN. L. REV. 571, 574 (2005); Anthony F. Granucci, “Nor Cruel and Unusual Punishments Inflicted.” *The Original Meaning*, 57 CALIF. L. REV. 839, 839–44 (1969); Donna H. Lee, *Resuscitating Proportionality in Noncapital Criminal Sentencing*, 40 ARIZ. ST. L.J. 527, 528 (2008); Eva S. Nilsen, *Decency, Dignity, and Desert: Restoring Ideals of Humane Punishment to Constitutional Discourse*, 41 U.C. DAVIS L. REV. 111, 157–68 (2007); Alice Ristroph, *Proportionality as a Principle of Limited Government*, 55 DUKE L.J. 263, 301–02 (2005); Carol S. Steiker, *Panetti v. Quarterman: Is There a “Rational Understanding” of the Supreme Court’s Eighth Amendment Jurisprudence?*, 5 OHIO ST. J. CRIM. L. 285, 290 (2007); John F. Stinneford, *Rethinking Proportionality Under the Cruel and Unusual Punishments Clause*, 97 VA. L. REV. 899, 927, 938–52 (2011); Stinneford, *supra* note 216, at 1747, 1770, 1808–10 (2008); Stephanie E. Carlson, Note, *State v. Pack: Proportionality of Sentences—Should It Be a Necessary Factor in Determining Whether a Sentence “Shocks the Conscience of the Court?”*, 40 S.D. L. REV. 130, 141 (1995); Adam M. Gershowitz, Note, *The Supreme Court’s Backwards Proportionality Jurisprudence: Comparing Judicial Review of Excessive Criminal Punishments and Excessive Punitive Damages Awards*, 86 VA. L. REV. 1249, 1297–98 (2000); Note, *The Eighth Amendment, Proportionality, and the Changing Meaning of “Punishments,”* 122 HARV. L. REV. 960, 961 (2009).

“Cruel and unusual” should not be interpreted to mean that the punishment must always be literally infrequent before it will violate the Punishments Clause, but neither should the word “unusual” be utterly disregarded in its literal sense. Rather, the word could be used to clarify the boundaries of what is excessively cruel *when the boundaries are unclear*. If, for example, a defendant has succeeded in showing that a prison condition violates a minimum human necessity, then that condition should be considered cruel and unusual without further need of analysis. However, if the evidence is not overwhelming that the complained-of condition is inhumane or excessively cruel, the word “unusual” in its literal sense could provide further data points in weighing the decision. Relevant data points in that analysis would include both the frequency of the current use of the condition in prisons and whether the use has been consistent over time—and if not, whether inconsistencies were due to concerns over the condition’s inherent cruelty.

Courts could use these data points to weigh the ultimate normative question: whether the conditions are too cruel to survive an Eighth Amendment analysis. If either domestic or international practice has been inconsistent over time due to concerns over the cruelty of the treatment, or if the current domestic or international trend is away from the practice for similar reasons, those factors should weigh in favor of finding the practice cruel and unusual. While international data is relevant, domestic evidence should weigh more heavily in the balance to ensure that U.S. law is in line with its own societal values. This alternative means of Eighth Amendment analysis of prison conditions would be truer to both the text and the purpose of the Punishments Clause than the current analytic framework.

*D. Why Solitary Confinement Is “Cruel and Unusual” Despite Its  
Frequent Use in the United States*

While this Article argues for a different standard for measuring what is cruel and unusual in terms of prison conditions, solitary confinement should qualify as a violation of the Punishments Clause under either the present or a modified interpretation of the Eighth Amendment.

1. Cruel and Unusual Under Today’s Standard

The analysis under today’s standard would focus on whether solitary-confinement conditions meet the two-prong test of (1) sufficiently serious cruelty (2) imposed with “deliberate indifference.”<sup>228</sup> Although almost all lower courts have refused to find solitary confinement cruel and unusual unless aimed at specific vulnerable categories such as the severely mentally ill,<sup>229</sup> solitary-confinement conditions in the United States do satisfy both prongs of the test.

First, the evidence previously discussed concerning the serious deleterious effects of prolonged solitary confinement on the psyche and on the body show that social contact and sensory stimulation is a “minimal life necessity”—just like food,

---

228. *Farmer v. Brennan*, 511 U.S. 825, 834 (1994).

