IN THE

Supreme Court of the United States

ALFREDO PRIETO,

Petitioner,

v.

HAROLD C. CLARKE, ET AL.,

Respondents.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Fourth Circuit

BRIEF OF AMICI CURIAE PROFESSORS AND PRACTITIONERS OF PSYCHIATRY AND PSYCHOLOGY IN SUPPORT OF PETITIONER

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TABLE OF CONTENTS

			Page
TABL	E OF	AUTHORITIES	ii
INTE	REST	OF THE AMICI CURIAE	1
SUM	MARY	OF THE ARGUMENT	3
ARGU	JMEN'	Т	6
I.	ISOLI SOLI	PHYSICAL AND SOCIAL ATION OF PROLONGED TARY CONFINEMENT IMPOSES CRE PSYCHOLOGICAL HARM	
	A.	Solitary Confinement Imposes Social Isolation And Restricts Environmental Stimuli	7
	В.	Social Isolation And Sensory Deprivation Have Severe Psychological Consequences	10
	С.	Prolonged Solitary Confinement Causes Strikingly Similar Psychological Harms In A Substantial Percentage Of Prisoners	13
		1. Research on solitary confinement reports a wide array of psychological harms	

TABLE OF CONTENTS

			Page
		2.	The strikingly consistent and prevalent psychological effects of solitary confinement indicate that it causes a distinct psychological
			syndrome16
		3.	Solitary confinement has additional disabling effects19
		4.	Solitary confinement is potentially harmful to all prisoners21
II.	FAR (GREAT M THA	CONFINEMENT IMPOSES TER PSYCHOLOGICAL N ORDINARY MENT23
	A.	Confin Of Me	ners In Solitary nement Have Higher Rates ental Illness Than General- ation Prisoners24
	В.	Confin Harm	es Confirm That Solitary nement Causes Greater To Prisoners Than ary Incarceration
CONC	CLUSI	ON	28

Page(s)
CASES
Commonwealth v. Prieto, No. FE05-1764 (Va. Cir. Ct. Fairfax Cnty.) 2
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INTEREST OF THE AMICI CURIAE¹

Amici curiae are professors and practitioners of psychiatry and psychology with extensive experience studying the psychological effects of imprisonment, including solitary confinement.

Carl Fulwiler, M.D., Ph.D., is a board-certified psychiatrist and neuroscientist, and currently is Assistant Professor of Psychiatry at the University of Massachusetts Medical School and Tufts University School of Medicine. Dr. Fulwiler's research focuses on violent behavior by the mentally ill. As a practitioner, he specializes in the diagnosis and treatment of mental illness among inmates and former inmates, and has 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. He has been studying prison conditions for more than 30 years, and has inspected numerous prisons, including multiple supermax facilities, in the United States. Dr. Haney has evaluated approximately 1,000 isolated prisoners, and has written extensively about the psychological effects of solitary confinement.

¹ Counsel of record received timely notice of the intention to file this brief, and all parties have consented to the filing of this brief. As required by Rule 37.6, *amici* state that no counsel for a party authored this brief in whole or in part, and no person other than *amici*, their members, and their counsel made any monetary contribution intended to fund the preparation or submission of this brief.

Terry A. Kupers, M.D., is Institute Professor at the Wright Institute and practices psychiatry in California. He provides expert testimony as well as consultation and staff training regarding the psychological effects of prison conditions, including solitary confinement. He is the author of Prison Madness: The Mental Health Crisis Behind Bars and What We Must Do About It (1999).

Pablo Stewart, M.D., is a board-certified psychiatrist who is currently a Clinical Professor of Psychiatry at the UCSF School of Medicine. He has over 30 years experience working in the criminal justice system, including 10 years as a federal-court-appointed psychiatric expert on the effects of solitary confinement on inmates' mental health. He also served as a consultant to the New Mexico Department of Corrections concerning the mental health of prisoners in solitary confinement. In addition to his academic duties, Dr. Stewart works as a forensic psychiatric consultant for various governmental and private agencies.²

Hans Toch, Ph.D., is Distinguished Professor Emeritus in the School of Criminal Justice at the State University of New York at Albany. He has written numerous texts considered "classics" about

² In September 2007, Dr. Stewart examined Mr. Prieto in his role as an expert witness for Mr. Prieto in *Prieto v. Ayers*, No. 2:05-cv-7566 (C.D. Cal.). Dr. Stewart also testified on behalf of Mr. Prieto in *Commonwealth v. Prieto*, No. FE05-1764 (Va. Cir. Ct. Fairfax Cnty.). *See Prieto v. Zook*, __ F.3d __, 2015 WL 3960915, at *5 (4th Cir. June 30, 2015) (describing Dr. Stewart's testimony). Other than as an *amicus curiae* in this Court, Dr. Stewart has had no role or involvement in this case.

the psychology of imprisonment and hundreds of articles on prison-related topics, and has served as a consultant to several correctional systems. He also has received multiple awards for distinguished contributions to criminology and penology.

