List of Exhibits

Ex. 1-Morgan Report

Ex. 2-Robert Morgan CV

Ex. 3-Testimony, Publications, and Compensation

Ex. 4-Desposition Transcript

Ex. 5-Brazeau Opinion

Ex. 6-CCLA Lower Court Opinion

Ex. 7-CCLA Court of Appeals Opinion

Ex. 8-Corrections Today

Ex. 9-Correction Today Website (Speak Out Column Description)

Ex. 10-Morgan Meta-Analysis

EXHIBIT 1

Dr. Morgan Report

Jay F. Vermillion v. Mark Levenhagen, et al.
Case No: 1:15-CV-605-RLY-TAB

Expert Report by Robert D. Morgan, Ph.D.

EXECUTIVE SUMMARY

The plaintiff, Mr. Jay Vermillion, filed an amended (third) complaint alleging harms as a result of his administrative segregation (AS) placement while in the custody of the Indiana Department of Correction (IDOC). Defendants retained me in this matter as an expert witness to review relevant case material and opine on the expert reports provided by two plaintiff experts. In my examination of relevant materials, I noted that plaintiff expert's reports provided incomplete literature reviews summarizing the effects of segregation on inmate physical and behavioral health functioning.

In my review of the scientific literature I noted that placing inmates in administrative segregation results in some inmates experiencing negative effects, whereas others experience no negative effects, and some will even improve in functioning. Thus, it is my opinion that the harms described by Dr. Kupers and Mr. Pacholke in their review of the literature are not universally experienced. Furthermore, it can be expected that the use of restrictive housing (such as AS) will, on average, produce mild to moderate physical and mental health effects comparable to the effects of incarceration as a general matter.

In reviewing Dr. Kupers' expert report, I noted several methodological concerns that render his clinical interpretations, conclusions, and opinions questionable. First and foremost, the plaintiff in this matter is seeking compensatory damages in his complaint such that he has motive to exaggerate his mental health problems. Dr. Kupers did not, however, conduct a structured assessment of the plaintiff's response style (i.e., no malingering testing was done) as is customary with such evaluations. This leaves open the very real possibility that the plaintiff was less than truthful in his self-report rendering the obtained data unreliable. This is particularly troubling given that the plaintiff reported to Dr. Kupers significant mental health concerns during his AS placement, a report that is grossly inconsistent with medical records which are void of any such reported concerns by the plaintiff during and after his period of AS placement. Dr. Kupers also failed to account for possible confirmation bias and preexisting conditions presented by the plaintiff. Finally, Dr. Kupers asserts that the plaintiff presents with a constellation of symptoms that is consistent with the Special Housing Unit (SHU) Post-Release Syndrome, a syndrome that has not been accepted in the greater scientific community. It is my opinion that the methodological errors in Dr. Kupers' evaluation of the plaintiff's mental health functioning and the effect of AS placement on that mental health functioning results in conclusions and opinions that are unreliable and potentially invalid.

Of concern with Mr. Pacholke's report is that he appears to be holding the IDOC responsible for a lack of rehabilitation programming; however, at the time of the plaintiff's placement in AS this had yet to be identified as best practice. Thus, it is my opinion that Mr. Pacholke is holding the IDOC to standards of practice regarding rehabilitation programming that was not commonly recognized during the time period in question (i.e., during the time period of the plaintiff's AS placement).

EXPERT QUALIFICATIONS

I received a Bachelor's of Science (B.S.) degree in psychology (minor in biology) from the University of Nebraska at Kearney in 1991, a Master's of Science (M.S.) degree in clinical psychology from Fort Hays State University (Kansas) in 1993, and a Doctor of Philosophy (Ph.D.) in counseling psychology from Oklahoma State University in 1999. I completed a pre-doctoral internship in correctional psychology at the Federal Correctional Institution – Petersburg (FCI-Petersburg; Virginia) in 1998-1999, and a postdoctoral fellowship in forensic psychology at the Department of Psychiatry, University of Missouri-Kansas City School of Medicine and Missouri Department of Mental Health in 1999-2000. I am a Licensed Psychologist (Texas; #31546) and annually meet the Texas Code of Criminal Procedures (Article 46B) Yearly Continuing Medical Education Requirements ("8 hours of education relating to forensic evaluations").

Currently, I am the Department Chairman and the John G. Skelton, Jr. Regents Endowed Professor in Psychological Sciences at Texas Tech University (TTU). I am also Director of the Institute for Forensic Sciences at TTU. I began my academic career at TTU in 2000 and was promoted to full professor in 2011. During my tenure at TTU, I also served as Associate Chair of the Department of Psychology (2003-2004) and Director of Training for the counseling psychology doctoral program (2005-2007). I was appointed Director of the Institute for Forensic Sciences in 2014 and Chair of the Department of Psychological Sciences in 2015.

At TTU, I have taught Abnormal Psychology and Forensic Psychology to undergraduate students; however, my primary teaching responsibilities are to graduate students enrolled in the American Psychological Association accredited doctoral programs in clinical and counseling psychology. These courses include Practicum in Intelligence Testing, Advanced Counseling Practicum, and Psychology and the Law. The practicum courses are geared toward teaching doctoral students how to conduct cognitive assessments (i.e., I taught doctoral students how to administer, score, interpret and report findings from standardized intelligence and cognitive assessments), and provide psychological assessments and psychotherapy in diverse clinical settings, to include correctional and forensic contexts. The Psychology and Law course provides doctoral students a foundation in the interface between psychology and the legal system, including topics in forensic and correctional psychology, court and judicial testimony and psychologists' influence in policy legislation. My current clinical supervision (2007 – present) is of doctoral students providing psychological services at the Lubbock-Crosby County Community Supervision and Corrections Department, which provides services to adults on probation, including adult males admitted to a residential treatment program.

The core purpose of my research and scholarly activities is to help criminal justice involved individuals achieve a higher quality of life that is crime free and that ultimately results in increased public safety. It is my professional mission to (1) disseminate evidenced-based correctional practices to clinicians, administrators and policy makers, and (2) to provide objective and scientifically based correctional and forensic services to assist fact finders in legal decision making and agencies in the quest to reduce criminal offending and increase public safety. Notably, I actively engage in research designed to contribute to a best practices model for the provision of mental health services in correctional environments. In this regard, my work has focused on the investigation of the effects of incarceration on inmates' mental health functioning and evaluations of effective correctional treatment programming. My research has been funded

by the National Institute of Mental Health, the National Institute of Justice, the Center for Behavioral Health Services & Criminal Justice Research, the Texas Department of Criminal Justice – Community Justice Assistance Division, the Windham School District (provider of educational and life skills programs to inmates in the Texas Department of Criminal Justice), and the Texas Tech University School of Law.

I have authored or co-authored over 95 articles, book chapters, and reports primarily dealing with identifying effective treatment approaches for working with inmates, including inmates with severe and persistent mental illnesses. I also remain interested in helping corrections departments provide an environment conducive to inmate growth and rehabilitation. For example, I recently published a comprehensive study of the magnitude of health and mental health effects experienced by inmates in administrative segregation (AS; Morgan et al., 2016). I have also published four books, including *A Treatment Manual for Justice Involved Persons with Mental Illness: Changing Lives and Changing Outcomes*, and the *Clinician's Guide to Violence Risk Assessment*. I am lead editor on the four volume *Encyclopedia of Criminal Psychology*. In addition, I co-developed a treatment program for inmates placed in segregated housing units (i.e., *Stepping Up and Stepping Out: A Mental Health Treatment Program for Inmates Detained in Restrictive Housing*). I have provided a number of conference presentations, trainings and workshops, and invited presentations at a number of conferences across the United States and Canada.

My research extends from my 20 years of providing correctional and forensic services to inmates and criminal defendants. From 1993 to 1995, I served as a Mental Health Professional with Prison Health Services at the El Dorado Correctional Facility (EDCF), a maximum security facility with multiple segregation units, and the Winfield Correctional Facility (WCF), a minimum security facility in the Kansas Department of Corrections (KDOC). My primary assignment at EDCF was to provide mental health services in one of the institution's restricted housing units (i.e., a segregation unit). In this role, I conducted weekly mental health rounds to monitor inmates for decompensated mental health functioning (i.e., increased psychiatric symptomatology, loss of functioning, etc.), and I served as a member of the segregation review board. I also provided crisis management services on an as-needed basis. Lastly, I provided psychotherapy services to inmates segregated for various periods of time, including five-to-ten year time periods, in part, to prepare them for release back to the general population. At WCF, I was responsible for all mental health services at the facility to include individual and group psychotherapy, psychological assessments, and crisis intervention, as well as monitoring the mental health functioning of inmates in segregation. As this was a minimum security facility, inmates placed in segregation remained segregated from the general population for shorter periods of time (i.e., typically less than thirty days). I also completed correctional internships in the United States Penitentiary at Leavenworth (10 weeks in 1993) and the aforementioned internship at FCI-Petersburg where I provided a range of psychological services to inmates including individual and group psychotherapy, psychological assessments, and crisis intervention and mental health rounds for inmates in segregation (FCI-Petersburg only).

From 2001 to present, I have operated an independent forensic psychology practice. From 2002 to 2012, I served as the Director of Forensic Services and Director of Postdoctoral Fellowship in Forensic Psychology at the Lubbock Regional Mental Health Mental Retardation Center

(LRMHMR) in Lubbock, Texas. In this role, I co-developed a community-based forensic mental health service to include a jail-based competency restoration program for criminal defendants adjudicated not competent to stand trial. I received full medical staff membership at Sunrise Canyon Hospital (an acute care psychiatric hospital) during my tenure at LRMHMR. I have completed approximately 1000 criminal pretrial mental health evaluations and post-trial criminal risk assessments to include issues of competency to stand trial, criminal responsibility, and criminal risk. I have provided expert testimony in several of these and other cases in state courts in Alabama, California, Kansas, Missouri, Oklahoma, and Texas, as well as in Ontario Province, Canada. I am also a mental health consultant to WellPath LLC, a private provider of correctional health care services (including mental health care) to correctional agencies across the United States. Finally, I am working with the Windham School District (Huntsville, Texas) to revise their life skills programming aimed at helping inmates prepare for community re-entry. Specifically, I revised two life skills programs, one of which is required of all inmates in the Texas Department of Criminal Justice prior to release, and we are currently evaluating the effectiveness of these two programs.

My other professional responsibilities are varied, but still founded in correctional mental health and geared towards improving local, state, national and international responses to criminal justice populations. In 2011, Texas Governor Rick Perry appointed me to the Advisory Committee to the Texas Board of Criminal Justice on Offenders with Medical or Mental Impairments (term ended in 2019). I am a Fellow of two divisions of the American Psychological Association, and formerly served as President of Division 18 (Psychologists in Public Service) of the American Psychological Association (2009-2010). I am a member of the Canadian Psychological Association, and I co-developed the North American Correctional and Criminal Justice Psychology Conference, with conferences held in 2007 (Ottawa, Canada), 2011 (Toronto, Canada), and 2015 (Ottawa, Canada). From 2006 to 2011, I was a member of the Mental Health in Corrections Consortium Advisory Board, and in 2008, I served as a consultant to the Justice Center: The Council of State Government for the development of a monograph entitled *Improving outcomes for people with mental illness under community supervision: A research guide for policymakers*. I am Editor-in-Chief of Criminal Justice and Behavior (2018-present), and was recently appointed to the Board of Directors of the National Commission on Correctional Health Care Educational Foundation.

My curriculum vitae is attached to this report as Attachment A.

TESTIMONY, PUBLICATIONS, AND COMPENSATION

Attachment B sets forth a list of cases in which I have provided expert testimony in deposition or at trial over the past four years, publications I have authored in the past ten years, and the compensation for my work in this matter.

OPINIONS

The opinions I offer in this report are to a reasonable degree of psychological certainty.

A. Specific Issues Referred for Evaluation

I was retained by the Defendants' counsel to review the reports of Dr. Terry Kupers and Mr. Dan Pacholke, two experts retained by the plaintiff in this case. I have reviewed the reports of Dr Kupers and Mr. Pacholke and offer a rebuttal to address methodological concerns (Dr. Kupers), as well as a concern regarding the use of a syndrome that is not scientifically accepted (Dr. Kupers), and reference to best practices that were not professionally identified during the plaintiff's confinement in AS (Mr. Pacholke).

