### STATEMENT OF INTEREST OF AMICI<sup>1</sup>

We are professors and practitioners of psychiatry and psychology. Each of us has extensive experience studying the psychology of imprisonment and/or treating prisoners who are in penal confinement. We professionally knowledgeable about the are psychological effects of a range of different prison conditions in the United States and many foreign countries. More specifically, we have background, experience, and expertise in analyzing the special psychiatric and psychological problems that arise in the course of isolated confinement in what has come to be called "supermaximum" security prisons.

Stanley L. Brodsky, Ph.D., is Professor of Psychology at The University of Alabama where he coordinates the doctoral concentration in Psychology-Law. He is editor or author of eleven books and hundreds of articles and scholarly presentations. He has worked as Chief of Psychology at the United States Disciplinary Barracks in Fort Leavenworth, Kansas, inspected solitary confinement facilities in eight states as part of his clinical-forensic work, and conducted research and clinical assessment interviews for prisoners in a variety of isolation conditions.

Professor Carl Clements, Ph.D., has taught and published in the field of correctional psychology for 30

<sup>&</sup>lt;sup>1</sup> The parties have consented to the filing of this brief. Their consent letters are on file with the Clerk of the Court. Pursuant to Supreme Court Rule 37.6, counsel for *amici curiae* certifies that this brief was not written in whole or in part by counsel for any party, and that the only person or entity other than counsel for *amici* who has made a monetary contribution to the preparation and submission of the brief is John Boston.

years and has inspected dozens of US prisons in regard to the effects of overcrowding, offender classification procedures, and the mental health needs of prisoners. He has testified in numerous conditions of confinement cases (e.g., Alabama, New Mexico, Rhode Island) especially regarding the negative impact of lock-down, severely restrictive protective custody, and overreaching and invalid offender classification systems.

Keith R. Curry, Ph.D., is a clinical psychologist in Washington, DC, with extensive expertise in conditions of confinement. For nearly twenty years he has evaluated jail and prison conditions and their effects on mentally ill inmates, including the cyclical interaction of mental illness and segregation for inmates with severe psychopathology.

Karen Froming, Ph.D., is a clinical psychologist, board certified neuropsychologist and Assistant Clinical Professor of Psychiatry at the University of California, San Francisco and the Pacific Graduate School of Psychology. She has extensive experience evaluating individuals who have been subjected to severe prison conditions producing behavioral problems, psychiatric, and neuropsychiatric conditions. Her specialties include the study of emotion processing by the brain in conditions of extreme stress.

Carl Fulwiler, M.D., Ph.D., is a board-certified psychiatrist and neuroscientist and is Assistant Professor of Psychiatry at the University of Massachusetts Medical School and Tufts University School of Medicine. His clinical specialty is the diagnosis and treatment of mental illness among inmates and former inmates and his research focuses on the causes of violent behavior by the mentally ill. He has extensive experience with the mental health effects of isolated confinement, having interviewed over two hundred inmates in over a dozen segregation units.

Craig Haney, Ph.D., J.D., is Professor of Psychology at the University of California, Santa Cruz and the principal author of this Brief. One of the researchers in the "Stanford Prison Experiment,"<sup>2</sup> he has been studying actual prison conditions for the more than thirty years since then. He has toured and inspected numerous prisons, including many supermax facilities, in the United States, and has written extensively about the psychological effects of this form of confinement.

Pablo Stewart, M.D., is a psychiatrist with over 20 years experience working within the criminal justice system, including ten years as the federal court appointed psychiatric expert in two cases focusing on the effects of supermax confinement on the mental health of inmates, and as a consultant to the New Mexico Department of Corrections concerning the mental health needs of prisoners in supermax confinement. He currently is a psychiatric and medical consultant with the Department of Justice, Civil Rights Division, for whom he inspects prison facilities around the country.

Hans Toch, Ph.D., is Distinguished Professor of Criminal Justice at the State University of New York at Albany, and has written numerous texts considered "classics" in the psychology of imprisonment, as well as hundreds of articles about prison-related topics. He has

<sup>&</sup>lt;sup>2</sup> Craig Haney et al., Interpersonal Dynamics of a Simulated Prison, 1 *Int'l. J. Criminology & Penology* 69 (1973).

served as a consultant to a number of correctional systems in the United States and elsewhere, and has received many awards for distinguished contributions to criminology and penology.

#### SUMMARY OF ARGUMENT

Because of the extraordinary nature of extremely isolating "supermax" confinement—including the type that has been described as being practiced at Ohio State Penitentiary (OSP)—and the significant risk of psychological harm it creates for some prisoners, we conclude that these conditions impose an "atypical and significant hardship on the inmate in relation to the ordinary incidents of prison life." Sandin v. Conner, 515 U.S. 472, 484 (1995). Indeed, long-term solitary confinement, in widespread use over a century ago, was abandoned largely because of its harmful psychological effects. Especially in its more modern supermax form, there is nothing "typical" about it. In addition, the literature that we review clearly documents that supermax confinement imposes a significant "hardship" in the form of grave psychiatric and psychological risks to prisoners. No study of the effects of solitary or supermax-like confinement that lasted longer than 60 days failed to find evidence of negative psychological effects. Moreover, research raises significant doubts about the ability of supermax prisons to achieve their goal of reducing violence in prison systems. Prisoners have a clear liberty interest, as this Court has defined it, in insuring that they are not exposed to such risks on the basis of mere conjecture, or absent a meaningful opportunity to contest the basis for their supermax confinement.