Amici's decades-long dedication to studying the unique psychological harms of solitary confinement and to urging reform of its conditions and use gives amici a strong interest in the resolution of the question presented here. Amici seek to highlight for the Court the scientific literature that concludes virtually unanimously that solitary confinement can cause significant psychological harm to all prisoners forced to endure its conditions. Amici also explain that the psychological harms of solitary confinement are far greater than those created by ordinary incarceration, presenting a significant risk of harm unique to solitary-confinement inmates.

SUMMARY OF THE ARGUMENT

- I. The relevant scientific research firmly establishes that prolonged solitary confinement causes severe psychological harms by imposing social isolation and sensory deprivation.
- A. Solitary confinement is the practice of confining inmates to cells generally no larger than 80 square feet for between 22 and 24 hours a day. The defining features of solitary confinement are twofold: social isolation and reduced environmental stimuli. Prisoners have virtually no opportunity for meaningful social contact or productive activities.
- B. Social isolation and sensory deprivation cause severe psychological harm. Psychological research outside of the prison context establishes the

necessity of social contact and environmental stimuli for human wellbeing, and that denial of social and environmental stimuli can result in severe psychological distress, including hallucinations, anxiety, panic, impaired memory, and psychotic behavior.

C. Studies of inmates in solitary confinement overwhelmingly establish that prolonged solitary confinement causes adverse psychological effects.

Inmates in solitary confinement suffer from a wide range of adverse symptoms, including panic, cognitive dysfunction, hallucinations, paranoia, depression, emotional breakdowns, self-mutilation, and suicidal impulses. Although the symptoms are wide-ranging, their manifestation is "strikingly consistent" among inmates. Indeed, studies from different decades, by researchers from varying academic backgrounds, and in different countries have "reached remarkably consistent conclusions about the adverse psychological consequences of solitary confinement." And in light of this research, experts have identified distinct "isolation" a associated syndrome with prolonged solitary confinement.

Beyond the specific psychological harms associated with isolation syndrome, prisoners develop "social pathologies" that cause permanent changes in their personality.

Moreover, *all* prisoners in long-term solitary confinement are at risk of psychological harm. Even psychologically resilient individuals with no history of mental illness suffer psychological harm in the extreme conditions of solitary confinement. In

addition to causing psychological harm de novo, solitary confinement exacerbates existing mental illness, placing mentally ill inmates at a greater risk of experiencing the specific psychological harms associated with isolation syndrome.

Solitary confinement imposes far greater harm than ordinary incarceration. Prisoners in solitary confinement suffer mental illness approximately twice the rate of prisoners in the general population, and fully half of all prison suicides occur in solitary confinement, even though solitary-confinement prisoners comprise less than 10 percent of the prison population. These higher rates of mental illness psychiatric symptoms, and moreover, cannot be attributed solely to pre-existing inmates sent to illness in confinement—studies instead point to the damaging psychological effects of solitary confinement itself. Studies comparing isolated and non-isolated prisoners further demonstrate the increased psychological effects of solitary confinement relative to ordinary imprisonment, and confirm the causal link between solitary confinement and psychological harm.

The severe psychological harms imposed by solitary confinement render it a different kind of imprisonment entirely, and amount to an "atypical and significant hardship" within the meaning of *Wilkinson v. Austin*, 545 U.S. 209, 223 (2005).

ARGUMENT

I. THE PHYSICAL AND SOCIAL ISOLATION OF PROLONGED SOLITARY CONFINEMENT IMPOSES SEVERE PSYCHOLOGICAL HARM.

By depriving prisoners of social interaction and environmental stimuli critical to mental health, prolonged solitary confinement causes significant and well documented psychological effects. literature "is virtually unanimous in its conclusion: prolonged supermax solitary confinement can and does lead to significant psychological harm." Thomas L. Hafemeister & Jeff George, The Ninth Circle of Hell: An Eighth Amendment Analysis of Imposing Supermax Solitary Confinement on Prolonged Inmates with a Mental Illness, 90 Denv. U. L. Rev. 1, The psychological effects of solitary 35 (2012). confinement are wide ranging, yet strikingly consistent among inmates across various studies, countries, and centuries. And while mentally ill prisoners are particularly susceptible to these harms, solitary confinement affects even psychologically resilient individuals—prolonged periods of solitary confinement "manufacture or increase mental illness," Gary C. Mohr & Rick Raemisch, Restrictive Housing: Taking the Lead, Corrections Today (2015), availablehttp://www.aca.org/ACA PROD IMIS/Docs/Correctio ns%20Today/2015%20Articles/March%202015/Guest %20Editorial.pdf. Accordingly, all inmates in solitary confinement are at significant risk of severe psychological harm.