229. *See, e.g., Madrid v. Gomez*, 889 F. Supp. 1146 (N.D. Cal. 1995).

sanitation, and medical care (the examples cited in *Rhodes*<sup>230</sup>), and “warmth or exercise” (examples added by *Wilson*<sup>231</sup>). As one expert explained: “Human beings require some degree of social interaction and productive activity to establish and sustain a sense of identity and to maintain a grasp on reality.”<sup>232</sup>

The efforts of some to distinguish psychological harm as somehow less serious than physical harm in an Eighth Amendment analysis is flawed on several grounds. First, the ongoing social-neuroscience research clarifies that the type of severe psychological deterioration observed in solitary confinement is due to physical harms imposed on the brain.<sup>233</sup> Second, these physical alterations in the brain can lead to what society would consider physical harms, such as disease and death.<sup>234</sup> Third, the disturbed behaviors can also lead to immediately obvious physical harm, including self-mutilation and suicide.<sup>235</sup> Fourth, if the purpose of cruel and unusual punishments is to protect the prisoner from tortuous punishments, most would agree that psychological tortures can be far worse than physical ones. Many prefer a broken arm to a broken mind.

The fact that any particular inmate in solitary confinement may not yet be exhibiting severe symptoms of psychological deterioration is irrelevant. *Helling* clarified that a risk of serious injury can constitute cruel and unusual punishment.<sup>236</sup> There is no need to wait for an inmate to become insane to acknowledge that solitary confinement is cruel and unusual. The fact that serious risks may never materialize in serious harm (or that harm may not be imminent) is not dispositive for either prong of the test.<sup>237</sup> Although it is clear that some populations are at greater risk of harm than others (juveniles and the already mentally ill, for instance), no person is immune to serious risk—as evidenced by the extremely high percentages of those affected in prisons and the studies of psychologically screened astronauts and explorers.<sup>238</sup>

The question is “whether society considers the risk that the prisoner complains of to be so grave that it violates contemporary standards of decency to expose *anyone* unwillingly to such a risk.”<sup>239</sup> Denial of minimal life necessities has been defined as cruel and unusual punishment precisely because such denial meets that standard. Civilized society will not tolerate neglecting the most basic human needs of those who are necessarily under the state’s care due to the state’s deprivation of their

---

230. *Rhodes v. Chapman*, 452 U.S. 337, 347–48 (1981).

231. *Wilson v. Seiter*, 501 U.S. 294, 304 (1991).

232. *Solitary Confinement Hearing I*, *supra* note 8, at 146 (written statement of Shenna Bellows, Executive Director, Zachary L. Heiden, Legal Director, and Alysia Melnick, Public Policy Counsel, American Civil Liberties Union of Maine) (quoting *An Act To Ensure Humane Treatment for Special Management Prisoners: Hearing on L.D. 1611 Before the J. Comm. on Criminal Justice & Pub. Safety*, 124th Leg., 2d Reg. Sess. (Me. 2010) [hereinafter *Maine Hearing*] (statement of Dr. Stuart Grassian)).

233. *See supra* notes 105–09 and accompanying text.

234. *See supra* note 110 and accompanying text.

235. *See supra* note 114 and accompanying text.

236. *See Helling v. McKinney*, 509 U.S. 25, 33, 36 (1993).

237. *See id.* at 33.

238. *See supra* notes 138–39 and accompanying text.

239. *Helling*, 509 U.S. at 36 (emphasis in original).

liberty.<sup>240</sup> The scientific evidence discussed above establishes that some degree of social interaction and productive activity is a minimal necessity without which the body, brain, and associated behavior may begin to seriously deteriorate.

The “deliberate indifference” prong of the test is also met. Where injunctive relief is sought, prisoners could certainly show by the time of trial that authorities were aware of either the actual harm or risk of harm caused by solitary confinement. The lawsuit itself would have made them aware even if it had not already been obvious. *Helling* explained that for purposes of injunctive relief, “deliberate indifference[] should be determined in light of the prison authorities’ current attitudes and conduct.”<sup>241</sup> And, according to *Farmer*, the awareness need not be individualized—awareness of a general serious risk involved with solitary confinement is enough.<sup>242</sup>

Thus, even under the arguably flawed current standard, solitary confinement is cruel and unusual—regardless of how usual it may currently be within our system.