B. Overarching Opinions

Given my investigation to date in this case, I offer the following opinions:

1. The literature clearly demonstrates that some inmates placed in AS experience the harms described by Dr. Kupers and Mr. Pacholke in their expert reports; however, these harms are not universally experienced. At the population level, it can be expected that the use of restrictive housing (such as AS) will, on average, produce mild to moderate health and mental health effects comparable to the effects of incarceration as a general matter. At the individual level, some inmates placed in AS will experience negative effects, some will not experience negative effects, and some will experience improved functioning.

2. Methodological errors in Dr. Kupers' evaluation of the plaintiff's mental health functioning, and the effect of AS placement on this mental health functioning, results in conclusions and opinions that are unreliable and potentially invalid. Furthermore, the plaintiff's mental health concerns during and after his AS placement, as reported to Dr. Kupers, are inconsistent with medical records, which are void of any such reported concerns by the plaintiff both during and after the period of time in which he was in AS.

3. Mr. Pacholke is holding the IDOC to standards of practice regarding rehabilitation programming that were not commonly recognized during the time period in question (i.e., during the time period of the plaintiff's AS placement).

C. Basis and Reasons for Opinions

The list below identifies the facts and data I considered to prepare this report:

1. Information provided by defendants' counsel, including: (a) plaintiff's Third Amended Prisoner's Civil Rights Complaint; (b) plaintiff's State of Indiana Presentence Investigation report; (c) expert reports of Dr. Terry Kupers and Mr. Dan Pacholke in support of plaintiff's third amended complaint; (d) the transcript from plaintiffs' deposition in this matter; (e) plaintiff's medical and mental health electronic records from December 12, 2008 to July 9, 2018; (f) additional plaintiff medical records; (g) Indiana Department of Correction Policy and Administrative Procedures: The Use and Operation of Adult Offender Administrative Segregation; (h) Indiana Department of Correction Policy and Administrative Procedures: Adult Offender Classification-Revised (Mental Health Transfers); (i) Indiana Department of Correction Policy and Administrative

Procedures: Adult Offender Classification (Mental Health Transfers); (j) Indiana Department of Correction Executive Directive (#09-48, August 17, 2009).

2. My experience and expertise in correctional mental health, including: (a) the provision of psychological services in state and federal correctional facilities, including in segregated housing units; (b) the development of a therapeutic program for inmates in segregated housing; (c) consultation with private and state correctional agencies regarding the provision of mental health services; and (d) my research on the effects of incarceration on inmate mental health functioning and prison mental health service provision.

3. Review of psychological, psychiatric, and general mental health scientific journals as well as legal journals regarding segregated housing in prison and the effects on inmate physical and mental health functioning.

CRITIQUE OF EXPERT REPORTS

A. Incomplete Reviews of the Literature Examining Segregated Housing

Dr. Kupers and Mr. Pacholke provided reviews of the literature on AS; however, their reviews are notably incomplete. I agree with Dr. Kupers in that much has been written about the potential adverse and harmful effects of segregation. Specifically, it has been reported by some that inmates experience a myriad of mental health concerns and symptoms, including appetite and sleep disturbance, anxiety (including panic), depression and hopelessness, irritability, anger and rage, lethargy, psychosis, cognitive rumination, cognitive impairment, social withdrawal, and suicidal ideation, as well as self-injurious behaviors (see Grassian, 2006, n.d.; Haney, 2003, 2009; Kupers, 2008; Andersen, Sestoft, Lillebaek, Gabrielsen, Hemmingsen, & Kramp, 2000; Bonner, 2006; Brodsky, & Scogin, 1988; Cloyes, Lovell, Allen, & Rhodes, 2006; Cohen, 2006, 2008, 2012; Hayes, & Rowan, 1988; Haney, 1993; Hresko, 2006; Lovell, 2008; Miller, & Young, 1997; and Smith, 2008). It has also been alleged that persons with mental illness are particularly vulnerable to placement in AS (Metzner & Fellner, 2010), where they generally appear to experience more mental health disturbance (i.e., greater symptomatology) than persons with mental illness not placed in AS (O'Keefe, 2007). Lastly, inmates released directly from segregation to the community have shown poorer post-release outcomes than inmates not released from segregation (Lovell, Johnson, & Cain, 2007). Dr. Kupers adequately summarizes this literature.

The collection of studies that are used to support the conclusion that AS is harmful to one's health (including mental health) and well-being, however, do not paint a complete picture of the effects of AS. There are also a number of studies that found minimal or no deleterious effects resulting from the use of AS. Remarkably, both Dr. Kupers' and Mr. Pacholke's reviews ignore the number of studies that draw opposing conclusions. In fact, their literature reviews omitted studies in conflict with their opinions. When examining very brief periods of segregation (as brief as a few days), almost no deleterious effects have been found (see Gendreau & Bonta, 1984; Bonta & Gendreau, 1995; and Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982). Controlled studies looking at longer periods of segregation have also found no deleterious effects. For example, Zinger and colleagues (2001) conducted a longitudinal study of inmates

segregated for 60 days. They found no significant mental health decompensation for segregated inmates compared to their peers in the general prison population. These results appear to hold up across longer periods of AS placement as well. Chadick and colleagues (2018) found that inmates in AS for one year or more evidenced no significant differences in mental health concerns (with the exception of subclinical depression) when compared to their non-segregated peers in the general population.

Additionally, it should be noted that the majority of studies investigating psychological outcomes from AS consist of case studies of small, nonrandom samples of inmates and do not include pre-AS baseline psychological measures, or appropriate comparison groups (Labrecque & Smith, 2013). Further, much of the AS literature includes studies employing the weakest type of research methodology (e.g., use interview strategies without accounting for honesty of responses rather than objective measures).

For example, in 1983 Dr. Stuart Grassian published an article in which he coined the term SHU-Syndrome (i.e., a constellation of symptoms and mental health deficits that are alleged to result from long-term placement in segregated housing). Although at the time this was a significant manuscript that raised awareness of the possible consequences of the use of segregation as a correctional management strategy, it should be noted that this research is now almost 36 years old. It is of questionable generalizability to the issue of contemporary segregation given changes in corrections and inmate populations. Moreover, this study consisted of a clinical interview with 14 segregated inmates and thus, data collection was limited to self-report information with no efforts to verify the inmates' self-report (e.g., file review, use of objective measures). This methodology is particularly problematic given these evaluations were directed by court order in response to the inmates' class action suit against the state department of corrections; thus, raising the concern of response bias (intentional effort by an individual to respond in a dishonest manner). In other words, the inmates had reason and were likely motivated to present as impaired for purposes of their lawsuit regardless of their actual mental health functioning. Additional concerns include the absence of a comparison group from which to compare responses, an exceedingly small sample size, and an absence of data regarding pre-existing symptoms or mental health concern. It is my opinion that these significant limitations render the reliability and validity of the results from this study meaningless. In fact, as editor of a leading criminal justice and psychology journal, I would not publish this paper as it does not meet current scientific standards and I believe no other reputable journal would today publish a paper of this quality.

On the opposite end of the scientific spectrum are the results from O'Keefe and colleagues (2010) who conducted the most sophisticated segregation study to date. In this study, commonly referred to in the corrections literature as the "Colorado Study," participants consisted of 247 men from AS, the general prison population, and a psychiatric care facility. Researchers assessed inmates across multiple time periods on the following domains: psychosis; anxiety, depression, and hopelessness; somatization; social functioning; cognitive functioning; anger; and hypersensitivity. Contrary to the researchers' hypotheses, results indicated that AS confinement of one year was generally not associated with the onset of psychological symptoms or cognitive impairment for mentally ill and non-mentally ill inmates, nor did inmates with mental illness fare

worse in AS than their non-mentally ill peers. In fact, some inmates with mental illness actually improved with regard to their psychological functioning.

It is my opinion that the Colorado Study is the gold standard when it comes to methodological approaches to examining effects of AS. Specifically, the researchers applied research methodology that provided several advantages over previous investigations that examined the effects of administrative segregation. First, this study was longitudinal in that it used a repeated measures design that assessed inmates up to five time periods at three-month intervals, a notable strength of the study (see also Berger, Chaplin, & Trestman, 2013). Additionally, the study included multiple groups to allow for comparisons between segregated and non-segregated populations. Most impressive, the researchers incorporated a multi-method assessment strategy, another significant improvement over the typical research approach of relying solely on a review of records, or even more problematic, observation and clinical interviews without controlling for bias or intentional manipulation (although not reviewed in this report, the scientific literature summarizing mental health professionals' ability to accurately predict likely outcomes based on observation and interviews is notoriously weak; see critique of Dr. Kupers report in section B). Finally, the Colorado Study presents a "reasonable real-world test of the hypotheses" outlined in the study (p. 1; Berger et al., 2013). Apparently, the National Institute of Justice, a highly reputable federal agency in the United States offering competitive research grants, was similarly impressed with the methodological approach as the agency funded this research project. Nevertheless, the Colorado Study is not without limitations. It is a truism that all studies in the psychological literature (including those relied upon by Dr. Kupers and Mr. Pacholke in their expert reports) are replete with limitations. However, I strongly disagree with those who state that the Colorado Study is "fatally flawed" (see for example Grassian & Kupers, 2011). Simply stated, there are no perfect studies. Given that this study represents the most sophisticated and methodologically sound longitudinal study to date on the effects of segregation on inmate mental health functioning, the findings are certainly relevant and highly informative.

In a follow-up to the Colorado Study, Walters (2018) used this data to further examine the effect of AS placement on inmate mental health functioning. Specifically, he sought to determine "whether placement in administrative segregation (AS) has a deleterious psychological effect on individuals with no history of mental health needs, and, if not, whether the effect is stronger for inmates with mental health needs housed in AS than it is for inmates with a mental health history not housed in AS" (i.e., in general population; p. 1351). As Dr. Walters noted, this study directly tested the two underlying assumptions of the SHU-Syndrome: (1) psychological deterioration will be as prevalent in inmates without mental health needs as it is in inmates with mental health needs; and (2) psychological deterioration will be significantly more prevalent in segregated inmates with mental health needs than it is in general population (non-AS) inmates with mental health needs. Walters found that inmates with mental health needs in AS did decompensate relative to inmates without mental health needs; however, inmates with mental health needs in AS and inmates with mental health needs in general population or a mental health unit experienced equivalent levels of psychological deterioration (i.e., inmates with mental health needs in AS did not fare worse over time relative to their non-AS peers). This study directly challenges the notion of a SHU-syndrome, suggesting that psychological deterioration has less to do with confinement in AS and more to do with pre-existing mental health needs.

Given the conflicting opinions on the effects of AS, it is not surprising that its use has become a hotly debated and litigated issue. Unfortunately, qualitative reviews such as that provided in this report, as well as those by Dr. Kupers and Mr. Pacholke, do little to clarify the issue. Furthermore, these narrative discussions are simply unable to examine the magnitude of harm when negative outcomes do occur. When the empirical studies reviewed above are subjected to a meta-analytic review, the results yield compelling data regarding the effects of placing inmates in segregation, and importantly, provide information about the magnitude of any such effects. A recent meta-analysis conducted by colleagues and me (Morgan et al., 2016) provides this information, yet, neither Dr. Kupers nor Mr. Pacholke chose to mention or discuss the findings in their reports.

Meta-analysis is a widely-accepted method for "summarizing the results of empirical studies within the behavioral, social, and health sciences" (Lipsey & Wilson, 2001, p. 1). Specifically, meta-analysis is the combination of multiple empirical studies into one comprehensive quantitative database to allow for an empirical (and theoretically more powerful) examination of a phenomena of interest, such as the effect of segregation on inmate mental health functioning. Meta-analyses produce an effect size for each outcome variable of interest. The effect size (*ES*) quantifies the difference between two groups (such as inmates in AS compared to inmates not in AS) and is a measure of the size of the difference between two groups.

Meta-analytic reviews can be particularly effective when a number of individual reports disagree, and offers many advantages over a qualitative review of the literature. Specifically, meta-analysis provides (Field & Gillett, 2010):

(1) the mean and variance of underlying population effects. For example, we can study the effects of segregated housing compared to general population housing;

(2) variability in effects across studies. Meta-analysis allows researchers to "estimate the variability between effect sizes (*ES*) across studies" (p. 666). For example, we can examine the magnitude of the effect (i.e., size of the effect) of placement in segregated housing versus placement in non-segregated housing, and we can examine how much variability exists in effects across studies; and

(3) moderator variables. Meta-analysis allows us to examine variables that contribute to the obtained effects. For example, if inmates respond unfavorably to segregated housing compared to their peers not placed in segregated housing in one study, but another study suggests that segregated inmates respond similarly to peers not placed in segregated housing, we can examine variables that may explain the different relations across the two studies. In other words, we can attempt to identify aspects of segregation or inmate characteristics that modify the relation between segregation and negative outcomes.