A. Solitary Confinement Imposes Social Isolation and Restricts Environmental Stimuli.

Solitary confinement here refers to the involuntary placement of a prisoner alone in a cell separated from the mainstream prison population, generally as a form of punishment, for an average of 22-24 hours each day with minimal opportunity for social interaction or meaningful activity.³ See Stuart *Psychiatric Effects* Grassian, of Solitary Confinement, 22 Wash. U. J.L. & Pol'y 325, 327 (2006); Craig Haney & Mona Lynch, Regulating Prisons of the Future: A Psychological Analysis of Supermax and Solitary Confinement, 23 N.Y.U. Rev. L. & Soc. Change 477, 496 (1997).

Solitary confinement is generally considered "prolonged" when it exceeds three months, Terry A. Kupers, Isolated Confinement: Effective Method for Behavior Change or Punishment for Punishment's Sake?, in The Routledge Handbook for Int'l Crime & Just. Studies 213, 214 (Bruce A. Arrigo & Heather Y. Bersot eds., 2014), though the United Nations has concluded "that 15 days is the limit between 'solitary confinement' and 'prolonged solitary confinement' because at that point" psychological effects "can become irreversible," U.N. Special Rapporteur, Interim Report of the Special Rapporteur on Torture

³ Prison administrators refer to solitary-confinement units using various labels, including supermax prisons, "Special Housing Units," "Special Management Units," and "administrative segregation." See Elizabeth Bennion, Banning the Bing: Why Extreme Solitary Confinement Is Cruel and Far Too Usual Punishment, 90 Ind. L.J. 741, 746 (2015).

and Other Cruel, Inhuman or Degrading Treatment or Punishment, at 9, U.N. Doc. A/66/268 (Aug. 5, 2011). In any event, United States prisoners on average live for years, not months, in solitary confinement. For example, in the federal supermax prison, inmates subjected to solitary confinement spend an average of 8.2 years in such confinement. Amnesty International, Entombed: Isolation in the US Federal Prison System 20 (July 2014), available at

http://www.amnestyusa.org/sites/default/files/amr51 0402014en.pdf; see also Solitary Watch, FAQ, http://solitarywatch.com/facts/faq (compiling average solitary-confinement periods for various states).

Solitary confinement socially isolates prisoners and deprives them of environmental stimuli. Prisoners live in windowless (or nearly windowless) cells measuring between 60 and 80 square feet that contain a bunk, toilet, and sink. Reassessing Solitary Confinement: The Human Rights, Fiscal, and Public Safety Consequences: Hearing Before the Subcomm. on the Constitution, Civil Rights & Human Rights of the S. Comm. on the Judiciary, 112th Cong. 75 (2012) (prepared statement of Dr. Craig Haney) (hereinafter "Solitary Hearing"). Prisoners spend virtually all of their time in these cells, forcing them to "sleep, eat, and defecate ... in spaces that are no more than a few feet apart from one another." Id. When prisoners do leave their cells, it is to exercise either in a metal cage or in an enclosed concrete pen, id. at 77, "areas that are so constraining they are often referred to as 'dog runs," Craig Haney, Mental Health Issues in Long-Term Solitary and "Supermax" Confinement, 49 Crime & Delinquency 124, 126 (2003). Prisoners thus live constantly in "barren 'industrial' environments," "surrounded by nothing but concrete, steel, cinderblock, and metal fencing." Solitary Hearing at 76.

Further isolating prisoners, they have no opportunity for normal physical contact with others. Virtually all solitary-confinement units prohibit contact visits. *Id.* As a result, prisoners' only physical contact often is with correctional officers who place them in restraints. Hafemeister, 90 Denv. U. L. Rev. at 17. Prisoners in solitary confinement can be imprisoned for years without touching another person with affection. Solitary Hearing at 76.

In addition to physically isolating prisoners, confinement socially isolates solitary have "no Prisoners opportunity for normal conversation or association with others." Elizabeth Bennion, Banning the Bing: Why Extreme Solitary Confinement Is Cruel andFar TooPunishment, 90 Ind. L.J. 741, 743 (2015). interactions between prisoners and staff minimal, as cameras, intercoms, and computerized locking and tracking systems permit staff to monitor prisoners without interacting with them. Haney, Mental Health Issues at 126. Thus, "socially and psychologically meaningful contact is reduced to a minimum." Peter Scharff Smith, The Effects of Solitary Confinement on Prison Inmates: A Brief History and Review of the Literature, 34 Crime & Just. 441, 449 (2006).

Solitary confinement also forces prisoners to endure extreme idleness. Inmates generally have no access to rehabilitative, education, or work programs. Bennion, 90 Ind. L.J. at 753; see also Kupers, *Isolated Confinement* at 213 ("Few if any rehabilitation programs exist in supermaxes."). They have "literally nothing meaningful to do." Solitary Hearing at 77.

This describes Petitioner's confinement. Petitioner spends 23 hours or more each day alone in a 71-square-foot cell. And because each cell has solid metal doors (which prevent communication between inmates, Grassian, 22 Wash. U. J.L. & Pol'y at 346), Petitioner "is deprived of almost all human contact, even cell-to-cell contact with other death row inmates," App.21a-22a. He has no opportunity to participate in education or work programs, and his out-of-cell exercise time takes place in a metal cage approximately the same size as his cell. *Id.* at 30a.