Since *Sandin* shifted the focus of the due process inquiry to the nature and severity of the conditions to which prisoners are subjected, we address those conditions and their effects in psychiatric and psychological terms. As one analysis of the nature of the supermax environment noted:

> To summarize: prisoners in these units live almost entirely within the confines of a 60 to 80 square foot cell, can exist for many years separated from the natural world around them and removed from the natural rhythms of social life, are denied access to vocational or educational training programs or other meaningful activities in which to engage, get out of their cells no more than a few hours a week, are under virtually constant surveillance and monitoring, are rarely if ever in the presence of another person without being heavily chained and restrained, have no opportunities for normal conversation or social interaction, and are denied the opportunity to ever touch another human being with affection or caring or to receive such affection or caring themselves. Because supermax units typically meld sophisticated modern technology with the age-old practice of solitary confinement, prisoners experience levels of isolation and behavioral control that are more total and complete and literally "dehumanized" than has been possible in the past. The combination of factors these is what makes this

extraordinary and extreme form of imprisonment unique in the modern history of corrections.<sup>3</sup>

In all but a few respects—some that appear to improve conditions and some that appear to make them worse—the OSP environment conforms to this general description.<sup>4</sup>

### ARGUMENT

## I. PROTRACTED SUPERMAX CONFINEMENT REPRESENTS A SERIOUS PSYCHOLOGICAL STRESSOR AND IMPOSES SIGNIFICANT PSYCHOLOGICAL PAIN.

Prolonged or long-term involuntary solitary confinement constitutes a significant, painful, and potentially damaging psychological stressor. Strong empirical support for this proposition comes from a variety of sources.

Some direct evidence on the effects of this kind of punishment is part of the historical record of long-term solitary confinement used a century or more ago. Its effects were drastic enough to lead nineteenth-century officials to abandon the practice.<sup>5</sup> Thus, the first block of

<sup>&</sup>lt;sup>3</sup> Craig Haney, Mental Health Issues in Long-Term Solitary and "Supermax" Confinement, 49 *Crime & Delinquency* 124, 127 (2003).

<sup>&</sup>lt;sup>4</sup> *Amici* rely on the District Court's description of these conditions. Austin v. Wilkinson, 189 F. Supp. 2d 719, 724 (N.D. Ohio 2002).

<sup>&</sup>lt;sup>5</sup> This historical record is summarized in Craig Haney and Mona Lynch, Regulating Prisons of the Future: A Psychological Analysis

solitary confinement cells in the Walnut Street jail was authorized by the Pennsylvania legislature in 1790, to house "the more hardened and atrocious offenders."<sup>6</sup> Some jurists soon recognized that solitary confinement was "a greater evil than certain death" and it was reported that prisoners in solitary "beg, with the greatest earnestness, that they may be hanged out of their misery."<sup>7</sup>

When a similar form of solitary confinement was tried in New York,<sup>8</sup> Gustav Beaumont and Alexis de Tocqueville recorded the outcome: "This experiment, of which such 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..."<sup>9</sup> Another historian also

of Supermax and Solitary Confinement, 23 New York Review of Law & Social Change 477, 481-496 (1997).

<sup>&</sup>lt;sup>6</sup> Harry Elmer Barnes, *The Evolution of Penology in Pennsylvania* Indianapolis: Bobbs-Merrill (1927), at 118-120.

<sup>&</sup>lt;sup>7</sup> Enoch Edwards, president of the Philadelphia Court of Quarter-Sessions, charging a grand jury in 1791. Quoted in Louis P. Masur, *Rites of Execution: Capital Punishment and the Transformation of American Culture*, 1776-1865. New York: Oxford University Press (1989), at 83.

<sup>&</sup>lt;sup>8</sup> See Adam J. Hirsch, From Pillory to Penitentiary: The Rise of Criminal Incarceration in Early Massachusetts, 80 *Michigan Law Review* 1178-1269 (1982), for a discussion of the forms of imprisonment in use during this period.

<sup>&</sup>lt;sup>9</sup> Quoted in Torsten Eriksson, *The Reformers, An Historical Survey of Pioneer Experiments in the Treatment of Criminals.* New York: Elsevier (1976), at 49. See, also, W. Davis Lewis, *From Newgate to* 

termed the Auburn experiment a "hopeless failure" and noted that it had "led to a marked prevalence of sickness and insanity on the part of the convicts in solitary confinement."<sup>10</sup>

Numerous states experimented with the Pennsylvania system during the nineteenth century, only to abandon the practice in light of its adverse effects.<sup>11</sup> United States Supreme Court Justice Miller summarized a hundred years of experience with solitary confinement:

> 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

*Dannemora: The Rise of the Penitentiary in New York, 1796-1848.* Ithaca, NY: Cornell University Press (1965), at 17-21.

<sup>10</sup> Harry Elmer Barnes, The Historical Origin of the Prison System in America, 12 *Journal of Criminal Law and Criminology* 35-60 (1921), at 53.

<sup>11</sup> Barnes recounted the following history of adoption and abandonment of the so-called "Pennsylvania system" of complete solitary confinement in the United States:

	Introduced	<u>Abandoned</u>
Maryland	1809	1838
Massachusetts	1811	1829
Maine	1824	1827
New Jersey	1820	1828
	1833	1858
Virginia	1824	1833
Rhode Island	1838	1844

Supra note 10, at 56, n. 54.

others became violently insane; others still, committed suicide; while those who stood the ordeal better were not generally reformed, and in most cases did not recover sufficient mental activity to be of any subsequent service to the community.<sup>12</sup>

In addition to this historical record, empirical research on settings and situations in some ways analogous to solitary confinement has reached consistent conclusions about the painful and stressful nature of the experience. According to the definition of "sensory deprivation" offered by medical researcher Leo Goldberger-as an "experimental condition aimed at reducing, altering, or by some means or other, interfering with a person's normal stimulation from, and commerce with, his environment"<sup>13</sup>—then virtually all forms of solitary and supermax confinement would qualify. Although most research on sensory deprivation per se has been done in artificial environments intended for only short-term exposure, we do know that participants characteristically have experienced a variety of negative psychological reactions, including high levels of anxiety. These studies also suggest that failing to inform participants of the upper time limit of the study aggravates the negative effects of the isolation. <sup>14</sup> In any

<sup>&</sup>lt;sup>12</sup> In re Medley, 134 U.S. 160, 168 (1890).