Thus, although results of meta-analytic reviews are not conclusive, meta-analyses are far superior to qualitative (i.e., narrative) reviews of a literature (Fagard, Staessen, & Thijs, 1996).

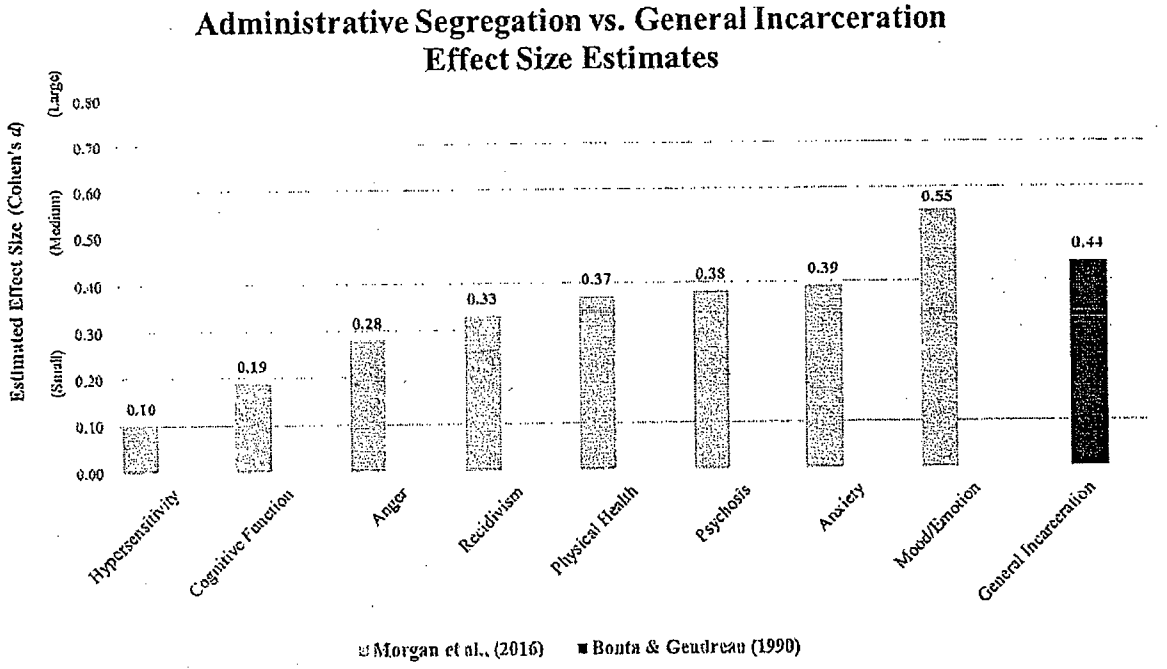
To better understand the effects, including the magnitude of effects, resulting from the use of AS in corrections, two research groups completed independent meta-analytic reviews. These

independent reviews found that inmates in segregation, on average, experience harms associated with their segregation placement (Morgan et al., 2016). Of note, however, is that these harms are not as severe as some have alleged. Specifically, the findings from these two independent meta-analytic reviews are in contrast to the opinion that segregation is akin to torture resulting in debilitating health and mental health outcomes (see Jackson, 1983; Kupers, 2008; Morris, 2000). The results of the two meta-analytic reviews are compelling in this regard.

Collectively, the two meta-analytic reviews indicated small to moderate (ES = 0.06 – 0.55) adverse physical and mental health outcomes associated with segregation placement. These investigations further revealed considerably smaller ESs among studies with stronger research designs compared to those with weaker designs. That is, the stronger the research design (which presumably provides a better evaluation of the phenomena of interest), the lower the ES.

To further our understanding of the magnitude of these adverse effects, it is relevant to compare the effects resulting from segregation to the effects resulting from general incarceration (i.e., non-segregated imprisonment). In other words, how do the adverse effects of segregation compare to the effects of incarceration in general (e.g., what is the magnitude of adverse effects an offender can expect to experience while in prison)? The results of the two meta-analytic reviews on the effects of segregation produced ESs (i.e., magnitudes of effect) that were very similar to results obtained from investigations on the general effects of incarceration completed by Bonta and Gendreau (1990). In other words, the quantifiable effects resulting from segregation are comparable to the quantifiable effects resulting from general incarceration (see Figure 1).

Figure 1.



When considered collectively, it is my opinion that the literature clearly demonstrates that some inmates placed in AS experience the harms described by Dr. Kupers and Mr. Pacholke; however, these harms are not universally experienced. In fact, it is my opinion that when placing inmates in AS, some inmates will experience negative effects, some will improve and some will remain unchanged. In totality, it can be expected that the use of restrictive housing (such as AS) will produce mild to moderate health and mental health effects comparable to the effects of incarceration generally.

The opinion that AS produces mild to moderate effects for some but not all inmates frequently elicits the question of how can it be possible to place someone in AS for a lengthy period of time and it not have a harmful effect on the individual? It is my opinion that inmates, like most people, adapt to their environment, whether it be a general prison population setting or AS. This opinion was supported and clearly articulated by an inmate (referred to here as Inmate A) I examined while he was serving a long-term period of confinement in AS in Pelican Bay State Prison, California. According to Inmate A, inmates are generally adept at serving time in correctional facilities prior to their AS placement. He stated to me that to anyone unaccustomed to serving time in prison (i.e., lay persons, lawyers, advocates, etc.), AS would seem daunting and completely overwhelming; however, experienced inmates are skilled at coping with incarceration such that AS is simply another adjustment in the process of confinement.

Furthermore, Inmate A relayed to me that although some inmates experience an initial period of difficulty, they eventually adjust and cope adequately in the structured environment of AS. This perspective is also supported by research. Zinger, Wichmann, & Andrews (2001) measured change in the mental health symptoms of segregated inmates over time in three Canadian federal institutions. In this study, they compared 60 inmates in AS to 60 inmates in general population. The inmates were tested using a battery of psychological tests (similar to those reported in observational studies) at the time of admission, 30 days after admission to AS, and 60 days after admission to AS. The 60 randomly-selected volunteers in general population were tested along the same timeframes. After 30 days, segregated inmates endorsed more symptoms of depressed mood and anxiety, as well as poorer psychosocial adjustment than their general population peers. Importantly, however, both segregated and non-segregated inmates improved over the 60 days on measures of depression, psychosocial adjustment, hopelessness, and anxiety. Zinger et al., concluded that this study "did not reveal any deterioration" (p. 75) in the 60 segregated inmates over the 60-day period, such that, consistent with Inmate A's report, the segregated inmates may have "generally adapted and coped well with the conditions of today's Canadian federal administrative segregation" (p. 75).

B. Dr. Kupers

I had opportunity to review Dr. Kupers' report, and before providing my critiques of this report, I will highlight my familiarity with Dr. Kupers. I became familiar with Dr. Kupers and his work in my preparation for my expert report submitted in *Ashker, et al. v. Governor, et al.* We have collaborated professionally as I requested and he agreed to submit an article entitled "Imprisonment and Stress" for the soon-to-be published *Encyclopedia of Criminal Psychology*. As Editor I accepted this article for inclusion in the encyclopedia. In the course of that work we engaged in professional electronic (email) correspondence. Based on these experiences and

interactions, I know Dr. Kupers to be a respected psychiatrist who shares my commitment to work aimed at improving the lives of incarcerated individuals with and without mental illness. Nevertheless, in reviewing his report I have identified several concerns that limit the reliability and possible validity of his conclusions and opinions.

1. **Response Bias.** After reviewing Dr. Kupers' report as requested by defense counsel, his failure to account for response bias raises questions as to the accuracy and reliability of his clinical conclusions and opinions. Response bias is the tendency of a person to answer questions untruthfully or in a misleading fashion. For example, in a research study, participants may feel compelled to give socially acceptable responses to questions. In a forensic examination, a plaintiff or defendant may provide inaccurate responses in an effort to obtain a desired outcome. In fact, malingering, the faking of an illness, is a common concern in forensic mental health assessments. So much so that clinicians are encouraged to expect malingering or exaggeration when conducting forensic evaluations (Rogers, Salekin, Sewell, Goldstein, & Leonard, 1998; Rogers, Sewell, & Goldstein, 1993).

   Clinicians have estimated that approximately 15 to 19% of criminal forensic cases and 30% of civil forensic cases involve malingering (Mittenberg, Patton, Canyock, & Condit, 2002; Rogers, Salekin, Sewell, Goldstein, & Leonard, 1998; Rogers, Sewell, and Goldstein, 1994). Even more striking, one study found that the majority of persons (67%) assessed in a forensic context distorted their presentations in response to external motivations (e.g., financial gain would be an external motivation; Heilbrun, Bennett, White, and Kelly, 1990). Thus, assessing response style is a "fundamental element" (p. 7; Goldstein, 2007) of any forensic assessment (see also Rogers, 1997; Rogers & Bender, 2003). Simply stated, accepting a plaintiff report without critically examining the accuracy of that report is "naïve at best…ignores the obvious motivation to deceive and does not meet acknowledged practice standards in the field" (p. 7, Goldstein 2007). Dr. Kupers is clearly aware of this standard as he noted on p. 42 of his report "It is always important to rule out **malingering** in the course of a forensic examination," citing his own work to this effect.

   Unfortunately, mental health professionals are notoriously poor at identifying symptom exaggeration or malingering on the basis of clinical judgement (see for example Faust, Hart, & Guilmette, 1988; Faust, Hart, Guilmette, & Arkes, 1988; Heaton et al., 1978; Jackson & Vitacco, 2012). In fact, it is increasingly recognized that "interview-based approaches to detecting malingering are of such limited utility" (p. 59; Melton, Poythress, Slobogin, Otto, Mossman, & Condie, 2018) that tests specially designed to detect malingering should be a routine part of forensic practice. Dr. Kupers, however, appears to have relied solely on his clinical interview and judgement. He stated on p. 42, "It is very clear to me, based on clinical techniques for identifying malingering, that Mr. Vermillion is not malingering." Dr. Kupers does not specify what his clinical techniques consisted of, but it appears he did not include instruments specifically designed to detect symptom exaggeration and/or malingering, which are commonly used in forensic evaluations. As such he appears to have relied on the least effective approach for determining examinee attempts to mislead – clinical judgement. As previously noted, given the plaintiff's incentive to deceive (i.e., for financial gain) and his history of exhibiting an antisocial personality disorder (i.e., a condition marked by a pervasive pattern of disregard for and violation of the rights of others occurring since age 15

years, as indicated by at least three symptoms, including breaking the law, deceitfulness, impulsivity, disregard for others' safety, consistent irresponsibility, and lack of remorse), failure to systematically test for response bias renders the clinical conclusions obtained from that evaluation unreliable and with questionable validity.

2. **Confirmation Bias**. Related to plaintiff response bias, Dr. Kupers does not identify efforts to minimize confirmation bias (i.e., "the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations, or a hypothesis in hand" p. 175, Nickerson, 1998). He provided deposition testimony in the Ashker case (referenced in his report) that every inmate he has ever interviewed who has spent time in administrative segregation has been "harmed" by this experience (Kupers Dep. 95). This is an extreme position that is certainly not supported by the most recent research literature (e.g., Chaddick et al., 2018; Morgan et al., 2016; Walters, 2018). In fact, the Colorado study found that approximately 20% of inmates in administrative segregation demonstrated improvement as a result of their AS placement (O'Keefe, Klebe, Stucker, Sturm, & Leggett, 2010). Dr. Kupers maintains such an extreme position that to be credible he would need to demonstrate efforts to minimize bias in his examinations and subsequent report, yet he did not do so.

3. **Preexisting Factors.** It is not clear from Dr. Kupers' report that he adequately accounted for preexisting conditions in determining the impact of the plaintiff's 4 years of segregation placement. Specifically, it is not clear how placement in segregation contributed to or exacerbated the plaintiff's prior physical and mental health conditions beyond everyday life experiences and the passage of time. Given the research findings noted above showing that inmates with mental health concerns, on average, fare no worse in AS than their non-segregated peers, it is not clear that the symptoms described by Dr. Kupers (e.g., "sadness and depression" p. 36") are not an extension of the major depression the plaintiff suffered from in 1996 (see presentence report p. 9 regarding Dr. Dinesh Mehta clinical conclusions). It is certainly possible that the plaintiff's mood and overall mental health functioning were negatively impacted by segregation; however, given that he appears to have previously exhibited symptoms consistent with those noted by Dr. Kupers, there simply is no way to know if these symptoms (if valid) would be present today in the absence of segregation placement. The plaintiff appears to attribute his current mental health functioning to the effects of segregation; however, as previously noted, he is financially motivated to do so. Without a systematic assessment of the reliability and validity of his responses, it is not clear what is genuine self-report and what is exaggerated for purposes of litigation.