## 2. Cruel and Unusual Under a Modified Standard

Under the modified standard proposed, there would be no need to do the deliberate-indifference analysis. Because the state has deprived the prisoners of their ability to care for themselves through imprisonment, the state has intentionally taken on the burden of providing for the prisoners’ basic needs. Thus, any requirement of intent inherent in the word “punishment” or “cruelty” is sufficiently met by the intent to carry out the sentence and take on the necessary obligations of prisoner care.

Because, as outlined above, the science has so clearly established that significant social contacts and opportunity for productive activity are a basic human necessity, there would be no need under the proposed standard to delve any further into the “usualness” of the practice. The evidence of what can happen to the body, brain, and behavior in conditions of extreme isolation; the high rates of prisoners who do severely deteriorate; and the unpredictability of who among the seemingly resilient will be among those who suffer severe harm all indicate a high risk of severe harm. The risk is unnecessary because no vital prison objective requires the extreme conditions employed.<sup>243</sup>

However, if a court were to turn to an “unusualness” analysis, it would also find support for the decision that the practice violates the Eighth Amendment. First, as explained in the history portion of this Article, the United States abandoned prolonged or extreme solitary confinement measures in the nineteenth century because of concerns over their serious mental health implications for the prisoners (as well as cost implications for the institution—though that point would be irrelevant to this part of the analysis).<sup>244</sup> Thus domestic use of solitary confinement has not been consistent over time due to its cruel effects. Second, there is a marked international movement against solitary confinement due to similar concerns.<sup>245</sup>

---

240. See Dolovich, *supra* note 173, at 911–13.

241. *Helling*, 509 U.S. at 36.

242. *Farmer v. Brennan*, 511 U.S. 825, 843–44 (1994).

243. See *infra* Part IV.A.

244. See *supra* Part I.

245. See, e.g., Eur. Comm. for the Prevention of Torture & Inhuman or Degrading Treatment or Punishment, *2nd General Report on the CPT’s Activities Covering the Period 1 January to 31*

Third, there is even the beginning of a movement against the practice in the United States—as evidenced by the stated positions of politicians in the two Senate hearings on the issue in 2012 and 2014 and by reforms in places such as Mississippi and Maine, which will be discussed in the next Part.

Thus, under either the current or a modified standard, common forms of solitary confinement in the United States are cruel and unusual under the Eighth Amendment.

#### IV. ALTERNATIVES

*Texas' administrative segregation units are virtual incubators of psychoses-seeding illness in otherwise healthy inmates and exacerbating illness in those already suffering from mental infirmities.*

– Judge William Justice<sup>246</sup>

##### A. The Policy-Goal Disconnect

Not only is solitary confinement cruel and unusual because it denies minimum life necessities (and is thus illegal regardless of what legitimate policies it might promote), but it also fails to significantly advance relevant legitimate policy goals—including cost savings, institutional safety, public safety, and rehabilitation.

First, as previously mentioned, solitary confinement is far more expensive than available alternatives. For example, in California the annual cost of keeping a prisoner in solitary confinement is estimated as \$71,000–\$78,000, whereas housing a prisoner in the general population for the same period costs approximately \$58,000.<sup>247</sup> In Arizona, the numbers are \$50,000 compared to \$20,000; in Maryland, the cost of solitary confinement is three times greater per prisoner; in Ohio, it is twice as high; in Texas, 45% greater; in Connecticut, nearly twice as high; and in Illinois, it is three times as high.<sup>248</sup> The reasons for this increase in cost include not only space but also staffing issues, because work done by prisoners in other types of prison settings (such as cooking and cleaning) must be done by prison staff.<sup>249</sup> The physical and psychological toll of the environment would also presumably increase medical costs. Note, however, that even if solitary confinement were extremely cost efficient, such efficiency could not be a basis for overriding the prohibition on denying minimal life necessities. It would be cost efficient to starve all prisoners, but the Punishments Clause would not permit it. Cost efficiency is simply one of the multiple policy goals that solitary confinement fails to advance.

