

REGULATING PRISONS OF THE FUTURE: A PSYCHOLOGICAL ANALYSIS OF SUPERMAX AND SOLITARY CONFINEMENT

CRAIG HANEY* AND MONA LYNCH**

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* Professor of Psychology, University of California, Santa Cruz. B.A., University of Pennsylvania; M.A., Ph.D., Stanford University; J.D., Stanford Law School.

** Assistant Professor, School of Justice Studies, Arizona State University. B.A., University of California, Santa Cruz; M.A., Stanford University; Ph.D., University of California, Santa Cruz.

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In this Orwellian age, punishment that endangers sanity, no less than physical injury by the strap, is prohibited by the Constitution. Indeed, we have learned to our sorrow in the last few decades that true inhumanity seeks to destroy the psyche rather than merely the body.¹

The mental, physical, and emotional status of individuals, whether in or out of custody, do deteriorate and there is no power on earth to prevent it. We decline to enter this uncharted bog. . . . The Constitution does not require that prisoners, as individuals or as a group, be provided with any and every amenity which some person may think is needed to avoid mental, physical, and emotional deterioration.²

INTRODUCTION

When California Governor George Deukmejian several years ago dedicated what was then the state's newest prison—a massive, windowless “security housing unit” (SHU) designed to segregate and isolate over a thousand prisoners from the rest of the prison system and from one another—he boasted that the Pelican Bay facility was “a state-of-the-art prison that will serve as a model for the rest of the nation. . . .”³ A California prison spokesman would later confirm that “we’ve had delegations here from other states and even other countries” studying the prison, one that kept prisoners confined to their cells almost twenty-three hours a day and minimized all forms of human contact through the use of technologically sophisticated locking and monitoring devices.⁴ News commentators closely followed the legal case that decided the constitutionality of the prison because they believed the proceedings might well “determine the shape of American penology in the 21st century.”⁵ Even the federal district court judge whose written opinion criticized the operation of the facility noted that it was a “prison of the future”⁶ and acknowledged that the prisoners’

1. *Sostre v. McGinnis*, 442 F.2d 178, 208 (2d Cir. 1971)(Feinberg, J., dissenting).

2. *Newman v. Alabama*, 559 F.2d 283, 291 (5th Cir. 1977).

3. *California Dedicates New High-Tech Max Security Prison*, CORRECTIONS DIGEST, June 27, 1990, at 9.

4. John Roemer, *High-Tech Deprivation Pelican Bay Prison Was Fine-Tuned To Isolate Gang Leaders, But Is It Instead Turning Out Dangerous Ex-Cons?* SAN JOSE MERCURY NEWS, June 7, 1992, at 16 (quoting Lt. Al Deines).

5. Claire Cooper, *Prison on Trial: Inmates Allege High-Tech Torture*, SACRAMENTO BEE, Sept. 18, 1993, at A1.

6. *Madrid v. Gomez*, 889 F. Supp. 1146, 1155 (N.D. Cal. 1995). Despite serving as a putative model for the rest of the nation, more than 200 prisoner complaints concerning Pelican Bay were filed with the United States District Court in less than two years of the prison's operation. Chief Judge Thelton Henderson took the unusual step of meeting with the warden and the state attorney general's office in response to the dramatic number of

claims of cruel and unusual punishment had "generated considerable attention . . . because the Pelican Bay SHU is considered a state-of-the-art, 'modern day' SHU, and thus a potential forerunner for other similar units around the country."⁷

As one of the first and most visible of these "super-maximum security" facilities, the Pelican Bay SHU in Crescent City, California was one of the very few to attract media attention.⁸ The legal challenge to conditions in California's "supermax" resulted in a strongly worded opinion in which the federal court condemned certain features of the prison but left the basic regimen of segregation and isolation largely intact. Although the court concluded that this kind of confinement "may press against the outer bounds of what most humans can psychologically tolerate,"⁹ the judge refrained from ordering any substantial modifications in the overall conditions that prevailed inside this supermax prison. To many observers, and to correctional officials hoping to emulate the California model, this seemed to provide precisely the kind of constitutional imprimatur needed to move forward and make this "prison of the future" a reality in various jurisdictions across the country.

The SHU at Pelican Bay thus appears to be at the cutting-edge of an extraordinarily important yet little-debated correctional trend: the increasingly widespread use of long-term and intensely segregated confinement supposedly reserved for the system's most troublesome offenders. Such confinement typically takes place inside newly-created, specialized housing units devoted exclusively to the task of establishing and maintaining previously unheard-of conditions of restricted movement and social isolation. Despite the dramatic shift in correctional philosophy that this trend represents and the extraordinary public expense that it has incurred, there has been surprisingly little public discussion or political debate about the wisdom of this new approach to prison punishment. Notwithstanding the potential damage to prisoners incarcerated for long periods of time in these segregation units and the potential risks to those members of the public who will eventually interact with some of the most adversely affected prisoners once they are released, few legal challenges have been lodged against these new policies and little or no systematic expert commentary has appeared analyzing the psychological and correctional consequences of this kind of penal confinement.

complaints the District Court had received, eventually leading to a class action lawsuit concerning conditions at the prison. *Id.* The first author (Haney) was one of several expert witnesses who testified about the psychological effects of confinement in this environment at the federal trial conducted before Judge Henderson in late 1993.

7. *Id.* at 1261.

8. See, e.g., Leslie White, *Inside the Alcatraz of the '90s*, 12 CAL. LAW., Apr. 1992, at 42; Nat Hentoff, *Buried Alive in American Prisons; Charles Dickens's Report to Zoe Baird*, THE WASH. POST, Jan. 9, 1993, at A21; Howard Mintz, *Is Pelican Bay Too Tough?* THE RECORDER, Sept. 19, 1991.

9. *Madrid v. Gomez*, 889 F. Supp. at 1267.

Indeed, although solitary confinement has a long and, at times, controversial history in the United States,¹⁰ a new consensus has emerged quietly over the last few decades among prison policymakers. In part in response to increasing pressures in badly overcrowded prison systems and the absence of resources with which to attempt alternative approaches, correctional administrators are turning to aggressive policies of punitive segregation in the hope of enhancing their control over prisoners.¹¹ The invention of a new and supposedly improved penal form—"hi-tech maxi-maxi" prisons devoted exclusively to the task of long-term segregated confinement—has given them a unique and (they argue) effective weapon in this war against unwieldy numbers of unruly prisoners.¹² By 1991, some version of these "supermax" prisons featuring extreme segregation and isolation was functioning in 36 states, with many others in the planning stages.¹³ In addition, a newly opened, highly restrictive, modern "control unit" has apparently committed the federal penitentiary system to the use of this penal form for some time to come.¹⁴ Although these trends have occurred quickly and quietly, they have had an enormous impact on American corrections. It is likely that at no point in the modern history of imprisonment have so many prisoners been so completely isolated for so long a period of time in facilities designed so completely for the purpose of near total isolation.

In this Article, we provide a comprehensive review of the existing literature on the effects of solitary confinement and punitive segregation and a discussion of the recent U.S. case law limiting its use in state and federal prisons. We address the psychological question of whether solitary confinement represents a distinct and distinctly worse form of incarceration than maximum security imprisonment generally. After providing a brief history of solitary confinement as legal punishment, we look in detail at its

10. See *infra* notes 28-71 and accompanying text.

11. For general discussions of the prevalence of solitary confinement in modern corrections as well as descriptions of some of the specific conditions subsumed by the term, see ROSEMARY L. O'BRIEN, SPECIAL HANDLING UNITS, FORUM ON CORRECTIONS RESEARCH, Sept. 1992, at 11. For an especially sympathetic view of these developments, see David Ward, *Control Strategies for Problem Prisoners in American Penal Systems*, in PROBLEMS OF LONGTERM IMPRISONMENT 74 (Anthony Bottoms & Roy Light, eds., 1987).

12. Craig Haney, *Infamous Punishment: The Psychological Effects of Isolation*, 8 THE NAT'L PRISON PROJECT J. 3 (1993) [hereinafter Haney, *Infamous Punishment*]; Russ Immarigeon, *The Marionization of American Prisons*, 7 THE NAT'L PRISON PROJECT J. 1 (1992). Human Rights Watch has concluded that "confinement in 'maxi-maxis' is administered by prison officials without independent supervision and leads to a situation in which inmates may in fact be sentenced twice: once by the court, to a certain period of imprisonment; and the second time by the prison administration, to particularly harsh conditions." HUMAN RIGHTS WATCH, PRISON CONDITIONS IN THE UNITED STATES 3 (1991).

13. Editorial, *Inside the Super-Maximum Prisons*, THE WASH. POST, Nov. 24, 1991, at C6.

14. Robert Perkinson, *Shackled Justice: Florence Federal Penitentiary and the New Politics of Punishment*, SOC. JUST. 117 (1994); Francis X. Clines, *A Futuristic Prison Awaits the Hard-Core 400*, N.Y. TIMES, Oct. 17, 1994, at A2.

psychological effects and focus especially on the threat it poses for the mental health of prisoners. We will suggest that the scholarly literature on this question is clear and that there is sufficient empirical justification to regard solitary confinement as a unique correctional environment that warrants special legal status. We turn next to a discussion of the way in which the courts have treated this issue, both historically and through the lens of contemporary legal doctrine. We will argue that constitutional doctrines currently governing solitary confinement fail to recognize the nature and magnitude of the psychological trauma that can be inflicted by this form of punishment and, therefore, that they fail to adequately regulate its use by properly limiting the nature and duration of prisoners' exposure to such confinement. We conclude by proposing a series of remedies to these legal shortcomings in the form of model regulations for the use of solitary confinement and punitive isolation.

I.

ON THE USE OF SOLITARY CONFINEMENT

Historically, the use of solitary confinement in correctional settings has been a continuing point of contention between prison administrators, mental health professionals, and legal decision makers. When British humanitarians debated the proper form of prison life in the 18th century, they touted solitary confinement for its powerful effect.¹⁵ The English jurist William Paley wrote that solitary confinement "would augment the terror of the punishment,"¹⁶ and many believed that this enhanced punishment would serve as a greater deterrent and increase its reformatory effect.¹⁷ Penologists were also enamored of the orderliness that solitary confinement permitted them to impose upon the prison regime, although one historian noted that the rigid system of "perfect order and perfect silence" in operation at Petonville prison resulted in "twenty times more cases of mental disease than in any other prison in the country."¹⁸ Indeed, reformers of England's harsh system of capital punishment thought they had found in

15. Solitary confinement was advocated as what one historian has called "reclamation," a technique intended to effect "a deeper change in the offender's psyche" than that produced by the rehabilitative aspects of mere hard labor. Adam J. Hirsch, *From Pillory to Penitentiary: The Rise of Criminal Incarceration in Early Massachusetts*, 80 MICH. L. REV. 1179, 1209 (1982).

16. WILLIAM PALEY, PRINCIPLES OF MORAL AND POLITICAL PHILOSOPHY 291 (1790).

17. LOUIS P. MASUR, RITES OF EXECUTION: CAPITAL PUNISHMENT AND THE TRANSFORMATION OF AMERICAN CULTURE, 1776-1865 (1989).

18. CHRISTOPHER HIBBERT, THE ROOTS OF EVIL: A SOCIAL HISTORY OF CRIME AND PUNISHMENT 160 (1963). As Martha Duncan observed, "the reformers' preoccupation with order was not entirely rational. . . ." Martha Duncan, *In Slime and Darkness: The Metaphor of Filth in Criminal Justice*, 68 TUL. L. REV. 725, 788 (1994).

solitary confinement "the 'most terrible penalty' short of death that a society could inflict *and* 'the most humane.'"¹⁹

It was not the success of solitary confinement that accounted for its popularity in the late 18th and early 19th centuries. As one commentator of the early use of solitary in the Netherlands observed, this type of imprisonment "appeared not to be successful at all. Again and again reports of insanity, suicide, and the complete alienation of prisoners from social life seriously discredited the new form of punishment."²⁰ Instead, much of the enthusiasm for solitary confinement derived from the underlying view of criminality it reflected. The individualism of the age underscored the hope that criminals could be compelled to change internally, especially when kept isolated from each other and from the influence of the outside social world.²¹ As another Dutch commentator put it, "[m]ind control became a major objective, and solitary confinement fit into this model."²² By maximizing control over its prisoners, solitary confinement was thought to maximize the prison's ability to change or transform them:

Uprooted from his universe, the inmate in solitary confinement gradually becomes aware of his weakness, of his fragility, of his absolute dependence upon the administration, that is, on the "other"; thus he becomes aware of himself as a subject-of-need. This is what can be described as the first stage of *reformation*: transformation of the real subject (criminal) into an "ideal subject" (prisoner).²³

Yet, especially in the early years before the use of solitary confinement became so widespread, courts and jailers remained sensitive to the effects of the "horrible situation of complete and continuous solitude"²⁴ and took steps to mitigate them, even for prisoners who were considered the most dangerous: "Early modern judges had fewer scruples about meting out physical punishments, but they found solitary confinement an unbearable torment."²⁵ Eventually, of course, the fundamental compatibility of solitary

19. MICHAEL JACKSON, *PRISONERS OF ISOLATION: SOLITARY CONFINEMENT IN CANADA* 13 (1983) (emphasis added) (citing JONAS HANWAY, *SOLITUDE IN IMPRISONMENT* 141 (1776)).

20. Herman Franke, *The Rise and Decline of Solitary Confinement: Socio-Historical Explanations of Long-term Penal Changes*, 32 *BRIT. J. CRIMINOLOGY* 125, 128 (1992).

21. See Franke, *supra* note 20, at 140 ("[t]he worldwide enthusiasm for solitary confinement at the beginning of the nineteenth century should. . . be understood as a refutation of the assumption that causes of crime were to be sought in social circumstances. . .").

22. Pieter Spierenburg, *From Amsterdam to Auburn: An Explanation for the Rise of the Prison in Seventeenth-Century Holland and Nineteenth-Century America*, 20 *J. SOC. HIST.* 439, 455 (1987) [hereinafter Spierenburg, *From Amsterdam to Auburn*].

23. DARIO MELOSSI & MASSIMO PAVARINI, *THE PRISON AND THE FACTORY: ORIGINS OF THE PENITENTIARY SYSTEM* 150 (Glynis Cousin trans., Barnes & Noble Books) (1981).

24. PIETER SPIERENBURG, *THE PRISON EXPERIENCE: DISCIPLINARY INSTITUTIONS AND THEIR INMATES IN EARLY MODERN EUROPE* 193 (1991) (internal quotation marks omitted) [hereinafter SPIERENBURG, *THE PRISON EXPERIENCE*].

25. *Id.* at 281.

confinement with other political and ideological transformations ensured its widespread use through much of nineteenth-century Europe.²⁶ This occurred despite the fact that these extreme forms of isolation appeared to lead to "illness, lunacy, and agony"²⁷ for many prisoners subjected to them.

Similarly, Louis Masur noted that "in the United States, the idea of solitary confinement belonged more to the age than to any individual" and that "[b]y the 1770s and 1780s, nearly everyone was abuzz with the possibility of solitary confinement" as a correctional practice.²⁸ Indeed, the great penological debate of the early 19th century turned on this question: whether prisoners should be completely isolated from one another (as they were under the Pennsylvania model) or permitted to engage in silent, congregate labor (as practiced under the model initiated in Auburn, New York). The first block of solitary confinement cells in the Walnut Street jail was authorized by the Pennsylvania legislature in 1790, to house "the more hardened and atrocious offenders."²⁹ Despite recognition by some jurists soon thereafter that solitary confinement was "a greater evil than certain death" and reports in some newspapers that prisoners in solitary "beg, with the greatest earnestness, that they may be hanged out of their misery,"³⁰ Pennsylvania officials were pleased enough with the results to use this form of punishment as the model upon which their large penitentiary was built. Thus, when the Western State Penitentiary was opened in 1826, all of its prisoners were confined in solitary cells.³¹

But when a similar form of solitary confinement was tried in New York, Beaumont and Tocqueville were on hand to record the outcome:

This experiment, of which the favourable results had been anticipated, proved fatal for the majority of prisoners. It devours the victim incessantly and unmercifully; it does not reform, it kills. The unfortunate creatures submitted to this experiment wasted away. . . .³²

26. See MICHEL FOUCAULT, *DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON* (trans. Alan Sheridan) (1977); Franke, *supra* note 20; Spierenburg, *From Amsterdam to Auburn*, *supra* note 22.

27. GEORG RUSCHE & OTTO KIRCHHEIMER, *PUNISHMENT AND SOCIAL STRUCTURE* 137 (1968).

28. MASUR, *supra* note 17, at 80-81.

29. HARRY ELMER BARNES, *THE EVOLUTION OF PENOLOGY IN PENNSYLVANIA* 120 (1927).

30. MASUR, *supra* note 17, at 83.

31. HIRSCH, *supra* note 15, at 1260.

32. See TORSTEN ERIKSSON, *THE REFORMERS, AN HISTORICAL SURVEY OF PIONEER EXPERIMENTS IN THE TREATMENT OF CRIMINALS* 49 (1976) (quoting Beaumont and Tocqueville).

Another historian also termed the Auburn experiment a “hopeless failure that led to a marked prevalence of sickness and insanity on the part of the convicts in solitary confinement.”³³

Numerous states experimented with the Pennsylvania system of complete isolation during the nineteenth century, only to abandon the practice in light of its adverse effects.³⁴ By the end of the century, United States Supreme Court Justice Miller could summarize a hundred years of experience with solitary since the first cells were constructed at Walnut Street this way: “[T]here were serious objections to it. . . and solitary confinement was found to be too severe.”³⁵ Specifically, as Miller recounted:

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.³⁶

Notwithstanding such general condemnation, solitary confinement continued to be part of at least some of the prison sentences that were meted out in a number of American jurisdictions. For example, it was common practice in the nineteenth century to require a death-sentenced prisoner to spend the final months preceding his or her execution date in solitary confinement.³⁷ In some states where solitary confinement was still permitted by statute to be part of a prisoner’s standard sentence, sentencing authorities and prison administrators were afforded much discretion in

33. Harry Elmer Barnes, *The Historical Origin of the Prison System in America*, 12 J. CRIM. L. & CRIMINOLOGY 35, 53 (1921). Barnes also distinguished the Pennsylvania and Auburn systems in terms of the specific conditions of confinement that each imposed. Unlike the Pennsylvania model in which prisoners were placed in two large, roomy cells with provisions for labor and an individual outside yard, Auburn’s solitary confinement cells more closely resembled those used in modern-day prisons—“a single small inside cell without any labor or other adequate provisions for physical exercise.” *Id.*

34. Barnes recounted the following history of adoption and abandonment of the so-called “Pennsylvania system” of complete solitary confinement in the United States:

State	Introduced	Abandoned
Maine	1824	1827
Maryland	1809	1838
Massachusetts	1811	1829
New Jersey	1820	1828
	1833 (reintroduced)	1858
Rhode Island	1838	1844
Virginia	1824	1827

Id. at n. 54.

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

36. *Id.*

37. Thus, a Vermont statute provided:

When execution is not to take place until after six months from date of sentence, the court at the same time shall sentence the respondent to hard labor in the state

deciding whether or not to actually impose it.³⁸ For example, an 1860 Pennsylvania statute providing that prisoners were to be sentenced to “undergo an imprisonment at separate and solitary confinement, at labor, or by simple imprisonment” was still on the books in the early twentieth century.³⁹ The Illinois Supreme Court held that a law encouraging wardens to employ physically capable prisoners in some form of labor did not conflict with a sentencing court’s discretion to prescribe some portion of a prisoner’s sentence to be served in solitary.⁴⁰

Other jurisdictions placed statutory limits on the amount of time a prisoner could be sentenced to solitary confinement. Thus, an 1818 Massachusetts law provided additional punishment for repeat offenders, including “solitary imprisonment, not exceeding 30 days.”⁴¹ At least one state explicitly excluded solitary confinement from the terms of its prison sentences,⁴² and more commonly its imposition was carefully circumscribed. Thus, when the Minnesota legislature in 1868 provided for life imprisonment as an alternative to the death penalty in first degree murder cases, the law specified that the convicted person:

shall be punished by imprisonment at hard labor in the state-prison during the remainder of the term of his natural life, with solitary confinement upon bread and water diet for twelve days in each year during the term, to be apportioned in periods of not

prison or house of correction until three months before the time fixed in the sentence of death for execution thereof, and shall also sentence him to solitary confinement in the state prison or house of correction from the expiration of the sentence to hard labor until the time of execution.

VT. STAT. ANN. § 2007 (1880). See *Rogers v. Peck*, 199 U.S. 425, 432 (1905) (describing the statute).

38. See *Ex parte Geary*, 10 F. Cas. 137, 138 (N.D. Ill. 1871) (noting that “the [Illinois] law provides that the court, in the case of the confinement of a criminal in the penitentiary, shall designate what part of the punishment shall be solitary confinement, and what part shall be hard labor . . . and it is clear that all who are not by the order of the court in solitary confinement are subject to hard labor”); *McCall v. State*, 185 So. 608, 613 (Fla. 1939) (applying a 1927 Florida statute allowing prisoner to be “sentenced to solitary confinement at the discretion of the court”).

39. *In re Spencer*, 228 U.S. 652, 656-57 (1913). The phrase meant nothing more, however, than “imprisonment in the penitentiary or in a suitable county prison.” *Stanton v. Francies*, 95 A. 798 (Pa. 1915).

40. *People v. Hahn*, 83 N.E. 937, 938 (Ill. 1908) (applying a 1903 Illinois statute stating that “the court, in pronouncing sentence, shall designate what portion of time the offender shall be confined to solitary imprisonment, and what portion to hard labor”). Hahn had been sentenced to 15 years imprisonment for murder and challenged the court’s order that the first 24 hours of the sentence be spent in solitary. *Id.*

41. *Commonwealth v. Richardson*, 55 N.E. 988, 989 (Mass. 1900) (citing MASS. GEN. L. ch. 176, §§5-6, year unknown).

42. See, e.g., *State v. Palmieri*, 46 N.E. 2d 318, 321 (Ohio Ct. App. 1938) (sentencing prisoner to “hard labor for not less than one year nor more than twenty years, no part of such time to be kept in solitary confinement”).

exceeding three days' duration each, with an interval of not less than fourteen days intervening each two successive periods.⁴³

It also mandated that "solitary imprisonment in the state-prison is hereby abolished, except for prison discipline."⁴⁴

The special pains of solitary confinement were implicitly acknowledged in other ways as well, as in Ohio laws passed in the 1880s that prohibited corrections officials from "relaxing" a sentence at hard labor "even in the case of disability" but allowed the corrections board to "modify the sentence of the court to solitary confinement, when necessary to prevent serious injury to health" and provided for the transfer of "insane convicts" from solitary to an asylum.⁴⁵

By the turn of the century, recognition of the painful psychological effects of solitary confinement was reflected in other legal decisions. For example, a series of state cases beginning around this time questioned the voluntariness of confessions in which solitary confinement had been used to persuade defendants to talk.⁴⁶ In 1910, the Washington Supreme Court wrote:

The effect of solitary confinement on the mind of a person charged with a crime may be imagined. It is a well-known psychological fact that men and women have frequently confessed to crimes which they did not commit. They have done it sometimes to escape present punishment which had become torture to them; sometimes through other motives; and the object of putting the inmates of this jail in this dark cell in solitary confinement is easily understood.⁴⁷

The effects of solitary confinement also provided the basis for claims of insanity. For example, in one case the defendant managed to escape from the "incurable ward" at San Quentin where he had been held in solitary confinement for 8 years. The prisoner made his way to the dining area of the prison where he attacked another convict. At trial he pled insanity on the basis of the effects of the circumstances under which he had been kept: "Defendant was allowed to show very fully the condition and mode of life of those so confined, and to introduce the evidence of experts

43. *Holden v. Minnesota*, 137 U.S. 483, 488 (1890) (citing MINN. STAT. §3 (1868)). Similarly, a Massachusetts statute provided that "where the punishment of imprisonment in the state prison is awarded, solitary confinement not exceeding twenty days at a time shall form part thereof." *Murphy v. Massachusetts*, 177 U.S. 155, 162 (1900) (citing MASS. GEN. L. ch. 504 (1895)).

44. MINN. STAT. Ch. 79, §1 (1876).

45. *State v. Peters*, 4 N.E. 81, 87 (Ohio 1885) (citing OHIO LAWS ch. 81, §187 (1884)).

46. *People v. Gonzales*, 69 P. 487 (Cal. 1902); *People v. Loper*, 112 P. 720 (Cal. 1911); *Stitt v. People*, 219 P. 205 (Colo. 1923); *Osborn v. People*, 262 P. 892 (Colo. 1927); *People v. Albers*, 195 N.E. 459 (Ill. 1935); *Kokenes v. State*, 13 N.E. 2d 524 (Ind. 1938); *Wright v. State*, 9 A.2d 253 (Md. 1939); *Commonwealth v. Sheppard*, 48 N.E.2d 630 (Mass. 1943).

47. *State v. Miller*, 111 P. 1053 (Wash. 1910).

as to the probable effect on the mind as to such conditions and mode of life."⁴⁸ The former warden of the prison was permitted to give descriptive testimony about the ward, "the object clearly being to show such conditions as might produce insanity."⁴⁹

Long-term solitary confinement was no longer commonplace in prison sentences in the United States by the beginning of the twentieth century. Although some criminal statutes retained nineteenth century terminology that included solitary confinement as part of the terms of imprisonment, in actual practice its use had largely ended. For example, even though prisoners convicted of certain crimes in Pennsylvania were sentenced to "imprisonment, by separate or solitary confinement at labor"—this in fact meant nothing more than the "equivalent of imprisonment in a penitentiary."⁵⁰ In some jurisdictions prisoners could be sentenced to a brief period of solitary confinement—say, on the anniversary of the crime for which they were incarcerated.⁵¹ Otherwise, solitary confinement was reserved as punishment for prison infractions.

Here, too, the trend was towards explicitly circumscribed terms. For example, although the Michigan Supreme Court failed to agree on whether to order the release from solitary confinement of a citizen held in jail on a civil suit, the Chief Justice cited the regulation limiting such confinement to 10 days.⁵² Noting that the record showed that the prisoner had been in

48. *People v. Oppenheimer*, 106 P. 74, 80 (Cal. 1909).

49. *Id.* at 78. See also *People v. Egan*, 23 P.2d 755, 755 (Cal. 1933) (stating that the defendant admitted that "by reason of his incarceration in Folsom prison for a number of years, a considerable portion of the time being in solitary confinement, he had 'just come out embittered against society. . . and came out with the intention that society owed [him] a duty and [he] was going to collect that duty. . . .'").

50. *Commonwealth v. Baldi*, 347 Pa. 601, 601, 33 A.2d 12, 13 (Pa. 1943).

51. See e.g. *People v. Thompson*, 44 N.E.2d 876 (Ill. 1942) (upholding sentence in which defendant was punished with a one hundred year sentence, and ordered to be placed in solitary confinement on each anniversary of the crime). The practice of permitting trial courts to specify some portion of a prison sentence to be served in solitary confinement persisted until recently in some states. For example, until 1993, some Nebraska criminal statutes provided that "the court . . . shall determine and declare in its sentence whether any such convict shall be kept in solitary confinement . . . and . . . for what period of time." NEB. REV. STAT. §29-2204 (1943). See *State v. Bennett*, 508 N.W.2d 294, 298 (Neb. 1993) (holding that requirement that defendant be kept in solitary confinement from the anniversary of the offense, July 28 to August 8 of each year was not an abuse of discretion, but that statute repealing the authority of court to order solitary confinement would be applied to defendant whose appeal was pending at the time the statute became effective). Although the amount of time prisoners were sentenced to solitary under this law was typically brief, solitary was clearly and pointedly designed to increase the punitiveness of the sentence, as when the Nebraska Supreme Court approved a criminal sentence for manslaughter that included placing the prisoner in solitary confinement both on his birthday and the anniversary of the crime for which he was committed to prison. *State v. Stratton*, 374 N.W.2d 31, 33-34 (Neb. 1985).

52. *Leach v. Whitbeck*, 115 N.W. 253, 254 (Mich. 1908). "If any person confined in any jail, upon a conviction or charge of any criminal offense, shall be refractory or disorderly, or shall willfully or wantonly destroy or injure any article of bedding, or other furniture, or a door or window, or any other part of such prison, the sheriff of the county, after due inquiry,

solitary for at least three months, the Court wrote that “[t]he records of the courts of this state do not show that any prisoner, civil or criminal (except convicted of a capital offense), has ever for such a length of time been subjected to such punishment.”⁵³

Although, until recently, solitary confinement was used more sparingly in the twentieth century, and rarely as a method of long-term incarceration, its cruel and unusual aspects continued to be debated much as they were during its period of initial popularity in the early nineteenth century. For example, the Federal Bureau of Prisons’ decision in 1934 to concentrate its most troublesome prisoners in a place of draconian isolation—Alcatraz Island—was questioned from the start. Under the direction of a warden who attempted to extend so-called “principles of scientific management” to the task of prison operations, Alcatraz was thought by some critics to have “pushed penology into the realm of mad science.”⁵⁴ Public scrutiny followed. That is:

It didn’t take long for the routine—and especially [the warden’s] edict of silence—to drive convicts stir-crazy. . . . Word of the self-mutilations began to leak. The Bureau of Prisons treated Alcatraz as if it were top secret, which only fueled media curiosity. Paroled inmates were speaking out. . . . The *Saturday Evening Post* in 1938 published a story in which an Alcatraz parolee claimed that he knew of 14 convicts who had gone violently insane there.⁵⁵

Alcatraz closed amid controversy in 1963.⁵⁶ A committee of British experts evaluated the Alcatraz experiment for possible replication in their country but decided against it. Among other things they concluded that “the dominant atmosphere” in a place like Alcatraz “could hardly fail to be excessively custodial” and that it also “might become repressive with the staff attitudes becoming affected by their anxieties about the attitudes and activities of a concentrated group of evil men who felt themselves finally rejected by society. . . .”⁵⁷

may cause such person to be kept in solitary confinement, not more than ten days for any one offense; and during such solitary confinement, he shall be fed with bread and water only, unless other food shall be necessary for the preservation of his health.” *Id.* (citing MICH. COMP. LAWS §2674 (1897)).

53. Leach, 115 N.W. at 254.

54. Jay Stuller, *There Never Was a Harder Place Than “The Rock.”* (U.S. Penitentiary, Alcatraz), 26 SMITHSONIAN 84, 86 (1995).

55. *Id.*

56. In the meantime a large, critical literature about the institution—much of it produced by ex-convict former inhabitants—educated the public about its harshness. For example, see: Roy Gardner, *Hellicatraz: The Rock of Despair* (1939); John Godwin, *Alcatraz: 1868-1963* (1963); Alvin Karpis, *On the Rock: Twenty-Five Years in Alcatraz / The Prison Story of Alvin Karpis as Told to Robert Livesey* (1980). See, also: James A. Johnston, *Alcatraz Island Prison, and the Men Who Live There*. (1949); Jim Quillan, *Alcatraz From Inside: The Hard Years, 1942-1952* (1991).

57. Home Office, *Managing the Long-Term Prison System, The Report of the Control Committee* 53 (1984), discussing the findings of the earlier “Radzinowicz Report”—Home

Despite Alcatraz's controversial history, the Bureau of Prisons sought to replace it with a similarly-run facility. As part of the newly constructed federal penitentiary at Marion, Illinois, a special "control unit" was erected in which conditions were more severe in some respects than those at Alcatraz.⁵⁸ The Marion control unit operated for a decade as perhaps the most secure and oppressive correctional facility in the world.⁵⁹ Yet, when violence erupted there in 1983, authorities responded to the tragic events not by questioning the logic and effectiveness of their especially punitive regime but rather by extending it to the entire prison.⁶⁰ Conditions at Marion became the subject of a congressional report,⁶¹ several critical outside evaluations,⁶² media commentary dubbing Marion "the new Alcatraz,"⁶³ and extensive testimony in a federal lawsuit that addressed their psychologically harmful consequences.⁶⁴ Yet, they persisted.

During approximately the same time period, criticism and controversy was directed at the use of so-called "group isolation" in a special high security unit of a women's federal prison that eventually led to the transfer of the women prisoners who had been confined there.⁶⁵ Nonetheless, the Federal Bureau of Prisons committed itself to a continuation of the Control

Office, *The Regime for Long-Term Prisoners in Conditions of Maximum Security: Report of the Advisory Council on the Penal System*, HMSO (1968).

58. The control unit itself evolved from prisoner disruptions and work stoppages that plagued the Marion penitentiary. See *Adams v. Carlson*, 488 F.2d 619, 622 (7th Cir. 1973) ("Taking no chances with simply isolating the ringleaders, the Marion administration undertook widespread segregation of inmates suspected of insubordination. . ."). However, the court also noted that "[t]rouble at Marion was not abated by the segregation of rebellious inmates." *Id.* at 623.