   Further complicating the clinical picture (as well as raising questions regarding the validity of his responses), the plaintiff's self-reported concerns to Dr. Kupers were grossly inconsistent with his self-report during his placement in AS, immediately upon release from AS, and in the intervening period after his release from AS. I reviewed the plaintiff's mental health records from December 12, 2008 to July 9, 2018 in detail for evidence of mental health problems occurring during the time period he was in and following his release from AS. Based on review of these records, although the plaintiff made a number of complaints regarding his physical health, he made no such complaints regarding his mental health functioning. Specifically, the plaintiff received monthly contact with mental health providers (including doctoral-level providers) while in AS and these assessments indicated the

defendant consistently denied mental health concerns. Additionally, he presented no indication of deteriorating mental health functioning (e.g., cell was appropriately maintained, grooming was appropriate, denied suicidal ideation or intent, no evidence presented regarding impaired mental status functioning to include mood, cognitive functioning, hopefulness, etc.). Contact with medical staff post-AS placement indicated similar findings with the exception of one instance of a suicide observation on December 13, 2016 during which the plaintiff "voiced no needs at this time." Thus, his self-reported mental health concerns to Dr. Kupers were inconsistent with his self-report and presentation both during and after his placement in AS.

Dr. Kupers noted that the plaintiff intentionally denied mental heath concerns in segregation "because he did not trust that their conversation was private or confidential…[and to] avoid the harsh stigma that goes with being known as having emotional problems in prison." To this latter point, stigma of inmates with mental illness is an unfortunate occurrence in prison (see Morgan et al., 2007 for example); however, there are mechanisms for inmates in segregation to request services without voicing their concerns cell side. For example, it is common practice that inmates can submit a written request for mental health services such that they can be removed from the cell and seen by a mental health professional in a private consultation room. It was my experience working in various segregation units that when inmates did not feel comfortable verbally disclosing their concerns to me cell side, they would submit such requests for a private consultation. The plaintiff did not make use of this opportunity calling into further question the validity of the problems he reported to Dr. Kupers.

Finally, it is my experience that inmates experiencing severe distress, such as that reported by the plaintiff to Dr. Kupers, is observable even in the absence of self-reported concerns. In other words, when inmates experience "very strong anxiety and depression" (p. 28) as noted in Dr. Kupers' report, such concerns are apparent not only to mental health professionals, but also medical professionals and correctional officers. For example, it is common for anxious individuals to appear jittery and on-edge, and for depressed persons to appear lethargic, apathetic, and to present with flattened emotional affect. Mental health professionals are trained and uniquely qualified to detect such behavioral changes in the absence of self-reported distress, and no such observations were documented regarding the plaintiff during his time period in AS (or after). Review of records indicate no such concerns were noted during a number of medical consultations or that any such concerns were reported by correctional staff. In other words, his behavioral presentation (which is much more difficult for persons with mental health concerns to conceal) during his time in AS matched his self-report of an absence of mental health concerns. As such, it leaves open the strong possibility that the plaintiff is exaggerating his retrospective report of problems during his placement in segregation, an issue that cannot be ruled out given the absence of structured malingering testing.

4. **SHU Post-Release Syndrome**. Dr. Kupers noted that the plaintiff exhibited symptoms consistent with the SHU Post-Release Syndrome. This syndrome is not a formal diagnosis, but allegedly represents a constellation of symptoms and mental health deficits that result

from long-term placement in restrictive housing (such as AS) and includes many of the following:

- Disorientation immediately following release.
- Anxiety in unfamiliar places and with unfamiliar people.
- Anxiety with daily life events that had been ordinary prior to SHU confinement as these become unfamiliar events following release from SHU.
- A tendency to retreat into a circumscribed, small space, often a bedroom or cell.
- A tendency to greatly limit the number of people one interacts with, usually limited to close family members and a few friends.
- Hyperawareness of surroundings, for example a need to sit facing the door to a room or with one's back to a wall.
- Heightened suspicion of everyone who comes close, especially strangers.
- Difficulty expressing feelings.
- Difficulty trusting others, even one's spouse or first degree relative.
- Problems with concentration and memory, beginning in the period of SHU confinement and continuing after release, making it difficult to accomplish tasks and to work.
- A sense of one's personality having changed. The most often reported form of this change is a change from a relatively outgoing, friendly individual with a sense of humor prior to SHU confinement, to a more serious, guarded, and inward individual following release from the SHU.
- Substance abuse to lessen emotional pain and make feelings of confusion and anxiety more bearable.

This syndrome was identified by Dr. Kupers but has not been peer reviewed or published in a peer reviewed journal. In fact, the only publications referring to this syndrome are those authored by Dr. Kupers which were not peer reviewed; thus, this syndrome is not accepted in the professional fields of criminal justice, correctional mental health, psychology, or psychiatry. Furthermore, the constellation of symptoms reported by Dr. Kupers are consistent with symptoms inmates report when released from prison, and Dr. Kupers makes no distinction between symptoms experienced by inmates leaving prison and inmates leaving restrictive housing.

C. Mr. Pacholke.

I was not familiar with Mr. Pacholke or his work prior to conducting this review. We have never met, corresponded, or collaborated in a formal or informal manner.

I concur with Mr. Pacholke that programming that addresses underlying criminogenic needs is important in offender rehabilitation, including for inmates in segregation. I further agree that "structured and progressive levels that include privileges as an incentive for positive behavior and/or program participation" (p. 31) are important best practices in the use of segregation. Finally, I concur that "step-down programming" (p. 32) is also an aspect of best practices.

Best practices were not generally identified until after the plaintiff's time in AS. For example, Mr. Pacholke references "Reforming restrictive housing: The 2018 ASCA-Liman Nationwide

Survey of time-in-cell" report as evidence of the benefits of step-down programs. This is accurate, but this document was not published until 2018, well after the plaintiff's release from AS in 2013. Another document referenced by Mr. Pacholke, "The U.S. Department of Justice report and recommendations concerning the use of restrictive housing" (2016) makes no such recommendations regarding the implementation of rehabilitation programs. The first instance of best practices in AS of which I am aware was by Dr. Jeffrey Metzner (2015). I followed Dr. Metzner's article with additional discussion of best practices to include therapeutic and step-down programming in an article published in *Corrections Today* (Morgan et al., 2017). To the point of rehabilitation, during the time period in which the plaintiff was placed in AS, there were no commercially or publicly available segregation programs for mental health professionals working with segregated inmates. Today there remain only two relevant programs that I am aware of, and both became available in the last two years. Consequently, it is my opinion that it is unreasonable to hold the IDOC to current standards of care when those standards were published after the date of the matter in question.

CONCLUDING OPINIONS

I was asked to review the reports of two experts retained by the plaintiff in this case, given that both render a variety of opinions regarding the conditions of confinement in AS in the IDOC and the effect those conditions had on the plaintiff. I found both reviews of the scientific literature to be incomplete. Results of my study of the scientific literature on the effects of segregated housing on inmate mental health, including results of meta-analytic reviews, indicated small to moderate adverse effects across a variety of physical, psychological, and behavioral (e.g., criminal recidivism) outcomes. Importantly, the magnitude of effects resulting from AS placement are comparable in magnitude to the effects encountered by inmates experiencing incarceration as a general matter. In other words, just like in the greater prison landscape, some inmates exposed to AS will experience negative outcomes, some will experience no change in outcomes, and some will experience improved outcomes.

In reviewing expert reports produced by Dr. Kupers and Mr. Pacholke, I noted several concerns. Most significantly, with regard to Dr. Kupers conclusions and opinions, were methodological errors in his assessment procedures. Specifically, he failed to account for response and confirmation bias which potentially render the data upon which he based his clinical interpretations, conclusions, and opinions unreliable and thereby meaningless. It is also not clear that he adequately accounted for preexisting functioning in his clinical considerations. Additionally, he is referencing a syndrome, SHU Post-Release Syndrome, that has not been gust, 2004 lly accepted. Of concern with Mr. Pacholke's report is that he appears to be holding the IDOC responsible for a lack of rehabilitation programming that are currently identified as best practices, although they were not identified as such at the time of the plaintiff's placement in AS.

Based on my examination of the available information and review of plaintiff's expert reports, I offer the following opinions:

1. The literature clearly demonstrates that some inmates placed in AS experience the harms described by Dr. Kupers and Mr. Pacholke in their expert reports; however, these harms

are not universally experienced. At the population level, it can be expected that the use of restrictive housing (such as AS) will, on average, produce mild to moderate health and mental health effects comparable to the effects of incarceration as a general matter. At the individual level, some inmates placed in AS will experience negative effects, some will not experience negative effects, and some will experience improved functioning.

2. Methodological errors in Dr. Kupers' evaluation of the plaintiff's mental health functioning, and the effect of AS placement on this mental health functioning, results in conclusions and opinions that are unreliable and potentially invalid. Furthermore, the plaintiff's mental health concerns during and after his AS placement, as reported to Dr. Kupers, are inconsistent with medical records, which are void of any such reported concerns by the plaintiff both during and after the period of time in which he was in AS.

3. Mr. Pacholke is holding the IDOC to standards of practice regarding rehabilitation programming that were not commonly recognized during the time period in question (i.e., during the time period of the plaintiff's AS placement).

Dated: May 6, 2019

Respectfully Submitted,

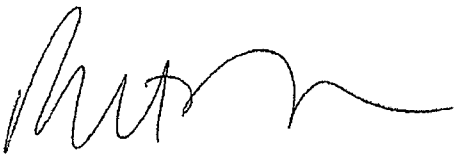


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EXHIBIT 2

Dr. Morgan Curriculum Vitae

Attachment A

Vita

ROBERT D. MORGAN
May 4, 2019

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EDUCATION

1999-2000	Postdoctoral Fellowship in Forensic Psychology, Department of Psychiatry, University of Missouri-Kansas City School of Medicine and Missouri Department of Mental Health
1998-1999	Predoctoral Internship, Federal Correctional Institution-Petersburg, VA (APA-Accredited)
Ph.D. 1999	Counseling Psychology, Oklahoma State University (APA-Accredited). Dissertation: The efficacy of an interpersonal/cognitive-behavioral group psychotherapy program with male inmates
M.S. 1993	Clinical Psychology, Fort Hays State University. Thesis: The utility of DSM-III-R decision trees in relation to diagnostic speed and accuracy
B.S. 1991	Psychology, University of Nebraska at Kearney

ACADEMIC POSITIONS/APPOINTMENTS

2015 – present	Chair, Department of Psychological Sciences, Texas Tech University
2014 – present	Director, Institute of Forensic Science, Texas Tech University
2011 – present	John G. Skelton, Jr. Regents Endowed Professor in Psychology, Texas Tech University

2011 – present	Professor, Department of Psychology, Texas Tech University
2005 – 2011	Associate Professor, Department of Psychology, Texas Tech University
May, 2005 – August, 2007	Director of Training, Counseling Psychology Doctoral Program (APA-Accredited), Department of Psychology, Texas Tech University
August, 2004 – May, 2005	Co-Director of Training, Counseling Psychology Doctoral Program (APA-Accredited), Department of Psychology, Texas Tech University
May, 2003 – August, 2004	Associate Chair of Psychology, Texas Tech University
2000 – 2005	Assistant Professor, Department of Psychology, Texas Tech University
1994	Adjunct Instructor, Butler County Community College, Kansas

PUBLICATIONS AND PRESENTATIONS

Refereed Journals

Mitchell, S. M., Brown, S. L., Roush, J. F., Bolaños, A. D., Littlefield, A. K., Marshall, A. J., Jahn, D. R., Morgan, R. D., & Cukrowicz, K. C. (in press). The clinical application of suicide risk assessment: A theory-driven approach. *Clinical Psychology & Psychotherapy.*

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Dvoskin, J. A., & Morgan, R. D. (2010). Correctional psychology. In I. Weiner, & W. E. Craighead (Eds.), *Corsini Encyclopedia of Psychology* (Vol. 1, pp. 417-420). New York: Wiley.

Community Corrections Research Guide Advisory Group (2009). *Improving outcomes for people with mental illness under community supervision.* New York: Council of State Governments Justice Center.

Morgan, R. D. (2007). Foreword [Special issue]. *Criminal Justice and Behavior, 34,* 877-878.