<sup>&</sup>lt;sup>13</sup> Leo Goldberger, Experimental Isolation: An Overview, 122 *American Journal of Psychiatry* 774-783 (1966), at 774.

<sup>&</sup>lt;sup>14</sup> Marvin Zuckerman, Variables Affecting Deprivation Results. In J. Zubek (Ed.), *Sensory Deprivation: Fifteen Years of Research*, New York: Appleton-Century-Crofts (1969).

event, this research emphasizes the importance of sensory stimulation in human experience and the dramatic effects that can occur when such stimulation is completely curtailed.<sup>15</sup> 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 deaf, and in explorers and prisoners had, in the past, been thought to be due to personal predisposition.<sup>16</sup>

<sup>16</sup> Hocking, *supra* note 15, at 7. Herbert 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

<sup>&</sup>lt;sup>15</sup> As one psychiatrist who conducted sensory deprivation experiments put it: "[T]he conscious mind is dependent on constant contact with the outside world for alerting, for orientation, for programming, and for gaiting of responses. Unless there is the constant incoming flood of sensation, behavior is highly disturbed and can even be so badly disturbed as to bring on what amounts to transient psychotic states," Solomon, P., Quantitative Aspects of Sensory Deprivation. In Leo Madow & Laurence H. Snow (Eds.), *The Psychodynamic Implications of Physiological Studies on Sensory Deprivation* (pp. 28-54). Springfield, IL: Charles Thomas (1970), at 47. See also, Frederick Hocking, Extreme Environmental Stress and its Significance for Psychopathology, 24 *American Journal of Psychotherapy* 4-26 (1970).

In a separate but related line of research, social isolation has been related to a number of other dysfunctional states and outcomes, including psychiatric illness.<sup>17</sup> The importance of social contact in grounding human identity and mental health is underscored by the frequent use of isolation to render people more malleable. Thus, coercive interrogation practices (including procedures once termed "brainwashing") virtually always include extreme forms of social isolation. As two students of these techniques wrote, a person "[e]xposed for the first time to total isolation... develops a predictable group of symptoms, which

> 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.

Herbert P. Leiderman, Man Alone: Sensory Deprivation and Behavioral Change, 8 *Corrective Psychiatry and Journal of Social Therapy* 64-74 (1962), at 73. See also, Paul Gendreau, N. Freedman, G. Wilde, and G. Scott, Changes in EEG Alpha Frequency and Evoked Response Latency During Solitary Confinement, 79 *Journal of Abnormal Psychology* 54-59 (1972), who concluded that significant changes in EEG frequency and visual evoked potentials (VEP) in prisoners after one week of solitary confinement paralleled those reported in laboratory studies of sensory deprivation.

<sup>17</sup> For example, see: Neena Chappell & Mark Badger, Social Isolation and Well-Being, 44 *Journal of Gerontology* 169-176 (1989); Gary L. Tischler, Jerzy E. Henisz, Jerome K. Myers & Philip C. Boswell, Utilisation of Mental Health Services, 32 *Archives of General Psychiatry* 411-415 (1975); Graham Thornicroft, Social Deprivation and Rates of Treated Mental Disorder: Developing Statistical Models to Predict Psychiatric Service Utilisation, 158 *British Journal of Psychiatry* 475-484 (1991). See also, Margaret K. Cooke & Jeffrey H. Goldstein, Social Isolation and Violent Behavior, 2 *Forensic Reports* 287-294, 288 (1989). might almost be called a 'disease syndrome.'"<sup>18</sup> Among the symptoms are bewilderment, anxiety, frustration, dejection, boredom, obsessive thoughts or ruminations, and depression. In addition, the authors observed that "[s]ome prisoners may become delirious and have visual hallucinations."<sup>19</sup>

In fact, other legal and mental health commentators have noted the frequency with which solitary confinement has been used as a form of torture,<sup>20</sup> underscoring its aversive nature and destructive potential.<sup>21</sup> Methods of psychological torture include

<sup>19</sup> Id. at 128.

<sup>20</sup> See, for example: W.E. Lucas, Solitary Confinement: Isolation as Coercion to Conform 9 *Australian & New Zealand Journal of Criminology* 153-167 (1976); Tim Shallice, Solitary Confinement—A Torture Revived? *New Scientist*, November 28, 1974; Raymone H. Thoenig, Comment: Solitary Confinement—Punishment Within the Letter of Law or Psychological Torture? 1972 *Wisconsin Law Review* 223-237 (1972).

<sup>21</sup> South African psychological researcher D. Foster, lists solitary confinement among the most common "psychological procedures" used to torture South African detainees. D. Foster, *Detention & Torture in South Africa: Psychological, Legal & Historical Studies.* Cape Town: David Philip (1987), at 69. He noted that "there can be little doubt that solitary confinement under these circumstances [in South Africa] should in itself be regarded as a form of torture" (at p. 136). For additional discussions of the use and effect of solitary confinement in South Africa, see J.G. Riekert, The DDD Syndrome: Solitary Confinement and a South African Security Law Trial. In A.N. Bell & R. D.A. Mackie (Eds.) *Detention and Security Legislation in South Africa* (pp. 121-147). Durban: University of Natal (1985); and Louis J. West, Effects of Isolation on the Evidence of Detainees.