59. See J. Michael Olivero & James B. Roberts, *The United States Federal Penitentiary at Marion, Illinois: Alcatraz Revisited*, 16 NEW ENG. J. CRIM. & CIV. CONFINEMENT 21 (1990) (describing conditions at Marion and the events that led to the extension of the Control Unit regimen to the rest of the institution).

60. See Olivero & Roberts, *supra* note 59. See also, *Bruscino v. Carlson*, 654 F.Supp. 609 (S.D.Ill. 1987) (denying relief in class-action suit on behalf of Marion inmates), *aff'd*, 854 F.2d 162 (7th Cir. 1988).

61. David A. Ward & Allen F. Breed, *THE UNITED STATES PENITENTIARY MARION, ILLINOIS: CONSULTANTS' REPORT SUBMITTED TO COMMITTEE ON THE JUDICIARY*, H.R. Doc. No. H522-3, 90th Cong., 2d Sess. 1984.

62. AMNESTY INTERNATIONAL, *ALLEGATIONS OF ILL-TREATMENT IN MARION PRISON, ILLINOIS, USA*. (1987) [hereinafter AMNESTY INTERNATIONAL, MARION]; HUMAN RIGHTS WATCH, *PRISON CONDITIONS IN THE UNITED STATES: A HUMAN RIGHTS WATCH REPORT* (1991).

63. Jack Anderson & Joseph Spear, "New Alcatraz" Abuses Charged, WASH. POST, July 27, 1985, at E9. See also, Michael Isikoff, *Hard Time: The Mission at Marion*, WASH. POST, May 28, 1991, at A1, A6. Selwyn Raab, *Uprising Challenges "Maxi-Maxi" Prison Idea*, N. Y. TIMES, June 2, 1991, at 20; Martin Tolchin, *Quaker Group Cites "Brutal Repression" at a Federal Prison*, N. Y. TIMES, June 19, 1985, at A20.

64. *Bruscino*, 654 F. Supp. at 611.

65. AMNESTY INTERNATIONAL, *UNITED STATES OF AMERICA: THE HIGH SECURITY UNIT, LEXINGTON FEDERAL PRISON, KENTUCKY* (1988). For additional discussion of conditions at the High Security Unit at Lexington Federal Prison and their consequences for prisoners, see Richard Korn, *The Effects of Confinement in the High Security Unit at Lexington*, 15 SOC. JUST. 8 (1988) [hereinafter Korn, *Lexington*]; Richard Korn, *Follow-up Report*

Unit philosophy, recently completing construction of a modernized version of these earlier institutions at Florence, Colorado.⁶⁶

Similarly, when California opened in its first "adjustment center" a little more than forty years ago, it became "the subject of considerable criticism."⁶⁷ Although the original concept of the "adjustment center" included the goal of returning prisoners to the mainline prison population and, ultimately, to society at large through an enriched program of psychological and social services, that plan was never implemented. The adjustment centers were recognized as "dismal failures" that represented little more than renamed isolation or segregation units that had proven problematic in the past.⁶⁸ Twenty years later the use of solitary confinement in California prisons was evaluated in a report by the state legislature and it was still controversial.⁶⁹ Based on interviews with prison administrators, inmates, and psychiatrists, the report criticized punitive segregation because of the arbitrariness with which prisoners were segregated; the fact that, once there, they were denied adequate program participation, psychological counseling, and recreation; and that decisions about whether to release prisoners from these lockup units were "arbitrary, subjective, and not based on any set of criteria."⁷⁰ In addition, the authors of the report concluded that long-term isolation resulted in psychological impairment and reduced prisoners' subsequent chances of successful rehabilitation.⁷¹

During the same two decades, numerous lawsuits alleging violations of prisoners' Eighth Amendment rights posed similar questions about the effects of solitary confinement in various prison systems across the country.⁷² This litigation alleged a panoply of ill effects—both physical and mental—stemming from conditions of isolation at the prisons in question.⁷³

on the Effects of Confinement in the High Security Unit at Lexington, 15 Soc. JUST. 20 (1988) [hereinafter Korn, *Follow-up*]; Baraldini v. Meese, 691 F.Supp. 432 (1988) (holding that while criteria used by Bureau of Prisons in assigning prisoners to the unit violated their First Amendment rights, the conditions themselves were not cruel and unusual under the Eighth Amendment).

66. See, e.g., Fay Dowker & Glenn Good, *From Alcatraz to Marion to Florence: Control Unit Prisons in the United States*, in CAGES OF STEEL; THE POLITICS OF IMPRISONMENT IN THE UNITED STATES 131 (Ward Churchill & J.J. Vander Wall eds. 1992) (describing the development of control unit prisons in the United States); Perkinson, *supra* note 14; Peter G. Chronis, "Baddest of the Bad" Coming to New Federal Prison, DENVER POST, May 11, 1990, at B1.1 (describing the construction of a new control unit prison in Colorado).

67. CALIFORNIA ASSEMBLY SELECT COMMITTEE ON PRISON REFORM AND REHABILITATION, ADMINISTRATIVE SEGREGATION IN CALIFORNIA'S PRISONS vii (1973).

68. *Id.* at 2-3.

69. *Id.*

70. *Id.* at 27.

71. *Id.*

72. See *infra* notes 326-387 and accompanying text.

73. See, e.g. Thomas B. Benjamin and Kenneth Lux, *Constitutional and Psychological Implications of the Use of Solitary Confinement: Experience at the Maine State Prison*, 9 CLEARINGHOUSE REV. 83 (1975) [hereinafter Benjamin & Lux, *Maine State Prison*] (stating that prisoners in solitary confinement at the Maine State Prison develop anger, hostility,

Psychologists and psychiatrists alike wrote and testified about the nature, magnitude, and long-term consequences of these acute negative effects.⁷⁴

Notwithstanding this long history of criticism and heightened awareness among mental health professionals about their harmful effects, long term solitary confinement and related practices are now being used on an increasingly widespread basis in prison systems across the United States. As mentioned earlier, rapid expansion of the nation's prison population—so rapid and unprecedented that massive building programs have been unable to keep pace—has meant that most correctional systems are plagued by extreme overcrowding and the serious management and control problems that go with it.⁷⁵ Many prison officials appear convinced that the turmoil brought about by increased population pressures can be managed by segregating and isolating prisoners whom they view as especially troublesome. In addition, many correctional administrators claim that the violence that purportedly plagues most prison systems now in a way it did not

aggression, and mental illness); Thomas B. Benjamin and Kenneth Lux, *Solitary Confinement as Psychological Punishment*, 13 CAL. W. L. REV. 265 (1977) [hereinafter Benjamin & Lux, *Solitary Confinement*] (detailing cognitive and emotional impairments resulting from solitary confinement); Jackson, *supra* note 19 at 64-80 (describing hallucinations, aggression, and self-mutilation found in inmates in solitary confinement); Maria A. Luise, *Solitary Confinement: Legal and Psychological Considerations*, 15 NEW ENG. J. ON CRIM. & CIV. CONFINEMENT 301 (1989) (arguing that solitary confinement may be cruel and unusual punishment); Nan Miller, *International Protection of the Rights of Prisoners: Is Solitary Confinement in the United States a Violation of International Standards?* 26 CAL. W. INT'L L. J. 139 (1995) (arguing that solitary confinement is a form of punishment that produces severe enough psychological effects to render it a violation of international human rights treaties).

74. See, e.g. Stanley L. Brodsky and Forrest R. Scogin, *Inmates in Protective Custody: First Data on Emotional Effects*, 1 FORENSIC REP. 267 (1988) (reporting psychological effects including anger, anxiety, and sleep disturbances); Stuart Grassian, *Psychopathological Effects of Solitary Confinement*, 140 AM. J. PSYCHIATRY 1450 (1983) [hereinafter Grassian, *Psychopathological Effects*] (detailing findings of perceptual changes, affective disturbances, disorders of thought and difficulties with thinking, and lack of impulse control); Stuart Grassian and Nancy Friedman, *Effects of Sensory Deprivation in Psychiatric Seclusion and Solitary Confinement*, 8 INT'L J. L. & PSYCHIATRY 49 (1986) (alleging that solitary confinement results in anxiety, hallucinations, regression, and can have long-term psychological implications); Haney, *Infamous Punishment*, *supra* note 12 (describing long-term results including dependence on institutional control, loss of ability to control or initiate behavior, withdrawal, and psychiatric disorders); Thomas O. Hilliard, *The Black Psychologist in Action: A Psychological Evaluation of the Adjustment Center Environment at San Quentin Prison*, 2 J. BLACK PSYCH. 75 (1976) (reporting frustration, hopelessness, and bitterness as results of time in solitary confinement); Korn, *Lexington*, *supra* note 63 (discussing findings of claustrophobia, chronic rage reaction, depression, hallucination, and apathy).

75. For data on the extraordinary increases in prison populations in the United States and discussions of some of the forces creating such changes, see Craig Haney, *Psychology and the Limits to Prison Pain: Confronting the Coming Crisis in Eighth Amendment Law*, 3 PSYCHOL., PUB. POL., AND LAW 499 (1997) [hereinafter Haney, *Psychology and the Limits to Prison Pain*]; and Craig Haney, *Riding the Punishment Wave: On the Origins of Our Devolving Standards of Decency*, 9 HASTINGS WOMEN'S L. J. 217 (1998) [hereinafter Haney, *Riding the Punishment Wave*].

twenty years ago can only be controlled by implementing policies that isolate suspected gang members in punitive segregation units. As one commentator summarized: "[T]he rise in power of prison gangs has made supermax facilities increasingly popular."⁷⁶

Among other things, these policies of supermax confinement are designed to remove gang members from the mainline population and subject them to increased punishment in the form of solitary confinement for periods of long and sometimes indefinite duration. For example, one recent study noted that the California Department of Corrections has implemented a number of special practices to deal with their perceived gang problem, including "using 'confidential informants,' segregating gang members in different buildings and prisons, intercepting gang communications, setting up task forces to monitor and track gang members, locking up gang leaders in high security prisons, and 'locking down' entire institutions."⁷⁷

Of course, this emphasis on long-term punitive segregation as a solution to the prison gang problem has influenced the makeup of the prisoner population in solitary confinement. A decade and a half ago, Barak-Glantz found that, not surprisingly, prisoners in punitive segregation were more likely to be committed to prison for violent offenses and more likely to be repeat offenders than were a sample of "control" prisoners.⁷⁸ In addition, the racial distribution of his sample of punitive segregation prisoners was not significantly different from the distribution of prisoners in the general population of the maximum security prison.⁷⁹ However, this latter finding differs dramatically from the more recent data collected by the senior author at one California prison in which 90% of the random sample of punitive isolation prisoners were minority (indeed, fully 70% were Latino).⁸⁰ This suggests that although punitive segregation has not always resulted in the overrepresentation of minority prisoners, the tendency of prison systems like California's to use alleged gang *membership* (as opposed to leadership) as one of the primary criteria for such segregation has the perhaps unintended consequence of disproportionately singling out minority prisoners. That is, because the criterion of gang membership is notoriously difficult to define and apply with precision or reliability, substituting it for overt, discrete behavior (i.e., actual disciplinary infractions) has left prison authorities with the subjective task of trying to determine whether prisoners fit into what is, at best, an elusive category.⁸¹ This ill-defined task is

76. Scott Tachiki, *Indeterminate Sentences in Supermax Prisons Based Upon Alleged Gang Affiliations: A Reexamination of Procedural Protection and a Proposal for Greater Procedural Requirements*, 83 CAL. L. REV. 1115, 1131 (1995).

77. Geoffrey Hunt et al., *Changes in Prison Culture: Prison Gangs and the Case of the "Pepsi Generation"*, 40 SOC. PROB. 398, 400 (1993).

78. Israel L. Barak-Glantz, *Who's in the "Hole"?* 8 CRIM. JUST. REV. 29 (1983).

79. *Id.* at 33.

80. CRAIG HANEY, *THE WORST OF THE WORST: PSYCHOLOGICAL TRAUMA AND PSYCHIATRIC SYMPTOMS IN PUNITIVE SEGREGATION* (1996).

81. See Tachiki, *supra* note 76.

susceptible to bias and stereotyping, as well as the very real possibility that increased solidarity among minority prisoners may increase the risk that they will be wrongly classified as gang members and placed in indefinite punitive segregation as a result.

The recent willingness to resort to solitary and supermax confinement is supported as well by a general tendency among corrections officials to account for violence within the prison walls through an exclusive focus on the characteristics of the prisoners who engage in it rather than the situation or context in which it occurs.⁸² Instead of considering the possibility that worsening prison conditions themselves may constitute the source of behavioral problems, a "new breed" of convict is christened periodically to account for putative increases in prison violence. Thus, the claim that a unique or special type of criminal has arrived on the prison scene who cannot be controlled through existing measures is accompanied by an escalation in the level of prison punishment that includes the creation of special conditions of confinement like solitary and punitive segregation units. Indeed, just the past thirty years have seen the emergence of several allegedly new criminal types, each one more fearsome than its predecessor and requiring a new level of prison security.⁸³

For example, Cohen and Taylor noted that the creation of "special security wings" in British prisons in the mid-1960s was justified when "[t]he media and the judiciary made great play with the idea of a 'new' type of criminal who was more ruthless, more violent and more organized than his predecessors."⁸⁴ A decade or so later, prison officials in New South Wales justified the construction of a controversial isolation unit in its main prison

82. For extended discussions of situational versus dispositional modes of explaining prison behavior, see Craig Haney, *Criminal Justice and the Nineteenth-Century Paradigm: The Triumph of Psychological Individualism in the "Formative Era,"* 6 LAW & HUM. BEHAV. 191 (1982); Craig Haney et al., *Interpersonal Dynamics in a Simulated Prison*, 1 INT'L J. CRIMINOLOGY & PENOLOGY 69 (1973); Craig Haney & Philip G. Zimbardo, *The Socialization into Criminality: On Becoming a Prisoner and a Guard*, in LAW, JUSTICE, AND THE INDIVIDUAL IN SOCIETY 198 (June Louin Tapp & Felice J. Levine, eds. 1977) [hereinafter Haney & Zimbardo, *Socialization*].

83. For parallels with the construction of general criminal categories that justified especially long (sometimes life) sentences for "habitual" and then "career" criminals in the 1920s and late 1960s, respectively, see Ronald C. Kramer, *From "Habitual Offenders" to "Career Criminals": The Historical Construction and Development of Criminal Categories*, 6 LAW & HUM. BEHAV. 273 (1982).

84. STANLEY COHEN & LAURIE TAYLOR, *PSYCHOLOGICAL SURVIVAL: THE EXPERIENCE OF LONG-TERM IMPRISONMENT* 13 (1972). Cohen and Taylor also described the special security precautions that were taken to accommodate this new breed: "The new security measures introduced during 1965 to help contain such men included electronic surveillance, dog runs, armed guards, gas masks, and (according to one report) the siting of a machine-gun nest on the external wall [of the prison]." *Id.* Another commentator referred to the British policy for these convicts as one of "incarcerating men in granite tombs for years on end." FRANK NORMAN, *LOCK 'EM UP AND COUNT 'EM* 6 (1970).

by claiming that "[m]en are going to be put there only because they have shown themselves to be savage monsters."⁸⁵

Around the same time, California prison officials claimed that increased use of punitive segregation in the state's prisons was needed to stem an "intolerable violence problem" brought about by an influx of aggressive prisoners.⁸⁶ About a decade later—in the early 1980s—Barak-Glantz observed that "researchers as well as correctional administrators are almost unanimous in their belief that prisons are receiving a more aggressive, more dangerous, more vocal, and less tractable offender."⁸⁷ And now—still a decade after that—many of today's prisoners are described as "rapacious monsters" in media depictions that are as ubiquitous as they are sensationalized, helping to fuel the public's demand for longer prison sentences and specialized, "tougher" institutions for those who are incarcerated.⁸⁸ Thus, the Pelican Bay Security Housing Unit was described by the correctional official who authorized its construction as "an important tool in managing a growing and more violent inmate population."⁸⁹

In response, a penal philosophy of sorts has emerged in which prison systems are now using *long-term* solitary confinement as a proactive policy of management and control. This policy represents a dramatic departure from pre-existing norms concerning the use of punitive segregation. The Seventh Circuit some 25 years ago summarized the then-prevailing view:

If a man commits a crime against state or federal law while in prison, he is tried in a court of law and sentenced to additional time in prison. Segregation is not usually imposed for criminal misconduct; it is reserved, instead, to correct serious infractions of prison rules. For a single such event, segregation does not and should not exceed a few months, if that long.⁹⁰

85. See W.E. Lucas, *Solitary Confinement: Isolation as Coercion to Conform* 9 AUSTRALIAN & NEW ZEALAND J. OF CRIMINOLOGY 153, 163 (1976) (quoting New South Wales Commissioner of Corrective Services). A policy statement issued by the same office captured the extension of this logic that is sometimes made by correctional administrators: "The conventional moral and legal restrictions are not acceptable in extreme areas of criminality; consequently, the ordinary and established codes of human conduct need not be expected to relate to the inmate population located in the programme involving maximum security containment." *Id.* at 164.

86. Howard Bidna, *Effects of Increased Security on Prison Violence*, 3 J. CRIM. JUST. 33 (1975) [hereinafter Bidna, *Effects of Increased Security*].

87. Barak-Glantz, *supra* note 76, at 29.

88. See, e.g., David A. Kaplan et al., *The Incurables: They Rape and Molest. They Defy Treatment. How Can Society Protect Itself?* NEWSWEEK, Jan. 18, 1993, at 48. This article is typical of the genre. It ends with the observation that "[o]ne way or another, society keeps searching for a way to protect itself. After all, the Constitution isn't a suicide pact." *Id.* at 50.

89. Decl. of Daniel J. McCarthy, former Director of Corrections, Madrid v. Gomez, No. C-90-3094 (N.D. Cal. 1993).

90. Adams v. Carlson, 488 F.2d 619, 628 (7th Cir. 1973).

Criticized as the "Marionization" of American prisons,⁹¹ after the notorious federal penitentiary at Marion where the new policy seems to have originated,⁹² a number of prison systems (including the Federal Bureau of Prisons) have either begun or completed construction on specialized prisons devoted *entirely* to long-term punitive segregation and solitary confinement-like conditions and routines.⁹³ Thus, one analyst has referred to the "accelerating movement toward housing prisoners officially categorized as violent or disruptive in separate, free-standing facilities where they are locked in their cells approximately 23 hours per day."⁹⁴ This movement has been indirectly facilitated by some academic commentary that has appeared in recent years minimizing previous concerns over the potential psychological harm caused by solitary confinement and implicitly authorizing its increased use.⁹⁵

91. See AMNESTY INTERNATIONAL, *MARION*, *supra* note 60; HUMAN RIGHTS WATCH, *supra* note 60; Immarigeon, *supra* note 12.

92. See *supra* notes 56-62, and accompanying text.

93. Conditions at Pelican Bay generated some amount of public attention (see *supra* note 8), and California was by no means the only state in which concerns were raised about the construction of "supermax" prisons. See, e.g. Bill Newman, *Marionizing Massachusetts*, 37 MASS. REV. 9, 81 (1996) (highlighting Eighth Amendment lawsuits in Illinois and Massachusetts that examined the extreme sensory deprivation and adverse psychological effects of lockdown in prisons). But see Robert Sheppard et al., *Closed Maximum Security: The Illinois SuperMax*, 58 CORRECTIONS TODAY 84, 84 (1996) (praising the new Illinois prison as "society's latest, no-holds-barred effort to ensure that certain predatory people are isolated from the rest of us, and from each other.") The authors of the latter article also provided detailed descriptions of the security hardware and other precautions built into the new facility (down to the number of video cameras that had been installed). Yet, despite conceding that "the lack of human contact, the absence of meaningful work, and a poverty of sensory and intellectual stimulation may have potentially adverse consequences"—so much so that the prison required a "baseline assessment" of each inmate upon entry to the unit and "periodic reevaluations at specific intervals" to be conducted by mental health staff—they provided no details of the nature or adequacy of those evaluations, nor did they bother to justify taking the risks of such "adverse consequences" with prisoners in the first place. *Id.* at 87.

94. Immarigeon, *supra* note 12 at 1. See also Miles Corwin, *High Tech Facility Ushers in New Era of State Prisons*, L. A. TIMES, May 1, 1990, at A1 (discussing the high-tech supermax prison at Pelican Bay).

95. James Bonta & Paul Gendreau, *Reexamining the Cruel and Unusual Punishment of Prison Life*, 14 LAW & HUM. BEHAV. 347 (1990) [hereinafter Bonta & Gendreau, *Reexamining*]; Paul Gendreau & James Bonta, *Solitary Confinement is Not Cruel and Unusual Punishment: People Sometimes Are!* 26 CANADIAN J. CRIMINOLOGY 467 (1984) [hereinafter Gendreau & Bonta, *Solitary*]; Paul Gendreau and James Bonta, *Boats Against the Current: A Rebuttal*, 15 LAW & HUM. BEHAV. 563 (1991) [hereinafter Gendreau & Bonta, *Boats*]; Peter Suedfeld, *Beyond Sentimentality*, 22 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 49 (1978); Peter Suedfeld & Chunilal Roy, *Using Social Isolation to Change the Behavior of Disruptive Inmates*, 19 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 90 (1975) [hereinafter Suedfeld & Roy, *Social Isolation*]; Peter Suedfeld et al., *Reactions and Attributes of Prisoners in Solitary Confinement*, 9 CRIM. JUST. BEHAV. 303 (1982) [hereinafter Suedfeld et al., *Reactions*]. One commentator has gone so far as to advocate an explicit return to the "Pennsylvania" model in which "inmates serve their entire sentences in total isolation from one another." Robert Rogers, *Solitary Confinement*, 37 INT'L J. OFFENDER THERAPY COMP. CRIMINOLOGY 339, 343 (1993).

As the correctional establishment in the United States appears poised to embark on a new era of repressive prisoner control that is based on unprecedented levels and kinds of solitary and related forms of penal confinement, the time has come to reconsider this prison form and to take a comprehensive look at what we know about its psychological effects. Despite the newness of supermax prisons, the regime of solitary confinement that is at their core not only has a long historical record but an equally rich store of research data on which to draw. The magnitude of the public resources that are about to be committed, the large number of prisoners likely to be affected, and the potential implications for our long-term crime rates as well as the loss of alternative prison and social welfare programs that may be sacrificed in the wake of the supermax approach compel us to a sober and realistic assessment of the expected consequences.

II.

THE EMPIRICAL LITERATURE ON SOLITARY CONFINEMENT

Several caveats are in order concerning the terminology that will be used in the discussion that follows. It is common for researchers and legal commentators to use the term "solitary confinement" generically, as if it refers to a single type of experience or describes the same set of conditions. Of course, it does not. Conditions of so-called solitary confinement vary dramatically, and these variations may very well account for the presence or absence of negative psychological effects found in empirical research. Thus, some authors have sought to draw conclusions about solitary confinement based on the results of studies in which the nature of the confinement in question bore little relationship to common correctional practices. For example, when Bonta and Gendreau argued that "solitary confinement" did not itself constitute a psychologically destructive environment—the real "culprit" they said was "the manner in which inmates have been treated" in solitary confinement and the excessive amounts of time they spent there⁹⁶—they simply redefined the term in such a way as to exclude what is, in many jurisdictions, the very essence of the experience. Therefore, whenever possible in our review of the empirical literature we will attempt to specify the exact nature of the conditions of solitary confinement studied.

Amnesty International has used the term "solitary confinement" to cover "all forms of incarceration that totally remove a prisoner from inmate society. It often means that the prisoner is visually and acoustically isolated from all other prisoners, as well as having no personal contact with them."⁹⁷ Yet, this general rubric subsumes many variations. For example,

96. Bonta & Gendreau, *Reexamining*, *supra* note 93, at 361.

97. AMNESTY INTERNATIONAL, AMNESTY INTERNATIONAL'S WORK ON PRISON CONDITIONS OF PERSONS SUSPECTED OR CONVICTED OF POLITICALLY MOTIVATED CRIMES IN THE FEDERAL REPUBLIC OF GERMANY: ISOLATION AND SOLITARY CONFINEMENT 9 (1980)

some American correctional systems now are so crowded that even prisoners in "solitary confinement" units are double-celled and, therefore, not isolated from one another at all. In fact, by some definitions, these prisoners are simultaneously and paradoxically isolated *and* overcrowded. Similarly, even when they are single-celled it is impossible to completely curtail communication between prisoners in solitary confinement units (under all but the most extreme architectural designs). In some of these units, sensory *overload* rather than sensory deprivation adversely affects prisoners whose restricted confinement in close quarters means they cannot escape the intrusive noise or presence of others. Moreover, some of the special units that have been most soundly condemned by mental health experts and the courts impose a regimen known as "small group isolation" on prisoners in which a restricted number of them are housed together but away from everyone else.⁹⁸

For largely historical reasons and to maintain consistency with existing literature, we will continue to employ the term "solitary confinement" to refer to this broad set of conditions. However, we will often use the seemingly more accurate term, "punitive segregation" interchangeably with solitary confinement to convey the sense in which, at the very least, solitary confinement entails segregation from the general population of prisoners for a punitive purpose that virtually always imposes severe restrictions in movement and activity within the segregated unit itself. Thus, solitary confinement or punitive segregation includes at least *partial* social isolation and *partial* reduction of certain forms of stimulation, as compared to general population prisoners.⁹⁹ Because of the ambiguity in the use of the term "solitary confinement," it is also difficult to estimate with any degree of precision how many prisoners may be subjected to the kinds of conditions whose effects we analyze here. In 1984, for example, Corrections Compendium reported on the results of a national survey of state correctional systems concerning the use of "restrictive housing" (defined in the survey as "[a] form of separation from the general population [of prisoners] for some necessary administrative purpose"). The percentages of prisoners

[hereinafter AMNESTY INTERNATIONAL, WORK ON PRISON CONDITIONS]. Judge McMillan employed this definition in *Berch v. Stahl*, 373 F. Supp. 412, 420 (W.D.N.C. 1974): "Solitary confinement by definition means confinement alone and removed from sustained contact with other human beings. Its severity as punishment is drastically increased when the isolation is accompanied by . . . 'sensory deprivation'"

98. The Amnesty Report on prison conditions imposed on persons suspected of political crimes in the Federal Republic of Germany refers to this as *Umschluss*. The Report also described the establishment of so-called "silent wings" (*Tote Trakte*) in which prisoners were prohibited from speaking to one another. AMNESTY INTERNATIONAL, WORK ON PRISON CONDITIONS, *supra* note 95 at 10.

99. Don Foster observed that solitary confinement "looks less and less like a single unified entity, but more as a situation varying along a continuum of severity." DON FOSTER, DETENTION & TORTURE IN SOUTH AFRICA: PSYCHOLOGICAL, LEGAL & HISTORICAL STUDIES 67 (1987) [hereinafter FOSTER, DETENTION AND TORTURE].

in restrictive housing ranged from 2.3% to 27.2% and averaged 7.7%.¹⁰⁰ We note that the increasingly widespread use of so-called "supermax" prisons that impose largely segregated and solitary-like confinement on a long-term basis means that these percentages likely have increased and will continue to do so for the foreseeable future.

We also acknowledge at the outset that there are significant limitations on the manner in which research on solitary confinement can be conducted. That is, the study of this experience has been constrained by ethical, legal, and practical barriers precluding the use of a single technique or design that could resolve all scientific questions about the causal role of such confinement in producing various measured effects. Yet, we will argue that this fact alone neither diminishes the significance of the relevant empirical research nor eliminates the possibility of gaining social scientific understanding of the topic. Indeed, our intention in providing a comprehensive review of the empirical literature is to transcend this limitation by interpreting the *pattern* of results that has emerged from this work and drawing conclusions about this specialized correctional environment. Like many complex empirical issues in psychology, in the absence of a single, definitive piece of research that effectively establishes a causal connection, we rely upon the method of "triangulation" wherein we systematically review available research from numerous diverse sources, each of which addresses some of the ways in which solitary confinement and punitive segregation may affect prisoners.

Although some commentators have advocated shrinking the pool of available knowledge to include only what they term "scientific experiments"¹⁰¹ and drastically limiting the acknowledged effects of solitary confinement to the statistically quantifiable, we firmly believe that much crucial information is lost or ignored by narrowing the scope of inquiry in this way. We do not believe that controlled laboratory studies represent the only source of valid scientific knowledge on this or any topic. In fact, much of the experimental research on isolation and sensory deprivation conducted with non-prisoner subjects is especially problematic because many of the crucial components of the experience of solitary confinement in prison are lacking.¹⁰² Yet, we believe these studies provide *some* insight into the effects of significantly decreased stimulation and restricted movement on prisoners. Because these are major components of conditions of solitary confinement, we have included this research in our discussion. Similarly, although the subjectivity of personal accounts of the effects of solitary confinement may affect the weight or significance that should be

100. *Restrictive Housing*, CORRECTIONS COMPENDIUM, Mar. 1985, at 1, 4-7.

101. Gendreau & Bonta, *Boats*, *supra* note 93.

102. The contrast between conditions in prison solitary confinement and those that prevail in sensory deprivation studies can be significant. See *infra* text accompanying notes 112-115.

attached to them, we have not *a priori* excluded observational studies or autobiographical writing from consideration.

In addition, we have been relatively inclusive in accepting the definitions of researchers and prison systems themselves concerning what constitutes "solitary confinement." For example, some of the published research on the effects of solitary confinement refers to the conditions in question as "segregation"¹⁰³ or to "isolation cells"¹⁰⁴ without offering specific details about what, if any, contact inmates might have had with others, or what kinds of stimulation and other activities (e.g., reading material, television) were available to prisoners. We have included these studies in our review if the researchers themselves termed the conditions solitary (or solitary-like) confinement. Similarly, we recognize that a variety of terms have been used to refer to solitary confinement in different correctional systems.¹⁰⁵ As long as they fit within our general definition of solitary-like confinement, we have included whatever published data were available on them, irrespective of labels. We also included studies that looked at dependent variables such as disciplinary infraction rates as a function of the restrictiveness of housing, whether or not the most restrictive conditions qualified as complete solitary confinement.

There is a logic to this inclusivity. Because it led us to examine a broad range of solitary-like conditions—not just the harshest or most extreme versions—our inclusive approach actually provided a conservative test of their negative effects. Indeed, one of the great strengths of this literature, viewed in its totality, is the robustness it reveals in the psychological effects of solitary-like confinement. That is, a very clear and consistent message emerges from the examination of studies conducted over a vast array of different isolated and restricted conditions for subjects who differed greatly in background and the duration of their confinement.

103. Frank Porporino, *Managing Violent Individuals in Correctional Settings*, 1 J. OF INTERPERSONAL VIOLENCE 139, 213-237 (1986).

104. Anne Jones, *Self-Mutilation in Prison: A Comparison of Mutilators and Nonmutilators*, 13 CRIM. JUST. AND BEHAV. 286, 287 (1986).

105. In the United States they have been called, among other things: "adjustment centers" in California, JACKSON, *supra* note 19, at 95; "special treatment and rehabilitative training units" ("STRT") in the Federal Bureau of Prisons, *id.* at 154; "punitive dissocialization" in Tennessee, *id.* at 115; and "special program units," in Illinois, *id.* at 154. In Canada, where they are said to be reserved for "dangerous inmates," *id.* at 155, and "particularly dangerous inmates," *id.* at 156, the units have been termed "special correctional units," *id.* at 44; "special handling units," *id.* at 150; "super-maximum security units," *id.* at 48; and "Prisons of Isolation," *id.* at 36. In England, so-called "intractable prisoners," *id.* at 155, are sent to places that have been labeled "control units," *id.* at 155. Although in some cases these units have included special behavior modification regimens (as in the case of the Federal Bureau of Prisons' "STRT" program and the "special program units" in Illinois), they virtually always include special housing and security, the isolation of prisoners from the mainline population and usually (but not always) from each other, and greatly restricted movement and activity within the prison itself. *Id.*

Thus, we have reviewed a wide range of studies—from controlled laboratory experiments to more qualitative case studies—and looked at data from a diverse group of persons exposed to solitary-like conditions—from college students to North American prisoners themselves. The empirical record compels an unmistakable conclusion: this experience is psychologically painful, can be traumatic and harmful, and puts many of those who have been subjected to it at risk of long-term emotional and even physical damage.

A. *Early Laboratory Experiments on Sensory Deprivation*

“Sensory deprivation” has been defined as “conditions aimed at reducing, altering or by some means or other, interfering with a person’s normal stimulation from, and commerce with, his environment.”¹⁰⁶ If we were to adopt this definition, then virtually all forms of solitary confinement and punitive segregation would qualify as sensory deprivation. Although the role of sensory deprivation and social isolation in the “brainwashing” of prisoners of war by their Korean captors¹⁰⁷ is what sparked much of the initial interest among researchers, the resulting studies often employed experimental conditions that did not closely approximate those created inside actual prisons. For example, most research on sensory deprivation has been done in highly artificial environments that are intended for only short term exposure. Taken as a whole, however, this research does underscore the importance of sensory and perceptual stimulation and the dramatic, negative effects that can occur when people are deprived of it.