Conference Presentations (Last 3 Years)

Hirsch, S., Scanlon, F., Morgan, R. D. (2018). *The therapeutic alliance and program evaluations in treatment for justice-involved persons with mental illness.* Poster presented at the 4th North American Correctional Criminal Justice Psychology Conference, Halifax, Canada.

Olafsson, B. N., Scanlon, F., Morgan, R. D., (2018). *Predictors of Disciplinary Infractions in Prisons.* Paper presented at the 4th North American Correctional Criminal Justice Psychology Conference, Halifax, Canada.

Scanlon, F., Morgan, R. D. (2018). *A process evaluation of the independent effects of psychiatric and criminal therapeutic components in Changing Lives and Changing Outcomes.* Paper presented at the 4th North American Correctional Criminal Justice Psychology Conference, Halifax, Canada.

Morgan, R., Gaspar, M., Brown, A., Ramler, T., Gigax, G., Ridley, K. (2018, June). *Examining effectiveness of Changing Lives and Changing Outcomes on mental health and criminal risk domains for dual diagnosed offenders.* Paper presented at the meeting of the International Association of Forensic Mental Health Services, Antwerp, Belgium.

Van Horn, S., Morgan, R., Duru, H., Brusman-Lovins, L., Lovins, B. (2018, June). *The Effect of Changing Lives, Changing Outcomes on Community Success in a Sample of Dually-Diagnosed Felony Offenders.* Paper presented at the meeting of the International Association of Forensic Mental Health Services, Antwerp, Belgium.

Grabowski, K. E., & Morgan, R. D. (2018, March). *Competency Restoration Outcomes for Defendants with Intellectual Disability.* Presentation at 2018 American Psychology-Law Society Annual Conference, Memphis, Tennessee

Mills, J. F., Morgan, R. D., Van Horn, S. (2018, March). *Inmates' Mental Health Functioning in Prison and the Effects of Administrative Segregation.* Paper presented at the American Psychology-Law Society Conference, Memphis, Tennessee.

Olafsson, B. N., Morgan, R.D., Scanlon, F. (2018, March). *Development of a Measure to Match Inmates to Correctional and Mental Health Services: Initial Examination of Validity.* Poster presented at the annual meeting of the American Psychology-Law Society, Memphis, TN.

Ramler, T. R., Morgan, R. D., & Wang, E. W. (2018, March). *Is more always better? Treatment dosage and re-offense among offenders.* Poster session presented at the annual conference of the American Psychology-Law Society, Memphis, TN.

Mitchell, S. M., Brown, S. L., Roush, J. F., Alquist, J. L., Bolaños, A. D., Morgan, R. D., & Cukrowicz, K. C. (2018, April). Thwarted interpersonal needs and suicide ideation distress among psychiatric inpatients: The moderating effects of criminal associates. Poster presented the annual meeting of the American Association of Suicidology, Washington, D.C.

Grabowski, K. E., & Morgan, R. D. (2017, August). *Competency Restoration Outcomes for Defendants with Intellectual Disability.* Poster presented at the annual meeting of the American Psychological Association, Washington, D.C.

Morgan, R. D., Ramler, T. R., Gaspar, M., & Brown, A. (2017, August). Effectiveness of *Changing*

Lives and Changing Outcomes for dual-diagnosed offenders. Poster presented at the annual meeting of the American Psychological Association, Washington, D.C.

Olafsson, B. N., & Morgan, R. D. (2017, August). *Administrative segregation: Who is in?*. Poster presented at the annual meeting of the American Psychological Association, Washington, D.C.

Morgan, R. D., Ramler, T., Gaspar, M., Brown, A., Gigax, G., & Brusman-Lovins, L., (2017, July). *Effectiveness of Changing Lives and Changing Outcomes: A Treatment Program for Justice Involved Persons with Mental Illness*. Paper presented at the meeting of the International Academy of Law and Mental Health, Prague, Czech Republic.

Morgan, R. D., & Olafsson, B. N. (2017, July). Administrative segregation: A research synthesis and a review of who is in. Paper presented at the meeting of the International Academy of Law and Mental Health, Prague, Czech Republic.

Morgan, R. D., Lovins, B., Lovins, L., Duru, H., S. Van Horn, & Gigax, G. (2017, June). *Effectiveness of CLCO in a residential treatment facility for dual diagnosed offenders.* Poster presented at the annual meeting of the Canadian Psychological Association, Toronto, Canada.

Morgan, R. D., Olafsson, B. N., & Mills, J. F. (2017, June). *Administrative segregation: Who is in and for how long?* Paper presented at the annual meeting of the Canadian Psychological Association, Toronto, Canada

Bolaños, A. D., Morgan, R. D., Delgado, D., & Mitchell, S. M. (2017, March). Psychiatric and criminogenic risk: Comparing psychiatric inpatients to offenders who plead not guilty by reason of insanity. In Morgan, R. D. (Chair), *Criminal risk in a forensic mental health sample: Identifying prevalence, risk, and needs.* Symposium presented at the annual meeting of the American Psychology-Law Society, Seattle, WA.

Delgado, D., Mitchell, S. M., Broderick, C. & Morgan, R. D. (2017, March). Inpatient violence and criminal risk factors. In Morgan, R. D. (Chair), *Criminal risk in a forensic mental health sample: Identifying prevalence, risk, and needs.* Symposium presented at the annual meeting of the American Psychology-Law Society, Seattle, WA.

MacLean, N., Neal, T., Morgan, R. D., & Murrie, D. (2017, March). Bias and bias awareness in forensic evaluations. In Murrie, D. (Chair), *Cognitive Bias in Forensic Psychology: Clinician awareness and interventions to reduce bias*. Symposium presented at the annual meeting of the American Psychology-Law Society, Seattle, WA.

Morgan, R. D., Lovins, B., Brusman-Lovins, L., Gigax, G., Van Horn, S. A., & Duru, H. (2017, March). *Effectiveness of Changing Lives and Changing Outcomes in a residential treatment facility for dual diagnosed offenders*. Paper presented at the annual meeting of the American Psychology-Law Society, Seattle, WA.

Neal, T., MacLean, N., Murrie, D., & Morgan, R. D. (2017, March). Robust Evidence of

Confirmation Bias in Forensic Psychologists' Diagnostic Reasoning. In Neal, T. (Chair), *Confirmation Bias, Hindsight Bias, and Measuring Bias in Forensic Psychology*. Symposium presented at the annual meeting of the American Psychology-Law Society, Seattle, WA.

Delgado, D., Bolanos, A., Mitchell, S., Rose, B., McDermott, B., Velasquez, S., Bauchowitz, A., Warburton, K., & Morgan, R. (2017, March). *Criminogenic risk factors among forensic psychiatric inpatients*. Poster session presented at the Forensic Mental Health Association Conference, Monterey, CA.

McDaniel, B., Morgan, R.D. (2016, August), *The Services Matching Instrument: Preliminary Development and Anaylsis of Internal Consistency*. Poster presented at the annual meeting of the American Psychological Association, Denver, CO

Morgan, R. D., Hunter, J., Van Horn, S., & Ramler, T. R. (2016, June). Changing Lives and Changing Outcomes: A treatment program for offenders with mental illness. In R. Serin (Chair), *Refining assessment and intervention in justice involved persons with mental illness*. Symposium presented at the 2016 annual meeting of the Canadian Psychological Association, Victoria, Canada.

Bolaños, A. D., Morgan, R. D., & Mitchell, S. M. (2016, June). Psychiatric and Criminogenic Risk: Comparing Psychiatric Inpatients to Offenders who Plead Not Guilty by Reason of Insanity. In Morgan, R. D. (Chair), *Treating Justice Involved Persons with Mental Illness in Forensic, Correctional, and Community Settings*. Symposium submitted for presentation at the annual meeting of the International Association of Forensic Mental Health Services, New York, NY.

Morgan, R. D., Hunter, J., Van Horn, S. A., & Ramler, T. (2016, June). *Changing Lives and Changing Outcomes: A Treatment Program for Offenders with Mental Illness*. In Morgan, R. D. (Chair), *Treating Justice Involved Persons with Mental Illness in Forensic, Correctional, and Community Settings*. Symposium submitted for presentation at the annual meeting of the International Association of Forensic Mental Health Services, New York, NY.

Van Horn, S. A., & Morgan, R. D. (2016, June). *Engagement and Treatment Completion in a Correctional Sample*. In Morgan, R. D. (Chair), *Treating Justice Involved Persons with Mental Illness in Forensic, Correctional, and Community Settings*. Symposium submitted for presentation at the annual meeting of the International Association of Forensic Mental Health Services, New York, NY.

Van Horn, S. A., Morgan, R. D., & Wang, E. (2016, June). *Assessing Risk in Justice-Involved Women: Predictive Validity of the Criminal Sentiments Scale-Modified and the Effect of Treatment on Recidivism*. Paper presented at the annual International Association of Forensic Mental Health Conference, New York City, New York.

Bolanos, A. D., Morgan, R. D., & Mitchell, S. M. (2016, June). Psychiatric and criminogenic risk:

Comparing psychiatric inpatients to offenders who plead not guilty by reason of insanity. In R. Serin (Chair), *Refining assessment and intervention in justice involved persons with mental illness*. Symposium presented at the 2016 annual meeting of the Canadian Psychological Association, Victoria, Canada.

Morgan, R. D. (2016, June). Communicating risk information. In J. Mills (Chair), *Factors that influence the over-estimation of criminal risk.* Symposium presented at the 2016 annual meeting of the Canadian Psychological Association, Victoria, Canada.

Morgan, R. D., Hunter, J., Van Horn, S., & Ramler, T. (2016, June). Changing Lives and Changing Outcomes: A treatment program for offenders with mental illness. In R. Serin (Chair), *Refining assessment and intervention in justice involved persons with mental illness*. Symposium presented at the 2016 annual meeting of the Canadian Psychological Association, Victoria, Canada.

Mitchell, S. M., Bolaños, A. D., Brown, S. L., Roush, J. F., Morgan, R. D., & Cukrowicz, K. C. (2016, April). *Adaptive functioning and perceived burdensomeness among psychiatric inpatients.* Poster submitted for presentation presented at the annual meeting of the American Association of Suicidology, Chicago, IL.

Morgan, R. D. (2016, April). *Changing Lives and Changing Outcomes: A treatment program for offenders with mental illness*. Paper presented at the Rethinking Mass Incarceration in the South conference, Oxford, Mississippi.

Batastini, A. B., Chadick, C. D., Morgan, R. D., & Levulis, S. J. (2016, March). *The psychological impact of solitary: A longitudinal comparison of general population and long-term administratively segregated inmates.* Paper presented at the annual meeting of the American Psychology-Law Society, Atlanta, Georgia.

Grabowski, K., Morgan, R. D., & Bauer, R. (2016, March). *The relationship of criminal risk factors and psychiatric symptomatology in predicting disciplinary infractions.* Poster presented at the annual meeting of the American Psychology-Law Society, Atlanta, Georgia.

Hoeffner, C., Batastini, A. B., & Morgan, R. D. (2016, March). *Does the method of risk communication effect mock jurors' perceptions of violence?* Poster presented at the annual meeting of the American Psychology-Law Society, Atlanta, Georgia.

Van Horn, S. A., Morgan, R. D., & Ramler, T. (2016, March). *Engagement and treatment completion in a correctional sample*. Poster presented at the annual meeting of the American Psychology-Law Society, Atlanta, Georgia.

Workshops Presented

Title: *Changing Lives and Changing Outcomes: A Treatment Program for Justice Involved Persons with Mental Illness*
Two Day Training Workshop
Trainer: Robert D. Morgan
Sponsored by California Department of State Hosptials
April 10-11, 2019

Title: *Treating Justice Involved Persons with Mental Illness in Criminal Justice Settings*
One Day Training Workshop
Trainer: Robert D. Morgan
Sponsored by WellPath
February 6-8, 2019

Title: *Treating Justice Involved Persons with Mental Illness in Criminal Justice Settings*
One Day Training Workshop
Trainer: Robert D. Morgan
Sponsored by WellPath
February 6-8, 2019

Title: *Stepping Up, Stepping Out: A Mental Health Treatment Program for Inmates Detained in Restricted Housing*
One Day Training Workshop
Trainer: Robert D. Morgan & Ashley Batastini
Sponsored by Corizon Health Care
January 12, 2018

Title: *Changing Lives and Changing Outcomes: A Treatment Program for Justice Involved Individuals with Mental Illness*
Two Day Training Workshop
Trainer: Robert D. Morgan & Daryl K. Kroner
Sponsored by Harris County Felony Mental Health Court
December 15 & 16, 2016

Title: *Evidenced based correctional practice for managing and treating offenders with mental illness.*
One Day Training Workshop
Trainer: Robert D. Morgan & Jeremy F. Mills
Sponsored by Canadian Psychological Association.
June 3, 2015

Title: *Changing Lives and Changing Outcomes: A Treatment Program for Offenders with Mental Illness*
One Day Training Workshop
Trainer: Robert D. Morgan
Sponsored by Correct Care Services, Inc.