B. Social Isolation And Sensory Deprivation Have Severe Psychological Consequences.

Psychological research on isolation and sensory deprivation outside of the prison context establishes that social contact and environmental stimuli are critical to maintaining mental health.

Studies on sensory deprivation—interfering with the stimulation a person normally receives from his environment—well illustrate the importance of sensory and perceptual stimuli. Haney, 23 N.Y.U. Rev. L. & Soc. Change at 500. Placement in an "unchanging monotonous environment" "deprives the sensory organs of normal levels of stimulation." Bennion, 90 Ind. L.J. at 759. The brain processes that deprivation as stress, resulting in elevated

cortisol levels that produce anxiety, paranoia, and interference with memory. Id.More extreme sensory deprivation cause "perceptual distortions. hallucinatory experiences, sometimes high levels of anxiety." Haney, 23 N.Y.U. Rev. L. & Soc. Change at 500. For example, air force pilots flying alone at high altitudes, where auditory and visual stimulation is limited, have reported severe anxiety and detachment from reality, including hallucinations. Bennion, 90 Ind. L.J. at 760.

Social isolation likewise has well-established adverse effects. Social contact is essential "for the creation and maintenance of 'self." Haney, 23 N.Y.U. Rev. L. & Soc. Change at 503. Interacting with others is how humans interpret emotions. *Id.* Without social interaction, unrealistic thoughts "cannot be tested in conversation with others, so they build up inside and are transformed into unfocused and irrational thoughts." Kupers, *Isolated Confinement* at 215.

Unsurprisingly, then, social isolation psychiatric illness are connected. Individuals who are "unmarried, unemployed, living alone, or without religious affiliations" tend to seek out mental-health services more frequently than socially connected Haney, 23 N.Y.U. Rev. L. & Soc. individuals. Change at 505. And isolated individuals can "suffer from symptoms that resemble posttraumatic stress disorder—including 'anxiety, nervousness, depression, difficulty sleeping, inability to work, and difficulty trusting people, as well as difficulties adapting to the world outside of confinement." Bennion, 90 Ind. L.J. at 760.

Several factors entailed in prolonged solitary confinement, moreover, can intensify these harmful psychological effects. "Experimental research has demonstrated that an individual who ... experience[s] the isolation situation as potentially threatening is far more likely to develop adverse psychiatric reactions." Grassian, 22 Wash. U. J.L. & Pol'y at 347. At California's Pelican Bay State Prison, for example, psychological-distress rates of solitaryconfinement prisoners were on average 14.5 percent higher than for protective-custody prisoners prisoners who were similarly isolated but for a protective rather than punitive purpose. Mental Health Issues at 137. The psychological effects also vary with the perceived duration of confinement. In particular, the indeterminate" the period of deprivation is, the greater the damaging effects. Amnesty International, Entombed 31; see also Haney, 23 N.Y.U. Rev. L. & Soc. Change at 501 ("[I]nforming subjects of the upper time limit of the study enhanced their ability to tolerate the isolation.").

In short, imposing social isolation and sensory deprivation has "drastic" effects on people. Indeed, that solitary confinement, involving stimulus deprivation and a near-total loss of control, "is among the most frequently used psychological torture techniques seems to underscore its aversive nature and destructive potential." Haney, 23 N.Y.U. Rev. L. & Soc. Change at 506.

C. Prolonged Solitary Confinement Causes Strikingly Similar Psychological Harms In A Substantial Percentage Of Prisoners.

These conclusions about social isolation and sensory deprivation are strongly confirmed by studies specific to solitary confinement, which "consistently and unequivocally" establish that solitary confinement causes adverse psychological effects. Haney, Mental Health Issues at 130. While the symptoms are wide-ranging, their manifestation is both remarkably consistent and highly prevalent among inmates in solitary confinement—prisoners in solitary confinement develop an "isolation" These consistent and widespread syndrome. psychological effects establish that all prisoners in prolonged solitary confinement are at risk of psychological deterioration.

1. Research on solitary confinement reports a wide array of psychological harms.

Prisoners in solitary confinement suffer various negative psychological effects, ranging from anxiety and panic to self-mutilation and suicide to changes in brain function. Haney, 23 N.Y.U. Rev. L. & Soc. Change at 530.

Among other psychological effects, inmates become hypersensitive to external stimuli, such as smells and noises. *Id.* For example, a prisoner reported that he "became enraged by routine noises—the sound of doors opening as the guards made their hourly checks, the sounds of inmates in nearby cells." Atul Gawande, *Hellhole*, The New

Yorker, Mar. 30, 2009, http://www.newyorker.com/magazine/2009/03/30/hell hole. Noises also might take on increased significance. An inmate in one study noted that noises "start[ed] to sound like sticks beating men." Stuart Grassian, *Psychopathological Effects of Solitary Confinement*, 140 Am. J. Psychiatry 1450, 1452 (1983).