Under conditions of extreme sensory deprivation, subjects characteristically experience perceptual distortions, hallucinatory experiences, and sometimes high levels of anxiety. As one overview of the early research on the topic suggested, “the absence of stimulation leads to the debilitation of behavior, making the individual less efficient and inducing strong affective states which are associated with marked changes in motivation.”¹⁰⁸ Here we review a representative sample of sensory deprivation studies to illustrate the specific psychological reactions that have been produced under such severe conditions.

Some of the first reports on the effects of experimentally-induced sensory deprivation came from John Lilly’s pioneering water-tank isolation studies. Although the initial research provided little more than qualitative

106. Leo Goldberger, *Experimental Isolation: An Overview*, 122 AM. J. PSYCH. 774, 775 (1966) (emphasis omitted).

107. THE PSYCHODYNAMIC IMPLICATIONS OF PHYSIOLOGICAL STUDIES ON SENSORY DEPRIVATION vi (Leo Madow & Laurence H. Snow eds. 1970).

108. Philip E. Kubzansky & P. Herbert Leiderman, *Sensory Deprivation: An Overview*, in SENSORY DEPRIVATION: A SYMPOSIUM HELD AT HARVARD MEDICAL SCHOOL 220, 237 (Philip Solomon, et al., eds.) (1961).

reports of "reveries and fantasies"¹⁰⁹ that the researcher and another subject experienced while immersed, later and more controlled water-tank suspension studies documented acute psychological reactions. Subjects often terminated participation within 8 hours of being placed in water-tanks and a large majority reported recurring fantasies during their immersion.¹¹⁰ In another study, all twenty subjects were confined to a sound restricted room wearing goggles. They were asked to stay as long as possible and could leave the experiment at any time.¹¹¹ Although the isolation conditions were periodically interrupted, subjects ended participation after relatively brief periods (two days on average for women and just over one day for men) and all of them listed anxiety and panic among their reasons for quitting.¹¹² In several other studies anxiety reactions were cited by a significant percentage of subjects who terminated participation.¹¹³

Several psychological variables appeared to moderate the level of stress created by sensory deprivation and the subjects' ability to endure it, including knowledge of the study's duration, awareness of the passage of time, and prior level of comfort and familiarity with the experimenter and experimental conditions. Specifically, informing subjects of the upper time limit of the study enhanced their ability to tolerate the isolation.¹¹⁴ In another series of studies, researchers concluded that the general atmosphere in the laboratory, the appearance and behavior of the personnel, and the subjects' degree of comfort and familiarity with both were crucial factors

109. John Lilly, *Mental Effects of Reduction of Ordinary Levels of Physical Stimuli on Intact, Healthy Persons*, 5 PSYCH. RES. REP. 1, 7 (1956). For other early work on this topic, see W.H. Bexton, W. Heron, & T.H. Scott, *Effects of Decreased Variation in the Sensory Environment*, 8 CAN. J. PSYCHOL. 70 (1954), and JACK A. VERNON, *INSIDE THE BLACK ROOM* (1963).

110. Marvin Zuckerman, *Variables Affecting Deprivation Results*, in SENSORY DEPRIVATION: FIFTEEN YEARS OF RESEARCH 47, 49-50 (John P. Zubek, ed. 1969).

111. S. Smith & W. Lewty, *Perceptual Isolation Using a Silent Room*, 2 LANCET 342 (1959).

112. All subjects were fed and tested by the experimenters 4 times a day. Length of stay ranged from 6-92 hours with women lasting on average 49 hours, men only 29 hours. *Id.*

113. See Zuckerman, *supra* note 108, at 49 (citing studies where anxiety was reported as a reason for terminating the experiment). For example, one researcher studied whether the sensory deprivation that polio patients experienced in respirator tanks caused psychological impairment. He conducted an experiment in which healthy subjects were placed in such tanks and then reactions were measured. Less than a third of the subjects lasted for the agreed upon thirty-six hour experimental period. Many left due to anxiety, panic, and other somatic complaints. Six of the seventeen subjects described "aberrant" mental imagery, and all reported time distortions. Herbert P. Leiderman, *Man Alone: Sensory Deprivation and Behavioral Change*, 8 CORRECTIVE PSYCH. & J. OF SOC. THERAPY 64, 69 (1962).

114. Zuckerman, *supra* note 110, at 68. Two-thirds to three-quarters of those who were informed of the upper time limit of the study stayed until the end, whether the duration was 4 days, 1 week, or 2 weeks. However, those that were not informed of the duration, and were told of the passage of time, quit earlier than those that were told nothing at all.

influencing whether and when the experience became stressful or intolerable.¹¹⁵

The dissimilarities between conditions created in these studies and those in solitary confinement or punitive segregation in correctional institutions are obvious.¹¹⁶ For example, the *complete* restriction of sensory stimulation created in many of these studies exceeds even the most severe prison isolation regimen. In addition, the subjects were all volunteers who were often paid for their participation, which at least one researcher has speculated may both account for the dramatic effects and compromise the generalizability of the results to prison settings.¹¹⁷ On the other hand, the exposure tended to be of extremely brief duration (at least when compared to prison lockup), subjects typically knew the time limit in advance of participation, were given the option of terminating their confinement, and there was a positive scientific rather than negative punitive meaning attached to the experience itself. Indeed, the experimenters in these studies were not perceived as hostile adversaries, and the confinement—although painful—was not experienced as punishment. Nonetheless, these studies do emphasize the importance of sensory stimulation in human experience and the dramatic effects that can be produced when such stimulation is significantly curtailed.¹¹⁸ In addition:

One of the most important results of sensory deprivation experiments has been the finding that the resultant psychologic disturbances are virtually universal. Similar symptoms occurring in the

115. See generally Martin T. Orne & Karl E. Scheibe, *The Contribution of Non-Deprivation Factors in the Production of Sensory Deprivation Effects: The Psychology of the "Panic Button,"* 68 J. ABNORMAL AND SOC. PSYCHOL. 3 (1964); Martin Zuckerman et al., *Responses to Confinement: An Investigation of Sensory Deprivation, Social Isolation, Restriction of Movement and Set Factors,* 27 PERCEPTUAL AND MOTOR SKILLS 319, 333 (1968).

116. Oddly, Bonta & Gendreau, whose writings have minimized the psychological significance of solitary confinement in prison, also counseled penologists to rely more heavily upon the results of these studies: "[T]here exists an extensive experimental literature on the effects of placing people (usually volunteer college students) in solitary, or conditions of sensory deprivation, which has been ignored in the penology literature. . . . In fact, this literature . . . and many of these studies are, methodologically, the most rigorous of all the prison studies. Therefore, conclusions drawn from this source are especially informative." Bonta & Gendreau, *Reexamining, supra* note 93, at 360 (citations omitted).

117. Melvin Morris Weinberg, *Effects of Partial Sensory Deprivation on Involuntary Subjects* (1967) (unpublished Ph.D. dissertation, Michigan State University) (on file with N.Y.U. Rev. L. & Soc. Change).

118. As one reviewer summarized:

The general response to isolation and sensory deprivation includes boredom, restlessness, irritability, increasing anxiety that is often extreme, and, eventually, depersonalization, disorientation, difficulty in concentration, impairment of the ability to solve simple problems, and sometimes delusions and abnormal visual sensations After periods of isolation, many subjects complain of fatigue, drowsiness, confusion, a loss of orientation in time, and difficulty in readjusting to a normal environment.

Frederick Hocking, *Extreme Environmental Stress and its Significance for Psychopathology*, 24 AM. J. PSYCHOTHERAPY 4, 7 (1970).

deaf, and in explorers and prisoners had, in the past, been thought to be due to personal predisposition.¹¹⁹

Finally, although it is clear that virtually everyone exposed to these conditions was affected in some way, it is also clear that even in these extreme situations people did not respond in identical fashion and that various aspects of the environment mediated the experience itself.

B. Psychological Literature on the Importance of Social Contact and Support

Classic theory and research in social psychology have underscored the importance of social contact for the creation and maintenance of "self." Indeed, two of the very first social psychologists—Charles Cooley and George Herbert Mead—premised their theories of selfhood entirely upon social interaction. Cooley's evocative term—"looking glass self"—suggested that we look to others and in them see identity-forming reflections of ourselves.¹²⁰ Mead also emphasized the importance of direct feedback from others in establishing a sense of self, writing that "[w]e appear as selves in our conduct insofar as we ourselves take the attitude that others take toward us"¹²¹ More recently, Leon Festinger's pivotal theory of social comparison processes posited an essential human "drive" for social evaluation that pushes people to belong to groups and associate with

119. *Id.* Leiderman's review of much the same literature led him to similar conclusions:

These disparate findings converge on one major point. Man is dependent on adequate and changing amounts of sensory and social stimulation in order to maintain his psychic and physiological functioning. When he lacks adequate supplies of stimuli, he may develop mental aberrations involving imagery similar to that of hallucinations, a loss of sense of time, a loss of motor coordination, become unable to think or reason clearly, become less able to initiate new tasks, perform less well on certain memory and visual tests, and perhaps become more susceptible to suggestion. Depending on the individual's biological, perceptual and social history, he may develop unusual cravings for or reactions against certain types of stimulations. If these become sufficiently fixed and persistent, they may interfere with his major task of preserving himself.

Leiderman, *supra* note 111 at 73.

120. CHARLIE HORTON COOLEY, *HUMAN NATURE AND THE SOCIAL ORDER* 168-210 (1902).

121. George Herbert Mead, *The Genesis of the Self and Social Control*, 35 *INT'L J. OF ETHICS* 251, 268 (1925). In a related vein, Susan Houston wrote:

There is no reasonable way to explain the extreme mental dissolution in situations of isolation without considering the mind as partly made up of material from other minds. The basic element in sensory deprivation situations is lack of human companionship, which would provide the necessary element to maintain mental stability in some sort of literal sense.

Susan Houston, *Inquiry Into the Structure of Mentation Processes*, 21 *PSYCHOL. REPORTS* 649, 653 (1967).

others.¹²² Researchers have documented the importance of social comparison to concepts about the self,¹²³ perceptions of relative deprivation,¹²⁴ and feelings of equity or fairness.¹²⁵ In a related series of experimental studies, one social psychologist documented the increased need to affiliate with others in order to interpret emotional states, especially in the face of ambiguous and anxiety-arousing situations.¹²⁶ Subsequent research on this issue added catharsis, interpersonal support, and self-esteem as components of the strong need to be with others—all needs that go unfulfilled when persons are isolated or alone.¹²⁷

A separate but related line of research has documented the positive role sometimes played by the presence of others—often referred to simply as “social support”—in mitigating and buffering the negative effects of stress. Such studies underscore the relationship between connectedness to

122. Leon Festinger, *A Theory of Social Comparison Processes*, 7 HUMAN RELATIONS 327 (1954). For more recent discussions of the concept of social comparison, see Symposium, 12 PERSONALITY AND SOC. PSYCHOL. BULL. 261 (1986).

123. Hazel Markus, *Self-Schemata and Processing Information About the Self*, 35 J. PERSONALITY AND SOC. PSYCHOL. 63 (1977).

124. See generally, RELATIVE DEPRIVATION AND SOCIAL COMPARISON: THE ONTARIO SYMPOSIUM, Vol. 4 (James M. Olson et al., eds. 1986).

125. William Austin, *Equity Theory and Social Comparison Processes*, in SOCIAL COMPARISON PROCESSES: THEORETICAL AND EMPIRICAL PERSPECTIVES 279 (Jerry M. Suls & Richard L. Miller eds. 1977).

126. Stanley Schachter, THE PSYCHOLOGY OF AFFILIATION: EXPERIMENTAL STUDIES OF THE SOURCES OF GREGARIOUSNESS 126 (1959).

127. See, e.g., Irving Sarnoff and Philip G. Zimbardo, *Anxiety, Fear, and Social Affiliation*, 62 J. ABNORMAL SOC. PSYCHOL. 356 (1961); Philip G. Zimbardo & Robert Formica, *Emotional Comparison and Self-Esteem as Determinants of Affiliation*, 31 J. PERSONALITY 141 (1963). John Bowlby, whose work focused primarily on early childhood experiences, was also emphatic about the importance of social contact throughout the life cycle:

Intimate attachments to other human beings are the hub around which a person's life revolves, not only when he is an infant or a toddler or a schoolchild but throughout his adolescence and his years of maturity as well, and on into old age. From these intimate attachments a person draws his strength and enjoyment of life and, through what he contributes, he gives strength and enjoyment of others. These are matters about which current science and traditional wisdom are at one.

JOHN BOWLBY, ATTACHMENT AND LOSS: LOSS, SADNESS, AND DEPRESSION 442 (1980).

Cultural theorists have also written about the historical importance of isolation and the construction of self. Thus, John Bender has argued that the new prisons of the late 18th and early 19th century were notable for their emphasis on isolation, which was thought to render prisoners more malleable as subjects for reconstruction:

Isolation divests the criminal of narrative resources and designates a ‘character’ to be formulated. The old prisons had allowed prisoners full access to narrative instruments: writing and publication, visits by auditors, normal reading matter, even hedged participation in society at large within the surrounding neighborhoods. . . . Isolation is conceptually requisite in the [new] penitentiary, not so that prisoners can reflect on the past—that would be old-style ritual penance aimed at forgiveness of sin rather than at alteration of being—but so that omniscience can restructure the inmate's identity through control of narrative resources.

JOHN BENDER, IMAGINING THE PENITENTIARY: FICTION AND THE ARCHITECTURE OF MIND IN EIGHTEENTH-CENTURY ENGLAND 202-3 (1987).

others and physical and mental health.¹²⁸ Thus, social isolation has been related to a number of dysfunctional psychological states and outcomes. For example, there appears to be an inverse relationship between social isolation and subjective measures of well-being among the elderly.¹²⁹ A number of studies also have established a connection between isolation and psychiatric illness. For example, one researcher found that patients who were unmarried, unemployed, living alone, or without religious affiliations were more frequent users of mental health services,¹³⁰ and another found certain measures of social deprivation to correlate significantly with psychiatric admission rates.¹³¹

Finally, the importance of social contact in grounding human identity and contributing to mental health is indirectly underscored by the frequency with which isolation is used to create or intensify human malleability. Techniques of coercive interrogation or so-called "brainwashing" virtually always include extreme forms of social isolation. As two students of these techniques wrote:

Man is a social animal; he does not live alone. From birth to death he lives in the company of his fellow men. When he is totally isolated, he is removed from all of the interpersonal relations which are so important to him, and taken out of the social role which sustains him. His internal as well as his external life is disrupted.

128. Sidney Cobb, *Social Support as a Moderator of Life Stress*, 38 *PSYCHOSOM. MED.* 300 (1976); Alfred Dean and Nan Lin, *The Stress-Buffering Role of Social Support*, 165 *NERVOUS & MENTAL DISEASE* 403 (1977).

129. Thus, one study found that living alone, being unmarried, having no companions, or having no confidants were related to chronic health problems and low scores on measures of subjective well-being. Neena Chappell & Mark Badger, *Social Isolation and Well-Being*, 44 *J. GERONTOL.* 169 (1989). This study and others explore the conceptual distinction between social isolation and psychological isolation and suggest that it is the quality of the social contact—for example, having companionship and confidants—rather than simply the presence of others that contributes to well-being. See also ELOISE RATHBONE-McCUAN AND JOAN HASHIMI, *ISOLATED ELDERS: HEALTH AND SOCIAL INTERVENTION* (1982).

130. Gary L. Tischler et. al., *Utilisation of Mental Health Services*, 32 *ARCH. GEN. PSYCH.* 411, 411-415 (1975).

131. See, e.g., E. H. Hare, *Mental Illness and Social Conditions in Bristol*, 102 *J. MENTAL SCI.* 340 (1956); Graham Thornicroft, *Social Deprivation and Rates of Treated Mental Disorder: Developing Statistical Models to Predict Psychiatric Service Utilisation*, 158 *BRIT. J. PSYCH.* 475 (1991). Cf. Margaret K. Cooke & Jeffrey H. Goldstein, *Social Isolation and Violent Behavior*, 2 *FORENSIC REP.* 287, 288 (1989):

A socially isolated individual who has few, and/or superficial contacts with family, peers, and community cannot benefit from social comparison. Thus, these individuals have no mechanism to evaluate their own beliefs and action in terms of reasonableness or acceptability within the broader community. They are apt to confuse reality with their idiosyncratic beliefs and fantasies and likely to act upon such fantasies, including violent ones.

Exposed for the first time to total isolation . . . he develops a predictable group of symptoms, which might almost be called a "disease syndrome."¹³²

Among the symptoms identified as part of this syndrome were bewilderment, anxiety, frustration, dejection, boredom, rumination, and depression. In addition, the authors observed that "[s]ome prisoners may become delirious and have visual hallucinations."¹³³

C. *Acutely Isolated and Restricted Living Conditions*

Observations of persons who have lived under isolated and restricted conditions provide some insight into the psychological stress of limited personal mobility, reductions in the nature and variety of activity and stimulation available in one's surrounding environment, and social (as opposed to purely sensory) deprivation. Thus, one early study of this topic concluded that "[i]t seems perfectly clear from work thus far that acute disturbances of the normal personality may occur, and rather quickly, in an environment providing reduced sensory or perceptual experience."¹³⁴ A more recent review that summarized several decades of research on people who were confined, restricted in movement and activity, and isolated from a larger population noted that "[r]eports of an inability to concentrate or maintain focus are common" and that "isolation produces significant and often dramatic increases in suggestibility and hypnotizability" and attentional shifts of the type associated with hallucinations.¹³⁵ Researchers reported increased levels of psychological problems, including sleep disturbances, impaired cognition, anxiety, hostility, minor forms of psychopathology, heightened frictions and social conflict among members of the confined group, and potential long-term animosities that could result in deterioration of interpersonal and familial relationships.¹³⁶

In addition, studies have confirmed the value of psychological screening and training to prepare military personnel for assignment in Antarctica and other isolated and confined environments. These precautions appear

132. Lawrence E. Hinkle & Harold E. Wolff, *Communist Interrogation and Indoctrination of "Enemies of the States"*, 76 ARCH. NEUROL. & PSYCH. 115, 127 (1956).

133. *Id.* at 128.

134. Raymond H. Thoenig, *Solitary Confinement—Punishment Within the Letter of Law or Psychological Torture?* 1972 WIS. L. REV. 223, 232 (1972) (citing E.K. Eric Gundersen, *Emotional Symptoms in Extremely Isolated Groups* 9 ARCH. GEN. PSYCH. 362, 363 (1963)). This and other research identified psychological symptoms that were manifested over the six to eight month period in which personnel were confined to indoor quarters with very limited resources for stimulation. Symptoms included insomnia, anxiety, depression, and irritability, and these effects increased as the winter months wore on.

135. Albert A. Harrison et al., *The Human Experience in Antarctica: Applications to Life in Space*, 34 BEHAV. SCI. 253, 257 (1989). The authors concluded that such environments are clearly "stressful" and that a "recurrent concern is that the stresses of isolation and confinement lead to poor mental health and negative moods." *Id.* at 258.

136. *Id.*

necessary to minimize the negative effects of the environment on those who will live there. Similarly, a special emphasis on "environmental design" is needed to minimize the effects of such isolation stress on human behavior. For example, research focused on maximizing the habitability of this kind of confinement and isolation indicates that "[w]indows are a critical design feature" because they allow the entry of natural light, make it possible to communicate with the outside world, and reduce feelings of being cramped.¹³⁷ Further, some researchers observed that adjustment to the isolated and confined environment "depends importantly upon the man's specific job at the station,"¹³⁸ suggesting that the psychological role that a person fills during isolation, including a basic sense of purpose, may be an important component in his or her adjustment. Of course, the intended negative or pejorative meaning of punitive segregation that is necessarily communicated to and emphasized with prisoners makes it unlikely that anyone's positive "role" or sense of purpose in lockup will moderate the negative psychological effects associated with such confinement.

D. Use of Seclusion With Hospitalized Mental Patients

The debate over whether "seclusion"—the imposition of sensory and social deprivation with hospitalized mental patients—can ever be used to accomplish a therapeutic purpose provides another perspective on the psychological consequences of solitary confinement.¹³⁹ Mental health professionals are divided over whether such seclusion sometimes can be beneficial or should *never* be permitted.¹⁴⁰ Mental patients who have been subjected to seclusion seem critical of the experience and question its therapeutic effect.¹⁴¹ Indeed, there is now "considerable self-scrutiny in psychiatry over the uses and abuses of such measures" and an awareness of the "potential dangers"¹⁴² of seclusion practices that has translated into mental health standards governing the manner and conditions under which they should be used.¹⁴³

137. *Id.* at 260-264.

138. E.K. Eric Gunderson, *Mental Health Problems in Antarctica*, 17 ARCH. ENVIRON. HEALTH 558, 564 (1988).

139. Of course, there are important differences between the two conditions. See, e.g., Grassian and Friedman, *supra* note 71 (comparing the effects of seclusion and solitary confinement).

140. Tom Mason, *Seclusion Theory Reviewed—A Benevolent or Malevolent Intervention?* 33 MED. SCI. LAW 95 (1993).

141. See, e.g., Ellen Heyman, *Seclusion*, 25 J. PSYCHOSOC. NURSING AND MENTAL HEALTH SERVICES 8, 8-12, 35, 37 (1987); Stanley M. Soliday, *A Comparison of Patient and Staff Attitudes Toward Seclusion*, 173 J. OF NERVOUS AND MENTAL DISEASE 282 (1985).

142. Jeff Mitchell & Christopher Varley, *Isolation and Restraint in Juvenile Correctional Facilities*, 29 J. AM. ACAD. CHILD ADOLESCENT PSYCH. 251 (1990).

143. JOINT COMMISSION ON THE ACCREDITATION OF HOSPITALS, CONSOLIDATED STANDARDS MANUAL, 1985; FOR CHILD, ADOLESCENT, AND ADULT PSYCHIATRIC, ALCOHOLISM, AND DRUG ABUSE FACILITIES AND FACILITIES SERVING THE MENTALLY RETARDED AND DEVELOPMENTALLY DISABLED 81-84 (Chicago, IL 1985).

One balanced review of the literature on this question recently concluded that "although it appears to be reasonably well-established that seclusion and restraint 'work,' i.e., they provide an effective means for preventing injury and reducing agitation, it is at least equally well-established that these procedures can have serious deleterious physical and (more often) psychological effects on patients."¹⁴⁴

Recognition of the risks of seclusion also has led to various task force reports and advisory opinions that recommend physician authorization, safety features in seclusion room design, and specialized training for hospital staff¹⁴⁵ as well as a range of proposed alternatives to seclusion for mental patients.¹⁴⁶ A number of psychiatrists have publicly criticized the use of isolation as "a prolonged intervention lasting days, weeks, and in some cases, months"¹⁴⁷ in juvenile correction facilities, citing the fact that "[t]he literature suggests that a variety of mental and behavioral disturbances can be created by isolation for long periods of time"¹⁴⁸ and that "programs relying on excessive isolation experience high rates of aversive behaviors among residents."¹⁴⁹

E. *Studies of Torture Victims*

Research done with torture survivors also provides some insight into the psychological effects of solitary confinement. Indeed, legal and psychological commentators critical of solitary confinement often analogized it to torture.¹⁵⁰ The fact that solitary confinement is among the most frequently used psychological torture techniques seems to underscore its aversive nature and destructive potential.¹⁵¹ Methods of psychological torture have

144. William A. Fisher, *Restraint and Seclusion: A Review of the Literature*, 151 AM. J. PSYCH. 1584, 1588 (1994).

145. See, e.g., AMERICAN PSYCHIATRIC ASSOCIATION, TASK FORCE REPORT 22: SECLUSION AND RESTRAINT: THE PSYCHIATRIC USES (1985).

146. D.G. Kingdon & E.W. Bakewell, *Aggressive Behaviour: Evaluation of a Non-Seclusion Policy of a District Psychiatric Service*, 153 BRIT. J. PSYCH. 631 (1988).

147. Mitchell & Varley, *supra* note 140, at 252.

148. *Id.*

149. *Id.* at 253. See also P. Herbert Leiderman et al., *Sensory Deprivation: Clinical Aspects*, 101 ARCH. OF INTERNAL MED. 389-396 (1958) (finding that changes in social and sensory environment of long-term hospital patients eliminated anxiety, delusions, and hallucinations developed by some patients).

150. See, e.g., Lucas, *supra* note 83, at 155 (asking "Is Solitary Confinement Torture?"); Tim Shallice, *Solitary Confinement: A Torture Revived?* NEW SCIENTIST, Nov. 28, 1974, at 666; Thoenig, *supra* note 132, at 231-233.

151. Foster, *supra* note 97. Solitary confinement is one of the most common "psychological procedures" used to torture South African detainees. *Id.* at 69. Foster also reported on the frequency with which solitary confinement was used for various age groups and in different geographical regions of the country and concluded that "[g]iven the full context of dependency, helplessness and social isolation common to conditions of South African security law detention, there can be little doubt that solitary confinement under these circumstances should in itself be regarded as a form of torture." *Id.* at 136. See also Hinkle & Wolff, *supra* note 130, at 115-75 (describing effects of isolation cells used by the "Communist State Police" in the Soviet Union and China).

been divided by researchers into two types: "weakening" methods are designed to exhaust the victim and render her helpless, while "personality destroying" methods are designed to induce guilt, fear and loss of self-esteem.¹⁵² Specific torture techniques often include stimulus deprivation as well as a near-complete loss of control. Some descriptions of these techniques bear close similarity to descriptions of modern supermax prisons:

Victims are submitted to a detailed set of regulations and rules, resulting in close supervision where everything (including completely insignificant details) is controlled. Violation of the rules (either real or supposed) is used as an excuse to punish the "offending" victim. . . . During torture and imprisonment the aggression of the victim is by necessity turned inwards and there is no possibility of adequately expressing emotions.¹⁵³

When used as a method of torture, solitary confinement impairs the victim's ability to think coherently and logically, and can produce anxiety, emotional instability, disorientation, anger, depression, and hallucinations.¹⁵⁴ Torturers have long recognized that more severe sensory deprivation results in more severe psychological trauma.¹⁵⁵

Torture victims are often diagnosed as suffering from Post Traumatic Stress Disorder ("PTSD"),¹⁵⁶ an extreme psychological reaction that can occur in the wake of a traumatic event. The disorder generally entails a subsequent, overwhelming emotional reaction that may be followed by some form of denial, including symptoms of amnesia, and avoidance of anything related to the trauma, as well as detachment and estrangement from others, limited affect, and a poor outlook on the future. Intrusive thoughts about the event, including pseudo-hallucinations and disturbing thoughts and emotions that "flood" the victim are also characteristic of

152. F.E. Somnier & I.K. Genefke, *Psychotherapy for Victims of Torture*, 149 BRIT. J. PSYCH. 323, 324 (1986).

153. *Id.*

154. *Id.* at 325-26; Shaun R. Whittaker, *Counseling Torture Victims*, 16 THE COUNSELING PSYCHOLOGIST 272, 273 (1988). As one commentator summarized: "Even the most unintrusive [torture] techniques were found to leave lasting psychological scars. For instance, sensory deprivation frequently led to anxiety, hypochondria, and hysteria." Matthew Lippman, *The Development and Drafting of the United Nations Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment*, 27 B.C. INT'L & COMP. L. REV. 275, 310 (1994).

155. William Ristow & Tim Shallice, *Taking the Hood Off British Torture*, NEW SCIENTIST, Aug. 5, 1976, at 272 ("The major 'advance' that the Combined Services Intelligence Centre instituted was to replace isolation in featureless, soundless cells (the KGB method) by the much more extreme environment of severe sensory deprivation").

156. Federico A. Allodi, *Assessment and Treatment of Torture Victims: A Critical Review*, 179 J. NERVOUS AND MENTAL DISEASE 4 (1991); Kenneth S. Pope & Rosa E. Garcia-Peltoniemi, *Responding to Victims of Torture: Clinical Issues, Professional Responsibilities, and Useful Resources*, 22 PROFESSIONAL PSYCHOLOGY: RESEARCH AND PRACTICE 269, 272 (1991); Robert I. Simon & Robert A. Blum, *After the Terrorist Incident: Psychotherapeutic Treatment of Former Hostages*, 41 AM. J. PSYCHOTHERAPY 194, 195 (1987); Whittaker, *supra* note 152, at 274.

PTSD.¹⁵⁷ Such intrusive thoughts often include feelings of guilt, fear, shame and rage over one's vulnerability as a victim, rage at the source of the trauma, and fear of the loss of control of aggressive impulses.¹⁵⁸

In the absence of therapy (or some other form of resolution or relief), PTSD victims often suffer from psychosomatic problems, an inability to work productively or to experience positive emotions. The onset of the disorder may be delayed by six months or more, but the symptoms may continue for years. Persons with higher levels of pre-trauma psychological health have better prognoses and, conversely, persons with less sturdy personalities appear to be more vulnerable to the stressors that lead to the disorder.¹⁵⁹ Some discussions of the psychotherapeutic techniques for treating the long-term problems of torture victims have acknowledged that segregated prisoners should be numbered among the patient population. For example, one review pointed to the guilt and discomfort clinicians may experience upon learning that "the clinician's [own] government was involved, directly or indirectly, in the torture,"¹⁶⁰ and used Amnesty International's condemnation of the High Security Unit of the Lexington Federal Prison as an example.¹⁶¹ Others have argued that the effects of reduced environmental stimulation can require long-term psychotherapy to abate.¹⁶²

157. AMERICAN PSYCHIATRIC ASSOCIATION, *DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS* 236 (3d ed. 1980). See also Mardi J. Horowitz, *Post-traumatic Stress Disorders: Psychosocial Aspects of the Diagnosis*, 19 INT. J. MENT. HEALTH 21 (1990) [hereinafter Horowitz, *Post-traumatic Stress*].

158. Ronald Siegel found that conditions of isolation, visual deprivation, restraint on physical movements, physical abuse, and threat of death that accompanied hostage situations appeared to influence the production of hallucinations in about a quarter of the survivors he examined. Ronald K. Siegel, *Hostage Hallucinations: Visual Imagery Induced by Isolation and Life-Threatening Stress*, 172 J. NERVOUS AND MENTAL DISEASE 264, 266 (1984). Hallucinations were also found by Grassian to be one of the defining characteristics of a psychiatric syndrome he identified in prisoners exposed to solitary confinement. Grassian, *Psychopathological Effects*, *supra* note 72, at 1451; Grassian and Friedman, *supra* note 72, at 54.

159. Horowitz, *Post-traumatic Stress*, *supra* note 155, at 21.

160. Pope & Garcia-Peltoniemi, *supra* note 154, at 270. D.H. Foster also commented on the inadvisability of concentrating on the psychologically negative effects of solitary confinement absent a broader discourse about the political context in which such confinement occurs, observing that: "For obvious ethical reasons, no systematic study of [solitary confinement] effects under political detention conditions has been possible, other than reported experiences of former detainees. In such cases, reports have been very negative." Donald Hugh Foster, *Political Detention in South Africa: A Sociopsychological Perspective*, 18 INT. J. MENT. HEALTH 21, 25 (1989).

161. Amnesty concluded that the "prolonged isolation, humiliating strip-searches and additional restrictions" imposed upon the women in this unit "had a detrimental effect on their physical and mental health." AMNESTY INTERNATIONAL, AMNESTY INTERNATIONAL REPORT: 1989 152 (1989).

162. Somnier & Genefke, *supra* note 150.

F. Data From Isolated and Segregated Prisoners

1. Autobiographical and Descriptive Accounts

Personal accounts of life in long-term solitary confinement and punitive segregation provide elaborate descriptions of the pains of such imprisonment, as well as the psychological extremes to which prisoners have gone to adjust to it. For example, Christopher Burney's eloquent account of his eighteen months in a German wartime prison camp focused on his attempts to survive the assault on his identity that the monotony and utter lack of stimulation represented: "We are narrow men, twisted men, smooth and nicely rounded men, and poets; but whatever we are, we have our shape, and we preserve it best in the experience of many things."¹⁶³ Because solitary confinement denied him the "experience of many things," he struggled to create an inner world of existence that preserved his sense of who he was. Although Burney observed that humans are "adaptable creatures" who "flatter ourselves with the conceit that by adapting ourselves to events we master them,"¹⁶⁴ his attempts to achieve psychological mastery of this environment were part of a constant battle to preserve his sanity.¹⁶⁵ Indeed, like many autobiographical accounts of solitary confinement, Burney's dwelled on ways of avoiding madness. He conceded: "[n]o doubt I would have gone mad, because it takes a well-nourished brain to cope with such an absolute as Nothing."¹⁶⁶

Jack Abbott's account of his numerous experiences in solitary confinement were similarly graphic and stark.¹⁶⁷ Indeed, he argued that prison solitary was so powerful that it could "alter the ontological makeup of a

163. CHRISTOPHER BURNEY, *SOLITARY CONFINEMENT* 8 (1961).

164. *Id.* at 11.