March 29, 2015

Title: *Escaping the cage: A mental health treatment program for inmates detained in restricted housing*
One Day Training Workshop
Trainer: Robert D. Morgan
Sponsored by Maine Department of Corrections
November 17, 2014, Warren, Maine

Title: *Changing Lives and Changing Outcomes: A Treatment Program for Offenders with Mental Illness*
Two day Training Workshop
Trainers: Morgan, R. D. & Kroner, D. G.
Sponsored by Harris County Community Supervision & Corrections Department
April 2014, Houston, Texas

Title: *Changing Lives and Changing Outcomes: A Treatment Program for Offenders with Mental Illness*
One day Training Workshop
Trainer: Morgan, R. D.
Sponsored by Maine Department of Corrections
February 2014, Warren, Maine

Title: *Risk, needs, and responsivity principles with offenders with mental illness*
One day Continuing Education Workshop
Trainer: Morgan, R. D.
Sponsored by Institute of Law, Psychiatry & Public Policy (University of Virginia)
January 2014, Charlottesville, Virginia

Title: *Changing Lives and Changing Outcomes: A Treatment Program for Offenders with Mental Illness*
Two day Training Workshop
Trainers: Morgan, R. D. & Kroner, D. G.
Sponsored by Forensic and Mental Health Services, Inc
September 2013, Cincinnati, Ohio

Title: *Treating persons with mental illness who are justice involved: A guide to practice*
One-half day Training Workshop
Trainer: Morgan, R. D.
Sponsored by StarCare Specialty Health System
August 2012, Lubbock, Texas

Title: *Treating Offenders with Mental Illness: An Evidenced-Based Approach*
One and one-half hour Continuing Education Workshop
Trainers: Morgan, R. D. & Kroner, D. G.

Sponsored by the 5th Academic & Health Policy Conference on Correctional Health
March 2012, Atlanta Georgia

Title: *Treating the Mentally Disordered Offender: A Model and Guide for Practice*
One day Continuing Education Workshop
Trainer: Morgan, R. D.
Sponsored by the Texas Forensic Mental Health Conference
October 2011, Vernon, Texas

Title: *Treating Offenders with Mental Illness: Toward an Evidenced-Based Approach*
One- day Pre-conference Workshop
Trainers: Morgan, R. D., Kroner, D. G., & Mills, J. F.
Sponsored by American Psychology-Law Society (Division 41; APA)
March 2011, Miami, Florida

Title: *Treating Mentally Disordered Offenders*
One-half day Pre-conference Workshop
Trainers: Morgan, R. D., Kroner, D. G., & Mills, J. F.
Sponsored by Mental Health in Corrections Consortium
April 2008, Kansas City, Missouri

Title: Texas *Criminal Procedure & Offenders with Mental Impairments: A Refresher*
One-half day Continuing Education Workshop
Trainers: Shannon, B., Gerlach, M., & Morgan, R. D.
Sponsored by the Texas Tech University Law School
December 2007, Lubbock, Texas

Title: *Assessing Criminal and Violence Risk: Theory, Ethics, and Application*
One-day Pre-conference Workshop
Trainers: Kroner, D. G., Morgan, R. D., & Mills, J. F.,
Sponsored by the North American Correctional and Criminal Justice Psychology Conference
June 2007, Ottawa, Canada

Title: *Assessing Criminal and Violence Risk: Theory, Ethics, and Application*
One-day Pre-conference Workshop
Trainers: Mills, J. F., Kroner, D. G., & Morgan, R. D.
Sponsored by Mental Health in Corrections Consortium
April 2007, Kansas City, Missouri

Title: *Assessing Criminal and Violence Risk: Theory, Ethics, and Application*
One-day Continuing Education Workshop
Trainers: Mills, J. F., Kroner, D. G., & Morgan, R. D.
Sponsored by the American Psychological Association
August 2006, New Orleans, Louisiana

Title: *Assessing Criminal and Violence Risk: Theory, Ethics, and Application*
One-day Continuing Education Workshop
Trainers: Mills, J. F., Kroner, D. G., & Morgan, R. D.
Sponsored by the Canadian Psychological Association
June 2006, Calgary, Alberta

Title: *Assessing Criminal and Violence Risk: Theory, Ethics, and Application*
One-day Pre-conference Workshop
Trainers: Mills, J. F., Kroner, D. G., & Morgan, R. D.
Sponsored by Mental Health in Corrections Consortium
May 2006, Kansas City, Missouri

Invited Addresses

Morgan, R. D. (March, 2018). Treating justice involved persons with mental illness in forensic, correctional, and community Settings. Invited address presented at University of Massachusetts Medical School, Worcester, MA.

Morgan, R. D. (January, 2018). Psychiatric symptoms and criminogenic risk among persons with mental illness who are and are not criminal justice involved. Invited address presented at Youngstown State University, Youngstown, Ohio.

Morgan, R. D. (January, 2018). Treating justice involved persons with mental illness. Invited address presented at Youngstown State University, Youngstown, Ohio.

Morgan, R. D. (April 2017). Beyond pop culture: The application of science in forensic psychology. Invited address presented at the 2017 meeting of the Southwest Psychological Association, San Antonio, Texas.

Morgan, R. D. (August, 2015). Counseling psychologists in corrections: A natural fit. Fellows address presented at the 2015 meeting of the American Psychological Association, Toronto, Canada.

Morgan, R. D. (June, 2015). Psychological assessment in correctional and forensic contexts. Keynote address presented at the Annual MMPI Symposium, Minneapolis, Minnesota.

Morgan, R. D. (April, 2015). Criminal risk factors and offenders with mental illness. Keynote address presented at the Mental Health in Corrections Consortium, Springfield, MO.

Morgan, R. D. (April, 2015). An evidenced-based approach for treating inmates with mental illness. Workshop presented at the Mental Health in Corrections Consortium, Springfield, MO.

Morgan, R. D. (April, 2014). Evidenced based correctional practice for managing and treating offenders with mental illness. Southern Illinois University, Carbondale, IL.

Morgan, R. D. (November, 2012). Treating justice involved persons with mental illness: An evidenced-based approach. Keynote address presented at the Ohio Department of Mental Health and the Northeast Ohio Medical University Forensic Focus Conference, Columbus, Ohio.

Lim, E. & Morgan, R. D. (April 2012). Insanity & other mental issues. Invited presentation at the Capital Trial Persecution for Texas district attorney's, Austin, Texas.

Morgan, R. D. (August 2010). *If not us, then whom?* Presidential address (Division 18) presented at the annual convention of the American Psychological Association, San Diego, California.

Morgan, R. D. (2010, April). Representing offenders with mental illness. Lubbock Special Needs Defenders Office. Invited presentation at a meeting of the Lubbock County Defense Association, Lubbock, Texas (1 hour CLE approved by the State Bar of Texas).

Morgan, R. D. & Gerlach, M. V. (2007, May). *Lubbock Regional MHMR Community Forensic Psychology Program.* Invited presentation at a meeting of the Lubbock County Defense Association, Lubbock, Texas.

Morgan, R. D. & Gerlach, M. V. (2007, March). *Lubbock Regional MHMR Community Forensic Psychology Program.* Invited presentation at the Texas Criminal Procedure & Offenders with Mental Impairments: CLE Training for Judges and Attorney's, Lubbock, Texas.

Morgan, R. D. (2006, June). *Treating Mentally Disordered Offenders: An Integrated Treatment Model.* Invited address at the 11th Biennial Symposium on Violence and Aggression, Saskatoon (Saskatchewan), Canada.

Morgan, R. D. (2006, May). *Ethics and Risk Assessment.* Invited address at the Northeastern Oklahoma Psychology Internship Program's Annual Conference, Tulsa, Oklahoma.

Morgan, R. D. (2003, December). *Forensic Psychology: Much More Than CSI and Silence of the Lambs.* Invited address at the annual Psychology Department Career Day, University of Nebraska at Kearney.

EXTRAMURAL FUNDING

Research Grants – Current/Pending

Windham School District
Title: Assessment, Review and Revision of the Windham School District Life Skills Curriculum
Principal Investigator
Funding Dates: January 4, 2016 – December 31, 2019
Direct Costs: $216,004
Status: Funded

Research Grants - Completed

Texas Tech University School of Law
Title: Criminal Defendants' Perceptions of Working Alliance, Trust, Procedural Fairness, and Satisfaction in Attorney-Client Pretrial Consultations: A Comparison of Videoconferencing and Face-to-Face Modalities
Co-Investigator
Funding Dates: June 1, 2012 – July 31, 2014
Direct Costs: $70,000 (estimated)

Texas Department of Criminal Justice – Community Justice Assistance Division
Lubbock Specialty Courts: Who's in and are they working?
Co-Principal Investigator
Funding Dates: September 1, 2012 – May 31, 2014
Direct Costs: $80,000

Center for Behavioral Health Services & Criminal Justice Research
Sub-recipient: 1P30MH079920 (National Institute of Mental Health Award)
Criminal Thinking in a Community Mental Health Sample: Effects on Treatment Engagement and Psychiatric Recovery
Co-Principal Investigator
Funding Dates: August 1, 2011 – July 31, 2013
Direct Costs: $88,500

Center for Behavioral Health Services & Criminal Justice Research
Sub-recipient: 1P30MH079920 (National Institute of Mental Health Award)
Piloting Changing Lives and Changing Outcomes for Offenders with Mental Illness
Principal Investigator
Funding Dates: May 1, 2009 – July 31, 2011
Direct Costs: $56,162

National Institute of Justice
2007-IJ-CX-0027
Re-entry: Dynamic Risk Assessment
Principal Investigator
Funding Dates: October 1, 2007 – September 30, 2011
Direct Cost: $185,950

JEHT Foundation
Changing Lives and Changing Outcomes: A Bi-Adaptive Intervention for Offenders with Mental Illness
Principal Investigator
Funding Dates: July 1, 2009 – June 30, 2010
Direct Costs: $60,957
Status: Funding rescinded due to foundation collapse following 2009 financial crisis

National Institute of Mental Health
R34 MH070401-01A1
Tailoring Services for Mentally Ill Offenders
Principal Investigator
Funding Dates: September 23, 2005 – June 30, 2009
Direct Costs: $292,500

University of Minnesota Press
Elaborating on the construct validity of MMPI-2-RF scales in an acute forensic and nonforensic inpatient setting
Principal Investigator
Funding Dates: August 2007 – August 2008
Direct Cost: $19,396

Institute for Forensic Sciences; Texas Tech University Health Sciences Center
Sub-recipient: 2005-IJ-CX-K016(S-1) (National Institute of Justice Award)
Inmate Characteristics and Mental Health Services: A Model for Predicting Treatment Outcome
Principal Investigator
Direct Costs: $14,011

Texas Tech University Research Enhancement Fund (REF)
Inmate Perceptions of Mental Health Services
Principal Investigator
Funding Dates: September 2001 – August 2002
Direct Costs: $2,500

Professional Service Grants – Current

Forensic and Mental Health Services, Inc (Hamilton Ohio, Butler County)
Title: Evidence based practice integrated service interventions for the justice involved client
Co-Investigator (PI: Jenny O'Donnell, Psy.D.)
Funding Dates: July 1, 2013 – June 30, 2015
Direct Cost: $278,000.00

Contracts – Current

Texas Tech University/Dr. Morgan and Lubbock – Crosby County Community Supervision and Corrections Department
Contract for provision of substance abuse and mental health services to probationers
Director and Clinical Supervisor: Robert D. Morgan
Funding Dates: September 1, 2007 – May 31, 2020
Costs: $80,000/year ($880,000 total costs)

TEACHING EXPERIENCE

Graduate

Practicum in Intelligence Testing
Advanced Counseling Practicum
Psychology and Law
Thesis and Dissertation Supervision

Undergraduate

Forensic Psychology
Abnormal Psychology
Introductory Psychology

PROFESSIONAL EXPERIENCE & POSITIONS

2018-Present Board of Directors (Appointed); National Commission on Correctional Health Care Educational Foundation

2013-Present Consultant, WellPath (formerly CorrectCare Solutions), Nashville, Tennessee
k2001-Present *Independent Practice*, Specialty: Criminal Forensic Psychology, Lubbock, TX.
2001-Present *Independent Practice*, Specialty: Criminal Forensic Psychology, Lubbock, TX.