<sup>&</sup>lt;sup>18</sup> Lawrence E. Hinkle & Harold E. Wolff, Communist Interrogation and Indoctrination of "Enemies of the States," 76 *Archives of Neurology and Psychiatry* 115-174 (1956).

stimulus deprivation, of which solitary confinement is an example, as well as so-called "constraint" techniques in which "[v]ictims are submitted to a detailed set of regulations and rules, resulting in close supervision where everything (including completely insignificant details) is controlled."<sup>22</sup> When used in this way as a method of torture, solitary confinement has been recognized as contributing to cognitive impairment, including the inability to think coherently and logically, as well as producing anxiety, anger and depression in its victims.<sup>23</sup>

<sup>22</sup> F.E. Somnier & I.K. Genefke, Psychotherapy for Victims of Torture, 149 British Journal of Psychiatry 323, 324 (1986). The authors systematically examined 230 torture victims in order to develop effective psychotherapeutic techniques with which to treat such patients. We note some obvious psychological similarities between the constraint techniques used to break the "will" of a subject in the course of interrogation and the regimens imposed in solitary or supermax confinement. Prisoners placed in solitary or supermax confinement have little control over their day to day existencetheir diet, hygiene, daily schedule, reading materials and other possessions are carefully regulated and greatly restricted by prison personnel. Further, a defining characteristic of the use of this form of isolated segregation in correctional facilities is the loss of control over one's physical self. Prisoners housed in supermax units are subjected to greater amounts and degrees of physical restraint than those housed elsewhere and, of course, have no direct control over whether and when they can leave these physically oppressive conditions.

<sup>23</sup> For example: Somnier & Genefke, *supra* note 22; Shaun R. Whittaker, Counseling Torture Victims, 16 *The Counseling Psychologist* 272-278 (1988). As one commentator summarized:

In A.N. Bell & R.D.A. Mackie (Eds.) *Detention and Security Legislation in South Africa* (pp. 69-80). Durban: University of Natal (1985). See, also, Hinkle & Wolff, *supra* note 18 (describing effects of isolation cells used by the "Communist State Police" in the Soviet Union and China).

# II. PROLONGED EXPOSURE TO THE STRESS OF EXTREME ISOLATION CREATES A SERIOUS RISK OF PSYCHOLOGICAL HARM.

Human beings cannot endure significant levels of uncontrollable stress for long periods of time without psychological harm. Although the magnitude of the harm will vary as a function of the nature of the stressor, the particular strengths and vulnerabilities of the person who endures it, and the length of time during which he or she is exposed, severe stress creates the substantial risk of some form of psychological harm. All other things being equal, the more prolonged and complete the isolation, the greater the risk of harm. Direct studies of solitary and solitary-like confinement reach consistent conclusions about the psychological stress that it creates for those persons subjected to it.

The harm that has been measured in many published studies is serious—in some instances, serious enough to exacerbate pre-existing psychological disorders, in others contributing to the emergence of previously unrecognized or undiagnosed symptoms. Here, too, the documentation is consistent from different sources. Some of the data are merely descriptive and observational. For example, in one early study Canadian researchers collected observational data on

<sup>&</sup>quot;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 *Boston College International* & Comparative Law Review 275 (1994), at 310 (footnotes omitted).

the effects of solitary from 21 isolated prisoners.<sup>24</sup> The authors observed three response patterns that they described as 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 they described as uncontrolled rage, including an increase in homicidal and suicidal impulses.

Accounts by psychiatrists working in several isolation units in California prisons raised similar concerns. They analyzed the extreme psychological adaptations that prisoners made to the extreme conditions of confinement. Psychiatrist Frank Rundle detailed conditions at Soledad's "adjustment center" (one precursor of the modern supermax) and concluded that the "madness" he witnessed in some of the prisoners who were confined there was a "partially functional and adaptive" response to the extreme conditions.<sup>25</sup> 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... "26 Other prisoners "would burst out in a frenzied rage of aimless destruction, tearing their sinks and toilets from the walls, ripping their clothing

<sup>26</sup> Id. at 167.

<sup>&</sup>lt;sup>24</sup> Bruno M. Cormier & Paul J. Williams, Excessive Deprivation of Liberty, 11 *Canadian Psychiatric Association Journal* 470-484 (1966).

<sup>&</sup>lt;sup>25</sup> Frank Rundle, The Roots of Violence at Soledad. In Erik Olin Wright, (Ed.), *The Politics of Punishment: A Critical Analysis of Prisons in America*. (pp. 163-172) New York: Harper (1973).

and bedding, and destroying their few personal possessions in order to alleviate the numbing sense of deadness or non-being and to escape the torture of their own thoughts and despair."<sup>27</sup>

Another descriptive small-scale study analyzed Maine prisoners held indefinitely in solitary confinement, most of whom had been given no reason for their isolation. It found that almost every isolated prisoner had attempted suicide, and that the prisoners often acted out in seemingly irrational ways—smashing their heads against the concrete walls, destroying their beds and light fixtures. <sup>28</sup> Similarly, attorney Michael Jackson

...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 to brief psychotic reactions, suicidal behavior and psychophysiological reactions. It causes misperceptions and overreactions. It fuels the cycle of violence, leading to more violence and terror.

Ibid.

<sup>28</sup> Thomas B. Benjamin and Kenneth Lux, Constitutional and Psychological Implications of the Use of Solitary Confinement: Experience at the Maine Prison, 9 *Clearinghouse Review* 83-90 (1975);

<sup>&</sup>lt;sup>27</sup> *Ibid.* Similarly, psychiatrist Robert 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." Robert Slater, Psychiatric Intervention in an Atmosphere of Terror, 7(1) *American Journal of Forensic Psychiatry* 5-12 (1986), at p. 10. Slater's description of the symptoms suffered by these prisoners in reaction to their severely restrictive environment included:

inspected segregation units in Canada and found that prisoners reported difficulties concentrating on even simple tasks, experienced headaches, mental and physical deterioration, emotional flatness, lability, breakdowns, hallucinations, paranoia, hostility and rage, and some were beset with thoughts of selfmutilation and suicide (which some acted upon).<sup>29</sup>

In more systematic research involving hundreds of indepth interviews with isolated prisoners, psychologist Hans Toch concluded that "isolation panic" was a serious problem among prisoners in solitary confinement. Symptoms reported included rage, panic, loss of control and breakdowns, psychological regression, a build-up of physiological and psychic tension that led to incidents of self-mutilation.<sup>30</sup> Toch noted that this kind of confinement marked an important dichotomy for prisoners: the "distinction between imprisonment, which is tolerable, and isolation, which is not." <sup>31</sup>

<sup>31</sup> Id. at 54.