165. Burney used self-imposed routines both to create artificial "events" during the day that made the passage of time more bearable, and to provide some semblance of structure to an otherwise unmarked experience. He paced in his cell—"the stock-in-trade of all those in solitary confinement," engaged in purposeful flights of imagination (like fantasized journeys), and forced himself through mental exercises (like self-administered quizzes). *Id.* at 20. See also Semyon Gluzman, *Fear of Freedom: Psychological Decompensation or Existentialist Phenomenon?* 139 AM. J. PSYCH. 57 (1982). A Soviet psychiatrist sentenced to some seven years in a labor camp, Gluzman spent long periods in solitary confinement and wrote eloquently about the psychological challenges of this extreme form of imprisonment:

There is no doubt that the very environment of the political labor camp, the combination of informational deprivation with constant extreme stimuli, has an impact on the individual's state of mind. Although situationally induced changes of mood—feelings of loneliness and distress—are not rare here, they are not manifestations of psychic disorder. They are a natural, healthy reaction to gloating brutality and trampled justice, to abuses of power, to the insensitivity of God and the world. Psychological inadequacy or deficiency under such conditions would manifest itself by the *absence* of such negative emotions.

Id. at 60.

166. Burney, *supra* note 161, at 21. Foster also discussed the fear of going insane that plagued a number of South African detainees who had been placed in solitary confinement. FOSTER, *DETENTION AND TORTURE*, *supra* note 97 at 136-140.

167. JACK ABBOTT, *IN THE BELLY OF THE BEAST: LETTERS FROM PRISON* (1981).

stone.”¹⁶⁸ He, too, focused on the despair that descended with inactivity and lack of meaning: “You sit in solitary confinement stewing in nothingness. . . . The lethargy of months that add up to years in a cell, alone, entwines itself about every ‘physical’ activity of the living body and strangles it slowly to death. . . . Time descends in your cell like the lid of a coffin.”¹⁶⁹ Of course, the death of which he wrote was psychological in nature. Like Burney, Abbott’s goal was to find ways of fighting against the monotonous routine and emptiness “without losing my mind.”¹⁷⁰

Descriptive accounts by those a step removed from the actual experience of prison solitary have focused on a related set of psychological issues. For example, Cohen and Taylor provided a lengthy account of a group of men sentenced to long-term confinement in a British special security unit. Among other things, they found that relationships with persons outside the prison became increasingly difficult to maintain, and that prisoners with no workable, sustaining ideology were prone to psychic retreat or withdrawal, or to fighting in self-destructive ways. Over time many prisoners learned to cope with the pains of imprisonment in an unreflective way, and what the authors referred to as the “ultimate existential problem”—fear of deterioration—became increasingly acute.¹⁷¹ Although conditions in the units were severe—one of the men likened it to “living in a submarine”¹⁷²—the men were permitted group interaction, relative freedom of movement within the units, and contact with outsiders (like Cohen and Taylor) to conduct classes. The authors found that the men in these units “hardly lost their identities,”¹⁷³ at least in the sense that there were clear assertions of self and even clearer differences between prisoners in terms of how they approached their confinement. Of course, imperatives of institutional life did mean that “over time certain adaptations [were] favored in that they represent the only workable ways of dealing with the accumulating problems of life inside.”¹⁷⁴ Distinct strategies emerged by which the prisoners adapted to their conditions of confinement that appeared to be a function of their relationship to authority.

Michael Jackson’s analysis of conditions in a variety of segregation units in Canada also detailed prisoners’ psychological reactions to their confinement.¹⁷⁵ Prisoners reported difficulties concentrating on even simple tasks, experienced headaches, mental and physical deterioration, emotional flatness, lability, breakdowns, hallucinations, paranoia, hostility and

168. *Id.* at 45.

169. *Id.* at 44.

170. *Id.* at 46.

171. Cohen and Taylor, *supra* note 82, at 198.

172. *Id.* at 62. The conditions in these units are described in some detail in chapter 3 of Cohen and Taylor’s book, where the environment is termed a “closed emotional world.” *Id.* at 60.

173. *Id.* at 148.

174. *Id.* at 153.

175. Jackson, *supra* note 19.

rage, and some were beset with thoughts of self-mutilation and suicide (which, in some instances, they acted upon). Jackson also described the "double binds" that prisoners in these units commonly confronted. For example:

The undercurrent of violence in the SHU poses a terrible dilemma for the prisoners. If they seek to avoid it by staying in their cells or forgoing exercise in the yard or time in the common room, they will be viewed negatively as demonstrating an unwillingness or an inability to associate with others. If they decide to come out of their cells when they are concerned about being attacked, they feel they are forced to carry a knife or other weapon in order to defend themselves. If a weapon is discovered the authorities' view that they are indeed dangerous and require further confinement in the SHU is reinforced.¹⁷⁶

Those placed in "special handling units" in which they supposedly were given the opportunity to ascend to slightly increased levels of freedom and privileges were confused about the criteria used to evaluate their behavior, harbored a sense of anger "bordering on outrage" about the illegitimacy and unreliability of the process by which they were reviewed,¹⁷⁷ and were plagued by a deep sense of helplessness.

The descriptive accounts of two psychiatrists who were employed in several of the California Department of Corrections's punitive segregation units provide additional data on the psychological adaptations needed to survive in such places. Frank Rundle's observations of Soledad's "adjustment center" led him to conclude that "madness" among the prisoners who were confined there was at least "partially functional and adaptive."¹⁷⁸ Specifically, Rundle watched some prisoners who had been isolated for days "become so desperate for relief that they would set their mattresses afire so as to force the staff to open the door and remove them from the torture chamber."¹⁷⁹ Other prisoners "would burst out in a frenzied rage of aimless destruction, tearing their sinks and toilets from the walls, ripping their clothing and bedding, and destroying their few personal possessions in

176. *Id.* at 177.

177. *Id.* at 170-171. In addition:

[T]here are still no real programs in Millhaven. The world of the SHU is still circumscribed by a television set, a common room and an exercise yard. The prisoner, even though he is now equipped with an individual program plan, is still no more able than he ever was to demonstrate "responsible behavior" beyond not breaking the rules.

Id. at 173.

178. Frank Rundle, *The Roots of Violence at Soledad*, in *THE POLITICS OF PUNISHMENT: A CRITICAL ANALYSIS OF PRISONS IN AMERICA* 163, 167 (Erik Olin Wright ed.,) (1973).

179. *Id.*

order to alleviate the numbing sense of deadness or non-being and to escape the torture of their own thoughts and despair."¹⁸⁰

Similarly, Robert Slater recounted the "atmosphere of terror" that prevailed in San Quentin prison during the 1980s, when most of the prison's housing consisted of "lockup" or punitive segregation of some kind.¹⁸¹ Slater observed the psychiatric consequences for "large numbers" of prisoners in their attempts "to cope with the psychological effects of terror as well as the debilitating effects of long-term lockup, excessive noise, poor sanitary conditions, sensory overload or deprivation . . . lack of privacy, brutality, isolation, and pests."¹⁸² His description of the symptoms suffered by prisoners in these units included:

tension, irritability, sleeplessness, nightmares, inability to think clearly or to concentrate, and fear of impending loss of impulse control. Sometimes the anxiety is severe enough to be crippling. It interferes with sleep, concentration, work, and study and predisposes prisoners to brief psychotic reactions, suicidal behavior and psychophysiological reactions. It causes misperceptions and over-reactions. It fuels the cycle of violence, leading to more violence and terror.¹⁸³

Slater attributed these reactions primarily to the acute effects of the environment in which the prisoners were confined since, in his opinion, "[t]hese are individuals who do not experience much anxiety in the free community of lower security prisons and their anxiety, therefore, would usually be regarded by psychiatrists as 'exogenous' or 'anxiety associated with the stress of day to day living.'"¹⁸⁴ Indeed, he concluded that the main function of a psychiatrist in environments like these was to "prevent the atmosphere of terror from breaking men down to the point where they are incapable of making rational decisions."¹⁸⁵

180. *Id.*

181. Robert G. Slater, *Psychiatric Intervention in an Atmosphere of Terror*, 7 AM. J. FORENSIC PSYCH. 5, 6 (1986).

182. *Id.* at 10.

183. *Id.*

184. *See id.*

185. *See id.* A former employee of the California Department of Corrections, Slater was no prisoner "sympathizer" nor someone easily convinced about the authenticity of prison-related syndromes. *See* Robert G. Slater, *Abuses of Psychiatry in a Correctional Setting*, 7 AM. J. FORENSIC PSYCH. 41 (1986). Jay Stuller also provided an early example of extreme isolation leading to a prisoner breakdown and the inability to make rational decisions:

In 1941 Henry Young, age 29, went on trial in San Francisco for the murder of another Alcatraz convict, Rufus McCain. He expected a first-degree murder conviction. But his attorney put Alcatraz in the dock, claiming that repeated beatings by guards and solitary confinement had put Young into a "psychological coma," which made him "legally unconscious" during the killing. Fellow convicts, brought to the courthouse shackled, testified to the prison's systematic brutality. Newspapers nationwide carried stories citing "the trial of Alcatraz." Young's attorney said

2. *Direct Studies of Solitary Confinement and Segregation*

Some of the effects of solitary confinement have been studied in research conducted in actual prison settings. A few of the studies have employed experimental or quasi-experimental designs. For example, one early study used long-term federal prisoner volunteers to examine the effects of short-term solitary confinement.¹⁸⁶ Half of the prisoners were placed in solitary for four days, although one dropped out before the end of the experiment; the other half served as controls. The researchers found no deterioration of mental or psycho-motor functioning after the brief period of isolation, and speculated that self-selection bias might have influenced the results (i.e., those better able to tolerate isolation might have been more likely to volunteer). Despite the possible role of self-selection in minimizing the measured effects, some psychological changes *were* identified in the isolated subjects, who showed significantly increased levels of anxiety and tended to be less "verbally productive" than the group of prisoners who had not been placed in solitary.

Another such study evaluated the psychiatric consequences of sensory deprivation in a maximum security prison.¹⁸⁷ Experimental subjects were placed in "relative deprivation" for seven days and were then compared to a control group. While few physiological differences were found between experimental subjects and control prisoners, EEG levels declined for the isolated group. These physiological differences correlated with apathetic, lethargic behavior, and the greater the social deprivation, the greater the withdrawal of the subject. The researchers concluded that, from a rehabilitative standpoint, long-term prisoners did not receive adequate stimulation. They also suggested that sensory-deprived inmates "cannot adjust to a sudden release into free society because [their] mental and emotional mechanisms are adjusted to the deprivation circumstances," and that the inmates they studied could not "tolerate the myriad sensory input in normal environments with its pace, noise, confusion and instant decision-making."¹⁸⁸ The researchers argued that the consequences of such confinement might well extend beyond the period of incarceration since "anxiety, restlessness, sleeplessness and irritability become so great in the released ex-inmate that he may seek means to return to prison with its retarded input and routine existence."¹⁸⁹ Finally, they concluded that adequate sensory stimulation

in closing argument "It was Alcatraz that killed McCain. It was the cold, sadistic logic that some men call penology that killed him." The jury agreed, finding Young guilty only of involuntary manslaughter.

Stuller, *supra* note 54, at 88-90.

186. Richard H. Walters, John E. Callagan & Albert F. Newman, *Effect of Solitary Confinement on Prisoners*, 119 AM. J. PSYCH. 771 (1963).

187. George Scott & Paul Gendreau, *Psychiatric Implications of Sensory Deprivation in a Maximum Security Prison*, 14 CAN. PSYCH. ASS'N. J. [LA REVUE DE L'ASSOCIATION DES PSYCHIATRES DU CANADA] 337 (1969).

188. *Id.* at 341.

189. *Id.*

should be introduced into maximum security prisons in the form of education, shop training, instruction in trades, and physical exercise programs, and that the lack of such programs was detrimental to the inmate's health and long-term rehabilitative potential.

Several years later, one of the same researchers and his colleagues conducted another study on solitary confinement, this one comparing prisoner volunteers in isolation for seven days to controls who were not isolated.¹⁹⁰ After carefully screening 82 volunteers and rejecting any with medical, psychiatric, behavioral, or intelligence problems, they randomly assigned 20 "fit" volunteers to the isolated conditions. Isolated subjects were once again found to have lowered EEG frequencies, which the researchers felt might be related to "frustration and stress" produced by the deprived circumstances of their solitary confinement.¹⁹¹ In a smaller follow-up study¹⁹² using carefully screened subjects, eight "controls" were compared to eight prisoners who were placed in solitary confinement for ten days—"this being the longest time inmates usually remain in solitary."¹⁹³ Although the researchers found no physiological evidence that this brief stay in solitary was any more stressful than the control conditions, fully half of the original subjects in solitary confinement, who had volunteered for the study and been screened for fitness, quit and were replaced with new subjects by the end of the second day of the experiment. Surprisingly, the researchers concluded that solitary was not stressful for inmates and offered the opinion that the "quitters" may have been "constitutionally" different from those who remained.¹⁹⁴

Among other things, these studies illustrate the degree to which experimental research on solitary confinement is plagued by several significant limitations. One significant problem is that most such research is based on periods of isolation that are vastly shorter (generally no more than 4-10 days) than the periods typically experienced by prisoners placed in actual punitive segregation. The use of volunteer subjects also may compromise the applicability of experimental research to real-life solitary confinement. As noted earlier, self-selection may increase the probability that persons with relatively higher tolerance for isolation will participate. Also, because of the way in which real or perceived control serves as an important mediator of psychological reactions to stress,¹⁹⁵ the ill effects of solitary may be

190. Paul Gendreau et al., *Changes in EEG Alpha Frequency and Evoked Response Latency During Solitary Confinement*, 79 J. ABNORMAL PSYCH. 54 (1972).

191. *Id.* at 57.

192. C.E.J. Ecclestone et al., *Solitary Confinement of Prisoners: An Assessment of its Effects on Inmates' Personal Constructs and Adrenocortical Activity*, 6 CAN. J. BEHAV. SCI. 178 (1974).

193. *Id.* at 179.

194. *Id.* at 189.

195. A sense of control can reduce subjective ratings of stress and threat and result in dramatic changes in the ways in which symptoms are labeled. Judith Rodin, *Aging and Health: Effects of the Sense of Control*, 233 SCIENCE 1271, 1273-74 (1986).

either re-labeled or minimized by subjects who, by virtue of their having chosen to participate and being able to decide whether or not to continue in the study, experience a measure of control that prisoners placed involuntarily into segregated confinement do not have.¹⁹⁶ Despite their limitations, these studies do illustrate the degree to which brief exposure to isolation can produce increased anxiety, lowered verbal production, decreased EEG levels that were correlated with apathetic behavior, and discomfort that even volunteers were unwilling to tolerate for short periods of time.

Although experimental research on solitary confinement is difficult to conduct, it has been supplemented by reasonably good clinical data about isolation effects in prison. For example, one early study collected observational data on the effects of solitary from 21 isolated prisoners.¹⁹⁷ The authors observed three response patterns typical of prisoners placed in isolation: verbal aggression, physical destruction of surroundings, and the development of an inner fantasy world, including paranoid psychosis. In addition, they observed an overall reaction to solitary confinement that

196. An unpublished study that is sometimes cited in the literature on solitary confinement suffered from a host of additional problems. See Weinberg, *supra* note 115. This study compared thirty-two prisoners involuntarily sentenced to segregated housing due to disciplinary infractions. Twenty subjects—the experimental group—were sent to solitary confinement for *five days*, where they were exposed to markedly reduced visual and auditory stimulation, including no reading materials or radios, substantially reduced lighting, and prohibitions against communicating with staff and other prisoners. The remaining twelve “control” subjects spent at least five days in segregation where they were physically restricted to a solitary cell for the entire period but given access to reading materials, radios, and the opportunity to talk to other inmates. All subjects were assessed on a variety of perceptual and cognitive tests, both before and after their terms in segregated housing. No differences were found between the two groups, or within groups comparing scores from before and after time in solitary confinement and segregation. However, these null findings were compromised by numerous methodological limitations, including the extremely short duration of the solitary confinement itself, the small sample size, lack of matched controls, and the fact that both solitary confinement and “control” subjects experienced special confinement as punishment for institutional transgressions. In addition, *all* subjects were confined to segregated housing for one or two days prior to the pre-test, awaiting the disposition on their charges. This fact alone confounded any meaningful interpretation of the comparisons between and within the groups since all subjects were “contaminated” by their stay in solitary immediately before the study began. Moreover, except for the partial sensory deprivation to which they were exposed, the conditions under which experimental subjects were confined did not differ significantly from those of the controls. Both groups experienced significant restrictions in the nature of their confinement or, as the author himself put it, “both groups of subjects were living in discomfort for at least five days.” *Id.* at 45. The final significant problem with the study concerned what was *not* measured. Aside from the Rorschach test—administered to measure ego control—all of the other measures were of intellectual and perceptual skills. At the time this study was conducted the Rorschach was notoriously difficult to score in a standardized fashion, and the experimenter’s inexperience with the test restricted the scope of potentially interesting psychological effects he attempted to measure. No objective or qualitative data were collected regarding depression, anxiety, self-injury, or any of the somatic illnesses that would be expected to be associated with the stress of isolation.

197. Bruno M. Cormier & Paul J. Williams, *Excessive Deprivation of Liberty*, 11 *CAN. PSYCH. ASS’N. J.* 470 (1966).

they described as uncontrolled rage, including an increase in homicidal and suicidal impulses.

Another study analyzed the effects of solitary confinement in case studies of prisoners who were held indefinitely in a Maine prison, many of whom had been given no reason for their isolation.¹⁹⁸ The authors found that almost every prisoner in the isolation unit had attempted suicide,¹⁹⁹ and that the prisoners often acted out in seemingly irrational ways such as smashing their heads against the concrete walls and destroying their beds and light fixtures.²⁰⁰

Hans Toch's large scale psychological study of prisoners "in crisis" in New York state correctional facilities included important observations about the effects of isolation.²⁰¹ After hundreds of in-depth interviews with such prisoners, he concluded that "isolation panic" was a serious problem among prisoners in solitary confinement.²⁰² Symptoms reported included rage, panic, loss of control, breakdowns, psychological regression, and a build-up of physiological and psychic tension that led to incidents of self-mutilation.²⁰³ Toch noted that although isolation panic could occur under other conditions of confinement, it was "most sharply prevalent in segregation."²⁰⁴ Moreover, it marked an important dichotomy for prisoners: the "distinction between imprisonment, which is tolerable, and isolation, which is not."²⁰⁵

During the same time period, Thomas Hilliard published the results of his evaluation of several prisoners who were being kept in the Adjustment Center at San Quentin.²⁰⁶ He wrote that the solitary confinement produced overwhelming tension and anxiety in the inmates for several reasons: the "caging" and chaining of the prisoners; the absence of meaningful exercise, activity, or other outlet through which to release frustration; the indeterminacy of the terms; the absence of any program leading to release; and the sense of possibly never being freed from such confinement. The prisoners experienced a "pervasive sense of frustration and hopelessness," "deep feelings of despair," and concerns that the psychological pain of their confinement might drive them "to extreme actions and desperate solutions."²⁰⁷ Hilliard concluded that conditions of confinement in the Adjustment

198. Benjamin & Lux, *Maine State Prison*, *supra* note 73.

199. *Id.* at 84. One nearly died from loss of blood after cutting himself with his broken light bulb, another swallowed glass, and a number of prisoners attempted hanging themselves. Several were successful. *Id.*

200. One of the prisoners offered this explanation for his extreme behavior: "In such an environment, it is normal to act abnormal." *Id.* at 84.

201. HANS TOCH, *MOsaIC OF DESPAIR: HUMAN BREAKDOWNS IN PRISONS* (1992).

202. *Id.* at 48.

203. *Id.* at 49.

204. *Id.* at 54.

205. *Id.*

206. Hilliard, *supra* note 72. Conditions in the Adjustment Center were described in *Spain v. Procnier*, 408 F. Supp. 534 (N.D. Cal. 1976).

207. Hilliard, *supra* note 72, at 77-80.

Center were "overwhelmingly negative and antagonistic to effective rehabilitation," and that they produced "hostility, resentment and resistance."²⁰⁸

One small-scale study reported on four prisoners in a Canadian facility who were sentenced to solitary confinement for disruptive behavior. The study illustrated not only the potential psychiatric consequences of isolation but also the way that the researchers' orientation could influence interpretations of seemingly objective data.²⁰⁹ The authors of this study, who became professionally associated with the promotion of isolation as a technique for producing positive behavioral change,²¹⁰ reported a variety of

208. *Id.* at 81.

209. Suedfeld & Roy, *supra* note 93.

210. See, e.g., Peter Suedfeld, *The Benefits of Boredom: Sensory Deprivation Reconsidered*, 63 AMERICAN SCIENTIST 60 (1975). Indeed, Professor Suedfeld has touted the salutary, therapeutic benefits of "reduced environmental stimulation" (RES) for a remarkable variety of behavioral problems and psychological ills. See generally Peter Suedfeld, *The Restricted Environmental Stimulation Technique in the Modification of Addictive Behaviors: Through the Centuries to Frontiers for the Eighties*, 2 BULL. SOC. PSYCHOL. IN ADDICTIVE BEHAV. 231 (1983)(advocating the therapeutic use of RES for the treatment of a full range of addictive behaviors, including alcoholism); Daryl Lynn Rank & Peter Suedfeld, *Positive Reactions of Alcoholic Men to Sensory Deprivation*, 13 INT. J. ADDICTIONS 807 (1978)(alcoholism); Peter Suedfeld & Frederick F. Ikard, *Use of Sensory Deprivation in Facilitating the Reduction of Cigarette Smoking*, 42 J. CONSULTING AND CLIN. PSYCHOL. 888 (1974)(smoking cessation); Alistair Wallbaum et al., *Progressive Muscle Relaxation and Restricted Environmental Stimulation Therapy for Chronic Tension Headache: A Pilot Study*, 38 INT. J. PSYCHOSOMATICS 33 (1991)(alleviating tension headaches); Peter Suedfeld et al., *Reduction of Post-ECT Memory Complaints Through Brief, Partial Restricted Environmental Stimulation (REST)*, 13 PROGRESS IN NEURO-PSYCHOPHARM. & BIOL. PSYCH. 693 (1989)(reducing complaints about memory loss by patients who have undergone electroshock treatments); Peter Suedfeld & J. Christopher Clarke, *Specific Food Aversion Acquired During Restricted Environmental Stimulation*, 11 J. APPLIED SOC. PSYCHOL. 538 (1981)(facilitating dieting); Peter Suedfeld et al., *Enhancement of Scientific Creativity by Flotation REST (Restricted Environmental Stimulation Technique)*, 7 J. ENV'TL. PSYCHOL. 219 (1987)(enhancing scientific creativity); Peter Suedfeld & Geraldine Schwartz, *Restricted Environmental Stimulation Therapy (REST) as a Treatment for Autistic Children*, 4 J. DEVELOP. & BEHAV. PEDIATRICS 196 (1983)(curing autism in children); Peter Suedfeld & Robert Hare, *Sensory Deprivation in the Treatment of Snake Phobia: Behavioral, Self-Report, and Physiological Effects*, 8 BEHAV. THERAPY 240 (1977)(treating snake phobias in adults). Chuni Roy, Suedfeld's co-author in their initial study on the effects of solitary confinement with prisoners, also advocated the use of Suedfeld's version of RES as an effective therapeutic remedy for smoking, hypertension, and general psychosomatic disorders: "The author hopes that medical practitioners, psychiatrists and others will give some serious attention to this unique therapeutic tool." Chuni Roy, *The Clinical Application of Restricted Environmental Stimulation Therapy (REST): Observations of a Psychiatrist*, 159 BRIT. J. PSYCH. 592, 593 (1991). However, the kind of RES advocated in these articles, consisting of "a flotation tank, various relaxation tapes, and a REST chamber for 24 hours," bears virtually no relationship to, and, indeed, seems almost the antithesis of, the conditions that prevail in solitary confinement or punitive segregation units in actual prisons. *Id.* at 592. In his later writing, however, Suedfeld has begun to blur the distinction between the potentially therapeutic use of certain forms of voluntary, carefully controlled forms of isolation with the involuntary, punitive solitary confinement that is practiced in prison. Indeed, he has appeared to defend solitary confinement in maximum security prisons as if it were therapeutic RES, and he has argued, without benefit of supporting data, that "solitary confinement has been viewed by many prisoners as a pleasant and desirable time-out from the constant pressures and over-stimulation of the

disturbing reactions by each of the isolated prisoners. The first prisoner, placed in solitary confinement for a month, became agitated, banging on his door by the fourth day. With no relief, the prisoner's behavior subsided and he became calm, quiet, and uninterested in his surroundings; furthermore, he began "muttering in an incoherent way."²¹¹ After his thirty days of isolation, staff reported him to be more cooperative and pleasant, yet a few months later he underwent six treatments of electroconvulsive shock therapy for severe depression. A second prisoner also became extremely agitated and verbally abusive during his 30-day stay. He was given anti-psychotic medication four times a day with little effect. This prisoner also became "calm, but incoherent."²¹² He hallucinated sporadically, was unsteady on his feet, and slept heavily, even though no psychotic symptoms had been noted prior to his experience in solitary. A third prisoner, sentenced to a week of solitary, displayed inappropriate behavior by the fourth day, including giggling, staring into space for long periods, loss of appetite, and heavy sleeping.²¹³ Remarkably, the authors concluded after these accounts that the prisoners had benefited from their experience in solitary, based on nurses' reports of behavior change. Even those reports were questioned, however, when one of the authors reported in a separate paper that some security staff had disagreed with the extent of improvement reported by the nurses.²¹⁴

In a later inquiry, the same researcher recruited prisoners from three North American prisons for two related studies.²¹⁵ The first study focused on 12 prisoners who had previously been in solitary for between five days to two and a half years. The qualitative data showed that three-quarters of the subjects suffered from apathy and depression, two-thirds complained of boredom, and half reported time distortions while in solitary. These complaints apparently were not pre-existing but began with the prisoners' isolation. In addition, fantasy and imagery increased, as did physical deterioration for a quarter of the respondents. Nonetheless, the researchers reported no evidence of adverse effects from isolation and noted that the "major complaints of the prisoners did not relate to social isolation, nor to a general lack of stimulation," but rather to such factors as physical beatings and use of tear gas and humiliation by the guards.²¹⁶ In a second study, the same researchers compared previously isolated inmates to those who

regular environment." Suedfeld, *Beyond Sentimentality*, *supra* note 91, at 51 (internal citations omitted).

211. Suedfeld & Roy, *Social Isolation*, *supra* note 93, at 92.

212. *Id.* at 94.

213. *Id.* at 95. The researchers failed to describe the week in isolation for the fourth prisoner, a schizophrenic, although they did claim that his behavior improved from subsequent visits to solitary.

214. Peter Suedfeld, *Solitary Confinement in the Correctional Setting: Goals, Problems, and Suggestion*, 20 CORRECTIVE AND SOC. PSYCH. 10, 17 (1974).

215. Suedfeld *et al.*, *Reactions*, *supra* note 95.

216. *Id.* at 317.

had never been in isolation. Subjects were interviewed and took several assessment tests in which ratings of personality, affect, intelligence, and creativity were obtained. The prisoners varied widely in terms of their lengths of stay (from several days to many months) and the number of previous times in solitary. Compared to a group of prisoners that had never been in isolation, those in solitary differed significantly on only a few factors, including measures of subjective stress. However, the assessment tests did show that longer time spent in solitary confinement was associated with a series of psychological reactions consistent with PTSD,²¹⁷ including suspicion, distrust, forceful and self-seeking behavior, inhibition, anxiety, submissiveness, depression, lack of self-insight, and higher levels of hostility.²¹⁸

In what was the most elaborate psychiatric assessment of prisoners in solitary confinement to date, Stuart Grassian reported on 15 prisoners kept in isolation for varying amounts of time at a Massachusetts prison.²¹⁹ He found that prisoners were initially reluctant to speak candidly about their experiences in solitary but, after considerable reassurance, they described a series of psychiatric symptoms that were "strikingly consistent."²²⁰ Specifically, Grassian observed that two-thirds of the isolated prisoners had become hypersensitive to external stimuli and about the same number experienced massive free floating anxiety. In addition, about half of the prisoners suffered from perceptual disturbances that for some included hallucinations and perceptual illusions. Half complained of cognitive dysfunction such as confused states, difficulty concentrating, and memory lapses. About a third of the prisoners Grassian examined also described thought disturbances such as paranoia, aggressive fantasies (particularly aimed at guards) and impulse control problems. Three out of the fifteen had cut themselves in suicide attempts while in isolation. In all but a very few instances the prisoners reported never having experienced any of these psychiatric reactions until being placed in solitary confinement, and all reported that their symptoms subsided shortly after being given a brief respite from isolation which took place, by law, every 15 days. Grassian concluded that "rigidly imposed solitary confinement may have substantial psychopathological effects and that these effects may form a clinically distinguishable syndrome."²²¹ He also noted that: "[S]olitary confinement

217. See, e.g., Horowitz, *Post-traumatic Stress*, *supra* note 155.

218. *Id.*

219. Grassian, *Psychopathological Effects*, *supra* note 72, at 1451. Grassian reported that the prisoners were kept in 1.8 m. x 2.7 m. windowless cells that were sparsely furnished with a toilet and sink, a bunk, a small fixed steel table, and a stool. The cells had double doors, the outer one solid steel except for a small Plexiglas window. The length of stay at time of assessment ranged from 11 days to 10 months, with two months as the median.

220. *Id.* at 1452.

221. *Id.* at 1453. Compare Barte's analysis of the "psychopathogenic" effects of solitary confinement in French prisons and his conclusion that prisoners placed there for extended periods of time could become schizophrenic instead of receptive to social rehabilitation. He argued that the practice was unjustifiable, counterproductive, and "a denial of the bonds

cannot be viewed as a single entity. The effects of solitary confinement situations vary substantially with the rigidity of the sensory and social isolation imposed."²²²

In another clinical study, Richard Korn evaluated five female prisoners housed in the High Security Unit at Lexington. The women were seen on two occasions, 108 days apart. The Lexington unit was a "high tech" prison-within-a-prison located in the basement of an older federal facility.²²³ On his first visit, Korn found that the prisoners suffered from a number of psychological and physical ailments. All reported feelings of chronic, suppressed rage and low-level to severe depression. Three of the five reported visual hallucinations, which Korn attributed to the monotonous visual environment, and the same number complained of an inability

that unite humankind." Henri N. Barte, *L'Isolement Carceral*, 28 PERSPECTIVES PSYCHIATRIQUES 252 (1989). Other social scientific and clinical literature published in international journals has reached many of the same conclusions. See, e.g., Reto Volkart, *Einzelhaft: Eine Literaturübersicht [Solitary Confinement: A Literature Survey]*, 42 PSYCHOLOGIE - SCHWEIZERISCHE ZEITSCHRIFT FÜR PSYCHOLOGIE UND IRHE ANWENDUNGEN 1 (1983) (reviewing the empirical and theoretical literature on the negative effects of solitary confinement); Reto Volkart et al., *Eine Kontrollierte Untersuchung über Psychopathologische Effekte der Einzelhaft [A Controlled Investigation on Psychopathological Effects of Solitary Confinement]*, 42 PSYCHOLOGIE - SCHWEIZERISCHE ZEITSCHRIFT FÜR PSYCHOLOGIE UND IRHE ANWENDUNGEN 25 (1983) (concluding that when prisoners in "normal" conditions of confinement were compared to those in solitary confinement, the latter were found to display significantly more psychopathological symptoms, including heightened feelings of anxiety, emotional hypersensitivity, ideas of persecution, and disordered thinking); Reto Volkart, *Einzelhaft als Risikofaktor für Psychiatrische Hospitalisierung [Solitary Confinement as a Risk for Psychiatric Hospitalization]*, 16 PSYCHIATRIA CLINICA 365 (1983) (finding that prisoners who had been kept in solitary confinement were over-represented amongst prisoners hospitalized in a psychiatric clinic); Boguslaw Waligora, *FUNKCJONOWANIE CZŁOWIEKA W WARUNKACH IZOLACJI WIEZIENNEJ [HOW MEN FUNCTION IN CONDITIONS OF PENITENTIARY ISOLATION]* (Seria Psychologia I Pedagogika No. 34, 1974) (so-called "pejorative isolation" of the sort that occurs in prison strengthens "the asocial features in the criminal's personality thus becoming an essential cause of difficulties and failures in the process of his resocialization"). See also Ida Koch, *Mental and Social Sequelae of Isolation: The Evidence of Deprivation Experiments and of Pretrial Detention in Denmark*, in THE EXPANSION OF EUROPEAN PRISON SYSTEMS, WORKING PAPERS IN EUROPEAN CRIMINOLOGY No. 7 119 (Bill Rolston & Mike Tomlinson eds., 1986). Koch found evidence of "acute isolation syndrome" among detainees that occurred after only a few days in isolation and included "problems of concentration, restlessness, failure of memory, sleeping problems and impaired sense of time and ability to follow the rhythms of day and night." *Id.* at 124. If the isolated confinement persisted "a few weeks" or more, there was the possibility that detainees would develop "chronic isolation syndrome," including intensified difficulties with memory and concentration, "inexplicable fatigue," a "distinct emotional lability" that can include "fits of rage," hallucinations, and the "extremely common" belief among isolated inmates that "they have gone or are going mad." *Id.* at 125.