Hallucinations and other perceptual distortions also affect inmates. Haney, 23 N.Y.U. Rev. L. & Soc. Change at 530. Prisoners have "hallucinated that the colors on the walls were changing," Gawande, *Hellhole*,

http://www.newyorker.com/magazine/2009/03/30/hell hole, and have reported "wavering cell walls, movements, and even the experience of entire visits in the cell," Smith, 34 Crime & Just. at 491. Inmates in solitary confinement also have "described hearing voices, often in whispers and often saying frightening things to them." Grassian, 22 Wash. U. J.L. & Pol'y at 335.

Prisoners additionally have difficulty with concentration, thinking, and memory. Grassian, Psychopathological Effects at 1453. They also experience lethargy and chronic tiredness. Smith, 34 Crime & Just. at 492. Such effects are symptoms of changes that occur in the brain as a result of the extreme idleness imposed by solitary confinement. In an experimental study of sensory deprivation in a Canadian maximum-security prison, socially isolated inmates exhibited slowed EEG, "which 'correlated with apathetic, lethargic behavior." Id.; see also Grassian, 22 Wash. U. J.L. & Pol'y at 331 ("[E]ven a few days of solitary confinement will predictably shift the electroencephalogram (EEG) pattern toward an abnormal pattern characteristic of stupor and delirium.").

Impulse control also suffers while prisoners remain in solitary confinement. Haney, 23 N.Y.U. Rev. L. & Soc. Change at 530. As one prisoner related, "I snap off the handle over absolutely nothing. Have torn up mail and pictures, throw things around." Grassian, 22 Wash. U. J.L. & Pol'y at 336.

Studies also report self-destructive behavior. Prisoners "become so desperate and despondent that they engage in self-mutilation." Solitary Hearing at 80. Terry Anderson, an Associated Press reporter held hostage for seven years, "snapped" after three years in solitary confinement, and beat his head against a wall until he was bleeding. Bennion, 90 Ind. L. J. at 753-54. A "prisoner in New Mexico ... used a makeshift needle and thread from his pillowcase to sew his mouth completely shut." Solitary Hearing at 80-81. Another "amputated one of his pinkie fingers and chewed off the other, removed one of his testicles and scrotum, sliced off his ear lobes, and severed his Achilles tendon with a sharp piece of metal." Id. Individuals in solitary confinement also report suicidal impulses, and "a disturbingly high number" of inmates in solitary confinement resort to suicide. Id. at 80. While less than 10 percent of prisoners live in solitary confinement, half of prison suicides occur there. *Id.* at 79; see Bennion, 90 Ind. L.J. at 757.

In sum, prisoners in solitary confinement experience "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." Haney, 23 N.Y.U. Rev. L. & Soc. Change at 530.

Those who have experienced both extreme physical pain and solitary confinement describe isolation as being "as torturous and agonizing as any physical abuse they suffered." Bennion, 90 Ind. L.J. at 753. Senator John McCain, for example, has said that solitary confinement "crushes your spirit and weakens your resistance more effectively than any other mistreatment," and he "was beaten regularly; denied adequate medical treatment for two broken arms, a broken leg, and chronic dysentery; and tortured to the point of having an arm broken again." *Id.*

 The strikingly consistent and prevalent psychological effects of solitary confinement indicate that it causes a distinct psychological syndrome.

These wide-ranging effects of solitary confinement are both consistent and highly prevalent.

Nearly all the symptoms documented in solitary-confinement studies are "strikingly consistent" among inmates. Grassian, *Psychopathological Effects* at 1452. Indeed, the scientific literature "has reached remarkably similar conclusions about the adverse psychological consequences of solitary

confinement." Solitary Hearing at 81; see also Haney, Mental Health Issues at 130-31 (citing for each adverse symptom numerous studies reporting that symptom); Hafemeister, 90 Denv. U. L. Rev. at 36 (discussing a variety of studies on solitary confinement, and noting that they "have consistently reported the same adverse symptoms"); Smith, 34 Crime & Just. at 507-18 (collecting more than 25 separate studies documenting similar adverse effects); Haney, 23 N.Y.U. Rev. L. & Soc. Change at 496-503, 511-29 (discussing empirical research, descriptive accounts, and case studies on the psychological effects of solitary confinement).

These modern studies also are consistent with observations of solitary-confinement prisoners in the nineteenth century, when the United States and European countries experimented with solitary confinement as a method of rehabilitating prisoners. Smith, 34 Crime & Just. at 457. Germany in particular developed "a psychiatric literature on 'prison psychoses." *Id.* at 466. That literature "described a hallucinatory, paranoid, confusional psychosis in which characteristic symptoms included ... extremely vivid hallucinations" affecting all of the and violence," senses. "aimless persecutory delusions, symptoms also observed in modern-day studies. Grassian, Psychopathological Effects at 1451.