---

*December 1991*, pt. 3, para 56, COUNCIL EUR. (Apr. 13, 1992), <http://www.cpt.coe.int/en/annual/rep-02.htm> (stating that solitary confinement can rise to the level of inhuman and degrading treatment and should be as short as possible); Jules Lobel, *Prolonged Solitary Confinement and the Constitution*, 11 U. PA. J. CONST. L. 115, 122–23 (2008).

246. *Ruiz v. Johnson*, 37 F. Supp. 2d 855, 907 (S.D. Tex. 1999), *rev'd sub nom. Ruiz v. United States*, 243 F.3d 941 (5th Cir. 2001).

247. *Solitary Confinement Hearing I*, *supra* note 8, at 258 (written statement of Geoffrey A. Gaskins, Project Director, California Interfaith Campaign on Solitary Confinement).

248. *Id.* at 130 (written statement of American Civil Liberties Union).

249. *See id.*

Second, the evidence does not show that solitary confinement reduces institutional violence. A study performed in 2003 found solitary-confinement units had no effect on prisoner-on-prisoner violence in Arizona, Illinois, and Minnesota; they had no impact in Minnesota, they caused an increase in such violence in Arizona, and they only had some deterrent effect on prisoner-on-staff violence in Illinois.<sup>250</sup> As will be discussed further, by June 2012 Mississippi witnessed a 50% decrease in violence after eliminating most of its solitary-confinement units, and Maine witnessed no increase in violence despite a 70% reduction of such units.<sup>251</sup>

Finally, solitary confinement has not proved to be an effective means of rehabilitating the prisoner or deterring future crime. As discussed above, rather than helping prisoners rehabilitate, solitary confinement may actually cause serious physical and psychological deterioration.<sup>252</sup> Studies also show that prisoners who reenter society directly from solitary confinement have a higher recidivism rate than those who spend time in the general population after solitary confinement and before release. The differential in a national study was 64% versus 41%.<sup>253</sup> Also, in a study of Washington inmates released over a one-year period that controlled for criminal history and mental health, those that had been released directly from a supermax facility were significantly more likely to commit felonies and crimes against individuals.<sup>254</sup>

Indeed, the evidence suggests that solitary confinement may make the public less safe, because such isolation may “severely impair[] the inmate’s capacity to reintegrate into the broader community upon release from imprisonment.”<sup>255</sup> As one expert noted, “95% of all incarcerated individuals are eventually released, some directly out of [solitary confinement] settings. We have succeeded in making those individuals as sick, as internally chaotic, as we possibly can.”<sup>256</sup>

---

250. Chad S. Briggs, Jody L. Sundt & Thomas C. Castellano, *The Effect of Supermaximum Security Prisons on Aggregate Levels of Institutional Violence*, 41 CRIMINOLOGY 1341, 1341, 1365–66 (2003).

251. See *infra* Part IV.B.2–3.

252. See *supra* Part II.A.

253. JOHN J. GIBBONS & NICHOLAS DE B. KATZENBACH, COMM’N ON SAFETY & ABUSE IN AM.’S PRISONS, CONFRONTING CONFINEMENT 55 (2006), available at [http://www.vera.org/sites/default/files/resources/downloads/Confronting\\_Confinement.pdf](http://www.vera.org/sites/default/files/resources/downloads/Confronting_Confinement.pdf).

254. David Lovell, L. Clark Johnson & Kevin C. Cain, *Recidivism of Supermax Prisoners in Washington State*, 53 CRIME & DELINQ. 633, 644–45 (2007). “A 2007 study of Washington State’s prison population found that 69 percent of those who were released directly to the community from solitary—a dishearteningly regular practice—committed new crimes that landed them back in jail within three years, compared with 46 percent of those who had been allowed to readjust to the general prison population before release.” Editorial, *Solitary Is Cruel and Unusual*, SCI. AM., Aug. 2013, at 10, 10.

255. Grassian, *supra* note 13, at 333.

256. *Solitary Confinement Hearing I*, *supra* note 8, at 146 (written statement of Shenna Bellows, Executive Director, Zachary L. Heiden, Legal Director, and Alysia Melnick, Public Policy Counsel, American Civil Liberties Union of Maine) (quoting *Maine Hearing*, *supra* note 232 (statement of Dr. Stuart Grassian)).

*B. Successful and Experimental Models*

As these negative effects of solitary confinement have become increasingly publicized and litigated, officials in some places have taken note and attempted reforms. This subpart will examine three examples: Britain, Maine, and Mississippi.