222. Grassian, *Psychopathological Effects*, *supra* note 72, at 1454.

223. Korn, note 65. At the time of evaluation, the prisoners occupied cells that were dark, small, and uniform in color, and all decorations were forbidden. The prisoners were allowed to use common recreation and yard areas, although those places were monitored by video cameras, as were the women's shower stalls. To avoid the constant monitoring that took place in the common areas, the women typically remained in their individual cells.

to concentrate and sustain attention. Prisoners reported physical manifestations of extreme stress including weight loss, lack of appetite, dizziness, heart palpitations, and the aggravation of pre-existing medical problems. On his follow-up visit, Korn found that the physical and mental condition of all the women had deteriorated to a dangerous level that he believed might be life-threatening. One prisoner was hospitalized for severe dehydration caused by the inability to keep down food or liquids. Among the women, insomnia, anxiety, fears of loss of impulse-control, intrusive thoughts about prison traumas, obsessive ideation, and increased hallucinations were reported.²²⁴

Stanley Brodsky and Forrest Scogin studied inmates placed in protective custody units (PC), where they experienced varying degrees of social isolation. Among PC inmates who were confined to a single cell for long periods, who had their activities restricted, and whose psychological stimulation was significantly decreased, the researchers found high levels of psychological stress. Specifically, fully 86% of the prisoners reported feeling moderate to severe anger, 79% expressed negative physical symptoms, and none reported any positive feelings. On the other hand, PC prisoners who lived in spacious two-man cells and were allowed program participation had no complaints and were actually psychologically better off than those in the general population. The researchers suggested that PC status itself was not responsible for negative psychological effects but rather the actual living conditions, such as social isolation and enforced idleness, that are often associated with that status.²²⁵

More recently, a group of German researchers reported on the long-term psychiatric consequences of political imprisonment that included solitary confinement in East German prison camps.²²⁶ The criterion used to select the sample was "a psychiatric disorder assumed to be due to a period of political imprisonment of at least six weeks."²²⁷ Despite the fact that seventy-one percent of the ex-prisoners had "no mental disturbances of any kind before imprisonment,"²²⁸ numerous psychiatric symptoms were reported after they were released, including "inner restlessness, irritability, brooding, feelings of weariness, insomnia, and trembling."²²⁹ In the opinion of the researchers, all of these patients suffered from a mental disturbance "characterized by symptoms of depression and anxiety accompanied by vegetative complaints and increased arousal."²³⁰ They concluded further

224. *Id.*

225. Stanley L. Brodsky & Forrest R. Scogin, *Inmates in Protective Custody: First Data on Emotional Effects*, 1 FORENSIC REP. 267 (1988).

226. Michael Bauer et al., *Long-Term Mental Sequelae of Political Imprisonment in East Germany*, 181 J. NERVOUS & MENTAL DISEASE 257 (1993). The authors reported that 93% of the patients had spent an average of 74.2 days in solitary confinement. *Id.* at 258.

227. *Id.*

228. *Id.*

229. *Id.*

230. *Id.* at 260.

that the psychiatric disorders diagnosed in the study were "due mainly to long-term stress and particularly to imprisonment" and not to any adjustment problems that may have occurred afterwards."²³¹

Finally, Haney has reported on research conducted with prisoners in Pelican Bay, California's "state-of-the-art" supermax prison devoted entirely to the segregated confinement of prisoners who had committed serious disciplinary infractions or were suspected of prison gang membership or affiliation.²³² This study found extraordinarily high rates of symptoms of psychological trauma among prisoners confined in these units. More than four out of five of those evaluated suffered from feelings of anxiety and nervousness, headaches, troubled sleep, and lethargy or chronic tiredness, and over half complained of nightmares, heart palpitations, and fear of impending nervous breakdowns. In addition, equally high numbers reported specific psychopathological effects of social isolation. That is, more than four out of five solitary confinement prisoners suffered from ruminations, confused thought processes, an over-sensitivity to stimuli, irrational anger, and social withdrawal. In addition, well over half reported violent fantasies, emotional flatness, mood swings, chronic depression, and feelings of overall deterioration, nearly half suffered from hallucinations and perceptual distortions, and a quarter experienced suicidal ideation.²³³

231. *Id.* at 261. Two factors limit the direct relevance of this study to the present discussion. First, and most important, these subjects were selected on the basis of their psychiatric symptomatology. Therefore, the data do not permit generalizations about the incident rates of these disorders among all prisoners subjected to the same conditions. They do underscore, however, the extreme and long-term psychiatric consequences that such traumatic experiences can have on prisoners and provide some insight into the patterns of psychiatric disorders that appear to be caused by this kind of confinement. Second, in addition to solitary confinement, the prisoners in the German study were subjected to some conditions that are not ordinarily imposed upon prisoners in correctional institutions, such as repeated interrogations. In fact, we have omitted discussion of several other studies of long-term psychiatric problems suffered by prisoners of war who experienced a variety of brutal conditions, including solitary confinement, because of the likelihood that the other dimensions of their mistreatment played a significant role in the resulting trauma. See, e.g., Harvey D. Strassman et al., *A Prisoner of War Syndrome: Apathy as a Reaction to Severe Stress*, 112 AM. J. PSYCH. 998 (1956); Patricia B. Sutker et al., *Cognitive Deficits and Psychopathology among Former Prisoners of War and Combat Veterans of the Korean Conflict*, 148 AM. J. PSYCH. 67 (1991). On the other hand, the frequency with which solitary confinement is used as a part of a range of brutalizing conditions speaks, at least indirectly, to its harmful effects.

232. Haney, *Infamous Punishment*, *supra* note 12; Haney, *supra* note 78. Unlike the German study, this research was conducted with a random sample of prisoners, ensuring their representativeness and permitting the results to be generalized to the entire population in the supermax prison of prisoners.

233. See also, Whittaker, *supra* note 152, at 273 (noting that solitary confinement "leads the person to fantasize and daydream. Logical and coherent thinking becomes impossible. The person becomes anxious, angry, and depressed."). These results are consistent with studies of other populations exposed to long-term solitary confinement. For example, one study of concentration camp survivors identified three forms of psychic disturbance that resembled the pattern of complaints voiced by a number of the prisoners Haney interviewed: resignation and despair (including depression and emotional flatness), apathy and inhibition (including lethargy and feelings of deterioration), and aggressive irritability (including anger and emotional instability). Only slightly more than one concentration camp

G. *The Secondary Effects of Solitary Confinement in Prisons*²³⁴

Other studies have linked isolated confinement in prison to various forms of stress-related, dysfunctional, and destructive behavior. For example, one researcher found that prisoners held in "protective" custody units in a Michigan prison had the highest levels of sick calls in the prison. He suggested that these sick calls might be related to the higher levels of stress that the prisoners experienced.²³⁵ Another study looked at the background characteristics of prisoners transferred to a mental hospital setting and found that, among other things, a disproportionate number of them had lived in protective custody or other forms of restricted housing prior to transfer.²³⁶ The author of this study acknowledged that it was impossible to determine whether the specialized conditions of confinement caused the mental illness or whether prison staff steered the mentally ill toward such special units.²³⁷

An analysis of the 902 self-mutilation incidents in the North Carolina Department of Corrections occurring between 1958 and 1966 revealed that nearly half occurred in segregation units.²³⁸ Similarly, a Virginia researcher found that 51% of the prison self-mutilation incidents she examined over the preceding year had taken place in isolation units.²³⁹ A nationwide survey found that "isolation" was one of the key correlates of jail suicides and that this correlate had remained stable between 1979 and 1986.²⁴⁰ More recently, another study concluded that violence towards self and towards staff were both significantly more likely when the violator was alone and living in disciplinary or restricted movement housing.²⁴¹

survivor in ten was relatively free of symptoms. In addition, many of the survivors were impaired in their interpersonal behavior, reporting feelings of mistrust, isolation, and paranoia. PAUL MATUSSEK, *INTERMENT IN CONCENTRATION CAMPS AND ITS CONSEQUENCES* (1975).

234. We define a "secondary" effect as something that appears to be a consequence of the primary psychological effects of solitary confinement, including subsequent reactive and dysfunctional behavior, both at an individual (e.g., suicide and violence) and collective (e.g., riots) level. We have omitted discussion of what might be termed "tertiary" effects, that is, the impact of solitary confinement on those persons who are related to and interact with the persons confined therein.

235. Ernest Otto Moore, *A Prison Environment: Its Effect on Health Care Utilization* (1980) (unpublished dissertation, University of Michigan (Ann Arbor)) (on file with the University of Michigan Library).

236. K. Anthony Edwards, *Some Characteristics of Inmates Transferred from Prison to a State Mental Hospital*, 6 *BEHAV. SCI. & LAW* 131 (1988).

237. *Id.* at 136.

238. Elmer H. Johnson, *Felon Self-Mutilation: Correlate of Stress in Prison*, in *JAIL HOUSE BLUES* 237, 269 (Bruce L. Danto ed., 1973).

239. Jones, *supra* note 104, at 290.

240. Lindsay M. Hayes, *National Study of Jail Suicides: Seven Years Later*, 60 *PSYCH. Q.* 7, 23 (1989).

241. Pamela Steinke, *Using Situational Factors to Predict Types of Prison Violence*, 17 *J. OFFENDER REHAB.* 119 (1991).

Howard Bidna evaluated the effects of intensified security and control measures implemented throughout the California prison system in response to what prison officials characterized as an "intolerable violence problem" that plagued state correctional institutions in the early 1970s.²⁴² He found that while the overall rate of stabbings in the prison system decreased, there was no significant effect on fatal stabbings or assaults by prisoners on staff. In addition, stabbings appeared to have "shifted" from the general population to security housing units, where the rate of stabbings rose significantly in the wake of increased coercion. Bidna hypothesized that this increase in violence might be accounted for by "the impact of crowding on aggressive tendencies, the lack of both mental and physical exercise in security units, the attachment of the violent label, and possible changing characteristics of the inmate population" in the units themselves.²⁴³ He concluded that "the imposition of tighter security measures, of the type inaugurated in California, is not likely to solve the problem of prison violence."²⁴⁴

Frank Porporino analyzed extensive incidence report data collected over a five year period in the Canadian prison system.²⁴⁵ He found that while only about 5% of the prison population was held in "punitive dissociation" (defined as confinement with limitation of privileges and close security supervision), 28.6% of self-directed violence and 29.6% of property damage incidents occurred in these housing units.²⁴⁶ Overall, 14.3% of security incidents occurred in such restricted housing. Porporino concluded that "[e]fforts to maintain order and control through more restrictive security can attain only limited success in curbing the incidence of prison violence" and that, in extreme cases, "such measures may increase the motivation to engage in violence or prod the ingenuity of inmates and result in more extreme violence."²⁴⁷ The fact that self-directed violence and property damage were more likely to occur in segregation units where limitations of privileges and security restrictions were greatest led him to speculate that "as prison conditions become more taxing, those individuals with

242. Bidna, *Effects of Increased Security*, *supra* note 84, at 33.

243. *Id.* at 44.

244. *Id.* at 45. Kevin Wright studied the interaction between prisoner characteristics and prison environments and also concluded that heightened controls may adversely affect violence-prone inmates:

Inmates who are perceived as potentially violent or who engage in violence are removed from less secure settings and placed in more structured settings with less freedom. It is possible that this practice compounds the problem. If these individuals were given greater freedom and opportunities to substantiate their self worth and manhood, then violence might be reduced.

Kevin Wright, *The Violent and Victimized in the Male Prison*, 16 J. OFFENDER REHAB. 1, 24 (1991).

245. Frank Porporino, *Managing Violent Individuals in Correctional Settings*, 1 J. INTERPERS. VIOLENCE 213 (1986).

246. *Id.* at 216.

247. *Id.* at 218.

the poorest coping skills may be particularly likely to resort to a pattern of impulsive and self-defeating violence."²⁴⁸

In addition to prompting individual aggressive responses, severe conditions of confinement have been related to collective prison violence. For example, one social scientist who analyzed the 1980 New Mexico riot (that began among prisoners who had been housed in punitive segregation) concluded that it was the result of a disintegration of social organization that had occurred during the preceding five years:

During the 1970's, the State Penitentiary changed from a relatively benign and well-run institution, to one that was harsh, abusive, painfully boring, and without the 'regulatory mechanisms' that had been in place in the early 1970's. With few programs or work assignments available, inmates remained confined to their living units with little to do or look forward to. Inmates became increasingly hostile not only toward prison officials and guards, but also toward one another.²⁴⁹

The harsh, abusive, and painfully boring conditions in the New Mexico prison resemble precisely the atmosphere that prisoners report prevails in many supermax prisons and segregation units. A similar pattern of increasing, widespread hostility toward staff and other inmates may result.

Peter Kratcoski's study of incident reports from two U.S. prisons found that the highest percentages of assaults on guards occurred in the detention/high security housing units.²⁵⁰ Seventy-one percent of the total number of assaults on staff in the federal institution he studied took place in the detention unit (which housed less than 10% of the prisoners), and 35% of such assaults in the state facility occurred in the high security unit.²⁵¹ These disproportions were made even more significant by the fact that restrictions in the units reduced prisoner access to staff. Kratcoski concluded that, despite the increased security measures that disciplinary or isolation units provided, the corresponding restrictions and deprivations imposed on prisoners helped to account for the higher violence rates:

[I]f prisoners with few privileges are denied them, a spontaneous angry response, caused by frustration, is likely to result. Such activities as access to medical care when daily rounds are conducted or reception or posting of mail may be viewed with great importance by prisoners and denial of these services can result in angry

248. *Id.* at 219.

249. Bert Useem, *Disorganization and the New Mexico Prison Riot of 1980*, 50 AM. SOCIOLOGICAL REV. 677, 685 (1985). See also BERT USEEM AND PETER KIMBALL, STATES OF SIEGE: U.S. PRISON RIOTS 1971-1986 (1989) (offering case studies of prison riots in five states).

250. Peter Kratcoski, *The Implications of Research Explaining Prison Violence and Disruption*, 52 FED. PROBATION 27, 28 (1988).

251. *Id.* at 28.

retaliations. Life in prison is so sterile, and the privileges enjoyed so few, that any interference with the privileges can trigger an outburst.²⁵²

Numerous studies have underscored the importance of staff attitudes and behavior on prisoners. This research has direct implications for solitary confinement units, where staff members tend to become especially harsh and rigid in their treatment of inmates. Thus, one study found that alienation between staff and prisoners was an important component in prison disturbances.²⁵³ Other researchers attributed reduced levels of violence at an English prison to the lack of tension and good communication between staff and inmates.²⁵⁴ To be sure, guards and prisoners are immersed in a tight dynamic in any maximum security setting, and their attitudes and behaviors are mutually influenced and reinforced by one another. Supermax and solitary confinement likely intensify the process because prisoners have so few other stimuli on which to focus and guards for the most part have only negative sanctions to impose. But as one prison commentator observed, the guards' "concentration upon control is likely to stimulate resistance" among prisoners.²⁵⁵ Similarly, a former warden noted that "if prison management provides an overly rigid and authoritarian style of management—that is, if it provides a target to be knocked down—prisoners may resort to violence as a means of saving face, as a means of showing that they can resist the regime."²⁵⁶

Although no research of which we are aware has focused specifically on the state of mind of guards who work in solitary confinement or supermax units, there is reason to believe that the level of fear and uncertainty is higher among them than guards working in the general prison population. Preconceptions that are based largely on the reputation of the prisoners in supermax and solitary confinement are no doubt exacerbated by the stressful conditions to which both guard and prisoner groups are exposed. Indeed, Lucien Lombardo has concluded that much prison violence is the result of actions that both guards and prisoners take in response to stereotypical images they hold of each other. When both groups believe the other to be prone to violence, individuals in those groups act accordingly and often preemptively.²⁵⁷ Since solitary confinement units are often permeated by an atmosphere of repression, domination, and control,

252. *Id.* at 32.

253. E.C. Zeeman, *A Model for Prison Disturbances*, 17 BRIT. J. CRIMINOL. 251, 252 (1977).

254. GUNN, J. ET AL., *PSYCHIATRIC ASPECTS OF IMPRISONMENT* (1978).

255. Michael Jenkins, *Control Problems in Dispersals*, in PROBLEMS OF LONGTERM IMPRISONMENT 261, 277 (Anthony E. Bottoms & Roy Light eds., 1987).

256. David J. Cooke, *Containing Violent Prisoners: An Analysis of the Barlinne Special Unit*, 29 BRIT. J. CRIMINOL. 129, 139 (1989).

257. LUCIEN X. LOMBARDO, *GUARDS IMPRISONED: CORRECTIONAL OFFICERS AT WORK* (1989).

a perverse dynamic may be created in which prisoners come to believe that they are as dangerous as their treatment seems to imply. Guards, also presuming great danger, overreact to transgressions in ways that escalate tension and violence.²⁵⁸

In sum, studies of the secondary effects of prison isolation and segregation indicate that such confinement is associated with increases in psychiatric complaints, self-mutilation, suicide, and property damage. These conditions also increase prisoner frustration to levels that may produce violent outbursts and assaults against staff, conditions similar to those created in isolation units have been identified as precipitating causes in prison riots. Thus, solitary confinement and punitive segregation may be responsible for escalating dangerous tensions between prisoners and guards that culminate in increased levels of disciplinary infractions and violent assaults and, in extreme cases, indirectly contribute to collective violence.

H. Conclusions Concerning the Effects of Solitary and Supermax Confinement

The possibility that higher levels of disciplinary infractions and mental health problems occur in segregated housing because of the "type" of prisoner incarcerated there seems improbable in light of the nature, magnitude, and consistency of the effects we have reviewed. A comprehensive assessment of the extensive clinical data collected on this issue, including the nature and extent of the psychic indices of stress employed, the unique and consistent psychopathological reactions that have been found, and the harmful secondary effects that have been documented in virtually every study on the question, point to the damaging psychological effects of punitive, isolated prison housing itself. Commentators who have insisted that research on solitary confinement employ experimental methods before definitive conclusions can be reached²⁵⁹ have perhaps ignored the virtual impossibility of acquiring such data.²⁶⁰ The practical and ethical constraints

258. See, e.g., Jackson, *supra* note 19, at 53-54 (footnotes omitted): "The guards, by perceiving the prisoners as the most dangerous and violent of men, can justify to themselves the intensity of the surveillance and the rigours of detention. Prisoners, by responding to that perception of dangerousness with acts of defiance, have at least one avenue of asserting their individuality and their autonomy, of making manifest their refusal to submit."

259. See, e.g., Bonta & Gendreau, *Reexamining*, *supra* note 93, at 349.

260. The only true experiment on the psychological effects of prison-like environments was conducted 25 years ago using college student volunteers who were randomly assigned to the role of either prisoner or guard. Although technically not a study of the effects of punitive isolation, student prisoners were subjected to reduced environmental stimulation, minimal out-of-cell time, and drastically reduced opportunities for meaningful social interaction, including extremely limited contact with other prisoners as well as friends and family. Scheduled to last for two weeks, the study was terminated after only six days because of the acute psychological distress that subjects experienced. Haney, *Socialization*, *supra* note 80.

that govern research in this area mean that researchers simply cannot create the psychological equivalent of genuine solitary or supermax confinement (including powerlessness and loss of control for the prisoner, the punitive and stigmatizing quality of the confinement, indeterminance of the time spent in solitary, constant threat of physical and psychological abuse, and so on) and randomly assign persons to such exposure.

Despite these ethical limitations and their methodological consequences, distinctive patterns of negative effects have emerged clearly, consistently, and unequivocally from personal accounts, descriptive studies, and systematic research on solitary and punitive segregation. The studies included in this review span a period of over three decades and were conducted in locations across several continents by researchers ranging from psychiatrists to sociologists to architects. In addition to the corroborating data from research on situations that are at least in some important ways psychologically analogous to solitary confinement (such as studies of harmful effects of acute sensory deprivation,²⁶¹ the psychological significance of social contact,²⁶² the pains of isolated, restricted living,²⁶³ and the psychiatric risks of seclusion for mental patients²⁶⁴), strikingly similar negative psychological effects have been uncovered in a wide variety of studies of solitary confinement itself. The case studies reported anxiety, panic, rage, loss of control, appetite and sleep disturbances, self-mutilations, and other recurring themes and symptoms.²⁶⁵ Direct studies of the effects of prison isolation have documented a wide range of harmful psychological effects, including increases in negative attitudes and affect, insomnia, anxiety, panic, withdrawal, hypersensitivity, ruminations, cognitive dysfunction, hallucinations, loss of control, aggression, rage, paranoia, hopelessness, lethargy, depression, emotional breakdowns, self-mutilation, and suicidal impulses.²⁶⁶ Among the correlational studies of the relationship between housing type and various incident reports, self-mutilation is prevalent in isolated housing, as is deterioration of mental and physical health, other-directed violence, such as stabbings, attacks on staff, and property destruction, and collective violence.²⁶⁷ In addition, many of the negative effects of solitary confinement are analogous to the acute reactions of trauma victims, and the psychiatric sequelae fit the common diagnostic criteria for victims of deprivation and constraint torture techniques.²⁶⁸

261. See *supra* notes 104-117 and accompanying text.

262. See *supra* notes 118-131 and accompanying text.

263. See *supra* notes 132-136 and accompanying text.

264. See *supra* notes 137-147 and accompanying text.

265. See *supra* notes 161-183 and accompanying text.

266. See *supra* notes 184-231 and accompanying text.

267. See *supra* notes 132-260 and accompanying text.

268. See *supra* notes 148-160 and accompanying text.

There is not a single study of solitary confinement wherein non-voluntary confinement that lasted for longer than 10 days failed to result in negative psychological effects. The deleterious effects varied in severity and included hypertension, uncontrollable anger, hallucinations, psychosis, chronic depression, and suicidal thoughts and behavior. Commentators who have sought to attribute these harmful consequences not to isolation per se but to mistreatment by guards and to the loss of educational, vocational, and recreational activities by prisoners²⁶⁹ seem to ignore the extent to which these practices regularly occur in solitary confinement. Greater exposure to staff mistreatment and the loss of meaningful programming cannot be characterized as unfortunate but merely occasional incidents to solitary confinement; they are too often an integral part of the experience.

Indeed, there is reason to believe that in some ways the published literature on the measurable effects of solitary confinement may underestimate its actual harm. Even in direct studies of the consequences of solitary confinement, those most adversely affected are likely to be absent from the calculation of consequences. For instance, data from persons who were completely unable to adapt to solitary confinement and became psychotic or committed suicide generally would not be included.²⁷⁰ Thus, a comprehensive picture that includes the most negative effects of solitary confinement is difficult to obtain. Moreover, there is reason to believe that prisoners may understate the degree to which they are affected by solitary confinement. Many studies of torture victims underscore the emotional barriers that can prevent them from talking openly and honestly about their experiences.²⁷¹ Patients who have been exposed to profound trauma may view even therapists as hostile figures who are not so different from the authorities responsible for their mistreatment. The desire to avoid talking about or re-living the incidents and the possibility that some victims may be in a denial state of PTSD²⁷² make establishing any form of candid and revealing dialogue difficult. An interviewer or therapist who asks too

269. E.g., Suedfeld et al., *Reactions*, *supra* note 93 at 333.

270. See, e.g., Suedfeld et al., *Reactions*, *supra* note 93, at 335.

271. See, e.g., Allodi, *supra* note 154; Marianne Kastrup et al., *Coping with the Exposure to Torture*, 10 CONTEMP. FAM. THER. 280 (1988); Jorgen Ortmann et al., *Rehabilitation of Torture Victims: An Interdisciplinary Treatment Model*, 7 AM. J. SOC. PSYCH. 161, 165 (1987); Pope & Garcia-Peltoniemi, *supra* note 154; Simon & Blum, *supra* note 154; Somnier & Genefke, *supra* note 150; Whittaker, *supra* note 152. Suedfeld and his co-authors argue, to the contrary, that "[t]he exact extent to which such reactions occur [in solitary confinement] is a matter of some controversy" and that, even when "self-injurious and other abnormal behavior" does take place in isolation units, it cannot be taken at face value since it "may be a device to attract attention, to be given a change of routine, or to exert power over the administration and staff of the institution." Suedfeld et al., *Reactions*, *supra* note 93, at 335. We find these suggestions highly speculative and, especially in the absence of any supporting data, implausible as a general explanation for behavior in solitary.

272. See, e.g., Horowitz, *Post-traumatic Stress*, *supra* note 155; Ortmann et al. *supra* note 269; Pope & Garcia-Peltoniemi, *supra* note 154.

many questions or is in other ways threatening may easily make persons with such trauma histories feel interrogated and defensive.²⁷³

Hans Toch, a psychologist who conducted extensive research with prisoners in New York correctional facilities, has described the difficult yet crucial task of establishing trust with inmates. Trust is particularly important when respondents are called upon to reveal or admit psychological stress or personal vulnerability, such as the ill effects of isolation.²⁷⁴ Similarly, Stuart Grassian reported initial resistance in his assessment of prisoners in a Massachusetts segregation unit. Prisoners at first denied that the isolation affected them, avoided talking about it, and appeared to want to repress or deny the effects of the experience. For example, one prisoner could not provide any details about having slashed his wrist or remember much about the several days surrounding the incident. It was only after Grassian established rapport, offered reassurance, and gained the trust of the prisoners that they were willing to be candid with him.²⁷⁵ The complexities of data-gathering in an environment as powerful and fraught with suspicion and distrust as punitive solitary confinement mean that evidence of psychological deterioration will be especially difficult for unskilled or insensitive researchers to uncover there.

The existence of pre-existing psychiatric disorders among prisoners sent to supermax and solitary confinement is sometimes used to minimize the implications of the adverse reactions and psychological dysfunction that occur there. That is, causal responsibility for subsequent psychological trauma is attributed to problems prisoners bring into punitive segregation rather than to the psychologically harmful conditions the prisoners encounter once they have arrived. Without in any way gainsaying the proposition that mentally or emotionally disturbed prisoners are too often placed in solitary confinement rather than prison psychiatric treatment programs,

273. Whittaker, *supra* note 152, at 276.

274. Toch, *supra* note 199. Toch noted that "inmates who break down. . .are expected to make light of their problems, to deny their manifest despair. If they fail to do so, they risk being seen, and seeing themselves, as weak, impotent, or sick." *Id.* at 11. Further: "[i]n male prisons, fear connotes weakness, and weakness unmanliness. Indices of fear must be disguised or explained away. The truth, if revealed at all, must be cautiously or circumspectly broached." *Id.* at 53. Toch observed:

It is a fact, described in important Danish and international prison literature, that accused and convicted persons do not show their symptoms to the prison staff if they can at all avoid it. This is even more true of men than of women. Very rarely do they disclose their real condition; they hide nervousness and suppress complaints. . . . Among the most often stated [reasons] are that the prisoner does not want to humiliate him/herself, does not want to demonstrate the result of the suppression, is afraid it will be used against him/her, especially by the police, is afraid of an uncontrollable opening and wants to try to maintain the feeling of his/her own worth.

Id. at 126-7.

275. Grassian, *Psychopathological Effects*, *supra* note 72, at 1451-2.

such dismissive logic is fundamentally flawed. First, no direct empirical evidence is offered to support the argument that the heightened levels of psychological trauma detected in punitive segregation reflect little more than the greater prevalence of chronic psychiatric disorders among the population of prisoners sent there. Indeed, this argument flies in the face of the conventional correctional justification that is offered for supermax prisons—that they are needed to contain the most dangerous (not the most psychologically vulnerable) prisoners in the system. In addition, the lack of psychiatric screening and monitoring, and the failure to provide for adequate psychological counseling and treatment that characterize many of these units suggest that correctional officials themselves do not believe that a sizable number of the prisoners who are being sent to segregation are already suffering from severe emotional problems.

Second, the data that we have reviewed in the preceding pages seem to belie this explanation. As we have noted, at least some of the research on the psychological effects of solitary confinement is experimental or quasi-experimental in nature and, therefore, allows for relatively straightforward causal inferences. Even in the non-experimental studies, subjects themselves consistently identify punitive segregation as the source of their psychic trauma. Given the psychologically powerful components of the experience, this inference seems unsurprising and theoretically sound. Third, the extraordinary levels of psychological pain and suffering documented in many of these studies, measured among prisoners who place a special premium on minimizing admissions of personal vulnerability,²⁷⁶ also appear to undercut the possibility that nothing more than pre-existing dysfunction is being manifested. That is, it seems improbable that the extremely high percentages of persons suffering from psychological trauma in the Brodsky, Korn, Grassian, and Haney studies can be accounted for simply in terms of pre-existing yet undetected chronic emotional problems.²⁷⁷ This improbability would seem to increase as alleged gang membership becomes one of

276. As Toch put it, “[p]ersonal breakdowns in isolation do not square with manly self-images and reputations.” TOCH, *supra* note 199, at 52.

277. Again, without dismissing the importance of correctional practices that may result in the overrepresentation of psychiatrically disturbed prisoners in supermax or solitary confinement, we do not believe that they can account for the levels of psychological trauma and psychopathological symptoms detected in the aforementioned studies. For example, one Canadian study estimated that approximately 30% of prisoners in special handling and long-term segregation units suffered from “severe mental disorders.” Sheilagh Hodgins & Gilles Cote, *The Mental Health of Penitentiary Inmates in Isolation*, 33 CAN. J. OF CRIMINOL. 175, 182 (1991). Although this figure is higher than similar estimates for the prisoner population in general, where between 8 and 25% of inmates have been found to suffer from some form of severe psychiatric disorder, the rate does not approximate the two-thirds or more of segregated prisoners who report suffering psychological trauma and acute isolation effects in the various studies we reviewed. Moreover, it would be incorrect to assume that the levels of psychopathology measured in studies such as Hodgins and Cote’s are independent of the psychological stresses of prolonged isolation to which their subjects were exposed.

the primary bases upon which confinement in punitive segregation is premised.²⁷⁸

Finally, it is important to acknowledge the fact that, however frequently they occur, pre-existing psychiatric disorders among segregated prisoners may render them more vulnerable to the psychological assaults of solitary confinement. This vulnerability raises additional serious questions about the propriety of punitive isolation. As one mental health expert noted: "In general, the psychologically rich get richer: healthy people tend to be resilient in their responses to stressor events, and people with personality or character disorders may be somewhat more vulnerable to PTSD following stressor events than are the mentally healthy."²⁷⁹ Those with pre-existing psychological disorders may therefore suffer more psychic pain and be at greater risk for permanent damage in segregation than others. In fact, in any other context this basic point would represent an argument in favor of *increased* concern for the mental health of persons confined to these psychologically stressful environments. Indeed, it is difficult to imagine another population of persons for whom the existence of predisposing vulnerability would be used to justify less, not more, caution and concern.

The debate over *how much* harm supermax and solitary confinement inflict on *how many*—virtually every researcher in this area acknowledges that they produce some ill effects in at least some of the prisoners on whom they are imposed—masks another important issue in evaluating their resurgence in contemporary U.S. corrections. That is, there are no credible or convincing data of which we are aware to suggest that such confinement produces any widespread beneficial effects. In essence, this was the conclusion of an official Canadian study group on "dissociation" that filed a report with the Commissioner of Penitentiaries in the mid-1970s: "Although we recognize the limitations on social sciences in effective change in inmates, we must still acknowledge the lack of substantive rehabilitative or therapeutic value in the concept of segregation."²⁸⁰ Moreover, since most prisoners eventually will be released from prison, "segregation as it presently exists is not practical. It further enhances the inmate's antisocial attitudes and, in general, constitutes a self-fulfilling prophecy."²⁸¹ Another study concluded that the use of solitary was not even effective as a deterrent. Disciplinary incidence rates were not affected among the punished

278. Researchers have found that although some gang members display symptoms of psychopathology, "their number is usually lower than that found among the general population, because the gangs themselves, in effect, screen their membership. Simply put, most gangs want to eliminate or at least limit the number of individuals who display mental disorders because they are unpredictable and create too many problems for the organization." MARTIN SANCHEZ-JANKOWSKI, *ISLANDS IN THE STREET: GANGS AND AMERICAN URBAN SOCIETY* 312 (1991).