Thomas B. Benjamin and Kenneth Lux, Solitary Confinement as Psychological Punishment, 13 *California Western Law Review* 265-296 (1977). For example, one nearly died from loss of blood after cutting himself up with his broken light bulb, another swallowed glass, and a number of prisoners attempted hanging (several successfully).

<sup>&</sup>lt;sup>29</sup> Michael Jackson, *Prisoners of Isolation: Solitary Confinement in Canada*. Toronto: University of Toronto Press (1983).

<sup>&</sup>lt;sup>30</sup> Hans Toch, *Men in Crisis: Human Breakdowns in Prisons*. Aldine Publishing Co.: Chicago (1975).

Similarly, psychologist Thomas Hilliard wrote that the "caging" and chaining of prisoners in the San Quentin Adjustment Center, the absence of meaningful exercise, activity, or other outlets through which to release their frustration, combined with the indeterminacy of the terms, the absence of any program leading to their release, and the sense that they might never be freed from such confinement was creating overwhelming tension and anxiety. The prisoners experienced a "pervasive sense of frustration and hopelessness," "deep feelings of despair," and the possibility that the psychological pain of their confinement might drive them "to extreme actions, and desperate solutions."<sup>32</sup> concluded finally that conditions Hilliard of confinement the Adjustment Center in were "overwhelmingly negative and antagonistic to effective rehabilitation," and that they were "both hostile and provocative" because they "provok[ed] hostility, resentment and resistance."33

In a particularly thorough psychiatric assessment of prisoners in solitary confinement, psychiatrist Stuart Grassian reported on 15 prisoners kept in isolation for varying amounts of time at a Massachusetts prison.<sup>34</sup>

<sup>&</sup>lt;sup>32</sup> Thomas Hilliard, The Black Psychologist in Action: A Psychological Evaluation of the Adjustment Center Environment at San Quentin Prison, 2 *Journal of Black Psychology* 75-82 (1976), at 80. Conditions in the Adjustment Center were described in Spain v. Procunier, 408 F. Supp. 534 (1976), *aff'd in part, rev'd in part,* 600 F. 2d 189 (9th Cir. 1979).

<sup>&</sup>lt;sup>33</sup> Id. at 81.

<sup>&</sup>lt;sup>34</sup> Stuart Grassian, Psychopathological Effects of Solitary Confinement, 140 *American Journal of Psychiatry* 1450-1454 (1983). See also, Stuart Grassian and Friedman, N., Effects of Sensory

The prisoners, initially reluctant to speak candidly about their experiences in solitary, described a series of psychiatric symptoms that were "strikingly consistent among the inmates."<sup>35</sup> Two-thirds of them had become hypersensitive to external stimuli (noises, smells, etc.) and about the same number experienced "massive free floating anxiety." About half of the prisoners suffered from perceptual disturbances that for some included hallucinations and perceptual illusions, and another cognitive half complained of difficulties like difficulty confusional states, concentrating, and memory lapses. About a third also described thought disturbances such as paranoia, aggressive fantasies, and impulse control problems. Three out of the fifteen had cut themselves in suicide attempts while in isolation. In almost all instances the prisoners had not previously experienced any of these psychiatric reactions, 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 а clinically distinguishable "[S]olitary syndrome."36 He also noted that:

<sup>35</sup> Grassian, *supra* note 34, at 1452.

<sup>36</sup> 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. 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. For example, see Reto Volkart, Einzelhaft: Eine

Deprivation in Psychiatric Seclusion and Solitary Confinement, 8 International Journal of Law and Psychiatry 49-65 (1986).

Literaturubersicht (Solitary confinement: A literature survey), 42 Psychologie - Schweizerische Zeitschrift fur Psychologie und ihre Anwendungen 1-24 (1983) (reviewing the empirical and theoretical literature on the negative effects of solitary confinement); Reto Volkart, Adolf Dittrich, Thomas Rothenfluh, & Paul Werner, Eine Kontrollierte Untersuchung uber Psychopathologische Effekte der Einzelhaft (A controlled investigation on psychopathological effects of solitary confinement), 42 Psychologie - Schweizerische Zeitschrift fur Psychologie und ihre Anwendungen 25-46 (1983) (when prisoners in "normal" conditions of confinement were compared to those in solitary confinement the latter were found to display considerably more psychopathological symptoms that included heightened feelings of anxiety, emotional hypersensitivity, ideas of persecution, and thought disorders); Reto Volkart, et al., Einzelhaft als Risikofaktor fur Psychiatrische Hospitalisierung (Solitary confinement as a risk for psychiatric hospitalization), 16 Psychiatria Clinica, 365-377 (1983) (finding that prisoners who had been kept in solitary confinement were overrprepresented among prisoners who were hospitalized in a psychiatric clinic); Boguslaw Waligora, Funkcjonowanie Czlowieka W Warunkach Izolacji Wieziennej (How men function in conditions of penitentiary isolation), Seria Psychologia I Pedagogika NR 34, Poland (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) who 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 an ability to follow the rhythm of day and night" (at 124). If the isolated confinement persisted-"a few weeks" or more, some detainees developed "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" (at 125).

confinement 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."<sup>37</sup>

Finally, psychologist Craig Haney studied prisoners in a "state-of-the-art" supermax prison that housed prisoners who had committed serious disciplinary infractions or were suspected of prison gang activity.<sup>38</sup> Haney's use of a random (and therefore representative) sample of prisoners in supermax confinement allowed him to establish prevalence rates (i.e., an estimate of how widespread the psychological reactions were among the group of persons confined in supermax).<sup>39</sup> This study found extraordinarily high rates of symptoms of psychological trauma. 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. Equally high numbers reported specific psychopathological effects of

<sup>&</sup>lt;sup>37</sup> Grassian, *supra* note 34, at 1454.