## 1. Great Britain

Great Britain began its reforms at approximately the same time that the United States was beginning its dive into more and more use of solitary confinement. Thus, it is a particularly helpful example in terms of looking at the longer-term effects of reform.

In the 1970s, Britain was dealing with a severe violence problem in its prisons and was making heavy use of solitary confinement. Because the costs were so high and the method did not seem to help decrease violence, authorities opted for reform. The philosophical basis for the new approach was “the simple observation that prisoners who are unmanageable in one setting often behave perfectly reasonably in another.”<sup>257</sup> Officials decided to focus on violence prevention rather than punishment for past violent behavior. “The British noticed that problem prisoners were usually people for whom avoiding humiliation and saving face were fundamental and instinctive. When conditions maximized humiliation and confrontation, every interaction escalated into a trial of strength. Violence became a predictable consequence.”<sup>258</sup>

Authorities found that they were able to reduce prison violence by giving prisoners increased freedoms, incentives, and opportunities rather than threats of harsher punishments and restraints. A *New Yorker* article explained:

They reduced isolation and offered them opportunities for work, education, and special programming to increase social ties and skills. The prisoners were housed in small, stable units of fewer than ten people in individual cells, to avoid conditions of social chaos and unpredictability. In these reformed “Close Supervision Centres,” prisoners could receive mental-health treatment and earn rights for more exercise, more phone calls, “contact visits,” and even access to cooking facilities. They were allowed to air grievances. And the government set up an independent body of inspectors to track the results and enable adjustments based on the data.<sup>259</sup>

The results have been impressive. The use of long-term isolation in England is now negligible. “In all of England, there are now fewer prisoners in ‘extreme custody’ than there are in the state of Maine.”<sup>260</sup>

The final comment above regarding England (with a population of fifty million) having fewer prisoners in solitary confinement than the state of Maine (with a

---

257. Gawande, *supra* note 87, at 44.

258. *Id.*

259. *Id.*

260. *Id.*

population of 1.2 million) was actually one of the factors that spurred a movement for change in Maine.<sup>261</sup>

## 2. Maine

When initial attempts to pass legislation reforming solitary confinement policies in Maine failed, the legislature authorized a study of the issue by representatives from both the Maine Department of Health and Human Services and the Maine Department of Corrections. The study included the following findings:

- Prisoners were subjected to solitary confinement for “extraordinary” periods of time while officials investigated whether the prisoner was the victim or the perpetrator of a particular offense;
- Prisoners were sometimes kept in solitary confinement simply because the prison could not find a bed for them in a general population unit;
- The prison underutilized alternative sanctions and incentives for controlling behavior, which led to overuse of solitary confinement;
- Prisoners were not provided with assistance in responding to accusations of rule-breaking, which was especially difficult for prisoners with mental illness or cognitive impairment;
- A number of individuals with apparent symptoms of serious mental illness were housed in the Special Management Unit, despite policies prohibiting such housing;
- The prison had too few mental health staff, and mental health screenings and evaluations were inadequately documented;
- The report noted that reforms might have costs, but that those costs needed to be viewed in light of the countervailing costs of recidivism, harm to communities, public safety, and “the simple humanity of what we do.”<sup>262</sup>

As a consequence of the study, a newly appointed corrections commissioner implemented a series of reforms to limit the use of solitary confinement both in terms of the number of prisoners and the length of each stay. Those reforms included the following:

- Solitary confinement in Maine is now reserved for the most serious offenses, and most prisoners are punished in their own units (by losing privileges or being confined to their own cell within the general population);
- A prisoner cannot be sent to the Special Management Unit for more than three days without the approval of the Commissioner himself;

---

261. *Solitary Confinement Hearing I*, *supra* note 8, at 145 (written statement of Shenna Bellows, Executive Director, Zachary L. Heiden, Legal Director, and Alysia Melnick, Public Policy Counsel, American Civil Liberties Union of Maine).

262. *Id.* at 150–51 (quoting MENTAL HEALTH/SUBSTANCE ABUSE FOCUS GRP., STATE BD. OF CORR., FINAL REPORT OF REVIEW OF DUE PROCESS PROCEDURES IN SPECIAL MANAGEMENT UNITS AT THE MAINE STATE PRISON AND THE MAINE CORRECTIONAL CENTER 4–13 (2011)).