279. Horowitz, *Post-traumatic Stress*, *supra* note 155, at 21.

280. JAMES VANTOUR, SOLICITOR GENERAL OF CANADA, *REPORT OF THE STUDY GROUP ON DISSOCIATION* 24 (1975).

281. *Id.*

nor among the general population by the length or number of visits to the "hole."²⁸²

In a related vein, although researchers have identified various categories of prisoners for whom punitive segregation is ill-advised, the literature fails to describe those whom it is likely to "help." For example, Herbert Leiderman's review of the isolation literature led him to recommend that "[i]solation as a punishment device should probably be reconsidered."²⁸³ Leiderman observed that there were essentially three types of persons who might be placed in prison isolation and that the psychiatric threats to each would vary as a function of their pre-existing condition. The worst risks, of course, were persons whose "inner life is under poor control" because isolation would only force them to rely on already inadequate psychological resources.²⁸⁴ Indeed, "[d]riving them further into themselves can only lead to an increase of anxieties, fears, and perhaps to the point of psychosis."²⁸⁵ A second group consisted of those who "might seek out isolation as an expression of a pathological inner need" and for whom isolation would not only be ill-advised but ineffective as punishment.²⁸⁶ Even for the final group, the psychologically healthy, Leiderman questioned the utility of isolation. Although such persons "should be able to tolerate varying periods of isolation without much deleterious effect," he thought they would truly learn "more adaptive behavior" only through use of "those techniques which utilize appropriate social interaction."²⁸⁷

Similarly, Hans Toch acknowledged that isolation generally could "dramatize the pains of imprisonment per se and also make those pains more acute," in part because it "removes even the coping resources ordinarily available in prisons."²⁸⁸ Toch argued that this intensification of pain was especially poignant for certain types of prisoners. For example, he found that even though isolation was the "most trying test of the extroverted inmate's coping competence," it ironically tended to "be used disproportionately with inmates who are hyperactive and relatively poor copers."²⁸⁹ Moreover, punitive isolation would "backfire most with individuals who have developed an acute sense of victimization or injustice" and that, for these prisoners, the use of solitary confinement as punishment

282. Barak-Glantz, *supra* note 76.

283. Leiderman, *supra* note 109, at 73. Similarly, the editors of the journal that published Leiderman's article questioned the wisdom of solitary confinement as a correctional policy: "[E]xperimenters' clinical findings on the deleterious effects of sensory deprivation reinforce the conviction that punitive isolation and similar prison methods can negate the purposes that correction is intended to serve." Editors, *Point of View*, 8 CORRECTIVE PSYCH. AND J. SOC. THERAP. 57, 58 (1962).

284. Leiderman, *supra* note 111, at 72.

285. *Id.*

286. *Id.*

287. *Id.*

288. TOCH, *supra* note 199, at 50.

289. *Id.*

"serves to accentuate the state of mind that provoked it."²⁹⁰ Toch also suggested that punitive segregation was inappropriate for many of those prisoners who were most distressed by their imprisonment and who, unfortunately, were more likely to be put in precisely the place least able to help them. That is:

[I]t remains a tragic fact that our ultimate tool for dealing with fear-obsessed persons defies and defeats their regeneration: We isolate such persons, make them feel trapped, and seal their fate. We place those who are their own worst enemies face to face with themselves, alone, in a void.²⁹¹

In contrast to the absence of documentation that supermax or solitary confinement "works," in general or for any particular type of inmate, there is some direct evidence to suggest that other approaches to handling violent prisoners are effective in both reducing levels of institutional aggression and decreasing recidivism among such prisoners upon release. Specifically, David Cooke has reported on an experimental unit "designed to contain violent and disruptive prisoners" in Scotland, following the abolition of the death penalty in 1973.²⁹² Prisoners eligible for placement in the unit were screened by psychological and psychiatric staff and deemed unsuitable if they suffered from "profound psychiatric illness," were gang members, or the staff suspected they would be "unable to cope with the stressful regime" at the prison.²⁹³ The cohort of prisoners who were transferred to the facility had all been involved in serious crimes of violence, were serving long prison sentences, and had been disruptive while incarcerated in other prisons. Past infractions included numerous assaults on prison staff. In spite of these past problems, transfer to the unit resulted in rapid positive change among the prisoners, including significant reductions in violence and disciplinary infractions.

To explain this markedly improved behavior, Cooke pointed to the radically different conditions that had been created inside the special unit. He noted that most of the factors that might promote violence in prison, such as "the level of frustration in the environment, as exemplified by closed visits, letters going missing, lack of work, the general monotony of prison life, limited access to education, poor food, etc.,"²⁹⁴ were largely absent in this unit. Indeed, although these prisoners were isolated from the rest of the Scottish prison population, they were given relative autonomy within the unit itself. A supportive and expressive environment was created that allowed prisoners to "discharge their emotions verbally rather than in their habitual physical mode," and prisoners were given "access to regular

290. *Id.*

291. *Id.* at 330.

292. Cooke, *supra* note 254, at 129.

293. *Id.* at 130.

294. *Id.* at 138.

and frequent visits from family and friends.”²⁹⁵ Finally, significant emphasis was placed on creating a positive relationship between prisoners and staff, something that a number of commentators have argued was “of central importance in the success of the regime.”²⁹⁶ Indeed, one commentator concluded that “relations between staff and prisoners are at the heart of the whole prison system, and that control and security flow from getting that relationship right.”²⁹⁷

Finally, we note that the psychologically destructive treatment to which prisoners in long-term punitive segregation and supermax prisons are exposed would not be countenanced for any other group in our society.²⁹⁸ Indeed, revelations that abused children,²⁹⁹ the mentally disabled in

295. *Id.* at 140-141. See also Winston Collins, *The Effect of Social Isolation on Inmate Self Concept*, 45 DISS. ABS. INT’L. 643 (1984) (finding that the more isolated prisoners, those who had less contact with persons outside the prison, tended to experience greater reductions in measured self-concept during the incarceration). For a discussion of the importance of maintaining family ties for both prison and post-release adjustment, see Creasie Hairston, *Family Ties During Imprisonment: Do They Influence Future Criminal Activity?* 52 FED. PROBATION 48 (1988); Creasie Hairston, *Family Ties During Imprisonment: Important to Whom and for What?* 18 J. SOC. & SOC. WELFARE 87 (1991). Punitive isolation typically results in drastic reductions in visits from family and friends, in part because the visitation time permitted segregated prisoners is officially limited and in part because of the often inhospitable conditions under which visitation occurs. Because of reduced outside social contact, such confinement has a directly negative effect on prisoners and may serve to undermine their post-release adjustment. That is, supermax and solitary confinement helps to ensure that prisoners will have few if any social ties to resume in the free world. In addition, prolonged prison isolation can create a fear of future social contact that will disable prisoners, especially upon release:

It is very common for isolated prisoners to experience fear of having to function with other people again. And this fear is seldom unfounded. Many detainees who have been in isolation say that the first time they have to spend with others is very painful. They are unable to concentrate on conversation, have difficulty paying attention, become restless, tired of any form of social life, or afraid of human openness and emotional intimacy. . . . This social disability may continue for years after a person has been in isolation. The disability may express itself in a fear of becoming attached to another person. Persons who have been in isolation have reported that they can no longer cope with physical and emotional intimacy and contact, and they feel an urge to be alone which is unnatural for them. They feel severely handicapped.

TOCH, *supra* note 199, at 126 (footnotes omitted).

296. Cooke, *supra* note 254, at 142 (citing Mike Fitzgerald, *The Telephone Rings: Long-term Imprisonment*, in PROBLEMS IN LONGTERM IMPRISONMENT (Anthony Bottoms & Roy Light, eds., 1987)). See also D.J. West, *The Clinical Approach to Criminology*, 10 PSYCHOL. MED. 619 (1980); Peter B. Whatmore, *Barlinnie Special Unit: An Insider’s View*, in PROBLEMS OF LONGTERM IMPRISONMENT (Anthony Bottoms & Roy Light, eds., 1987). See also Peter McKinlay, *Good Staff-Prisoner Relations Key to Success of Scotland’s Supermax*, 7 NAT’L PRISON PROJ. J. 22 (1992) (containing the comments of Peter McKinlay, former director of the Scottish Prison Service).

297. Fitzgerald, *supra* note 290, at 148-9 (quoting from a report of the British Home Office, *Managing the Long-Term Prison System: The Report of the Control Review Committee*, HMSO (1984)).

298. That is, current debates over exactly how negatively solitary confinement affects prisoners, the magnitude and permanence of the harm and size of the group that suffers it, would seem strangely out of place were we to substitute virtually any other group into the

institutional settings,³⁰⁰ or elderly citizens in nursing homes have been subjected to punitive isolation are understandably and justifiably met with widespread criticism and public indignation. Similarly, few people doubt the adverse psychological consequences that isolated hostage victims are presumed to incur. Accounts of innocent citizens held in social isolation under degraded conditions generate appropriately widespread public concern and unquestioned support for the provision of badly needed psychiatric services.³⁰¹ The fact that the harm inflicted by this kind of confinement on innocents is real, tangible, psychologically damaging, and potentially

equation. With this in mind, compare Bonta & Gendreau, *Reexamining*, *supra* note 95 and Gendreau & Bonta, *Solitary*, *supra* note 93, with Julian V. Roberts & Michael Jackson, *Boats Against the Current: A Note on the Effects of Imprisonment*, 15 L. & HUM. BEHAV. 557 (1991).

299. For example, parents responsible for the long-term solitary confinement of their children would be criminally prosecuted, and few citizens would question the propriety of that prosecution. The charges would be serious: felony child abuse and/or endangerment. According to the Child Abuse Prevention and Treatment Act of 1996, 42 U.S.C.A. § 5106(g)(4): "[T]he term 'child abuse and neglect' means the physical or mental injury, sexual abuse or exploitation, negligent treatment, or maltreatment of a child by a person who is responsible for the child's welfare." Endangerment is ordinarily conceived in terms of acts of omission, as in intentionally failing to take actions when the failure results in harm to a child's physical or mental development and well-being. For example, California's felony child endangerment statute provides: "Any person who . . . willfully causes or permits such child to be placed in such situation that its person or health is endangered, is punishable by imprisonment." Cal. Penal Code § 273a (Deering 1997).

300. The long-term punitive isolation of mental patients has never been advocated or widely accepted and even its short-term "therapeutic" use has been severely criticized and restricted. See *supra* notes 137-147 and accompanying text. In Massachusetts, for example, a forensic psychiatrist was asked by the courts to report on the effects of solitary confinement in two concurrent lawsuits, one involving isolation in a mental hospital, another involving the punitive use of solitary in a state prison. The resulting contrast was instructive. The mental hospital regulations dictated that the use of isolation be limited to no more than 8 hours at a time, with staff interaction for 15 minutes every 2 hours, and for therapeutic reasons only, those reasons conveyed to the patient so he or she was made aware that therapy, not punishment, guided the decision. On the other hand, prison regulations allowed inmates to be maintained in isolation for 15 days without respite, renewable after a 24 hour break. Grassian and Friedman, *supra* note 72, at 62.

301. For example, see JAMES CAMPBELL, *HOSTAGE: TERROR AND TRIUMPH* (1992) (analyzing the psychological trauma of hostage experiences, the subsequent recovery process, and recommended treatment); Robert Hillman, *The Psychopathology of Being Held Hostage*, 138 AM. J. PSYCH. 1193 (1981) (comparing the psychopathological effects of being taken hostage with prisoner of war and concentration camp survival); Peggy Jessee et al., *The Aftereffects of a Hostage Situation on Children's Behavior*, 62 AM. J. ORTHOPSYCHOL. 309 (1992) (discussing the negative consequences of hostage experiences on children); Thomas Strentz, *Crisis Intervention and Survival Strategies for Victims of Hostage Situations*, in *CRISIS INTERVENTION AND TIME-LIMITED COGNITIVE TREATMENT* 127 (Albert Roberts ed., 1995) (discussing FBI involvement in assisting with provision of social work services and psychological support for hostage victims at crisis sites); Henk Van der Ploeg and Wim Kleijn, *Being Held Hostage in the Netherlands: A Study of Long-Term Aftereffects*, 2 J. TRAUMATIC STRESS 153 (1989) (finding that the aftereffects of hostage experience included PTSD and symptoms of generalized anxiety disorder that warranted psychological treatment).

long-lasting or even permanent is beyond debate. Yet the fact that no comparable recognition and concern is typically extended to prisoners in solitary confinement, whose experiences in captivity may be similar or worse, and are often of longer duration, reflects a distorted legal and societal view. By this view, to be sure, prisoners neither require nor deserve the same humane treatment as the rest of us. But this same view confounds the putative blameworthiness of the targets of such mistreatment with the consequences of the mistreatment itself. Thus, devaluing the prisoners' claim to be free from such harm has led to the erroneous perception that the harm is not real. Moreover, whatever their alleged transgressions in prison, no person can be constitutionally sentenced to torture, to potentially permanent psychiatric damage, or to psychological deterioration that may impede future adjustment in and out of prison. However deserving of some form of punishment prisoners placed in solitary confinement may be, legal regulators must carefully establish the limits of such punishment and implement effective mechanisms and procedures by which those limits can be enforced. They have done neither.

III.

CONSTITUTIONAL CHALLENGES TO SUPERMAX AND SOLITARY CONFINEMENT: THE CURRENT STATE OF LEGAL DOCTRINE

Judicial analyses of the constitutionality of punitive isolation have too often truncated the crucial inquiry into the psychological risks that such units pose. Courts frequently have engaged in superficial assessments of the damage that may be inflicted by solitary confinement and manifested a corresponding disregard of the magnitude of the psychic pain that the segregated prisoners suffer. In addition, courts have long granted nearly complete deference to correctional decision makers. Although these unfortunate tendencies were in decline during the "civil rights revolution" several decades ago, the modern trend appears to be in the opposite direction.³⁰² Moreover, the normative acceptability of supermax confinement in maximum security prisons threatens to distort any implicit comparative standard used to gauge the constitutional significance of the psychological harm, making even clearly cruel punishment appear commonplace to the courts. That is, the increasingly widespread use of segregation is beginning to substitute as its legal and psychological justification; conditions that are no worse than even a deteriorating norm or inflict no more harm than other equally bad prisons are presumed to be tolerable and constitutional. In addition, the relative newness of long-term punitive isolation and the persistent biases against the largely subjective tools with which we must

302. This trend appears related to other changes that have taken place in the public and political climate concerning crime and punishment. For a discussion of some of these changes and their impact on prison policy in general, see Haney, *Psychology and the Limits to Prison Pain*, *supra* note 73, and Haney, *Riding the Punishment Wave*, *supra* note 73.

measure its harms further undermine contemporary legal analyses of this emerging penal form.³⁰³

In the earliest federal cases involving solitary confinement, legal questions concerning effects were posed only indirectly. For example, *In re Medley*³⁰⁴ presented the issue of whether a Colorado law imposing solitary confinement on prisoners awaiting execution for crimes committed prior to passage of the law was constitutionally *ex post facto*, inasmuch as it amounted to a harsher regime of punishment than had been prescribed at the time of the crime. In concluding that it was, the Supreme Court discussed the nature of solitary confinement itself. The Court noted that "it is within the memory of many persons interested in prison discipline that some 30 or 40 years ago the whole subject attracted the general public attention, and its main feature of solitary confinement was found to be too severe."³⁰⁵ Although the Justices stopped well short of prohibiting solitary confinement for condemned prisoners, they did note that "[i]n Great Britain, as in other countries, public sentiment revolted against this severity and. . .the additional punishment of solitary confinement was repealed."³⁰⁶

One year later, the Court rejected a direct Eighth Amendment challenge to solitary confinement by deferring to a determination made by the legislature and courts of New York that such punishment was not cruel and unusual.³⁰⁷ Condemned prisoners who were left in solitary in excess of the statutory period, often because their execution was stayed pending resolution of a legal appeal, thereafter complained to federal courts to no avail.

As the *Medley* opinion made clear, however, federal courts during this period were not oblivious to the special pains of solitary confinement. In 1922, Justice Brandeis noted in dissent that "the most severe punishment inflicted" in American prisons "was solitary confinement without labor."³⁰⁸ Indeed, its unique severity made hard labor seem lenient by comparison, and Brandeis termed prison work a "means of restoring and giving self-respect."³⁰⁹ In 1940, the Supreme Court referred to solitary confinement as one of the techniques of "physical and mental torture" that had been used by governments to coerce confessions from their citizens:

The rack, the thumbscrew, the wheel, solitary confinement, protracted questioning and cross questioning, and other ingenious

303. See *infra* notes 326 to 359 and the accompanying text. Also see the discussion in Haney, *Psychology and the Limits to Prison Pain*, *supra* note 73.

304. 134 U.S. 160 (1890).

305. *Id.* at 168.

306. *Id.* at 170.

307. *McElvaine v. Brush*, 142 U.S. 155 (1891). The same year *Medley* was decided the Court had determined that death by electrocution was not forbidden by the 8th Amendment. *In re Kemmler*, 136 U.S. 436 (1890). The *McElvaine* Court decided that its decision in *Kemmler* was "decisive of this, although the character of the confinement of the condemned pending his execution was not alluded to" in the earlier case. *McElvaine*, 142 U.S. at 159.

308. *United States v. Moreland*, 258 U.S. 433, 449 (1922) (Brandeis, J., dissenting).

309. *Id.* at 450.

forms of entrapment of the helpless or unpopular had left their wake of mutilated bodies and shattered minds along the way to the cross, the guillotine, the stake and the hangman's noose.³¹⁰

Despite occasional sensitivity to the unusual cruelty of solitary confinement, the Court has been reluctant to consistently accord the suffering of prisoners—whether from isolation or other extremely harsh conditions of confinement—meaningful constitutional recognition.

A. *The Current Contours of Eighth Amendment Jurisprudence*

Reconstructing the history of the Constitutional prohibition against cruel and unusual punishment, Anthony F. Granucci concluded that the Framers' use of the phrase was a misinterpretation of English law.³¹¹ The result, protecting individuals against torturous but not excessive punishments, gave the Eighth Amendment too narrow a scope, and it was rarely invoked.³¹² Not until the turn of the century did the Supreme Court expand the reach of the cruel and unusual punishment clause to include severely disproportionate penalties.³¹³

The Court has employed a number of different concepts in determining whether punishment is cruel and unusual. These include disproportionality to the offense,³¹⁴ lack of relationship between penal objectives and the severity of the punishment,³¹⁵ arbitrariness,³¹⁶ repudiation by modern society,³¹⁷ and inherent cruelty.³¹⁸ Of course, these concepts govern Eighth Amendment challenges to the constitutionality of particular conditions of confinement. Eighth Amendment based claims in which particular prison conditions have been found unconstitutional include: solitary confinement, beatings by prison guards, forced labor, denial of food, and deprivations of

310. *Chambers v. Florida*, 309 U.S. 227, 237-8 (1940).

311. Anthony F. Granucci, "*Nor Cruel and Unusual Punishments Inflicted*": *The Original Meaning*, 57 CAL. L. REV. 839 (1969).

312. *Id.* at 865.

313. *Weems v. United States*, 217 U.S. 349 (1910) (holding that 15 years hard labor for making a false entry in government payroll records is so disproportionate a punishment as to violate the Eighth Amendment). *See also* *O'Neil v. Vermont*, 144 U.S. 323, 340 (1892) (Justice Fields arguing in dissent that a possible 54 year prison sentence for shipping alcoholic beverages violates the Eighth Amendment's prohibition of excessive punishment).

314. *Weems*, 217 U.S. at 549; *Furman v. Georgia*, 408 U.S. 238 (1972) (J. Brennan, concurring); *Gregg v. Georgia*, 428 U.S. 153, 173 (1976).

315. *Furman*, 408 U.S. at 281 (J. Brennan, concurring); *see also* *Rudolph v. Alabama*, 375 U.S. 889 (1963) (J. Goldberg, dissenting).

316. *Furman*, 408 U.S. at 250 (J. Douglas, concurring) (noting that a punishment that is "administered arbitrarily or discriminatorily" is "unusually imposed").

317. *Trop v. Dulles*, 356 U.S. 86 (1958).

318. *Louisiana ex. rel. Francis v. Resweber*, 329 U.S. 459, 471 (1947) (J. Frankfurter, concurring) (punishment that is "repugnant to the conscience of mankind" is cruel and unusual (quoting *Palko v. Connecticut*, 302 U.S. 319, 323 (1937))); *Furman*, 408 U.S. at 359 (J. Marshall, concurring) (stating that punishment that "shocks the conscience and sense of justice of the people" is cruel and unusual).

medical treatment.³¹⁹ However, none of these conditions are *per se* unconstitutional.

In *Wilson v. Seiter*³²⁰ the Supreme Court articulated a two-prong test to determine whether prison-related treatment and deprivations are cruel and unusual. The objective component of the test requires the plaintiff to show that the prison conditions have the “sufficiently serious”³²¹ result of denying “the minimal civilized measure of life’s necessities.”³²² In addition, the conditions of imprisonment must pose a “substantial risk of serious harm.”³²³ There is no fixed standard for determining how much harm the prisoner must suffer before this first prong is satisfied. Although the failure to draw a bright-line test may derive in part from Chief Justice Warren’s often-quoted observation that the Eighth Amendment “must draw its meaning from the evolving standards that mark the progress of a maturing society,”³²⁴ attempts to define “minimal civilized measures” of prisoners’ mental health and well-being seem more likely to have *devolved* in recent years (as we discuss below).

The subjective component of the *Wilson* test asks whether prison officials were deliberately indifferent to the inmate’s health and safety.³²⁵ To satisfy this prong, the plaintiff must first show that officials knew of the risk of harm to the prisoner and then that they nonetheless disregarded it. Only then would prison officials be found to have a “sufficiently culpable state of mind” to satisfy *Wilson*’s subjective requirement.³²⁶ In the case of solitary confinement, one commentator has argued that because the harms of “extreme conditions of confinement” are well known to officials before prisons are even built, the subjective component of an Eighth Amendment violation seemingly should be “met without difficulty.”³²⁷ But there is little evidence that it has worked that way in practice.

B. Solitary Confinement and Cruel and Unusual Punishment

As we have noted, inquiries into the constitutionality of supermax and solitary confinement currently suffer from several major flaws. First, the legal analysis often reflects a superficial understanding of the nature of the

319. For a catalogue of cases in which these kinds of claims were advanced, see William H. Danne, Jr., Annotation, *Prison Conditions as Amounting to Cruel and Unusual Punishment*, 51 A.L.R.3d 111 (1996).

320. 501 U.S. 294 (1991).

321. *Id.* at 298.

322. *Rhodes v. Chapman*, 452 U.S. 337, 347 (1981).

323. *Farmer*, 511 U.S. at 894 (1994).

324. *Trop v. Dulles*, 356 U.S. 86, 100 (1958) (punishment of expatriation for a one day wartime desertion violates cruel and unusual punishment clause); *see also Rhodes*, 452 U.S. at 346 (determining whether punishment is cruel and unusual depends not upon a static test but rather upon dynamic community standards).

325. *Estelle v. Gamble*, 429 U.S. 97, 104 (1976).

326. *Farmer v. Brennan*, 511 U.S. 825, 832 (1994).

327. Sally Mann Romano, *If the SHU Fits: Cruel and Unusual Punishment at California’s Pelican Bay State Prison*, 45 EMORY L.J. 1089, 1117 (1997).

psychological harm inflicted on many prisoners confined to isolation units. Second, while perhaps less categorical now than fifty years ago, judicial deference to administrative discretion has re-emerged as a constitutional norm. Finally, the increasingly widespread use of long-term punitive segregation is beginning to serve as a *de facto* justification for the practice, undercutting its meaningful legal regulation and critical analysis of its adverse psychological effects. This section briefly surveys each of these problem areas, then turns to the recent decision on the constitutionality of the Security Housing Unit at Pelican Bay Prison, where many of the limitations in prevailing legal doctrine became evident.

1. *Psychological Harm*

The federal courts have traditionally been loathe to examine the psychological effects of solitary confinement or to acknowledge the constitutional significance of its harmfulness to prisoners.³²⁸ Instead, the courts have tended to focus on the physical conditions of confinement and issues such as whether prisoners were provided the "basic element of hygiene."³²⁹ In *Newman v. Alabama*,³³⁰ for example, the Fifth Circuit found that the state's provision of "reasonably adequate food, clothing, shelter, sanitation, medical care, and personal safety. . .ends its obligations under Amendment Eight."³³¹ Indeed, the *Newman* court was reluctant to consider psychological or psychiatric consequences of confinement, calling such inquiries an "uncharted bog."³³²

An even more dramatic example of the tendency of courts to shift the focus from psychological to physical conditions was provided in *O'Brien v. Moriarty*.³³³ The First Circuit rejected a challenge to conditions in the isolation unit at Walpole prison that had been based largely on prisoners' psychological reactions, including depression and self-mutilation, to their

328. We have confined our discussion to federal case law. Most state courts have refrained from conducting detailed analyses of solitary confinement or the effects of such incarceration. *But see* *State v. Wall*, 356 So.2d 75 (La. Ct. App. 1977) (finding that placement of Louisiana prisoner in solitary confinement for 5 days following disciplinary infraction not cruel and unusual); *People v. Hoffmeister*, 217 N.W.2d 58 (Mich. Ct. App. 1974) (Michigan trial court's recommendation that the first 5 years of prisoner's life sentence be served in solitary confinement not cruel and unusual); *Birde v. Rodriguez*, 501 P.2d 195 (N.M. 1972) (requiring prisoner who alleged he was being kept in excessively cold and rat and insect-infested conditions, without being informed of the reason, to exhaust administrative remedies). The use of such confinement for juveniles, however, has been enjoined by state courts. *See, e.g.,* *People v. Owen*, 295 N.E.2d 455 (Ill. 1973) (precluding the use of lengthy periods of solitary confinement for juveniles without prior institutional hearings); *State v. Werner*, 242 S.E.2d 907 (W.Va. 1978) (finding use of punitive practices like solitary confinement with juveniles prohibited by constitution).

329. *Novak v. Beto*, 453 F.2d 661, 665 (5th Cir. 1971).

330. 559 F.2d 283 (5th Cir. 1977).

331. *Id.* at 291.

332. *Id.*

333. 489 F.2d 941 (1st Cir. 1974).

confinement.³³⁴ Noting that the prisoners had not complained about inadequate physical conditions like poor sanitation or heat, the court concluded that merely being "cut off markedly from all others" was not "so severe as to be *per se* impermissible."³³⁵

Similarly, in *Johnson v. Anderson*,³³⁶ a federal district court ruled that the transfer of prisoners into solitary confinement at the Delaware Correctional Center absent a hearing within a reasonable period of time violated their due process rights, but that conditions in the solitary unit, although "extremely unpleasant,"³³⁷ did not constitute cruel and unusual punishment. In reaching its conclusion, the court employed a three-part analysis that balanced the nature of: the hardship and deprivation inflicted, the duration of the time spent in solitary, and the seriousness of the infraction for which it was imposed.³³⁸ The judge also acknowledged that "[w]hile aware that more subtle forms of punishment, psychological in nature, may also offend the Eighth Amendment's guarantee of civilized treatment, the courts have generally been more tolerant of the non-physical deprivations associated with solitary confinement."³³⁹ Thus, isolating prisoners from companionship, imposing severe restrictions on intellectual stimulation, and exposing prisoners to prolonged inactivity in solitary generally would not constitute Eighth Amendment violations *if* prisoners had received other things the judge believed necessary to maintain their physical well-being.³⁴⁰ Even in a case where the prisoners showed that they were forced to live "a monotonous and bleak existence," because they failed to present any testimony "that the deprivations they have experienced have inflicted demonstrable psychological damage on them" or any authoritative evidence that "such deprivations are calculated to induce mental deterioration or imbalance,"³⁴¹ they did not prevail.³⁴²

334. Prisoners were housed alone in 6 x 9 foot cells for 23 hours each day. Although they had been permitted to interact and converse with one another in a corridor outside their cells, this practice was ended following a prison disturbance. The total isolation that followed this termination appeared to precipitate the psychological reactions and was what gave rise to the litigation. *Id.* at 942-3.

335. *Id.* at 944.

336. 370 F. Supp. 1373 (D. Del. 1974).

337. *Id.* at 1388.

338. *Id.* at 1386-7 (citing to Malcolm Wheeler, *Toward a Theory of Limited Punishment: An Examination of the Eighth Amendment*, 24 STAN. L. REV. 838 (1972)).

339. *Id.* at 1387 (footnote omitted).

340. The cells in the isolation unit were described by the court as dry, clean, heated, and including exterior windows that "admit a substantial amount of daylight." However, the prisoners in these units also were prohibited access to reading materials, commissary, and out-of-cell exercise. In addition, they were denied visitation and the only face-to-face contact they had was with guards, doctors, and a social worker who made weekly visits. *Id.* at 1385-6.

341. *Id.* at 1390. The court also expressed doubts that a consensus of evidence or opinion "could be marshaled" in support of the "general proposition" that the deprivations of solitary confinement produced psychological deterioration and damage. *Ibid.* Of course, the court did not have the benefit of the studies we reviewed above, many of which were conducted post-1974.

A pair of California cases provided a counterpoint to the otherwise anti-psychological bent of some of the early federal court decisions. In *Jordan v. Fitzharris*,³⁴³ a federal district court examined conditions in the "strip cells" at Soledad prison. The judge found that confinement in such cells could result "in a slow burning fire of resentment on the part of the inmates until it finally explodes into open revolt, coupled with violent and bizarre conduct," that the conditions themselves were "degrading," and that they offended "elemental concepts of decency."³⁴⁴ In *Spain v. Proconier*³⁴⁵ another federal district court considered conditions of confinement in San Quentin's "Adjustment Center," where prisoners were segregated for long periods of time, denied access to programming of any sort, visited behind screens while chained and manacled, and given only 5 hours of indoor exercise per week. Judge Zirpoli found that such confinement occurred in an "atmosphere of fear and apprehension" and ruled that these "degrading conditions" were "counterproductive" because they instilled in prisoners "a deeper hatred for and alienation from the society that initially justly put them there."³⁴⁶ In both cases, the courts' analysis of the psychological consequences of long-term solitary confinement contributed to their conclusions that the conditions of confinement were cruel and unusual.³⁴⁷

Similarly, in *LaReau v. MacDougall*,³⁴⁸ the Second Circuit considered the psychological effects of five days of isolation in a dark strip cell at the

342. The court also found that if "undue corporal punishment were an established and recurring feature of the prison regime, there would be cause for searching Eighth Amendment scrutiny," but not where only "isolated guards may have overstepped the bounds of moderation." *Id.*

343. 257 F. Supp. 674 (1966).

344. *Id.* at 680.

345. 408 F. Supp. 534 (N.D.Cal. 1976), *aff'd in part, rev'd in part*, 600 F.2d 189 (9th Cir. 1979).

346. *Id.* at 541-4. Judge Zirpoli was no stranger to questions about the nature of solitary confinement. Almost 30 years earlier he had represented the United States in defending against Robert Stroud's claim that conditions of confinement at Alcatraz constituted cruel and unusual punishment. *Stroud v. Johnston*, 139 F.2d 171 (9th Cir. 1943).

347. Another California case found that conditions that resembled restrictive housing and solitary confinement for pretrial detainees in the main Los Angeles County Jail were unconstitutional. The court in *Dillard v. Pitchess*, 399 F.Supp. 1225 (C.D. Cal. 1975) described those conditions this way: "[A prisoner is] forced to spend substantially all of his time in one of the drab and dismal cells. . . virtually without recreation, diversion or entertainment; where the depressing monotony is not broken by a change of setting even at meal time; and where he sleeps and eats in immediate proximity to the toilet, necessarily in the hope that the cellmate's digestive system will remain reasonably regular and subdued." *Id.* at 1233. Pre-trial detainees at the jail were kept "for weeks or months at a time" under these conditions which experts at trial testified were "physically and psychologically unhealthy." *Id.* at 1236. The court concluded: "[U]nder any responsible modern day evaluation, to keep any person for long periods of time in such manner constitutes cruel and unusual punishment." *Id.*

348. 473 F.2d 974 (2d Cir. 1974). The prison apparently distinguished between punitive segregation, a maximum punitive cell, and the strip cell to which LaReau was confined. The latter was a 6 x 10 cell with a solid steel door, total silence, long periods of total darkness, no

Connecticut Correctional Institution. Holding that the punishment violated the Eighth Amendment, the court found that the strips cells went beyond "mere coerced stagnation" to actually "threatening an inmate's sanity and severing his contacts with reality by placing him in a dark cell almost continuously day and night."³⁴⁹ The court noted that "prison officials, no less than sentencing judges, are bound by the strictures of the Eighth Amendment" and that the conditions in the strip cells fell below the "irreducible minimum of decency" required by those strictures.³⁵⁰ The court found "most offensive" the fact that prisoners were required to "live, eat and perhaps sleep in close confines with his own human waste," and concluded that such treatment seriously threatened inmates' "physical and mental soundness."³⁵¹

In *Berch v. Stahl*³⁵² jail inmates challenged various forms of solitary confinement in the Mecklenburg County Jail. Judge McMillan ruled that although solitary confinement for punishment purposes was "an extremely severe form of punishment," it was not cruel and unusual "when administered within proper bounds."³⁵³ However, it did offend the Eighth Amendment when imposed for "excessive durations."³⁵⁴ For prisoners subjected not only to isolation but also sensory deprivation in "cells so bare and dimly lit" that it was difficult for them to "do anything except sit, think and feel," there was the distinct possibility that their "[m]ental and emotional stability are thus threatened, and mental health may be impaired."³⁵⁵

Although less explicitly psychological in their analysis, other courts clearly recognized the pains of solitary confinement. For example, in *Landman v. Royster*,³⁵⁶ a federal court ruled that prisoners in solitary confinement are "denied all human intercourse and any means of diversion" and "[l]oss of good time credit may in effect amount to an additional prison sentence."³⁵⁷ Thus, due process required that they be given a hearing in front of an impartial tribunal that afforded the right to counsel or counsel substitute and the opportunity to cross-examine witnesses before being placed there. The court noted further that it mattered little whether the

sink or toilet (except for a hole in the floor that was flushed from outside the cell), and no reading material. The maximum period of time to which a prisoner could be sentenced was eight days, extended only upon approval of the Commissioner of Corrections. *Id.* at 976-977.