Moreover, these psychological symptoms are highly prevalent—a substantial percentage of prisoners suffer from them. Solitary Hearing at 82. Specifically, "[r]esearch suggests that between one-third and more than 90 percent experience adverse symptoms in solitary confinement." Smith, 34 Crime

& Just. at 502. For example, in Dr. Grassian's 1983 in-depth study of 14 prisoners in Walpole, Massachusetts, 11 were hypersensitive to external stimuli. Half of the prisoners suffered from hallucinations or illusions. And 8 of the 14 prisoners suffered difficulties with thinking, concentration, and memory. Three prisoners reported cutting themselves in suicide attempts. Grassian, Psychopathological Effects at 1453.

Dr. Haney, in a study of 100 randomly selected inmates in solitary confinement in Pelican Bay "found extraordinarily high rates symptoms of psychological trauma." Reassessing Solitary Confinement: The Human Rights, Fiscal, and Public Safety Consequences: Hearing Before the Subcomm. on the Constitution, Civil Rights & Human Rights of the S. Comm. on the Judiciary, 112th Cong. 496 (2012) (comments by Dr. Terry "[V]irtually all" prisoners—91% experienced nervousness and anxiety and 70% "felt themselves on the verge of an emotional breakdown." Haney, Mental Health Issues at 133. Moreover, "[a]lmost all ... prisoners reported suffering from ruminations or intrusive thoughts, an oversensitivity to external stimuli, irrational anger and irritability, confused thought processes, difficulties attention and often with memory, and a tendency to withdraw socially." Id. at 134 (reporting that over of prisoners suffered these symptoms). Hallucinations and other perceptual distortions affected 41% of prisoners, and 27% had thoughts of suicide. Id.

Other studies similarly report high rates of psychological effects. In a study of mentally ill prisoners solitary confinement, 53% attempted suicide at least once. Correctional Association of New York, Mental Health in the House of Corrections: A Study of Mental Health Care in New State Prisons York 57(2004),availablehttp://www.correctionalassociation.org/wpcontent/uploads/2004/06/Mental-Health.pdf. Moreover, 40% reported self-mutilation, id. at 59, and 70% had difficulty thinking, concentrating, or paying attention, id. at 55.

Given the consistency and prevalence symptoms experienced by prisoners in solitary confinement, experts have classified these symptoms as a distinct "syndrome, calling it 'isolation sickness,' 'reduced environmental stimulation syndrome,' or 'security housing unit syndrome." Hafemeister, 90 Denv. U. L. Rev. at 30; see also Haney, 23 N.Y.U. Rev. L. & Soc. Change at 518 (describing Dr. Hans Toch's finding "that 'isolation panic' was a serious problem" in solitary confinement). As Dr. Grassian has explained, the symptoms observed in solitary confinement "are almost pathogonomic of the syndrome, meaning they are symptoms virtually found nowhere else." Grassian, 22 Wash. U. J.L. & Pol'v at 337. "[T]he fact that all of these guite unusual symptoms ran together ... was itself a clear confirmation of the distinct nature of this syndrome." Id. at 338.

3. Solitary confinement has additional disabling effects.

Beyond the measurable psychological harms of isolation syndrome, solitary confinement affects

prisoners' patterns of thinking and acting. These "social pathologies," while not "clinical syndromes per se," are "equally if not more problematic" for inmates' health. Haney, *Mental Health Issues* at 138. The patterns that prisoners develop in adapting to solitary confinement often are permanent. *See* Solitary Hearing at 83.

For example, after adapting to solitary confinement's environment of total control, prisoners no longer can set limits for themselves, and "become uncomfortable with even small amounts of freedom." Haney, *Mental Health Issues* at 139. Some inmates might "lose the ability to initiate behavior of any kind." *Id.*

Additionally, the nearly total deprivation of social contact creates the risk that prisoners will "los[e] their grasp on who they are." Id. While in solitary confinement, prisoners become desperate for any human response, even a negative one. might attempt to trigger an emergency "cell extraction"—a "brutal" removal from their cell simply "to reaffirm their existence." Hearing at 77. Prisoners' desperation also explains "the high prevalence of feces, urine, and semen throwing that occurs universally" in solitary confinement. Hafemeister, 90 Denv. U. L. Rev. at 37. Although these actions make their living conditions even worse, prisoners act out to "prov[e] to themselves that they are still alive and capable of eliciting a genuine response—however hostile—from other human beings." Haney, Mental Health Issues at 139-40. That same lack of social contact can cause other prisoners to severely withdraw to the point that they become frightened by social contact. Id. at 140. Indeed, "[e]ven the prospect of returning to the comparative 'freedoms' of a mainline maximum security prison ... fills them with anxiety." Solitary Hearing at 83.