2013-2015 Consultant, State of California, Department of Justice

2011-2017 *Appointee* (Governor Perry), Advisory Committee to the Texas Board of Criminal Justice on Offenders with Medical or Mental Impairments

2002-2012 *Director of Forensic Services* and *Director of Postdoctoral Fellowship Program in Forensic Psychology (2007-2012)*, Lubbock Regional Mental Health Mental Retardation Center. Center (Full Medical Staff Membership to Sunrise Canyon Hospital)

2008 *Consultant*, Justice Center: The Council of State Government. *Improving outcomes for people with mental illness under community supervision: A research guide for policymakers.*

2005 *Consultant*, BrianPower Inc. for the Dallas Cowboys at the National Football League Combine.

2001-2003 *Mentee*, Mentoring and Education for Health Services Research Program, Yale University and National Institute of Mental Health (NIMH).

8/97-5/98	*Intake Counselor*, University Counseling Center, Oklahoma State University.
1997	*Consultant*, Oklahoma Department of Corrections.
1995-1997	*Psychologist in Training*, Edwin Fair Community Mental Health Center, Perry, OK and Jim Thorpe Rehabilitation Hospital, Oklahoma City, OK.
1993-1995	*Mental Health Professional*, El Dorado Correctional Facility and Winfield Correctional Facility, KS.
1992	*Psychology Internship*, Psychology Department, United States Penitentiary at Leavenworth, KS.
1991-1993	*Graduate Teaching Assistant*, Department of Psychology, Fort Hays State University, KS.
1991-1992	*Psychologist in Training*, Kelly Center, Fort Hays State University, KS.

HONORS AND AWARDS

2018 Barnie E. Rushing, Jr. Faculty Distinguished Research Award, Texas Tech University
2017 Leadership in Education Award, Division 18, American Psychological Association
2014 Outstanding Researcher from College of Arts and Sciences, Texas Tech University
2007 Extramural Research Promotion Award, Texas Tech University
2007 Mary S. Cerney Student Award For Best Personality Assessment Research Paper (Jarrod S. Steffan, Robert D. Morgan, & Daryl G. Kroner)
2006 Outstanding Contribution to Science Award, Texas Psychological Association
2005 Extramural Research Promotion Award, Texas Tech University
2003 Early Career Achievement Award, Division 18, American Psychological Association

ORGANIZATIONS AND ADDITIONAL PROFESSIONAL ACTIVITIES

Memberships in Professional Associations and Licenses

American Psychological Association
Fellow, Division 17, Society of Counseling Psychology
Fellow, Division 18, Psychologists in Public Service
Member, Division 41, American Psychology-Law Society

Canadian Psychological Association

International Association for Correctional and Forensic Psychology

Licensed Psychologist, State of Texas (#31546), 2001-present

Editorial Responsibilities

Editor

2018 – present *Criminal Justice and Behavior*

Editorial Board

2005 – 2017 *Criminal Justice and Behavior*
2002 – 2013 *Psychological Services*

Ad Hoc Reviewer

Guilford Publishing House. *Assessment; Criminal Justice and Behavior; Journal of Clinical Psychology; Journal of Consulting and Clinical Psychology; Journal of Contemporary Psychotherapy; Journal of Counseling Psychology; Journal of Forensic Psychiatry and Psychology; Journal of Psychopathology and Behavioral Assessment; Professional Psychology: Research and Practice; Social Psychiatry and Psychiatric Epidemiology; The Counseling Psychologist.*

Service Activities

National Service

2005-2016 Member, American Psychology-Law Society Corrections Committee

2014 *External Reviewer*, Promotion and Tenure, University of Indiana

2014 *External Reviewer*, Promotion (Professor), University of Virginia

2013 *External Reviewer*, Promotion (Professor), Penn State Harrisburg

2010 *External Reviewer*, Promotion and Tenure, University of Saskatchewan (Canada)

2008-2011 *President-Elect, President, and Past-President*, Division 18, American Psychological Association

2006-2015 *Member*, Steering Committee, The North American Correctional and Criminal Justice Psychology Conference (NACCJPC)

2006-2011 *Member*, Mental Health in Corrections Consortium Advisory Board

2005-2007 and *Member*, Executive Committee, Division 18, American Psychological

2008-2011	Association
2005-2007	*Chair*, Criminal Justice Section, Division 18, American Psychological Association
2004-2007	*Member*, Division 17 Program Committee, American Psychological Association
2004-2006	*Administrator*, Criminal Justice Listserv, Division 18, American Psychological Association
2004	*Secretary-Treasurer*, Division 18, American Psychological Association (appointed by the division president to complete the term of the elected secretary-treasurer who was unable to complete the term due to illness)
2004	*Member*, Committee for Preparing Public Service Psychologists for Prescribing Psychotropic Medications, Division 18, American Psychological Association
2004	*Member*, Hospitality Suite Committee, Division 17, American Psychological Association
2003-2005	*Secretary*, Criminal Justice Section, Division 18, American Psychological Association
2003	*Member*, Program Committee (Student Proposals), Division 17, American Psychological Association
2002–2004	*Member-at-Large*, Section on Counseling and Psychotherapy Process and Outcome Research, Special Section of Division 17, American Psychological Association.
2002-2003	*Member*, Division 18 Program Committee, American Psychological Association
1999–2000	*Member*, New Professionals Task Force, American Psychological Association

University Service

2013-2016	*Senator*, Faculty Senate, Texas Tech University
2015	*Member*, 74.08 Committee (Allegations of Misconduct in Research, Scholarly, or Creative Activity), Texas Tech University
2010-2015	*Member*, College of Arts & Sciences Awards Committee, Texas Tech University
2011-2012	*Member*, College of Arts & Sciences STEM Committee, Texas Tech University

2005-2006	Academic Advisor, Forensic Sciences Minor, Texas Tech University
2002	*Ad Hoc Reviewer*, Research Enhancement Fund (REF) proposals, Texas Tech University
2001–2004	*Member,* Advisory Group, The International Forensic Sciences Institute of the Texas Tech University System
2001–2003 & 2004-2006	*Faculty Mentor*, McNair Scholars Program, Texas Tech University
2001	*Graduate School Representative*, Doctoral Dissertation Defense, Department of Education, Texas Tech University

Department Service

2003-2007 & 2015 – present	*Member*, Executive Committee, Texas Tech University
2015-2016	*Chair*, Department Search Committee (5 hires), Texas Tech University
2013	*Chair*, Counseling Psychology Search Committee, Texas Tech University
2011-2012 & 2013-2015	*Chair*, Research & Faculty Development Committee, Texas Tech University
2007-2011	*Member*, Research Committee, Texas Tech University
2007- 2012 & 2002-2004	*Coordinator*, Counseling Psychology Internship Applications, Texas Tech University
2009	*Member*, Student Misconduct Committee, Texas Tech University
2004	*Member*, Merit Raise Committee, Texas Tech University
2003-2004	*Member*, Clinical Psychology Search Committee, Texas Tech University
2002-2004	*Chair*, Counseling Psychology Program Admissions Committee, Texas Tech University
2002–2003	*Member*, Human Factors Search Committee, Texas Tech University
2002	*Judge*, First Annual Research Methods Poster Competition, Texas Tech University

This vita is accurate as of this date: May 4, 2019.

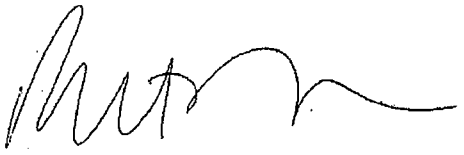

EXHIBIT 3

Dr. Morgan Report Addendum

ATTACHMENT B

TESTIMONY, PUBLICATIONS, AND COMPENSATION

List of cases Dr. Morgan has testified in over the past 4 years

Christopher Brazeau and David Kift v. Attorney General of Canada (Court File No.: CV-15-53262500-CP), Ontario Superior Court of Justice, Ontario, Canada

- Testified for the government in the class action matter of Christopher Brazeau and David Kift v. Attorney General of Canada (March 26, 2018)

State of Texas v. Rudolfo Gill (Cause No.: DCR-5301-15), 154th Judicial District Court of Lamb County, Texas

- Testified (limited) for the defense during the punishment phase before the Honorable Judge Felix Klein (September 27, 2017)

Corporation of the Canadian Civil Liberties Association and the Canadian Association of Elizabeth Fry Societies v. Her Majesty the Queen as represented by The Attorney General of Canada (Court File No.: CV-15-520661), Ontario Superior Court of Justice, Ontario, Canada

- Testified via video conference for the government in the matter of Corporation of the Canadian Civil Liberties Association and the Canadian Association of Elizabeth Fry Societies v. Her Majesty the Queen (June 23, 2017)

State of Texas v. Marcus Gonzales (Cause No.: 2015-406055), 364th District Court of Lubbock County, Texas

- Testified for the defendant during the punishment phase before the Honorable William R Eichman II (December 12, 2016)

Dunn, et al. v. Dunn, et al. (Case No.: 2:14-cv-00601-MHT-TFM), United States District Court, Middle District of Alabama, Northern Division

- Deposition testimony for the state in the class action matter of Dunn, et al., v. Dunn, et al. (September 8, 2016)

Christopher Holder v. Stacy M. Saunders et al. (Case No.: 13-CV-038-ART), United States District Court, Eastern District of Kentucky Southern Division Pikeville

- Deposition testimony for the plaintiff in the civil matter of Holder v. Saunders, et al. (September 11, 2015)

Ashker, et al. v. Governor, et al. (Case No.: C 09-05796 CW (N.D. Cal.)), United States District Court, Northern District of California, Oakland Division

- Deposition testimony for the state in the class action matter of Ashker, et al., v. Governor, et al. (May 15, 2015)

List of Dr. Morgan's publications during the past 10 years

Batastini, A. B., Morgan, R. D., Kroner, D. G., & Mills, J. F. (in press). *Stepping Up, Stepping Out: A Mental Health Treatment Program for Inmates in Restrictive Housing*. New York: Routledge Taylor & Francis Group.

Kuther, T. L., & Morgan, R. D. (in press). *Careers in Psychology: Opportunities in a Changing World* (5th ed.). Thousand Oaks, CA: Sage Publications.

Mitchell, S. M., Brown, S. L., Roush, J. F., Bolaños, A. D., Littlefield, A. K., Marshall, A. J., Jahn, D. R., Morgan, R. D., & Cukrowicz, K. C. (in press). The clinical application of suicide risk assessment: A theory-driven approach. *Clinical Psychology & Psychotherapy.*

Mitchell, S. M., Cukrowicz, K. C., Roush, J. F., Brown, S. L., Alquist, J. L., Bolaños, A. D., Morgan, R. D., & Poindexter, E. K. (in press). Thwarted interpersonal needs and suicide ideation distress among psychiatric inpatients: The moderating role criminal associates. *International Journal of Offender Therapy and Comparative Criminology.*

Morgan, R. (In press). *Encyclopedia of Criminal Psychology* (Vol. I-IV). Thousand Oaks, CA: Sage Publications.

Morgan, R. D. & Ax, R. K. (in press). Toward a theory of mental illness and crime. In S. H. Decker & K. Wright (Eds.), *Criminology and Public Policy: Putting Theory to Work.* Philadelphia, PA: Temple University Press.

Manchak, S. M. & Morgan, R. D. (in press). Offenders with mental illness in prison. In J. Wooldredge & P. Smith (Eds.), *The Oxford Handbook of Prisons and Imprisonment.* New York, NY: Oxford.

Morgan, R. D., Bolanos, A. D., & Grabowski, K. (in press). Forensic mental health in corrections. In R. Roesch & Cook, A. N. (Eds.), *Handbook of Forensic Mental Health Services*. New York, NY: Routledge.

Morgan, R. D., Van Horn, S. A., & Dvoskin, J. A. (in press). Correctional settings and prisoner's rights. In R. Frierson & L. H. Gold (Eds.) *Textbook of Forensic Psychiatry, 3rd edition.* Arlington, VA: American Psychiatric Publishing.

Morgan, R. D., Van Horn, S. A., MacLean, N., Hunter, J. T., & Bauer, R. L. (in press). Effects of imprisonment. In D. Polaschek, A. Day, & C. Hollin (Eds.), *The handbook of psychology and corrections*. Hoboken: John Wiley & Sons.