349. *Id.* at 978.

350. *Id.*

351. *Id.*

352. 373 F. Supp. 412 (W.D.N.C. 1974).

353. *Id.* at 420.

354. *Id.*

355. *Id.*

356. 333 F. Supp. 621 (E.D.Va. 1971). Conditions at the solitary units at the Virginia State Penitentiary and the Virginia State Farm included the absence of any work and educational programs, no direct library access, limited outdoor exercise, and virtually no chance of parole directly from solitary.

357. *Id.* at 652.

prison administration chose to characterize solitary confinement as punishment or as something done in the interests of security or control. Instead the *effect* of the decision to place someone in solitary, given the realities of the conditions there, was what triggered the due process hearing.³⁵⁸

To be sure, courts in a number of other cases demonstrated a persistent unwillingness to consider the numerous studies on the adverse psychological effects of isolation. Some acknowledged the serious psychological risks posed by solitary confinement even as they declined to forbid prison officials from taking them. As the First Circuit noted:

Although depression, hopelessness, frustration, and other psychological states may well prove to be inevitable by products of life-long incarceration, the threat of substantial serious and possibly irreversible if not critical psychological illness together with prolonged or indefinite segregated confinement should increase the burden on prison authorities to explore feasible alternative custodial arrangements.³⁵⁹

Yet, many courts have simply refrained from ever directly “increasing the burden” on prison officials to address the psychological pains of supermax or solitary confinement and failed to provide them with meaningful legal incentives to explore feasible alternatives. The tendency to minimize psychological inquiries into the effects of solitary confinement has significantly reduced the effectiveness of judicial oversight.³⁶⁰ As one commentator has noted, “the emotional consequences of isolation

358. Other due process cases implicitly recognized the punitive nature of solitary confinement. *See, e.g.,* Gray v. Creamer, 465 F.2d 179 (3rd Cir. 1972) (transferring prisoners from general prison population to segregated confinement without a hearing or notice of charges violated due process).

359. Jackson v. Meachum, 699 F.2d 578, 584 (1st Cir. 1983).

360. Even courts that recognize the possibility and impropriety of psychological harm appear much more comfortable focusing on physical rather than psychological forms of mistreatment. For example, in Young v. Quinlan, 960 F.2d 351 (3d Cir. 1992), the court noted that “[w]hile the prison administration may punish, it may not do so in a manner that threatens the physical and mental health of prisoners.” *Id.* at 364. The court found that placing a prisoner in a “dry cell” in which he was refused the opportunity “to relieve himself with dignity, let alone adequate sanitation” was cruel and unusual. *Id.* at 365. But its analysis focused much more on the physical conditions, the squalor and inadequate sanitation than on whether such conditions might “jeopardize the mental health or stability of the inmates so confined.” *Id.* at 364. The tendency to ignore psychological testimony about the effects of solitary confinement or minimize its implications has not been limited to courts in the United States. A Canadian Justice dismissed expert testimony on the adverse effects of solitary confinement because the experts were “quite naturally for them, carrying on their dialogue in the witness box in the language of their discipline, namely Psychology.” JACKSON, *supra* note 19, at 102. Without benefit of any independent empirical base of his own, however, the Justice simply asserted that “[i]n the context of construing and/or applying the laws of this country . . . such terminology overstates or exaggerates the effects and consequences of the accused.” *Id.*

play a minor role in determining whether a constitutional violation exists.”³⁶¹

2. *Deference to Administrative Discretion*

In the early years of federal litigation concerning prison conditions generally and solitary confinement in particular, courts were extremely reluctant to critically scrutinize the judgments of corrections officials and order relief for prisoners. A district court's 1961 decision in *Blythe v. Ellis*³⁶² captured the attitude of the courts toward the decisions of prison administrators. A prisoner who had discussed a “personal problem” with the Director of the Texas Department of Corrections was placed in solitary confinement where the conditions were described as “most unpleasant and detrimental to health.”³⁶³ Although the prisoner was “yet weak from surgery” when he was placed in solitary, and “sickness and more surgery resulted from the unhealthy conditions” there,³⁶⁴ the district court dismissed the claim by characterizing placement in such a unit as “internal discipline” and noting that “[f]ederal courts do not inquire into such matters as solitary confinement.”³⁶⁵

A New York case that was decided a decade later reached similar conclusions about solitary confinement. In *Sostre v. McGinnis*,³⁶⁶ the Second Circuit focused primarily on the adequacy of the prisoner's diet, his opportunity for exercise and personal hygiene, and access to therapy, reading materials, and communication with other prisoners in concluding that the conditions in this solitary confinement unit were “several notches above those truly barbarous and inhumane conditions” that courts had previously found unconstitutional.³⁶⁷ The court explicitly acknowledged its deference to correctional administrators: “Even a lifetime of study in prison administration and several advanced degrees in the field would not qualify us as a federal court to command state officials to shun a policy that they have

361. Maria A. Luise, *Solitary Confinement: Legal and Psychological Considerations*, 15 NEW ENG. J. CRIM. & CIV. CONFINEMENT 301, 317 (1989). But see Justice Blackmun's attempt to counter this tendency by reminding his colleagues of the importance of psychological harm in analyses of prison cruelty. In his partial concurrence in *Hudson v. McMillian*, 503 U.S. 1 (1992), he wrote that it was “not hard to imagine inflictions of psychological harm—without corresponding physical harm—that might prove to be cruel and unusual punishment,” that “pain” surely included psychological harm, and that there was no precedent of which he was aware indicating that “psychological pain is not cognizable for constitutional purposes.” *Id.* at 16.

362. 194 F. Supp. 139 (S.D. Tex. 1961).

363. *Id.* at 139.

364. *Id.*

365. *Id.* at 140.

366. 442 F.2d 178 (2d Cir. 1971), *rev'd on other grounds sub nom.* Davidson v. Scully, 694 F.2d 50 (2d Cir. 1982).

367. *Sostre*, 442 F.2d at 193-4.

decided is suitable because to us the choice may seem unsound or personally repugnant."³⁶⁸

As the decade of the 1970s progressed and an increasing number of prisoner rights cases worked their way through the federal system, however, a different view began to surface. One Court of Appeals noted that "blind deference to correctional officials does no real service to them" and suggested that prisoners "need to be able to challenge what appears to be arbitrary assertions of power by correctional officials during the course of their confinement."³⁶⁹

Yet, one significant barrier to those challenges remained: the Supreme Court had still done little to take the Constitution inside prison walls. That barrier was partially crossed in *Wolff v. McDonnell*.³⁷⁰ Here the Court addressed a procedural due process claim concerning the adequacy of disciplinary procedures used in a Nebraska prison, and gave prison litigators some hope that the era of blind deference to correctional administrators might be ending. While noting that prisoners could have their constitutional rights "diminished by the needs and exigencies of the institutional environment,"³⁷¹ they could not be stripped of their rights entirely. Indeed, Justice White wrote that "[t]here is no iron curtain drawn between the Constitution and the prisons of this country."³⁷²

The *Wolff* doctrine certainly did not suggest that the preferences and concerns of prison officials were to be ignored. Although prisoners were entitled to the protection of the Due Process Clause, there still "must be mutual accommodation between institutional needs and objectives and the provisions of the Constitution."³⁷³ The liberty interest at stake in the loss of good time credits entitled prisoners to the minimal requirements of due

368. *Id.* at 191.

369. *Palmigiano v. Baxter*, 487 F.2d 1280, 1283-4 (1st Cir. 1973), *rev'd on other grounds*, 425 U.S. 308 (1976).

370. 418 U.S. 539 (1974).

371. *Id.* at 555.

372. *Id.* at 555-6.

373. *Id.* at 556. Justice White acknowledged that the unique nature of prison hearings was relevant to the balancing required by a due process analysis:

Prison disciplinary proceedings. . . take place in a closed, tightly controlled environment peopled by those who have chosen to violate the criminal law and who have been lawfully incarcerated for doing so. . . . [M]any are recidivists who have repeatedly employed illegal and often very violent means to attain their ends. They may have little regard for the safety of others or their property, or for the rules designed to provide an orderly and reasonably safe prison life. . . . Guards and inmates co-exist in direct and intimate contact. Tension between them is unremitting. Frustration, resentment, and despair are commonplace. . . . Retaliation is much more than a theoretical possibility; and the basic and unavoidable task of providing reasonable personal safety for guards and inmates may be at stake, to say nothing of the impact of disciplinary confrontations and the resulting escalation of personal antagonism on the important aims of the correctional process.

Id. at 561-2.

But White did not seem to recognize that the closed, tightly controlled environment of prison and the unremitting tension, frustration, resentment, and despair that it generates

process, but because adversary proceedings typical of a criminal trial would "very likely raise the level of confrontation between staff and inmate, and make more difficult the utilization of the disciplinary process as a tool to advance the rehabilitative goals of the institution,"³⁷⁴ the opportunity to confront and cross-examine one's accusers was not made part of the constitutionally-required procedure. The Court did not single out solitary confinement; it was willing to mandate the same process when any "major change in the conditions of confinement" was imposed.³⁷⁵

It was not until *Hutto v. Finney*³⁷⁶ was decided in the late 1970s that the Supreme Court explicitly acknowledges that solitary confinement represented a type of punishment and therefore was subject to Eighth Amendment standards. At issue was a district court's remedial order following a finding that conditions in the Arkansas prison system were cruel and unusual.³⁷⁷ The contested order limited a prisoner's stay in punitive isolation to 30 days.³⁷⁸ The Supreme Court endorsed the district judge's analysis that punitive isolation, although not a *per se* constitutional violation, "may be, depending on the duration of the confinement and the conditions thereof."³⁷⁹ Put simply, the Court found that what "might be tolerable for a few days" could be "intolerable for weeks or months."³⁸⁰ Among other things, this decision seemed to signal a willingness to review the solitary confinement policies and practices of prison administrators and perhaps to consider whether conditions in punitive isolation were psychologically tolerable.

Unfortunately, the Court quickly clarified its position, and set course in the opposite direction. Just a year after *Hutto* the Court reaffirmed its deferential stance toward corrections officials: "[P]rison administrators [are to be] accorded wide-ranging deference in the adoption and execution of policies and practices that in their judgment are needed to preserve internal order and discipline and to maintain institutional security."³⁸¹ This is a course from which the Justices have rarely strayed. Indeed, more recently,

might distort the judgment and undermine the fair-mindedness of corrections officials, making meaningful judicial oversight that much more essential. He wrote instead that: "We should not be too ready to exercise oversight and put aside the judgment of prison administrators." *Id.* at 566.

374. *Id.* at 563.

375. *Id.* at 572 & n.19.

376. 437 U.S. 678 (1978).

377. Justice Stevens recounted the district court's characterization of the "routine conditions" in the Arkansas system as a "dark and evil world completely alien to the free world." *Id.* at 681 (quoting *Holt v. Sarver*, 309 F. Supp. 362, 381 (E.D. Ark. 1970)).

378. "Punitive isolation" at that time in Arkansas was described as indeterminate confinement in a windowless 8 x 10 cell into which four or more prisoners were typically crowded, with no furniture other than a source of water and toilet controlled from outside the cell, and a special, highly restrictive, and unappealing diet. *Id.* at 682-3.

379. *Id.* at 685-6.

380. *Id.* at 687.

381. *Bell v. Wolfish*, 441 U.S. 520, 547 (1979).

the Court's greater emphasis on the state of mind of prison officials³⁸² and its use of what amounts to a criminal recklessness standard with respect to the subjective prong of its Eighth Amendment inquiries,³⁸³ suggests that its deferential tendencies have become even more pronounced. A willingness to routinely uphold virtually all internal correctional decisions concerning conditions of confinement in long-term supermax and solitary-like confinement—as judgments about “practices needed to preserve internal order and discipline and to maintain institutional security”—may emerge as a result.³⁸⁴

Perhaps not surprisingly, many of the subsequent cases concerning solitary confinement or disciplinary segregation have focused on alleged violations of procedural due process rather than potentially cruel and unusual conditions.³⁸⁵ This stance may reflect a compromise; while courts are still uncomfortable second-guessing the policies of prison administrators in creating and maintaining psychologically harmful conditions in solitary confinement, they are at least more willing to carefully and critically review the procedures by which prisoners were placed in such conditions.

Perhaps also to avoid challenging prison administrators too directly or fundamentally, much caselaw has focused on very specific aspects of solitary confinement rather than the totality of conditions. Litigation has targeted mail policies,³⁸⁶ food,³⁸⁷ conditions under which isolated prisoners exercised,³⁸⁸ and the justification for long-term disciplinary segregation,³⁸⁹ leaving the overall atmosphere intact.

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

383. *Farmer*, 511 U.S. 825. The prison official “must both be aware of facts from which an inference could be drawn that substantial risk of serious harm exists, and he must also draw that inference.” *Id.* at 837.

384. *See Peterkin v. Jeffes*, 855 F.2d 1021, 1033 (3d Cir. 1988) (“The Eighth Amendment does not authorize a federal court to second guess their decisions nor is it our role to express our agreement or disagreement with their overall policies or theories of prison administration, as long as we find no constitutional violation.”).

385. *See, e.g., Graham v. Baughman*, 772 F.2d 441 (8th Cir. 1985) (finding that prison officials’ arbitrary denial of inmates’ qualified right to present witnesses or documentary evidence at disciplinary hearing violated procedural due process); *Pitts v. Kee*, 511 F. Supp. 497 (D. Del. 1981) (finding that keeping a prisoner in solitary confinement without affording him an opportunity to rebut charges against him violated due process clause).

386. *See, e.g., Gregory v. Auger*, 768 F.2d 287 (8th Cir. 1985) (holding that Iowa prison officials may implement certain restrictive mail policies in disciplinary detention); *Guajardo v. Estelle*, 568 F. Supp. 1354 (S.D. Texas 1983) (holding that denial of certain publications to inmates in punitive segregation did not violate First Amendment rights).

387. *See, e.g., Ford v. Board of Managers*, 407 F.2d 937 (3d Cir. 1969) (finding no Eighth Amendment violation in the fact that prisoners in solitary confinement received only four slices of bread and a pint of water three times daily and one full meal every other day). *But see Jenkins v. Werger*, 564 F.Supp. 806 (D. Wyo. 1983) (finding that statute permitting inmates who were “unruly or disorderly,” or who “willfully or wantonly” destroyed prison property to be confined to solitary confinement where they were fed only bread and water for five days violated the Eighth Amendment).

388. *See, e.g., Gordon v. Faber*, 800 F. Supp. 797 (N.D. Iowa 1992) (holding that forcing prisoners to exercise outside in subfreezing weather without hats or gloves for more than

3. *The Normalization of Solitary Confinement*

Another more subtle but equally important trend threatens to undermine the utility and vitality of the Eighth Amendment in future litigation over cruel conditions of supermax and solitary confinement. In the modern era of Eighth Amendment jurisprudence, a prisoner's right to be free of cruel and unusual punishment is thought to be informed by "broad and idealistic concepts of dignity, civilized standards, humanity, and decency."³⁹⁰ An implicit assumption in the way most commentators have thought and written about these idealistic concepts was that they *were* "evolving," improving, moving, however slowly, towards more humane and civilized standards of treatment. Indeed, Chief Justice Warren's previously cited view explicitly recognized the degree to which the Eighth Amendment was thought to be tethered to increasingly civilized and humane sensitivities, indeed, that the Amendment "must draw its meaning from the evolving standards of decency that mark the progress of a maturing society."³⁹¹ Presumably, then, as the process of its "maturing" unfolded, our society would progress towards greater levels of decency in the standards used to evaluate and limit state-sanctioned punishment.

This perspective establishes the context in which the objective prong of *Wilson's* two step inquiry—that is, whether the conditions in question inflicted pain serious enough to implicate constitutional concerns—must be viewed. As the Supreme Court stated in *Farmer v. Brennan*, the conditions created by "a prison official's act or omission must result in the denial of the minimal civilized measure of life's necessities."³⁹² Indeed, it was precisely this definition of "minimal civilized measures" that most courts, legal commentators, and prison litigators assumed was in the process of evolving—however slowly—towards something more sensitive, humane, and decent.

Over the last several decades, however, this process appears to have been reversed. We have witnessed what might better be characterized as the "devolution" of standards of decency on matters of crime and punishment.³⁹³ State sanctioned punishments that once were generally disfavored if not actually condemned by the larger society have now become politically expedient and once again commonplace.³⁹⁴ Applicable standards for Eighth Amendment assessments of supermax and solitary confinement are

one hour inflicted pain in the absence of penological purpose and, therefore, violates the Eighth Amendment).

389. See, e.g., *Morris v. Travisono*, 549 F. Supp. 291 (D.R.I. 1982) (finding that confinement in punitive segregation for over eight years could not be justified by prison or criminal record and instead appeared to be punishment for the murder of a prison guard).

390. *Estelle v. Gamble*, 429 U.S. 97, 102 (1976).

391. *Trop v. Dulles*, 356 U.S. 86, 101 (1958).

392. *Farmer*, 511 U.S. at 834 (citing *Rhodes v. Chapman*, 452 U.S. 337, 349 (1981)).

393. See *supra* note 300 and the articles cited therein.

394. Francis Cullen, *Assessing the Penal Harm Movement*, 32 J. RES. IN CRIME & DELINQ. 338 (1995).

implicated at several levels. For one, dimensions of public repudiation are themselves influenced by existing penal practices. What people think about prison practices is influenced in part by what they learn about practices that are currently in effect and by the presumption that institutions engage in those practices for good reasons.³⁹⁵ Yet, legal commentators have been shocked by what they have characterized as a "rage to punish"³⁹⁶ that has emerged in American political and correctional circles in recent years. This period has been termed the "mean season"³⁹⁷ of American corrections, one in which prison policy has been reduced to finding "creative strategies to make offenders suffer,"³⁹⁸ and the best that many critics can say about prevailing correctional practices is that they reflect the "malign neglect"³⁹⁹ of those who impose them.

This politically-inspired punishment wave has made it increasingly difficult for the public to repudiate supermax and solitary confinement. Thus, when the Supreme Court indicates that the harm complained of in an Eighth Amendment case must be validated by more than a scientific and statistical inquiry establishing some likelihood that serious injury would result, and would require a demonstration that the risk be so grave that society would not tolerate unwilling exposure to it,⁴⁰⁰ it is becoming increasingly difficult to imagine what such a demonstration might consist of. It is precisely in times like these—admittedly, unusual times—that the circularity of the Eighth Amendment—evaluating the propriety of policies and practices of publicly-elected or politically appointed officials by reference to the sentiments of the public or the officials themselves—is most problematic. And, certainly to the extent that members of the public at large are kept uninformed about the psychological consequences of long-term supermax and solitary confinement and have little or no firsthand knowledge of actual prison conditions, then they are even less likely to condemn or reject practices whose widespread use implies professional acceptability.

Moreover, to courts that have become accustomed to mainline conditions of confinement that are increasingly severe and countenanced by the same correctional perspective that has created the "mean season" of contemporary prison life, long-term supermax and solitary confinement no doubt look less unusual and, presumably, less cruel—not because they are objectively any more tolerable but because we have simply gotten used to

395. Haney and Zimbardo termed this the "presumption of institutional rationality." Haney & Zimbardo, *Socialization*, *supra* note 80, at 204.

396. LOIS G. FORER, *A RAGE TO PUNISH: THE UNINTENDED CONSEQUENCES OF MANDATORY SENTENCING* (1994).

397. Cullen, *supra* note 392, at 340.

398. *Id.*

399. MICHAEL TONRY, *MALIGN NEGLECT: RACE, CRIME, AND PUNISHMENT IN AMERICA* (1995).

400. *Helling v. McKinney*, 509 U.S. 25, 36 (1993).

them and to other conditions much like them. One variation of this implicit comparative logic could be seen in the Supreme Court's analysis of due process issues in *Sandin v. Conner*.⁴⁰¹ Because disciplinary segregation did not, in the Court's view, impose a hardship that was "atypical and significant"⁴⁰² in relation to the "ordinary incidents of prison life" at the institution in question,⁴⁰³ it held that no additional procedures were constitutionally mandated in order to place prisoners there. Indeed, since conditions in the prison were said to "involve significant amounts of 'lockdown' time even for inmates in the general population,"⁴⁰⁴ the Justices concluded that 30 days in the hole did not represent a major disruption. The harshness of conditions in the general prison population mitigated their view of the nature of the deprivation created by this solitary-like confinement.

Thus, direct judicial scrutiny of supermax and solitary confinement is significantly weakened by the requirement that courts formally defer to the judgments of the same prison officials who have created the conditions under review. And, as these extreme penal practices become increasingly widespread, it becomes correspondingly more difficult for courts to condemn them as outside correctional norms. Long-term and severe conditions of solitary confinement are "penologically justified" by their increasingly widespread use, and perhaps little else. Put differently, one is hard pressed to apply a standard of review that requires any practice, however ill-conceived, to be "totally without penological justification,"⁴⁰⁵ so long as it exists in more than a few prison systems.

C. *Pelican Bay*

The inadequacies that plague current constitutional doctrines used to evaluate solitary confinement were apparent in the recently litigated case involving the Security Housing Unit at Pelican Bay Prison. Many commentators viewed the litigation as a test case on the constitutional viability of the new "supermax" prison form.⁴⁰⁶ The trial court heard extensive testimony concerning the psychologically destructive potential of the extreme form of punitive segregation practiced at the prison, and it reached a series of extremely critical conclusions about the operation of the prison itself, including a number of sophisticated insights about the psychological dynamics prevailing inside the isolation units. However, the court stopped short of taking all of the direct steps necessary to reduce the widespread psychic pain suffered at the prison or to lessen the risks of long-term harm

401. 515 U.S. 472 (1995).

402. *Id.* at 484.

403. *Id.* at 486.

404. *Id.*

405. *Young v. Quinlan*, 960 F.2d 351 (1992).

406. *Madrid v. Gomez*, 889 F. Supp. 1146 (N.D. Cal. 1995).

for the great majority of prisoners housed there. To be sure, the court ordered the Pelican Bay SHU to modify a number of specific practices, such as the prevalent pattern of brutality, the "systematic deficiencies" in the provision of medical care,"⁴⁰⁷ and the severe shortcomings in the level of mental health staffing needed to provide adequate psychological screening, monitoring, or treatment services. But prevailing legal doctrine precluded the court from significantly altering the general conditions of SHU confinement at the prison. Indeed, the court was unable to extend its otherwise complex and nuanced understanding of the psychological forces at work in a punitive segregation unit to the critical task of directly modifying the totality of conditions that adversely affected the great majority of prisoners who experienced them on a long-term basis.

The *Madrid* court acknowledged the prison's "tremendous potential for abuse," stemming in part from the guards' "nearly total control over the inmates under their supervision," as well as the fact that the physical environment at the prison "reinforces a sense of isolation and detachment from the outside world, and helps create a palpable distance from ordinary compunctions, inhibitions and community norms."⁴⁰⁸ The findings of fact pointed to the "stark sterility and unremitting monotony" of the prison,⁴⁰⁹ the fact that prisoners "can go weeks, months or potentially years with little or no opportunity for normal social contact with other people,"⁴¹⁰ and the fact that overall conditions in the units "may be harsher than necessary to accommodate the needs of the institution."⁴¹¹

Nonetheless, the court did not require the prison to alter or modify any of these general conditions. The opinion acknowledged that "[s]ocial science and clinical literature have consistently reported that when human beings are subjected to social isolation and reduced environmental stimulation, they may deteriorate mentally and in some cases develop psychiatric

407. *Id.* at 1210.

408. *Id.* at 1160. The court found that the use of excessive force had taken a variety of forms at the prison. This included breaking one prisoner's arm by bending it back through his tray slot, leaving prisoners "hog-tied" or in fetal restraints for hours at a time, placing "naked or partially dressed inmates in outdoor holding cages during inclement weather" where they were "exposed to the elements as well as public view," engaging in unnecessarily high numbers of "cell extractions" in which teams of guards employed prescribed procedures that the court characterized as "undeniably violent maneuver[s] which can involve several weapons, including 38 millimeter gas guns, tasers, short metal batons, and mace," and discharging firearms that were "used unnecessarily, and in some cases, recklessly" and sometimes with lethal consequences. *Id.* at 1171, 1172, 1179-80.

409. *Id.* at 1229.

410. *Id.*

411. *Id.* at 1263.

disturbances”⁴¹² and found in the instant case that “many, if not most, inmates in the SHU experience some degree of psychological trauma in reaction to their extreme social isolation and the severely restricted environmental stimulation in the SHU.”⁴¹³

Yet, the court simultaneously ruled that although the conditions in the segregation units were “relatively extreme,” the fact that “they do not have a uniform effect on all inmates”⁴¹⁴ led to the conclusion that “for many inmates, it does not appear that the degree of mental injury suffered significantly exceeds the kind of generalized psychological pain that courts have found compatible with 8th Amendment standards.”⁴¹⁵ The operative formulation was this one:

While a risk of a more serious [mental] injury is not non-existent, we are not persuaded, on the present record and given all the circumstances, that the risk of developing an injury to mental health of *sufficiently serious magnitude* due to current conditions in the SHU is high enough for the SHU population as a whole, to find that current conditions in the SHU are *per se* violative of the 8th Amendment with respect to all potential inmates.⁴¹⁶

This conclusion was unexpected in light of the testimony given at trial but not in the context of prevailing legal precedent. The prison had produced no convincing evidence that the extreme harshness of this environment was necessary to further any legitimate penological purpose, and the court noted that on it had found none.⁴¹⁷ No evidence had been produced to indicate that psychological destructiveness of these conditions was limited only to those prisoners who previously had suffered from mental illness. To the contrary, the thrust of the expert testimony was that trauma of the sort that was being inflicted at the prison, and which the court acknowledged existed for “most” of the prisoners who endured it for longer than brief periods (virtually all of the prisoners housed in punitive segregation), was likely to have acutely painful effects that posed a significant risk of long-term damage.⁴¹⁸ Moreover, many prisoners reported symptoms that

412. *Id.* at 1230.

413. *Id.* at 1235. Later in the opinion the court seemed to go a step further: “[T]he record demonstrates that the conditions of extreme social isolation and reduced environmental stimulation found in the Pelican Bay SHU will likely inflict some degree of psychological trauma upon most inmates confined there for more than brief periods.” *Id.* at 1265.

414. *Id.*

415. *Id.* In this context the court found that prisoners who were already mentally ill, those with borderline personality disorders, brain damage or mental retardation, impulse-ridden personalities and those with a history of prior psychiatric problems or chronic depression could not be constitutionally housed in these segregation units.

416. *Id.* (emphasis in original).

417. *Id.* at 1264 (“some of these conditions appear, at best, tenuously related to legitimate concerns”).

418. The court’s suggestion that Haney’s study of psychological trauma and isolation-related psychopathology revealed that “the more severe symptoms are only experienced by

were not only indicative of a significant risk of future long-term damage but actually evidence that such damage had already occurred.

The *Madrid* opinion crystalizes the problematic state of the legal doctrine that now governs these issues. A federal court that had been courageous enough to consolidate prisoner complaints and, in essence, initiate the litigation, that had engaged in an unusually sophisticated psychological analysis of an especially elaborate factual record, and that documented adverse effects that were widespread and extreme, nevertheless was forced by existing law to articulate a standard of psychological harm that will be very difficult for future plaintiffs to meet. Admitting that conditions inside these units "may press the outer bound of what most humans can psychologically tolerate,"⁴¹⁹ the court found them legally tolerable because they did not create "a sufficiently high risk to *all* inmates of incurring a serious mental illness."⁴²⁰ Unfortunately, this portion of the opinion could easily be misinterpreted to mean that no prison can be considered psychologically cruel and unusual unless it is highly likely to drive its prisoners crazy. Although it seems very doubtful that the court intended to articulate such a standard. Yet if consistently misapplied, this extraordinary threshold of cognizable Eighth Amendment psychic pain, limited to those things that create a high risk that everyone exposed to them will become seriously mentally ill, could legitimize virtually any form of degrading, inhumane, and psychologically abusive treatment in prison, no matter how extreme and otherwise harmful. This is because no known set of conditions, in prison or out, can create a high probability that everyone who experiences them will suffer serious mental illness as a result.⁴²¹ If this were to become the legal standard by which the psychological significance of the pains of supermax and solitary confinement were judged, it would be no standard at all.

a minority of the SHU population" was difficult to interpret in light of the record itself, in which very serious symptoms were reported by significant majorities of prisoners. *Id.* at 1235. Indeed, at one point the court referred to a finding that some 19% of prisoners who responded to a "control" question (i.e., something that was not identified as a symptom of psychological disturbance) as a "relatively high response," possibly indicative of some degree of overall exaggeration. On virtually every actual symptom, however, even on indices of severe psychopathology, the prisoners' response level was much higher—double or more—than the "high" response level to this control question. *Id.*

419. *Id.* at 1267; see also *id.* at 1280 ("Conditions in the SHU may well hover on the edge of what is humanly tolerable for those with normal resilience, particularly when endured for extended periods of time.").

420. *Id.* at 1267 (emphasis added). The court employed a different and more workable standard later in the opinion, when concluding that the prison had "cross[ed] the constitutional line" by forcing certain subgroups of prisoners to endure SHU conditions when it knew that "the likely consequence for such inmates is serious injury to their mental health." *Id.* at 1279.

421. It is important to acknowledge that the *Madrid* court did exempt certain categories of prisoners from placement in the Pelican Bay Security Housing Unit based on their pre-existing psychological state. Prisoners who were already mentally ill or who suffered from chronic depression, from brain damage, or from mental retardation were not to be exposed to the extreme SHU conditions because, as the judge put it, "[s]uch inmates are not required to endure the horrific suffering of a serious mental illness or a major exacerbation

Clearly, any realistic hope of developing meaningful protections for prisoners inside these specially designed "prisons of the future" rests on our ability to fashion standards more psychologically sensitive than those now being applied. Evolving standards of decency must be premised on advances in psychological knowledge as well as changing technological and penological norms. Even in this most recent opinion concerning Pelican Bay—one that seemed to grapple very seriously and thoughtfully with the psychological consequences of this new prison form—the implications of the large and consistent literature documenting the deleterious effects of solitary confinement, although seemingly fully appreciated, were not and could not be effectively brought to bear. Thus, in the spirit of applying existing knowledge to the development of badly needed standards, in the next section we propose a set of tentative guidelines by which conditions of confinement inside modern solitary and punitive segregation units can be more meaningfully regulated.

IV.

REGULATING THE USE OF SUPERMAX AND SOLITARY CONFINEMENT: TOWARD HUMANE LIMITS ON THE PAINS OF ISOLATION

Meaningful legal regulation must balance the legitimate interests of prison administrators to maintain institutional security and the physical safety of the line staff and prisoners against the interests of prisoners themselves to be free from unnecessarily cruel and psychologically harmful punishments. To do so, legal regulators must carefully and realistically examine the correctional goals that are achieved and the harms that are inflicted by the use of long-term solitary confinement and punitive segregation. The penological justification of solitary confinement cannot simply be assumed or accepted at the outset of this inquiry. Instead, it must be assessed by examining both the positive and negative impact on prisoner behavior and institutional functioning as well as the physical and psychological harm that results. Legal regulators cannot routinely react with largely unquestioning deference to claims by correctional administrators that solitary confinement is necessary to achieve legitimate penal goals without demanding persuasive evidence to corroborate these claims. Similarly, there is no legal or

of an existing mental illness before obtaining relief." *Id.* at 1265. Thus, about a year after its historic decision, the *Madrid* court ordered the state to remove prisoners meeting those diagnostic descriptions from the SHU, to implement plans for the screening and monitoring of the psychiatric condition of prisoners, and to create a special "Psychiatric Security Unit" to provide treatment for acutely disturbed SHU prisoners. Specifically *not* included in the removal order were prisoners suffering from the acute effects of isolation itself, sometimes called "reduced environmental stimulation syndrome," because the court had not found that "the risk of suffering a sufficiently serious degree of psychological trauma was high among all inmates to justify a presumptive exclusionary category based" on this syndrome alone. *Madrid v. Gomez*, No. C90-3094 (N.D. Cal. Dec. 15, 1995) (remedial order re: exclusion from Security Housing Unit), at 15-16.

constitutional justification for narrowly focusing on physical rather than psychological standards of harm and mistreatment, even though judicial analyses of the effects of solitary confinement on prisoners ignored overwhelming evidence of psychological harm of the sort that we reviewed above. By underestimating the psychological pain and deterioration produced by these conditions and simultaneously accepting, often uncritically, the validity of penological justifications, the courts have given prisoners the worst of both worlds: they suffer untold pains inflicted without proven purpose.