- When a prisoner is sent to the Special Management Unit, his bed remains open until he returns;
- Prisoners in the Special Management Unit have the opportunity to have their punishment time cut in half through good behavior;
- Prisoners in the Special Management Unit have an opportunity to interact with other prisoners and with mental health staff in a group setting, and they have an opportunity to attend group religious services. Attendance in group treatment sessions earns the prisoner additional recreation time, which can be used indoors or outdoors;
- Prisoners are more closely monitored for changes in mental health status;
- Prisoners in the Special Management Unit have access to televisions, radios and reading material, which alleviate some of the oppressive qualities of isolation.<sup>263</sup>

These changes resulted in a 70% reduction in the use of solitary confinement in the Maine State Prison—with no accompanying increase in violence toward prisoners or guards.<sup>264</sup>

### 3. Mississippi

In Mississippi, Unit 32 was a 1000 bed maximum-security facility where all inmates were in lockdown in single cells for twenty-three to twenty-four hours per day.<sup>265</sup> Lawsuits were pressuring the state to improve conditions at Unit 32; in the spring and summer of 2007, violence culminated with three homicides, one suicide, and many disruptive incidents.<sup>266</sup> The Commissioner explained that the cultural norm of Unit 32 had become “disruptive as there were no incentives to change behavior. As one offender told me ‘you took all our hope and we have nothing to lose.’”<sup>267</sup>

The Commissioner was convinced change was necessary by the deteriorating and dangerous environment as well as by the “increased litigation.”<sup>268</sup> Partnering with experts from the National Institute of Corrections and the American Civil Liberties Union, the Department of Corrections developed a classification model using objective criteria for placement in administrative segregation and requiring an individualized plan so that every prisoner understood what steps he must take to be released from solitary and how to increase his privileges. Counseling and education programs were implemented, including group counseling sessions for those in solitary (with some innovative methods of restraint to ensure safety). Special steps were taken to better care for the needs of mentally ill inmates, including employing specially trained correctional officers for those units housing them.<sup>269</sup> Group

---

263. *Id.* at 151.

264. *Id.* at 152.

265. *Id.* at 54 (written statement of Christopher Epps, Commissioner of Corrections for the State of Mississippi).

266. *Id.* at 55.

267. *Id.* at 54–55.

268. *Id.* at 55.

269. *Id.*

recreational and congregate dining opportunities were also provided to those that had been in twenty-three to twenty-four hour isolation.<sup>270</sup>

Due to these types of reforms, Mississippi was able to close Unit 32 in 2010, resulting in annual savings of approximately \$5.6 million.<sup>271</sup> Those housed in solitary confinement dropped by 75.6% between 2007 and 2012.<sup>272</sup> As of June 2012, Mississippi housed 316 prisoners in solitary confinement units—down from 1300 in 2007. Those 316 constituted 1.4% of the Mississippi prison population.<sup>273</sup> This reduction not only did not cause more violence—there was a 50% drop in violent incidents that the Commissioner credits to “[t]he administrative segregation reduction along with the implementation of faith-based and other programs.”<sup>274</sup> He also credited the state’s 27% recidivism rate over a three-year period (one of the lowest in the country) to the programs implemented in the wake of these reforms, including “Adult Basic Education, vocational school, alcohol and drug programs, fatherhood education, and pre-release programs, as well as [the state’s] reentry programs.”<sup>275</sup>

In oral testimony before a Senate committee, Commissioner Epps explained that there were three keys to his reforms. First, there must be a genuine, documented classification system. Second, there must be rehabilitative programs in place. Third, leadership must have the correct vision of who belongs in solitary confinement—in Mississippi, he said, any prisoner’s placement in solitary has to be approved by himself and a deputy director.<sup>276</sup> Having strict guidelines for placing people in solitary confinement, he explained, can help distinguish between “who you are afraid of” versus “who you are mad at.”<sup>277</sup> Only the former, he implied, should spend any time in isolation units.