<sup>&</sup>lt;sup>38</sup> Haney, *supra* note 3.

<sup>&</sup>lt;sup>39</sup> Another study of a random sample of prisoners in a supermaxlike setting found symptom prevalence rates nearly as high, suggesting that these levels were not unique to the facility at issue in the Haney study. See Stanley Brodsky and Forrest R. Scogin, Inmates in Protective Custody: First Data on Emotional Effects, 1 *Forensic Reports* 267-280 (1988). Although they studied isolation in the context of protective custody rather than supermax housing, Brodsky and Scogin described conditions of isolation and restricted movement that paralleled many of those that exist in most supermaxes.

social isolation—obsessive ruminations, confused thought processes, an oversensitivity to stimuli, irrational anger, and social withdrawal. Well over half reported violent fantasies, emotional flatness, mood swings, chronic depression, and feelings of overall deterioration, while nearly half suffered from hallucinations and perceptual distortions, and a quarter experienced suicidal ideation.<sup>40</sup>

The overall consistency of these findings—the same or similar conclusions reached by different researchers examining different facilities, in different parts of the world, in different decades, using different research methods—is striking. The well-documented psychological risks created by long-term prison isolation are matters of grave concern to *Amici.*<sup>41</sup> To

<sup>&</sup>lt;sup>40</sup> See, also, Whittaker, *supra* note 23 to the effect that solitary confinement "leads the person to fantasize and daydream. Logical and coherent thinking becomes impossible. The person becomes anxious, angry, and depressed" (at 273). These results are consistent with studies of other populations exposed to long-term solitary confinement.

<sup>&</sup>lt;sup>41</sup> As a recent report presented to the European Court of Human Rights summarized: "The serious physiological, psychological and psychiatric effects of solitary confinement on prison inmates are by now very well documented by a long history and by extensive psychiatrists, psychologists, research-bv sociologists, criminologists, historians, etc. from many different countries in different parts of the world." Peter Scharff Smith, The Effects of Solitary Confinement on Prison Inmates. A Report to the European Court of Human Rights, May, 2004, p., 37. The single study that failed to find serious negative effects was limited to 60-days of supermaxtype confinement. See Ivan Zinger, Cherami Wichmann, and D. Andrews, Segregation: The Psychological Effects of 60 Days in Administrative Segregation, 41 Canadian Journal of Criminology 47-83 (2001). The authors themselves conceded that the results of this study were "somewhat irrelevant to current segregation practices

summarize, these effects include increases in the following potentially damaging symptoms and problematic behaviors: negative attitudes and affect,<sup>42</sup> insomnia,<sup>43</sup> anxiety,<sup>44</sup> panic,<sup>45</sup> withdrawal,<sup>46</sup>

in the United States..." Ivan Zinger & Cherami Wichmann, *The Psychological Effects of 60 Days in Administrative Segregation*. Research Branch. Correctional Services of Canada (1999), at p. 64. Indeed, in Ohio, prisoners are kept in OSP for a minimum of a full year, and many prisoners spend several years or more there. Austin v. Wilkinson, 189 F.Supp. 719, 726 (2002).

<sup>42</sup> For example, see: Michael Bauer, Stefan Priebe, Bettina Haring & Kerstin Adamczak, Long-Term Mental Sequelae of Political Imprisonment in East Germany, 181 Journal of Nervous & Mental Disease 257-262 (1993) (a study of persons who had spent at least six weeks in political imprisonment that included solitary confinement); Hilliard, supra note 32; Richard Korn, The Effects of Confinement in the High Security Unit at Lexington, 15 Social Justice 8-19, (1988); Richard Korn, Follow-up Report on the Effects of Confinement in the High Security Unit at Lexington, 15 Social Justice 20-29 (1988) (studies of women federal prisoners subjected to "small group isolation"); Koch, supra note 36; Holly Miller & Glenn Young, Prison Segregation: Administrative Detention Remedy or Mental Health Problem? 7 Criminal Behaviour and Mental Health 85-94 (1997); Peter Suedfeld, Carmenza Ramirez, John Deaton, & Gloria Baker-Brown, Reactions and Attributes of Prisoners in Solitary Confinement, 9 Criminal Justice & Behavior 303-340 (1982).

<sup>43</sup> For example, see: Bauer et al., *supra* note 42; Brodsky & Scogin, *supra* note 39; Haney, *supra* note 3; Koch, *supra* note 36; Korn, *supra* note 42.

<sup>44</sup> For example, see: Henrik Andersen, Dorte Sestoft, Tommy Lillebaek, Gorm Babrielsen, & Ralf Hemmingsen, A Longitudinal Study of Prisoners on Remand: Repeated Measures of Psychopathology in the Initial Phase of Solitary Versus Nonsolitary Confinement, 26 *International Journal of Law & Psychiatry* 165-177 (2003); Brodsky & Scogin, *supra* note 39; Grassian, *supra* note 34; Haney, *supra* note 3; Hilliard, *supra* note 32; Koch, *supra* note 36; hypersensitivity to stimuli,<sup>47</sup> ruminations,<sup>48</sup> cognitive dysfunction,<sup>49</sup> hallucinations,<sup>50</sup> loss of control,<sup>51</sup> irritability, aggression, and rage,<sup>52</sup> paranoia,<sup>53</sup>

Korn, *supra* note 42; Toch, *supra* note 30; Volkart, Dittrich, Rothenfluh & Werner, *supra* note 36; Richard Walters, John Callagan & Albert Newman, Effect of Solitary Confinement on Prisoners, 119 *American Journal of Psychiatry* 771-773 (1963).