For example, according to a recent study of the California prison system,⁴²² segregation policies adopted in California to deal with that state's gang problem not only have done little to reduce violence or to create a feeling of safety and security among prisoners but actually may have worsened the problem that they were intended to solve. Researchers report increased fear among prisoners—prison life in California is now seen as more “capricious and dangerous”⁴²³—and, paradoxically, gang activity has *increased* as gang members have been removed and housed in special “security housing units” throughout the system: “In other words, prison authorities’ efforts to contain the spread of gangs led, unintentionally, to a vacuum within the prison population within which new prison groupings developed.”⁴²⁴ Prisoners must currently contend with the conflicting loyalties and alliances among some nine or ten different prison gangs in the California system rather than the four or five main gangs that previously operated. Moreover, the prison system’s policy of inferring gang membership from what may reflect little more than prior neighborhood contact or acquaintance, combined with the increased level of uncertainty and fear among the prisoners themselves, mean that “gang membership has now become more automatic, especially for Chicanos.”⁴²⁵ Many interviewees expressed precisely the same feeling in Haney’s⁴²⁶ study of the state’s harshest punitive segregation prison, Pelican Bay, where many of the suspected gang members have been sent. Prisoners reported having reacted to the official policy of housing them at certain mainline prisons based on the geographical locales in which they previously lived and the perceived high likelihood that they would be erroneously identified as gang members and suffer the negative consequences anyway. When added to the uncertainties of life in badly overcrowded prisons, these things led many prisoners to conclude that the prison administration had in essence given them no other choice but to join gangs.

422. Hunt et al., *supra* note 75.

423. *Id.* at 407.

424. *Id.* at 403.

425. *Id.* at 404-5.

426. Haney, *Infamous Punishment*, *supra* note 12.

A careful analysis of both the negative psychological effects of supermax and long-term solitary confinement and the absence of convincing evidence of its correctional benefits or rational justification leads us to conclude that these practices must be subjected to more searching legal monitoring and regulation. Toward that end, we propose a series of limiting standards that are rooted in the psychological literature and intended as the basis for a more effective, realistic, and psychologically meaningful oversight of solitary and supermax confinement. Like all frameworks for institutional oversight, this one will prove useful only if it is seen as programmatic (i.e., a starting point whose provision should be read as interconnected) and provisional (i.e., in continuous need of evaluation and revision). In general terms, we advocate mandatory screening and monitoring of prisoners placed in solitary confinement for psychiatric reactions, drastically limiting the maximum lengths of time prisoners can be kept in solitary confinement, and greatly improving the nature of the conditions to which prisoners are exposed while incarcerated under such a regime. Specifically:

Segregated prisoners must retain all of the fundamental constitutional rights and privileges afforded mainline prisoners.⁴²⁷

Adequate due process should be afforded all prisoners before transfer to disciplinary segregation, solitary, or supermax units, irrespective of the particular purpose that correctional officials ascribe to the transfer itself.⁴²⁸

427. The argument has been made that, to the degree that coercive mistreatment cannot be eliminated from the solitary confinement regime, the regime itself should be prohibited. For example, Don Foster has concluded that since legal safeguards in South Africa "have usually proved ineffective in protecting detainees from physical and psychological abuses," numerous reforms are required, including "[t]he abolition of solitary confinement and any other form of prescribed social isolation." FOSTER, DETENTION & TORTURE, *supra* note 97, at 178. Other researchers recommend that juvenile institution administrators "[e]liminate separate isolation units. They are a needless drain on the budget and personnel, undermine creative behavior programs, and increase the likelihood that isolation will be overused." Mitchell and Varley, *supra* note 140, at 254.

428. Our preceding discussion of the nature of solitary confinement established its substantial psychological risks. These risks do not vary as a function of the different purposes that correctional decision makers may have for placing a prisoner in such units. To protect prisoners' liberty interests in avoiding such potentially destructive experiences and to safeguard against the erroneous and unreliable placement of prisoners in these painful and sometimes damaging environments, prisoners should be afforded the due process protections first outlined by the United States Supreme Court in *Wolff v. McDonnell*, 418 U.S. 539 (1974), including advance notice of the violation and evidence and the right to a hearing or disciplinary proceeding that includes the opportunity to present witnesses and other evidence in a manner consistent with institutional security. This recommendation appears somewhat inconsistent with *Sandin v. Conner*, 515 U.S. 472 (1995), in which the Supreme Court recently decided that 30 days confinement in a Special Holding Unit (much like the generic punitive isolation units to which we have been referring) did not implicate liberty interests of the sort that would require *Wolff*-like due process. In reaching this result, however, the Court focused on whether the segregated confinement represented "a dramatic departure from the basic conditions" of the prisoners sentence, whether it was an "atypical, significant deprivation," and whether conditions in the special unit were similar to others, "even for inmates in the general population." *Id.* at 484 (footnote omitted). Indeed, there is

No prisoner should be kept in administrative segregation for longer than 10 days absent or pending a due process hearing to determine disciplinary segregation status.⁴²⁹

Except under truly extraordinary circumstances, segregation from mainline prisoners should be limited to no more than 2 years, irrespective of the nature of the disciplinary offense.⁴³⁰

nothing about the conditions of confinement in long-term punitive segregation that is "within the range of confinement to be normally expected" by maximum security prisoners. *Id.* at 485. It is worth noting, in this context, that four Justices filed two separate dissents arguing in essence that even a 30-day sentence in the prison segregation unit should trigger the full panoply of *Wolff* due process procedural protections. For example, Justices Breyer and Souter saw such confinement as "work[ing] a fairly major change" in the prisoner's conditions:

As a result of disciplinary segregation. . . Conner, for 30 days, had to spend his entire time alone in his cell (with the exception of 50 minutes each day on average for brief exercise and shower periods, during which he nonetheless remained isolated from other inmates and was constrained by leg irons and waist chains).

Id. at 488.

429. Administrative segregation often amounts to a kind of correctional "no man's land" in which prisoners are kept segregated and often isolated for reasons of administrative discretion and sometimes mere convenience or unspecified punitive purposes. On the other hand, it is not difficult to appreciate the legitimate uses to which immediate, short-term housing in such units can be put, such as housing vulnerable prisoners who are awaiting transfers to safer institutions, those who are suspected of serious disciplinary infractions who must be segregated pending a hearing, and so on. However, administrative segregation lends itself to abuse of discretion, precisely because of the often standardless nature of the decision-making process by which it is imposed and the sometimes indefinite length of the confinement itself. Indeed, it represents what one legal commentator has called "the most debilitating punishment the lawful prison has to offer. It is used to break the spirit of prisoners who look too proud or strong, and to settle scores between guards and prisoners that do not lend themselves easily to the factual proof required in disciplinary hearings." Jonathan A. Willens, *Structure, Content and the Exigencies of War: American Prison Law After Twenty-Five Years 1962-1987*, 37 AM. U. L. REV. 41, 129 (1987). Willens also observed: "[I]solation attacks the personality and long separation makes the prisoner a stranger in his community. If citizenship includes 1) a claim to be with people, and 2) a claim to be kept whole, then necessary discretion rejects half of the prisoner's citizenship." *Id.* at 130.

430. This provision should be read in conjunction with *all* subsequent ones, including those concerning access to programs and activities for prisoners confined to segregation for 90 days or longer. See *infra* note 438 and accompanying text. Compare AMERICAN CORRECTIONAL ASSOCIATION, MANUAL OF CORRECTIONAL STANDARDS 253 (1959):

Segregation for punishment should be for the shortest period that will accomplish the desired result of making the inmate amenable to discipline, and in any event not over thirty days. With most inmates and for most infractions a period of a few days proves sufficient. In other cases, a few days in punitive segregation followed by thirty to ninety days in administrative segregation, or in some other status that involves continued control or loss of privileges is sufficient. Excessively long periods for punishment defeat their own purpose by embittering and demoralizing the inmate. . . . For isolation and separate confinement, increased security arrangements imposed at the institutional level, these rules provide some discretion. Isolation is to be used only for major violations of disciplinary rules (or a persistent pattern of minor violations) and is limited to ten days rather than the current fifteen. The change follows trends in several states. Separate confinement may be imposed for disciplinary violations for periods of up to thirty days. It may also be used for protective custody.

No prisoner should be confined to segregated housing for indeterminate or indefinite terms.⁴³¹

Conditions of total social isolation and extreme sensory deprivation (e.g., darkness) should be prohibited entirely.⁴³²

Nothing that has been learned since about the psychological consequences of solitary confinement or punitive segregation indicates that these nearly 40-year old guidelines are obsolete. However, they seem wildly out of synch with contemporary practices in which prisoners are confined to segregation for many years. We propose a two-year limit as a compromise between earlier, saner standards and the extraordinary and dangerous practices to which American corrections has become accustomed. *See also* Mitchell and Varley, *supra* note 140 at 254 (recommending much more stringent limits for juveniles). They also recommend that administrators “[p]lace a firm upper time limit on isolation. A 24-hour upper limit is more than sufficient. One of the facilities the authors consulted found a 5-hour limit workable, and judges who enjoin facilities from overusing isolation tend to impose limits in the range of 2 to 5 hours.” *Id.* at 254 (reference omitted). *Cf.* *Lollis v. New York State Department of Social Services*, 322 F. Supp. 473, 482 (S.D.N.Y. 1970): “Measured by the standards of the Eighth Amendment cases . . . [and] the views of experts in the field of adolescent psychology . . . a two-week confinement of a fourteen-year old girl in a stripped room in night clothes with no recreational facilities or even reading matter must be held to violate the Constitution’s ban on cruel and unusual punishment.” *Id.* *Compare* *Adams v. Carlson*, 488 F.2d 619,628 (7th Cir. 1973) (segregation “should not exceed a few months, if that long”). The *Adams* court cited state statutes limiting punitive segregation to approximately one month:

Several states place a statutory maximum on the time for which a prisoner may be segregated, including Missouri, Ann.Mo. Stats. § 216.455(1) (1962) (ten days), New Hampshire, N.H.Rev.Stats.Ann. § 622:14 (1955) (thirty days), and Tennessee, Tenn. Code Ann. § 41-707 (1955) (thirty days). *Id.* at 628 n. 14. Note, in addition, the regulations of the Texas Department of Corrections referred to in *Novak v. Beto*, 453 F.2d 661, 667 (5th Cir. 1971) (fifteen days maximum), and those of the Department of Corrections, District of Columbia, cited in *Fulwood v. Clemmer*, 206 F. Supp. 370, 378 n. 29 (D.D.C. 1962) (fifteen days maximum).

431. Indeterminate terms can result in the kind of abuses the *Madrid* court described but did not prohibit:

[A]n inmate who was validated [as a gang member] in 1979, but has not engaged in any gang activity or otherwise associated with gang members since then will still be retained in the SHU in 1994, fifteen years later, absent a successful debriefing [in which he must provide incriminating information about other gang members]. The lack of continuing evidence of gang membership or activity is simply considered irrelevant since the justification for administrative segregation is the fact of gang membership itself, not any particular behavior or activity.

Madrid, 889 F.Supp. at 1273.

Yet, California state law provides: “Release from segregation status shall occur at the earliest possible time in keeping with the circumstances and reasons for the inmate’s initial placement in administrative segregation. . . .” CAL. CODE REGS. tit. 15 § 3339(a) (1994). This contrast underscores the need for specific time limits rather than vague phrases such as “earliest possible time” whose ambiguity makes them impossible to enforce.

432. Such conditions serve no penological purpose and expose prisoners to serious risks of psychopathological reactions. Consistent with this prohibition, Judge McMillan’s graduated scale of time limits reflects similar concerns. *See Berch v. Stahl*, 373 F. Supp. 412, 420-1 (W.D.N.C. 1974) (“The court rules that the following types of confinement, when utilized as punitive measures in this jail, violate the Eighth Amendment prohibition against cruel and unusual punishment: (i) Confinement in the ‘box’ for periods longer than twenty-four (24) hours; (ii) Confinement in the solid-door solitary confinement cells for periods longer than fifteen (15) days; (iii) Confinement in the barred-door solitary confinement cells

Complete social isolation and restricted movement that precludes social interaction should not exceed 30 days in duration for any prisoners.⁴³³

Prisoners should not be placed in disciplinary segregation when the infraction for which they are being punished was the result of pre-existing psychiatric disorders, mental illness, or developmental disability.⁴³⁴

Segregated prisoners should be screened in advance of supermax or solitary confinement and those whose psychological and medical conditions would render them significantly more susceptible to the potentially harmful consequences of the experience should be precluded from it.⁴³⁵

Prison mental health staff should be required to articulate explicit diagnostic procedures for screening prisoners who are to be placed in solitary, and to specify the diagnostic criteria that would disqualify prisoners for such confinement.⁴³⁶

for periods longer than thirty (30) days; and (iv) Depriving an inmate of the clothing necessary for warmth and modesty.”).

433. Cf. Benjamin & Lux, *Solitary Confinement*, *supra* note 71, at 284 (“Unless we feel that persons in ‘administrative segregation’ *should* become hostile, mentally ill and dehumanized the only possible solution is to give *all* prisoners, whatever their label, maximum human contact and a variety of perceptual stimuli. This can only be done by abolishing solitary confinement as we know it, or by limiting a person’s stay in solitary until he or she calms down, but in no event for more than a few hours.”). Even John Howard, the English prison reformer commonly regarded as having contributed to the early development of solitary confinement in English prisons, understood that long terms of unbroken isolation could lead prisoners to “insensibility or despair,” JACKSON, *supra* note 19, at 15. The Center for Criminal Justice proposed a 30 day limitation on punitive segregation and a 60 day limitation on administrative segregation. SHELDON KRANTZ ET AL., *MODEL RULES AND REGULATIONS ON PRISONERS’ RIGHTS AND RESPONSIBILITIES* 182 (1973).

434. The placement of mentally ill and developmentally disabled prisoners in segregation for behavioral problems that are the product of their psychiatric condition or cognitive impairments rather than a culpable disregard of institutional rules is a serious and potentially widespread problem. Indeed, since studies indicate that between 8 and 25% of US prisoners suffer from some form of serious psychiatric disorder, there is much potential for mistake and abuse. A number of commentators have discussed the manifest unfairness of placing psychiatrically impaired prisoners in punitive segregation, where they not only will be punished for their mental illness but also usually receive significantly worse, if any, psychiatric treatment and care. Simultaneously, these inmates are exposed to conditions that are likely to exacerbate their disorder. Hans Toch, *The Disturbed Disruptive Inmate: Where Does the Bus Stop?* 10 J. PSYCH. & L. 327 (1982); Marilyn D. McShane, *The Bus Stop Revisited: Discipline and Psychiatric Patients in Prison*, 17 J. PSYCH. & L. 413 (1989); W. Rold, *Considerations of Mental Health Factors in Inmate Discipline*, 11 J. PRISON & JAIL HEALTH 41 (1992). Consistent with these concerns, the Texas Department of Corrections regulations require a psychiatric team to determine whether a prisoner’s “mental status precludes participation in the disciplinary process,” whether the mental status “contributed to the alleged disciplinary offense,” and whether the mental status “contraindicates any particular form of punishment (e.g., confinement in punitive segregation).” Rold, *supra* at 47.

435. For example, under new policies implemented in 1990, the procedures for entry into Canadian “Special Handling Units” include “a 90-day assessment period” which includes “psychological and psychiatric evaluations and assessments and assessments of the prisoner’s educational level.” Rosemary L. O’Brien, *Special Handling Units*, F. ON CORRECTIONS RES., Sep. 1992, at 11.

436. As noted the *Madrid* court identified three such groups of prisoners: 1.) “the already mentally ill,” 2.) “persons with borderline personality disorders, brain damage or mental retardation, [and] impulse-ridden personalities,” and 3.) those with “a history of

Those prisoners who are unfit for segregated housing should not be confined in it at all. Alternative facilities to house and care for such prisoners should be created by prison administrations.⁴³⁷

Prisoners housed in segregation should be regularly and carefully monitored by correctional, medical, and mental health staff to detect adverse reactions to segregated confinement. Mental health staff should be present in solitary confinement units a minimum of one hour per month for every two prisoners housed there. All prisoners should be seen by mental health staff no less than once every month for evaluation as to fitness for segregated housing.⁴³⁸

Prisoners in segregated housing for longer than three months should be offered the same kinds of activities as those in mainline prison units, albeit on a modified or reduced basis consistent with security concerns, including access to therapy, work, educational, and recreational programs.⁴³⁹

prior psychiatric problems or chronic depression." *Madrid*, 889 F.Supp. at 1265. This represents an important starting point from which additional and more precise definitions of specialized vulnerabilities to punitive isolation might be developed. Prisoners who do not fall into *Madrid's* general categories nonetheless should be evaluated for such particularized vulnerabilities and excluded if any are detected. There has been an understandably large investment in assessing the "risk" that prisoners will engage in subsequent problematic behavior while in prison or once released. See D.A. Clark et al., *A New Methodology for Assessing the Level of Risk in Incarcerated Offenders*, 33 BRIT. J. CRIMINOL. 436 (1993) and references cited therein. We should begin to make similar attempts to assess the risks that prisoners will be psychologically damaged by extreme conditions of confinement, especially since, for some, such damage will be related to subsequent problematic behavior that may include disciplinary infractions and criminality.

437. There are a number of effective models for the provision of mental health services to prisoners who suffer from psychological disturbances and disorders. See James R.P. Ogloff et al., *Mental Health Services in Jails and Prisons: Legal, Clinical, and Policy Issues*, 18 L. & PSYCHOL. REV. 109 (1994).

438. According to David Ward, the Minnesota correctional system requires "that inmates in the Control Unit be periodically rotated into the Mental Health Unit for observation and a change of physical environment, as well as for a period of relief from nearby inmates and staff." Ward, *supra* note 11 at 91. Indeed, one of the leading apologists for solitary confinement, Peter Suedfeld, once stressed the importance of using it only in non-punitive, therapeutic ways. According to him this would include explaining the nature and duration of the experience in advance to the prisoner, and implementing the confinement under carefully controlled conditions with close monitoring for any negative effects. He acknowledged that because solitary confinement traditionally has been used in ineffectual and unethical ways, any prisoner who rejected the technique should not be forced to endure it. Suedfeld also has been quoted as having testified in a case concerning the effects of solitary confinement in Canadian prisons that: "I would expect that for many people after some prolonged period of time, especially if there is no hope of being released from that environment, things would tend to become inadequate and an individual would then take on another form of reaction to the environment. That may take place in the form of apathy, fantasizing, general withdrawal from the external environment, some kind of inner life, and in some cases, I expect it would lead to psychosis." Jackson, *supra* note 19, at 79.

439. The new Canadian SHU policy includes "the integration of essential components in programming, including psychiatric intervention, employment opportunities," as well as "the promotion of staff-inmate interaction and fewer physical controls so that the correctional environment will be conducive to inmates changing their behaviour." O'Brien, *supra* note 433. Indeed, if the goal of segregation is redefined to include the proactive promotion

Whenever possible, activities of this sort should not be precluded for those housed in short term solitary confinement terms of three months or less.⁴⁴⁰

Visitation should be offered to segregated prisoners on a basis that resembles mainline visiting as closely as security considerations will allow.⁴⁴¹

No prisoner should be subjected to punitive segregation solely on the basis of alleged or documented gang membership in the absence of behavioral infractions.⁴⁴²

of prisoners' return to mainline maximum security housing, then it may need to include specialized or enriched programming.

440. Studies of long-term prisoners indicate that those who are able to work and maintain involvement in other activities and are able to continue contact with the outside world improve in their overall adaptation to prison and decrease "dysphoric" emotional states and stress-related medical problems. See, e.g., Edward Zamble, *Behavior and Adaptation in Long-Term Prison Inmates: Descriptive and Longitudinal Results*, 19 CRIM. JUST. & BEHAV. 409 (1992) (stating that punitive segregation should not be structured and implemented in such a way that it interferes with a prisoner's long-term adaptation to prison).

441. Cooke noted that the liberal visitation policy allowed prisoners to "develop or re-establish close affectional bonds with families or friends," something that was especially important since:

Many of the prisoners have spent most of their adult lives in penal establishments; the availability of visitors often provides them with the opportunity to learn—for the first time—how to form close adult relationships outside prison. These relationships give them interests which are outside the prison culture and hopefully outside the criminal culture. Finally, the visiting privilege is so important to prisoners that the threat of its loss acts as a powerful control, and can be used by the community as a sanction against bad behaviour.

Cooke, *supra* note 254, at 140-41.

Others have acknowledged the importance of visitation in helping prisoners shed their prison identities. E.g., Thomas Schmid & Richard Jones, *Suspended Identity: Identity Transformation in a Maximum Security Prison*, 14 SYMBOLIC INTERACTION 415, 427 (1991) ("Reaffirmations of his preprison identity by outsiders—visits and furloughs during which others interact with him as if he has not changed—provide powerful support for his efforts to revive his suspended identity."). Persons housed in segregated or isolated environments who have been denied the opportunity for meaningful social interaction in prison are especially in need of outside contact that either affirms their pre-prison identity or encourages them to fashion a post-prison identity that will facilitate their free world adjustment.

442. Gang membership constitutes a "status offense" of the sort that is highly disfavored in other legal contexts. Moreover, the unreliability of administrative decisions to classify someone as a gang member or affiliate increases concern over the unfairness of such status-based placements in supermax and solitary confinement. See generally, Tachiki, *supra* note 76. "[G]ang affiliation, in and of itself, should not be constitutionally sufficient to justify the transfer of a prisoner to the SHU. Instead, the procedures for segregating a prison gang member should require evidence of some other kind of infraction, especially those types of infractions normally committed by prison gangs." *Id.* at 1120 (footnote omitted). As one person appointed to monitor the implementation of court orders in an earlier case involving California's punitive segregation units observed: "[G]ang membership. . . is inherently virtually impossible to ascertain or discover with precision. The gang's only tangible existence is in the minds of the prisoners and prison officials." Third Special Report of the Monitor, *Toussaint v. Rowland*, 711 F.Supp. 536 (N.D. Cal. 1989), at 22. These sources of unreliability are insurmountable. Because of the sub rosa nature of prison gang membership and activity, the identification of alleged gang connections traditionally has been based on the word of so-called "confidential informants," persons who provide information to prison officials usually in order to obtain favorable treatment for themselves. The potential for

Staff members who work in punitive segregation units should be given specialized training that addresses the unique psychological stresses that such environments have for prisoners and guards alike, including in-depth instruction in recognizing and responding to signs of psychological trauma and the psychopathological effects of such isolation.

Staff members who work in punitive segregation units should be monitored for the use of excessive force, removed from such assignments whenever their behavior begins to deteriorate in the face of the pressures of these working conditions, and periodically rotated out of these units to ensure that they maintain a broader perspective on prisoner behavior and the range of potential relationships between staff and inmates.⁴⁴³

CONCLUSION

The recent trend toward increased use of supermax and solitary confinement is dangerously ill-conceived. It ignores or contravenes a diverse and robust empirical literature that has consistently documented the psychologically destructive effects of prolonged extreme idleness and social deprivation. Solitary confinement and punitive isolation take the pains of imprisonment and intensify them, demonstrating little regard for the long-term psychological consequences to prisoners. Commentators who have

abuse and the widespread perceptions of unfairness that accompany this process underscore its unreliability and problematic effects. For instance, the misuse of a system like this appeared to be at the root of the New Mexico Penitentiary prison riot at Santa Fe in 1980, perhaps the worst in United States corrections history. Cf. Useem, *supra* note 247. In addition, interviews conducted with prisoners in California confirm the current potential for abuse. Interviewers reported that many of the inmates they spoke to regarded these policies as "particularly unfair because it meant that a prisoner could be identified as a gang member and 'jacketed' purely on the basis of information from a confidential informant." Hunt et al., *supra* note 75, at 401. Prisoners who are identified in this way and who are placed in punitive segregation as a result must provide incriminating evidence on others, in what is euphemistically referred to as "debriefing," before they have any hope of being released. Thus, there are powerful incentives that encourage prisoners to volunteer information about each other, without effective quality controls to prevent erroneous or unreliable information from being offered. Because prison officials have no way of knowing whether prisoners are providing accurate information, they cannot and do not screen out or ignore "inaccurate" information or sanction prisoners who offer it.

443. The unique conditions that are created in supermax and solitary confinement lend themselves to abusive mistreatment and the use of excessive force. These units are often built in isolated locations, free from outside scrutiny or the moderating influence of a diverse surrounding community. Staff members have far greater control over prisoners in these units than anywhere else in the prison system. Institutional procedures and routines ensure that staff members will never interact with prisoners on even remotely normal bases or observe them behaving in other than highly constrained, unnatural ways under deprived and desperate circumstances. The tension that pervades supermax and solitary confinement creates the potential for self-fulfilling prophecies in which the staff inadvertently elicits provocative behavior from prisoners (and vice versa), so that confrontations become more likely. On the power of prison roles and situations to dramatically shape the behavior of prison actors, see Haney et al., *supra* note 80; Haney & Zimbardo, *Socialization*, *supra* note 80. Compare *supra* note 406 and accompanying text for the perceptive observations made by the *Madrid* court on precisely these issues.

suggested that there is little or no evidence of the damaging effects of solitary confinement⁴⁴⁴ or that the topic “is addressed more as an emotional issue than an empirical one”⁴⁴⁵ simply cannot have looked closely and systematically at the empirical record. Although there may be times when the segregation of prisoners from the rest of the population is justified in terms of prison management and violence control, significant deprivations beyond the fact of separation itself cannot be justified on a long-term basis. No convincing evidence has been produced to demonstrate that such policies achieve any lasting positive benefits for the prison systems that employ them. The resulting long-term personal, penal, and social consequences appear to outweigh whatever motives prison administrators may have for seeking new and inventive ways to punish disruptive prisoners.

The distinctive psychological components of the experience of solitary confinement combine and interact creating a whole that is potentially more destructive than the sum of its parts are also independently and separately harmful. Thus, supermax and solitary confinement impose significant and intense restrictions on movement and activity (i.e., prisoners in solitary and punitive isolation are denied the opportunity to move about and engage in meaningful programs in the course of their specialized confinement and, therefore, endure unheard of levels of enforced idleness). Many of the same prisoners suffer drastically limited spatial confinement so that even when prisoners are living alone they are “crowded” in an admittedly unconventional sense and, when housed with another, they are paradoxically both “isolated” and “overcrowded.” In addition, they are subjected to the painful and psychologically destructive deprivation of normal social contact and interaction (i.e., lockup prisoners are often prohibited from interacting with other prisoners, staff, and visitors in ways that allow them to have meaningful human contact, maintain social skills, and preserve pre-existing social identities and relationships). And, finally, they are immersed in an atmosphere of negative affect and hostility that comes both from the stigma of such confinement and its heightened potential for mistreatment and abuse. As we have shown, the combination of these separate components produces a harmful psychological mix in supermax and solitary confinement, one whose destructive potential has been empirically well-documented.

In addition, supermax and solitary confinement pose politically and legally unexamined risks that extend beyond the prison walls. Prolonged punitive segregation compels many prisoners to develop habits of survival that may be difficult if not impossible to relinquish once they are released into either the mainline prison population or the free world. Some prisoners will lose the ability to initiate behavior or impose internal organization on their daily routines, jeopardizing their chances for productive post-

444. *See, supra* note 93 and references cited therein.

445. Rogers, *supra* note 93, at 341.

prison adjustment. Others will suffer the loss of emotional control and experience increased bouts of impulsive anger that may precipitate future disciplinary infractions, parole violations, and subsequent offenses. Some prisoners will be disabled by the decreased memory and concentration that accompanies extended isolation. Chronic anxiety and the fear of impending breakdowns and other common reactions to solitary confinement will be debilitating for those prisoners in whom they persist. The fear of social interaction and personal intimacy, the loss of the basic ability to interact comfortably with others, and the breakdown of social and familial ties that occur in supermax and solitary confinement are equally problematic, dysfunctional and threaten already disadvantaged ex-convicts with additional handicaps. In addition, chronically isolated prisoners who suffer the long-lasting effects of PTSD may be plagued by recurring symptoms months or years after their experience in solitary confinement. In more extreme cases, prisoners who become psychotic or suicidal while housed under these severe circumstances may cross into dangerous psychological territory from which it will be impossible to return.

At more mundane levels, isolated prisoners spend years in what amounts to a kind of socioeconomic and interpersonal suspended animation, lacking any opportunities to obtain job training, improve educational levels, or to address through counseling, anger management, or violence reduction programs any of the personal problems that may have contributed to their initial placement in these punishment units. Others, finding themselves surrounded by gang members, with few alternative outlets and no opportunities to connect to new or different groups of people, may initiate or intensify their involvement in prison gangs.

Whether or not such confinement is permanently disabling for all prisoners exposed to it, there can be little doubt about not only its capacity to inflict widespread psychological pain but also its potential to significantly undermine already tenuous chances for subsequent adjustment. Indeed, it is difficult to imagine realistic scenarios whereby such long-term solitary confinement will not worsen a prisoner's odds of future successful adjustment, in prison or anywhere else. The fact that solitary and supermax confinement is increasingly reserved for minority prisoners seems to reveal a pattern of punitive social control that selectively targets some groups and not others.⁴⁴⁶ By design or not, it also ensures that a significant number of young, minority men will be functionally excluded from living socially productive lives. Vast numbers of minority prisoners, particularly, are thus consigned to life on the margins, in part because of the way they have been treated in prison.

During the mid-1970s, an official Canadian "study group on dissociation" evaluated that country's solitary confinement policy. The so-called Vantour Report observed that while "the most severe hardship for most

446. For example, see notes 76-79, *supra*, and accompanying text.

inmates is the deprivation of association," the "ultimate goal of the criminal justice system is the reintegration of the offender into the community—adjustment to life outside of the prison—and the basic fact of life is association."⁴⁴⁷ In much earlier times, other observers saw and wrote about different aspects of extremely harsh and lengthy periods of punitive isolation. Charles Dickens was shocked at the long-term solitary confinement he saw in the United States, and described his reactions to it in his *American Notes*:

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; and in guessing at it myself, and from what I have seen written upon their faces, from what to my certain knowledge they feel within, I am only the more convinced that there is a depth of terrible endurance in it which none of the sufferers themselves can fathom, and which no man has a right to inflict upon his fellow creatures.⁴⁴⁸

Aside from the politically expedient manipulation of public opinion that has occurred over the last several decades to intensify a rampant "rage to punish,"⁴⁴⁹ no new data have emerged, no penetrating insights have been developed, and no thoughtful perspectives have surfaced to challenge the wisdom of these earlier observations.

Yet, we appear to have come full circle on the issue of solitary confinement, with the emerging supermax prison form putting a technological spin on an old and long-discredited idea. The "evolving standards of decency" that not only mark the progress of a maturing society but also provide the benchmark against which cruel and unusual punishments are to be measured have taken an unexpected turn over the last several decades. The politicization of punishment during this period has hastened the translation of popular fear and distrust into extraordinarily punitive crime control policies.⁴⁵⁰ This process has been facilitated by the mass media's willingness to pander to what has become a national obsession with crime-related issues and to present an often superficial and one-sided view of the problem. Along with the rise of a punishment industry that wields substantial political as well as economic power, these forces have appeared to "normalize" the most extreme forms of punishment and compromised the Eighth Amendment's ability "to acquire meaning as public opinion becomes enlightened by humane justice."⁴⁵¹

447. VANTOUR, *supra* note 278, at 29.

448. CHARLES DICKENS, *AMERICAN NOTES FOR GENERAL CIRCULATION* 119-20 (1842).

449. FORER, *supra* note 394.

450. See Haney, *Riding the Punishment Wave*, *supra* note 73.

451. *Weems v. United States*, 217 U.S. 349, 378 (1910).

The entire scale of punishment has shifted; what was regarded as unacceptable just a few decades ago is now seen as part of the normative given in the delivery of penal pain. Supermax and the increased use of solitary confinement are important, terribly problematic by-products of these broader trends. Ironically, absent more meaningful, psychologically-informed legal restraints, intervention, and oversight, these “prisons of the future” promise to return us to some of the worst norms of the nineteenth century.