#### CONCLUSION: PROPOSED CHANGES AND REAWAKENING TO REHABILITATION

*If you treat people like animals, that’s exactly the way they’ll behave.*

– Christopher Epps, Commissioner of Corrections for the State of Mississippi<sup>278</sup>

From the above examples it is clear that there are many avenues a state could take to improve conditions and outcomes in this nation’s prisons. States should be free to experiment with a wide variety of approaches, but “[t]here are limits to the extent to which a [state] may conduct . . . experiments at the expense of the dignity and personality’

---

270. AMNESTY INT’L USA, STATEMENT PREPARED FOR THE HEARING ON REASSESSING SOLITARY CONFINEMENT (2012), available at <http://solitarywatch.com/wp-content/uploads/2012/06/amnesty-international-usa.pdf>.

271. *Solitary Confinement Hearing I*, *supra* note 8, at 56.

272. *Id.* at 55.

273. *Id.* at 55–56.

274. *Id.* at 56.

275. *Id.*

276. *Id.* at 19 (statement of Christopher Epps, Commissioner of Corrections for the State of Mississippi).

277. *Id.* at 56 (written statement of Christopher Epps, Commissioner of Corrections for the State of Mississippi).

278. Goode, *supra* note 21.

of the individual.”<sup>279</sup> What are those limits? What are the minimum reforms necessary to avoid cruel and unusual punishment in the context of solitary confinement?

For a system of solitary confinement to survive Eighth Amendment scrutiny, it cannot deny a minimum human necessity—and creating environments that present a high risk of severe and unnecessary harm denies a minimum human necessity. It may be necessary, in the interest of institutional safety, to place a prisoner alone in a cell temporarily—but being housed alone should not entail denial of access to meaningful social relationships, nor should it deny access to all rehabilitative programs, nor should it require excessive sensory deprivation.

Experts who have studied prisoners in solitary confinement have explained that “[h]uman beings require some degree of social interaction and productive activity to establish and sustain a sense of identity and to maintain a grasp on reality.”<sup>280</sup> Moreover,

isolation does not need to be complete in order to be dangerously debilitating; it is the absence of “meaningful” social interaction that destroys a person’s ability to cope. The occasional sight of a guard or sound of a distant human voice does not qualify, and the increased use of modern technology (surveillance cameras, timed lights, and remote locks) . . . have only added to prisoners’ isolation.<sup>281</sup>

As demonstrated by the science, extreme isolation and sensory deprivation measures put all inmates at a high risk of severe harm by denying basic human necessities. As demonstrated by the Britain, Maine, and Mississippi examples, such steps are also contrary to any legitimate policy goals.

Whether “meaningful social relationships” are provided through regular counseling, group therapy, outside visitors, participation in rehabilitation programs that involve human interaction, or other forms of prisoner interaction should be left to state and prison authorities, within the bounds of what science continues to indicate is humane. Likewise, precisely how sensory-deprivation issues are addressed should not be dictated by the Constitution; given the current science, however, it is likely that prisoners are entitled to more time outside of the cell, some opportunity for meaningful participation in rehabilitative programs, and some time outdoors during daylight hours.<sup>282</sup>

Finally, even under these improved conditions, solitary confinement should not be indefinite (which seems to needlessly add to a prisoner’s stress and risk of decline)<sup>283</sup>

---

279. *Poe v. Ullman*, 367 U.S. 497, 555 (1961) (Harlan, J., dissenting) (alteration in original) (quoting *Skinner v. Oklahoma*, 316 U.S. 535, 546 (1942) (Jackson, J., concurring)).

280. *Solitary Confinement Hearing I*, *supra* note 8, at 146 (written statement of Shenna Bellows, Executive Director, Zachary L. Heiden, Legal Director, and Alysia Melnick, Public Policy Counsel, American Civil Liberties Union of Maine) (quoting *Maine Hearing*, *supra* note 232 (statement of Dr. Terry Kupers)).

281. *Id.* (citing *Maine Hearing*, *supra* note 232 (statements of Dr. Stuart Grassian and Dr. Terry Kupers)).

282. *See supra* Part II.