<sup>45</sup> For example, see: Toch, *supra* note 30.

<sup>46</sup> For example, see: Cormier & Williams, *supra* note 24; Haney, *supra* note 3; Miller & Young, *supra* note 42; G. Scott & M. Gendreau, Psychiatric Implications of Sensory Deprivation in a Maximum Security Prison, 14 *Canadian Psychiatric Association Journal* 337-341 (1969); Toch, *supra* note 30; Waligora, *supra* note 36.

<sup>47</sup> For example, see: Grassian, *supra* note 34; Haney, *supra* note 3; Volkart, Dittrich, Rothenfluh & Werner, *supra* note 36.

<sup>48</sup> For example, see: Brodsky & Scogin, *supra* note 39; Haney, *supra* note 3; Korn, *supra* note 42; Miller & Young, *supra* note 42.

<sup>49</sup> For example, see: Brodsky & Scogin, *supra* note 39; Grassian, *supra* note 34; Haney, *supra* note 3; Koch, *supra* note 36; Korn, *supra* note 42; Miller & Young, *supra* note 42; Peter Suedfeld & Chunilal Roy, Using Social Isolation to Change the Behavior of Disruptive Inmates, 19 *International Journal of Offender Therapy & Comparative Criminology* 90-99 (1975); Volkart, Dittrich, Rothenfluh & Werner, *supra* note 36.

<sup>50</sup> For example, see: Brodsky & Scogin, *supra* note 39; Grassian, supra note 34; Haney, *supra* note 3; Koch, *supra* note 36; Korn, *supra* note 42; Suedfeld & Roy, *supra* note 49.

<sup>51</sup> For example, see: Grassian, *supra* note 34; Haney, *supra* note 3; Suedfeld & Roy, *supra* note 49; Toch, *supra* note 30.

<sup>52</sup> For example, see: Bauer et al., *supra* note 42; Brodsky & Scogin, *supra* note 39; Cormier & Williams, *supra* note 24; Grassian, *supra* note 34; Haney, *supra* note 3; Hilliard, *supra* note 32; Koch, *supra* 

hopelessness,<sup>54</sup> lethargy,<sup>55</sup> depression,<sup>56</sup> a sense of impending emotional breakdown,<sup>57</sup> self-mutilation,<sup>58</sup> and suicidal ideation and behavior.<sup>59</sup> The damaging effects ranged in severity and included such clinically significant symptoms as hypertension, uncontrollable anger, hallucinations, emotional breakdowns, chronic depression, and suicidal thoughts and behavior.

These studies of the psychiatric and psychological effects of isolated confinement focused on discrete and measurable consequences. However, there are other

note 36; Miller & Young, *supra* note 42; Suedfeld, Ramirez, Deaton, & Baker-Brown, *supra* note 42; Toch, *supra* note 30.

<sup>53</sup> For example, see: Cormier & Williams, *supra* note 24; Grassian, *supra* note 34; Volkart, Dittrich, Rothenfluh & Werner, *supra* note 36.

<sup>54</sup> For example, see: Haney, *supra* note 3; Hilliard, *supra* note 32.

<sup>55</sup> For example, see: Brodsky & Scogin, *supra* note 39; Haney, *supra* note 3; Koch, *supra* note 36; Scott & Gendreau, *supra* note 46; Suedfeld and Roy, *supra* note 49.

<sup>56</sup> For example, see: Andersen, et al., *supra* note 44; Brodsky & Scogin, *supra* note 39; Haney, *supra* note 3; Hilliard, *supra* note 32; Korn, *supra* note 42.

<sup>57</sup> For example, see: Brodsky & Scogin, *supra* note 39; Grassian, *supra* note 34; Haney, *supra* note 3; Koch, *supra* note 36; Korn, *supra* note 42; Toch, *supra* note 30.

<sup>58</sup> For example, see: Benjamin & Lux, *supra* note 28; Grassian, *supra* note 34; Toch, *supra* note 30.

<sup>59</sup> For example, see: Benjamin & Lux, *supra* note 28; Cormier & Williams, *supra* note 24; Grassian, *supra* note 34; Haney, *supra* note 3.

psychiatric and psychological changes that are common in such confinement that do not lend themselves to quantification but are extremely familiar to mental health professionals. These may be equally if not more problematic for the future health and well-being of prisoners and those around them. Many prisoners gradually change their patterns of thinking, acting, and feeling in order to survive the rigors of supermax and, for some, these changes may persist or even become permanent. Although they do not represent clinical syndromes per se, these patterns of behavior are dysfunctional in more normal social settings.

Thus, the unique totality of the control in supermax units requires prisoners to become highly dependent upon the institution to organize their daily existence. Some supermax prisoners gradually lose the ability to initiate or to control their own behavior, or to organize their personal lives. The two separate components of this reaction—problems with the self control and self initiation of behavior—are both adaptations to an institutional regime that *limits* virtually all aspects of their behavior. Some prisoners become uncomfortable with even small amounts of freedom because they lose confidence in their own ability to behave without the constant and rigid restrictions to which they have become accustomed.

In addition, because so much of a person's individual identity depends on interaction with others, the virtually complete absence of normal human contact undermines their sense of self and the sense of being connected to a larger social world. For some the experience of total social isolation leads, paradoxically, to social withdrawal, which may persist even after their release from supermax confinement.