The recent story of Kalief Browder illustrates these harms. After three years in prison waiting for a trial date, including 17 months in solitary confinement, "[e]verybody could see that he had changed." Jennifer Gonnerman, Before The Law, The New Yorker. Oct. 6, 2014.http://www.newyorker.com/magazine/2014/10/06/befo re-the-law. Kalief recognized it, too: "I'm mentally scarred right now ... [T]here are certain things that changed about me and they might not go back." Id. Six months after his release, he tried to slit his wrists and, when a friend stopped him, he tried to hang himself from a banister. Id. A year later, he had deteriorated further, throwing out his television because, he said, "it was watching me." Gonnerman, Kalief Browder, 1993-2015, The New June Yorker, 7, 2015, http://www.newyorker.com/news/news-desk/kaliefbrowder-1993-2015. This past June, two years after he had been released, he committed suicide by hanging himself with an air-conditioning cord from a bedroom window. *Id*.

4. Solitary confinement is potentially harmful to all prisoners.

The high rates of similar adverse psychological effects in solitary-confinement prisoners establish that solitary confinement creates a risk of harm to all prisoners. Solitary Hearing at 81. Indeed, solitary confinement is so "toxic to mental functioning" that "even those inmate[s] who are more

psychologically resilient inevitably suffer severe psychological pain," Grassian, 22 Wash. U. J.L. & Pol'y at 354, and may become mentally ill, Bennion, 90 Ind. L.J. at 743. For example, highly educated women with "a history of relatively strong functioning" psychological nonetheless "demonstrated significant psychopathological reactions to their prolonged confinement," including anxiety, panic attacks, and perceptual disturbances. Grassian, 22 Wash. U. J.L. & Pol'y at 352-53. Similarly, a prisoner in California with no preexisting mental illness became "catatonic. unresponsive, and incoherent" in isolation. Solitary Hearing at 87.

Inmates with mental illness are particularly vulnerable to the psychological effects of isolation. Hafemeister, 90 Denv. U. L. Rev. at 38. "The stress, lack of meaningful social contact, and unstructured days can exacerbate symptoms of illness or provoke recurrence." Jeffrey L. Metzner & Jamie Fellner, Solitary Confinement and Mental Illness in U.S. Prisons: A Challenge for Medical Ethics, 38 J. Am. Acad. Psychiatry & L. 104, 105 (2010). And "[a]ll too frequently, mentally ill prisoners decompensate in isolation, requiring crisis care or psychiatric hospitalization." This particularly harmful Id.impact on the mentally ill is significant, because approximately one-third of solitary-confinement inmates are mentally ill. Solitary Hearing at 78-79. Mentally ill prisoners often lack the capacity to follow the rigid rules and procedures of prison life, and so are more likely to end up in solitary confinement as punishment for rule violations. Haney, Mental Health Issues at 142; see also Hafemeister, 90 Denv. U. L. Rev. at 49 ("prison officials often 'treat disordered behavior as disorderly behavior.").

In sum, "[t]he empirical record compels an unmistakable conclusion"—solitary confinement "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." Haney, 23 N.Y.U. Rev. L. & Soc. Change at 500. Accordingly, "the overall conclusion must be that solitary confinement—regardless of specific conditions and regardless of time and place—causes serious health problems for a significant number of inmates." Smith, 34 Crime & Just. at 502-03.

II. SOLITARY CONFINEMENT IMPOSES FAR GREATER PSYCHOLOGICAL HARM THAN ORDINARY IMPRISONMENT.

In light of this Court's focus on whether conditions amount to "atypical and significant hardship," Wilkinson, 545 U.S. at 223, it is important to recognize that the conditions of solitary confinement create a far greater risk of psychological harm for prisoners than do the conditions of ordinary incarceration. Both the overall rates of mental illness in solitary confinement compared to the general population, and studies comparing isolated and non-isolated prisoners, provide convincing support for the increased harm of solitary confinement.

A. Prisoners In Solitary Confinement Have Higher Rates Of Mental Illness Than General-Population Prisoners.

The higher rates of mental illness in solitaryconfinement prisoners reflect the "significant additional strain and additional health problems" caused by solitary confinement. Smith, 34 Crime & Just. at 503. Solitary confinement imposes social isolation and sensory deprivation to a much greater extent than ordinary imprisonment. Haney, 23 N.Y.U. Rev. & Soc. Change at 497. Predictably, then, "[s]olitary confinement produces a higher rate of psychiatric and psychological health problems than 'normal' imprisonment." Smith, 34 Crime & Just. at 476. Experts estimate that prisoners in solitary confinement suffer from mental illness at twice the rate of the general prison population. Hafemeister, 90 Denv. U. L. Rev. at 46; Haney, Mental Health Issues at 142. Approximately onethird of prisoners in solitary confinement suffer from mental illness. Solitary Hearing at 78-79. contrast, in the general prison population, approximately 15% of inmates are mentally ill. Treatment Advocacy Center & National Sheriffs' Association, More Mentally Ill Persons Are in Jails and Prisons Than Hospitals: A Survey of the States 1 (May 2010), availableat http://www.treatmentadvocacycenter.org/storage/doc uments/final_jails_v_hospitals_study.pdf.