283. *See* Thomas B. Benjamin & Kenneth Lux, *Constitutional and Psychological Implications of the Use of Solitary Confinement: Experience at the Maine State Prison*, 9 CLEARINGHOUSE REV. 83, 84 (1975) (finding that almost every prisoner being held indefinitely in an isolation unit in Maine had attempted or contemplated suicide in addition to other

or last for an unreasonable length of time. Studies have shown that even when there is not total isolation, increased time spent with a restricted group of people in restricted circumstances will increase the risk of deleterious effects.<sup>284</sup> The Supreme Court has likewise acknowledged that “the length of confinement cannot be ignored in deciding whether the confinement meets constitutional standards.”<sup>285</sup>

However, science currently provides no clear basis for setting a precise number of days that is too long. It has been established that seven days in isolation is sufficient to cause a decline in brain activity.<sup>286</sup> “Mental health experts conclude that ‘[n]o study of the effects of solitary or supermax-like confinement that lasted longer than 60 days failed to find evidence of negative psychological effects.’”<sup>287</sup> And “for just about all prisoners, being held in isolated confinement for longer than 3 months causes lasting emotional damage if not full-blown psychosis and functional disability.”<sup>288</sup> But these studies were not performed under the modified conditions that this Article argues are necessary to meet constitutional standards. The U.N. special rapporteur on torture, who advocates banning prolonged solitary confinement in the United States and elsewhere, admitted that he “more or less arbitrarily defined that as anything beyond 15 days.”<sup>289</sup>

Rather than set an arbitrary number as a constitutional standard, states should evaluate the risk of physical and mental decline to their inmates given their own solitary confinement policies and set reasonable boundaries of which inmates are made aware. Inmates should know why they are being housed in restricted conditions, for how long, and any steps necessary on their part to achieve more freedoms. This would alleviate the unnecessary stress and increased risk of decline caused by indefinite confinement; it would also address due process concerns beyond the scope of this Article.<sup>290</sup>

---

self-destructive behavior); Maximilienne Bishop, Note, *Supermax Prisons: Increasing Security or Permitting Persecution?*, 47 ARIZ. L. REV. 461, 469 (2005) (explaining that even for the psychologically resilient “severe psychological pain . . . results due to prolonged solitary confinement, especially if the isolation is indefinite in duration”); Robert M. Ferrier, Note, “*An Atypical and Significant Hardship*”: *The Supermax Confinement of Death Row Prisoners Based Purely on Status—A Plea for Procedural Due Process*, 46 ARIZ. L. REV. 291, 303 (2004) (“Health professionals and American courts have recognized that indefinite solitary confinement leads almost inevitably to serious, negative psychological effects for almost any inmate.”).

284. See *supra* note 138 and accompanying text.

285. *Hutto v. Finney*, 437 U.S. 678, 686 (1978).

286. SHARON SHALEV, A SOURCEBOOK ON SOLITARY CONFINEMENT 20 (2008), available at [http://solitaryconfinement.org/uploads/sourcebook\\_web.pdf](http://solitaryconfinement.org/uploads/sourcebook_web.pdf).

287. Lobel, *supra* note 245, at 118 (alteration in original).

288. Terry A. Kupers, *What To Do with the Survivors? Coping with the Long-Term Effects of Isolated Confinement*, 35 CRIM. JUST. & BEHAV. 1005, 1005–06 (2008).

289. Rodriguez, *supra* note 20; see also U.N. News Centre, *Solitary Confinement Should Be Banned in Most Cases*, UN Expert Says, (Oct. 18, 2011), [http://www.un.org/apps/news/story.asp?NewsID=40097&Cr=torture&Cr1=#.VHObrovF\\_bM](http://www.un.org/apps/news/story.asp?NewsID=40097&Cr=torture&Cr1=#.VHObrovF_bM).

290. See *Wilkinson v. Austin*, 545 U.S. 209 (2005); Angela A. Allen-Bell, *Perception Profiling & Prolonged Solitary Confinement Viewed Through the Lens of the Angola 3 Case: When Prison Officials Become Judges, Judges Become Visually Challenged, and Justice Becomes Legally Blind*, 39 HASTINGS CONST. L.Q. 763, 766 (2012).

These reforms would still allow great room for state experimentation without crossing the constitutional boundaries drawn by the Eighth Amendment. The reforms would also immeasurably improve the mental and physical health of inmates. The consequences of this improved health, as demonstrated by the Mississippi reforms, may include reducing prison violence and recidivism—thus promoting safer prisons and a safer public. By reducing the unnecessary use of solitary confinement through stricter time boundaries, states would also save money and save lives.