We have also seen how the prolonged deprivations, severe restrictions, and the totality of control in supermax can create high levels of frustration in that may turn to anger or sudden outbursts of rage, with some prisoners becoming consumed by the fantasy of revenge against people they perceive as having unfairly provoked, thwarted, or oppressed them.

These observations suggest skepticism about the value of supermax prisons in achieving their main purpose of reducing violence in prison systems. Given the welldocumented destructive effects of extreme or prolonged isolation discussed earlier in this brief, the intense frustrations of supermax confinement (including increases in negative affect; loss of control, irritability, aggression, and rage; and paranoia),<sup>60</sup> and the tendency of frustration to lead to aggression,<sup>61</sup> we would expect supermax confinement to increase or at best to have no effect on an individual's violence potential rather than decreasing it. Moreover, prison violence that comes for structural reasons-for about example, overcrowded conditions or the lack of meaningful or effective programming—would not be abated by the

<sup>&</sup>lt;sup>60</sup> As cited *supra* in notes 42, 51, 52, and 53.

<sup>&</sup>lt;sup>61</sup> For example, see Leonard Berkowitz, Situational Influences on Aggression, in J. Groebel & R. Hinde, (Eds.), *Aggression and War: Their Biological and Social Bases* (pp. 91-100). Cambridge, England: Cambridge University Press, (1989). One of the early studies on prolonged isolation concluded that one of its effects was to mobilize the potential for aggression. See Cormier & Williams, *supra* note 24.

supermax prison. Some researchers have concluded that more severe levels of restriction imposed on inmates in segregated housing may increase problems within prison systems rather than relieving them.<sup>62</sup>

Thus, it is not surprising that as one review of the nature and status of the supermax put it: "All the evidence points to the opposite being true. The creation of control units and increased use of administrative segregation have not reduced the level of violence within general prison populations."<sup>63</sup> A more recent, systemic study of the effects of supermax in three different states concluded that "[t]he findings presented here reveal that the opening of a supermax had no effect on eight of the measures of institutional violence examined across three states."<sup>64</sup> The authors found "no support" for the proposition that supermaxes reduced aggregate levels of inmate-on-inmate assaults, and that

<sup>&</sup>lt;sup>62</sup> For example, see: Miller & Young, *supra* note 42.

<sup>&</sup>lt;sup>63</sup> Rodney Henningsen, Wesley Johnson, and Terry Wells, Supermax Prisons: Panacea or Desperation, 3 *Corrections Management Quarterly* 53-59 (1999), at p. 55. Another recent review of the literature on supermax prisons concluded much the same thing: "[t]he extant empirical research on supermax facilities suggests that these institutions have the potential to damage inmates' mental health while failing to meet their purported goals (e.g., deterring inmates in the general prison population from committing criminal acts inside prison)." Jesenia Pizarro and Vanja Stenius, Supermax Prisons: Their Rise, Current Practices, and Effect on Inmates, 84 *Prison Journal* 248 (2004).

<sup>&</sup>lt;sup>64</sup> Chad Briggs, Jody Sundt, and Thomas Castellano, The Effect of Supermaximum Security Prisons on Aggregate Levels of Institutional Violence, 41 *Criminology* 301 (2003), at p. 325.

it produced stable reductions in inmate-on-staff assaults in only one of the three states in which it was studied.

Finally, we note the important role that the perception of fair treatment plays in a context such as this. Much psychological research has addressed the importance of the perception of fair process in the evaluation of the quality of justice dispensed in any legal setting.65 Supermax prisons are no exception. In fact, because of the severity of the restrictions, the level of the deprivation, and the potential psychological harm imposed, the need for fair process may be greater here (and the failure to provide such fairness may exacerbate the psychological stress experienced). We note that Michael Jackson's study of isolated Canadian prisoners revealed that "the single most important factor in [the segregated inmates'] descriptions of the effects that segregation had upon them" was "the prisoner's the justice or injustice of experience of his segregation."66 Moreover, as one comprehensive review of the psychological effects of imprisonment observed,

<sup>&</sup>lt;sup>65</sup> For example, see: John Darley, Sol Fulero, Craig Haney, & Tom Tyler, Psychological Jurisprudence: Taking Psychology and Law into the Twenty-First Century, in James Ogloff (Ed.), *Taking Psychology and Law into the Twenty-First Century* (pp. 35-59). New York: Kluwer Academic/Plenum Publishing (2002). Psychologist Tom Tyler has produced much of this research. For example, see: Tom Tyler, Public Trust and Confidence in Legal Authorities: What Do Majority and Minority Group Members Want From the Law and Legal Institutions? 19 *Behavioral Science & the Law* 215-235 (2001); and Tom Tyler & Allen Lind, Procedural Justice, in Joseph Sanders & Lee Hamilton (Eds.), *Handbook of Justice Research in Law* (pp. 65-92). Dordrecht, Netherlands: Kluwer Academic Publishers (2001).

<sup>&</sup>lt;sup>66</sup> Jackson, *supra* note 29, at p. 114.

"when inmates are dealt with capriciously by management... psychological stress can be created even in the most humane prison environments."<sup>67</sup>

### CONCLUSION

Severe conditions of isolated confinement such as those found in supermax prisons inflict psychological pain and distress and, if prolonged, create a serious risk of harm for prisoners. These facts strongly support requiring carefully designed and fair procedures that avoid unnecessary—erroneous, overreaching, or premature—placement in supermax prisons. Insofar as the lower court imposed procedures designed to ensure greater care, reliability, and fairness in supermax placement and retention decisions, its decision should be affirmed.

Respectfully submitted,

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<sup>&</sup>lt;sup>67</sup> James Bonta and Paul Gendreau, Reexamining the Cruel and Unusual Punishment of Prison Life, 14 *Law and Human Behavior* 347-372 (1990), at p. 361.