Prisoners in solitary confinement also engage in higher rates of self-destructive behavior than general-population prisoners. For example, in a study of North Carolina and Virginia prisons, more than half of all self-mutilation incidents occurred in solitary-confinement units. Haney, 23 N.Y.U. Rev. L. & Soc. Change at 525. And a study last year found that solitary-confinement prisoners were nearly seven times more likely to harm themselves than prisoners in the general population. See Homer Venters et al., Solitary Confinement and Risk of Self-Harm Among Jail Inmates, 104 Am. J. Pub. Health Suicide rates, too, 442, 442-47 (2014). disproportionately high in solitary confinement. Indeed, "[o]ne of the most stunning and inescapable statistical facts" regarding solitary confinement is that half of prison suicides occur among the 2-8% of prisoners in solitary confinement. Stuart Grassian & Terry Kupers, The Colorado Study vs. The Reality of Supermax Confinement, Correctional Mental Health Rep. 1 (May/June 2011).

These higher rates of mental illness psychiatric symptoms cannot be attributed solely to the fact that mentally ill prisoners are more likely to end up in solitary confinement. Solitary-confinement prisoners themselves "consistently identify punitive segregation as the source of their psychic trauma." Haney, 23 N.Y.U. Rev. L. & Soc. Change at 533. Moreover, the consistent and highly prevalent psychological effects reported among confinement prisoners substantially "undercut the possibility that nothing more than pre-existing dysfunction is being manifested." Id. These effects instead "point to the damaging psychological effects of punitive, isolated prison housing itself." Id. at 529 (emphasis added).

B. Studies Confirm That Solitary Confinement Causes Greater Harm To Prisoners Than Ordinary Incarceration.

Studies involving isolated prisoners and a control group of non-isolated prisoners are "especially convincing[]" in demonstrating the increased harm of solitary confinement relative to ordinary imprisonment. Smith, 34 Crime & Just. at 476. For example, in a study of 34 Kentucky inmates, solitaryconfinement prisoners "reported more feelings of inadequacy, inferiority, withdrawal, and isolation," as well as "rage, anger, and aggression," than the general prison population. Id. at 455. Similarly, a Danish study involving 367 prisoners found nearly twice as many prisoners in solitary confinement compared to the general population experienced psychiatric problems. Id. at 477. The Danish study concluded that a prisoner in confinement was 20 times more likely to be hospitalized for a psychiatric reason than a prisoner in the general population. *Id*.

A study of 30 solitary-confinement prisoners and 28 general-population prisoners reported a similar divergence in psychological effects. "The group of isolated inmates 'showed considerably more psychopathological symptoms than the control group." *Id.* at 476. The authors also concluded that the divergence was "mainly caused by solitary confinement; age, schooling, duration of detention and personality turned out to be of subordinate importance." *Id.* at 476-77.

Craig Haney's study of 25 maximum-security prisoners and 41 randomly selected solitaryconfinement prisoners at Pelican Bay in 2013 likewise revealed significant differences in the prevalence of psychological symptoms. Erica Goode, Solitary Confinement: Punished for Life, N.Y. Times, Aug. 3, 2015, http://www.nytimes.com/2015/08/04/health/solitaryconfinement-mental-illness.html? r=1. "While 63 percent of the men in solitary for more than 10 years said they felt close to an 'impending breakdown,' only 4 percent of the maximum-security inmates reported feeling that way." Id.Similarly, seventy-three percent of solitary-confinement inmates reported chronic depression, compared with 48% of maximumsecurity inmates. Id.

Data from a recent study in Colorado also indicate that solitary confinement imposes unique harms beyond those experienced by generalpopulation prisoners. The 59 mentally ill inmates in solitary confinement experienced a total of 37 incidents—an average of 0.62 incidents per inmate of either suicidal behavior, self-destructive behavior, or emergence of psychotic symptoms. Grassian & Kupers, Colorado Study at 7-8. By contrast, during the same period the 33 inmates with mental illness in the general population experienced only three such incidents, or 0.09 incidents per inmate. Id. Thus, psychiatric crises "were dramatically more prevalent" among mentally ill prisoners in solitary confinement compared with mentally ill inmates housed in the general population. *Id.* at 9.

Accordingly, prolonged solitary confinement causes far greater psychological harm than ordinary incarceration, posing an atypical and severe risk of harm to inmates who must endure its conditions. The relevant scientific literature unequivocally establishes the severe and wide-ranging psychological harms of solitary confinement. That "research ... confirms what this Court suggested over a century ago: Years on end of near-total isolation exact a terrible price." *Davis v. Ayala*, 135 S. Ct. 2187, 2210 (2015) (Kennedy, J., concurring). This case thus presents an important issue warranting the Court's review.

CONCLUSION

The petition for a writ of certiorari should be granted.

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Respectfully submitted,

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