Walters, G., & Morgan, R. D. (in press). Assessing Criminal Thought Content: Preliminary Validation of the Criminal Thought Content Inventory (CTCI). *Psychology, Crime and Law.*

Walters, G., Morgan, R. D., & Scanlon, F. (in press). The moderating effect of criminal thinking on certainty of apprehension in decisions to engage in antisocial behavior: Replication and extension. *Journal of Forensic Sciences.*

Van Horn, S. A., Morgan, R. D., Brusman-Lovins, L., Littlefield, A., Hunter, J. T., & Gigax, G.

(in press). *Changing Lives, Changing Outcomes*: "What works" in an intervention for justice-involved persons with mental illness. *Psychological Services*.

Bartholomew, N. R., Morgan, R. D., Mitchell, S. M., & Van Horn, S. (2018). Criminal thinking, psychiatric symptoms, and recovery attitudes among community mental health patients: An examination of program placement. *Criminal Justice and Behavior*, *45*, 195–213. doi:10.1177/0093854817734007

Batastini, A. B., Hoeffner, C. E., Vitacco, M. J., Morgan, R. D., Coaker, L. C., & Lester, M. E. (2018). Does the format of the message effect what is heard? A two-part study on the communication of violence risk assessment data. *Journal of Forensic Psychology: Research and Practice*, 19, 44-71. doi: 10.1080/24732850.2018.1538474

Chadick, C. D., Batastini, A. B., Levulis, S. J., & Morgan, R. D. (2018). The psychological impact of solitary: A longitudinal comparison of general population and long-term administratively segregated male inmates. *Legal and Criminological Psychology, 23*, 101-116.

Mitchell, S. M., Brown, S. L., Bolaños, A. D., Rose, B., Delgado, D., Morgan, R. D., Velasquez, S. & Cukrowicz, K. C. (2018). Psychiatric symptoms, criminal risk, and suicidal ideation and attempts among not guilty by reason of insanity state hospital inpatients. *Psychological Services, 15*, 340-348. doi:10.1037/ser0000209

Mitchell, S. M., Brown, S. L., Roush, J. F., Bolaños, A. D., Morgan, R. D., & Cukrowicz, K. C. (2018). Do criminal associates impact psychiatric inpatients' social support and interpersonal needs? *Death Studies*. Advance online publication. doi:10.1080/07481187.2018.1493003

Morgan, R. D., Kroner, D. G., & Mills, J. F. (2018). *A treatment program for justice involved persons with mental illness: Changing Lives and Changing Outcomes*. Routledge Taylor & Francis Group.

Morgan, R. D., Kroner, D. G., & Mills, J. F. (2018). *A workbook for justice involved persons with mental illness: Changing Lives and Changing Outcomes*. Routledge Taylor & Francis Group

Batastini, A. B., Bolaños, A. B., Morgan, R. D., & Mitchell, S. M. (2017). Bias in hiring applicants with mental illness and criminal justice involvement: A follow-up study with employers. *Criminal Justice and Behavior, 44,* 777-795.

Mitchell, S. M., Bartholomew, N. R., Morgan, R. D., & Cukrowicz, K. C. (2017). A preliminary investigation of the Psychological Inventory of Criminal Thinking - Layperson Edition - Short Form. *Criminal Justice and Behavior, 44,* 756-769.

Morgan, R. D., Labrecque, R. M., Gendreau, P., Ramler, T. R., & Olafsson, B. (2017). Questioning solitary confinement: Is administrative segregation as bad as alleged? *Corrections Today, 79,* 18-22.

Whited, W. H., Wagar, L. B., Mandracchia, J. T., & Morgan, R. D. (2017). Partners or partners in crime? The relationship between criminal associates and criminogenic thinking. *The International Journal of Offender Therapy and Comparative Criminology, 61,* 491-507.

Batastini, A. B., King, C. M., Morgan, R. D. & McDaniel, B. (2016). Telepsychological services with criminal justice and substance abuse clients: A systematic review and meta-analysis. *Psychological Services, 13,* 20-30.

Batastini, A. B. & Morgan, R. D. (2016). Connecting the disconnected: Preliminary results and lessons learned from a telepsychology initiative with special management inmates. *Psychological Services, 13,* 283-291. doi: 10.1037/ser0000078

McDonald, B. R., Morgan, R. D., Metz, P. (2016). The attorney-client working relationship: A comparison of in-person versus videoconferencing modalities. *Psychology, Public Policy, and Law, 22,* 200-210.

Morgan, R. D., Gendreau, P., Smith, P.., Gray, A. L., Labrecque, R. M., MacLean, N., Van Horn, S. A., Bolanos, A. D., Batastini, A. B., & Mills, J. F. (2016). Quantitative syntheses of the effects of administrative segregation on inmates' well-being. *Psychology, Public Policy, and Law, 22,* 439-461. http://dx.doi. org/10.1037/law0000089

Morgan, R. D., Mitchell, S. M., Thoen, M. A., Campion, K., Bolanos, A. D., Sustaita, M. A., & Henderson, S. (2016). Specialty courts: Who's in and are they working. *Psychological Services, 13,* 246-253.

Bartholomew, N. R. & Morgan, R. D. (2015). Co-morbid mental illness and criminalness: Implications for housing and treatment. *CNS Spectrums, 20,* 231-240.

Morgan, R. D., Batastini, A. B., Murray, D. D., Serna, C., & Porras, C. (2015). Criminal thinking: A fixed or fluid process? *Criminal Justice and Behavior, 42,* 1045-1065.

Batastini, A. B., Bolanos, A. D., & Morgan, R. D (2014). Attitudes toward hiring applicants with mental illness and criminal justice involvement: The impact of education and experience. *International Journal of Law and Psychiatry 37,* 524-533.

Kroner, D. G., & Morgan, R. D. (2014). An overview of strategies for the assessment and treatment of criminal thinking. In R. C. Tafrate & D. Mitchell (Eds.), *Forensic CBT: A Handbook for Clinical Practice*. Hoboken, NJ: Wiley-Blackwell.

Morgan, R. D., Kroner, D. G., Mills, J. F., & Batastini, A. B. (2014). Treating criminal offenders. In I. B.Weiner & R. K. Otto (Eds.) *Handbook of Forensic Psychology* (pp. 795-837). Hoboken, NJ: John Wiley & Sons.

Morgan, R. D., Romani, C. J., & Gross, N. G. (2014). Group work with offenders and mandated clients. In J. L. DeLucia-Waack, C. Kalodner, & M. Riva (Eds.), *The Handbook of Group Counseling and Psychotherapy* (pp. 441-449). Thousand Oaks, CA: Sage Publications.

Morgan, R. D., Kroner, D. G., Mills, J. F., Bauer, R., & Serna, C. (2014). Treating justice involved persons with mental illness: Preliminary evaluation of a comprehensive treatment program. *Criminal Justice and Behavior, 41,* 902-916.

Wilson, A. B., Farkas, K., Ishler, K., Gearhart, M. Morgan, R. D., & Ashe, M. (2014). Criminal thinking styles among people with serious mental illness in jail. *Law and Human Behavior, 38,* 592-601.

Batastini, A. B., McDonald, B., & Morgan, R. D. (2013). Videoteleconferencing in forensic and correctional practice. In K. Myers & C. Turvey (Eds.) *Telemental Health: Clinical, Technical and Administrative Foundations for Evidence-Based Practice* (pp, 251-271). Kidlington, United Kingdom: Elsevier.

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Compensation

Dr. Morgan's compensation for this work was $285.00/hourly.

ATTACHMENT C

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EXHIBIT 4

Dr. Morgan Deposition Excerpts

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF INDIANA

JAY VERMILLION,
Plaintiff,
VS. Case No. 1:15-CV-0605-RLY-TAB
MARK LEVENHAGEN, et al,
Defendants.

****

ORAL AND VIDEOTAPED DEPOSITION OF DR. ROBERT MORGAN

May 21, 2019

****

ORAL AND VIDEOTAPED DEPOSITION of DR. ROBERT MORGAN, produced as a witness at the instance of the PLAINTIFF, and duly sworn, was taken in the above-styled and numbered cause on the 21st day of May, 2019 from 9:31 a.m. to 4:23 p.m. at the Overton Hotel and Conference Center, 2322 Mac Davis Lane, Lubbock, Texas, 79401, before JAMIE JACKSON, CSR in and for the State of Texas, reported by machine shorthand, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto.

the State had failed to represent me, so there was a -- I don't know what it's called.

Q. A default judgment?

A. A default judgment. So I wrote back and said, "I didn't know about this." I was a member, and they took care of it. And I don't -- I never heard anything else by way of outcome.

Q. Do you know anything about the substance of that complaint?

A. Yes. It was in regard to the practice of the segregation review board in a segregation unit. And as the mental health professional assigned to that unit, I was by default a member of the segregation review board. So it named the segregation review board, plus the warden, I believe, of the facility, and I was named with everybody else on the review board.

Q. Got it. Thank you.

A. Uh-huh.

Q. Have you ever been named in any lawsuit other than the case that you were just describing?

A. No, I have not.

Q. And Dr. Morgan, I understand that you are a Professor of Psychology at Texas Tech here in Lubbock; is that right?

A. That's correct.

Q. And if we look at the first page of your CV, you have a heading for Education. And if I understand this correctly, you have three degrees; is that right?

A. Yes.

Q. An undergraduate degree, a master's degree in Clinical Psychology, and a doctoral degree in Counseling Psychology, correct?

A. Yes, that's correct.

Q. Dr. Morgan, you are not a medical doctor, meaning you didn't go through medical training, right?

A. No, I did not.

Q. And you received your doctoral degree in Counseling Psychology from Oklahoma State University; is that correct?

A. Yes, it is.

Q. Can you explain for me, a lay person, the difference between Counseling Psychology and Clinical Psychology, please?

A. Yes. The differences are really theoretical by way of approach to one's work. The outcome is by way of what somebody will do with a clinical and counseling PhD are essentially the same. I've contributed to research on that. There's a body of literature to that. We do the same things, we do psychological assessments, we provide psychotherapy, do crisis interventions,

Position/Appointments section of your CV, it looks to me like your first academic position came after you received your master's degree when you were teaching at a Junior College in Kansas; is that correct?

A. Yes. I taught one semester of Introductory Psychology course.

Q. And then after you finished your post-doc, you started at Texas Tech; is that right?

A. That's correct.

Q. And so all of these academic positions from about 2000 forward will be here at Texas Tech?

A. Yes, that's correct.

Q. And then the next heading of your CV is Publications and Presentations. Do you see that?

A. Yes, I do.

Q. And that is further subdivided and begins with a section on Refereed Journals. Does the term "Refereed Journals" refer to peer review journals?

A. Yes, it does.

Q. And does that mean that a piece is accepted for -- when a piece is accepted for publication it has to be subjected to peer review by others in the field?

A. Correct.

Q. And I've counted here you have a number of peer review publications. My count is 82. Does that sound

about right?
A. That sounds about right.
Q. And these are listed in reverse chronological order by publication date; is that right?
A. Yes.
Q. And if we look at the third page of your CV, I see one article with a lead author Chadick entitled "The psychological impact of solitary: A longitudinal comparison of general population and long-term administratively segregated male inmates," and that has a 2018 publication date. Is that one of the articles that you've cited in your opinions in this case?
A. Yes, I did.
Q. And also seen on page 3, I see a 2017 piece where you are the lead author, and it appeared in Corrections Today, "Questioning solitary confinement: Is administrative segregation as bad as alleged;" is that right?
A. Yes.
Q. And Dr. Morgan, is Corrections Today the magazine of the American Corrections Association?
A. Yes.
Q. And so as I understand it then, the peer review process would involve other correctional professionals; is that right?

A. Yes.

Q. This isn't a peer review process where that article was subjected to peer review by other research psychologists, right?

A. No, other professionals in the field, not necessarily psychologists.

Q. And the circulation of this magazine would be primarily to correctional administrators and officials; is that right?

A. It would include that -- that group, but other folks might access or subscribe to the journal as well.

Q. Are you a member of the ACA?

A. I am not.

Q. And this piece, as I understood it, essentially described the results of your 2016 meta-analysis; is that right?

A. That was one piece -- component of it.

Q. What were the other components?

A. Following up on an article by Dr. Metzer to outline best practices for mental health services in segregation.

Q. Is Dr. Metzer the same Dr. Metzer who was involved in the Colorado study from 2010?

A. Yes, he was.

(EXPERT EXHIBIT NO. 2 MARKED.)

no, I don't market it.

Q. Do you know if correctional mental health professionals receive the Corrections Today magazine?

A. I don't know if they do or don't.

Q. Do you?

A. I do not. I look at it -- if I can elaborate?

Q. Yes, please.

A. I look at it on occasion online to look at the table of contents, but I don't -- I don't subscribe to the journal.

Q. Dr. Morgan, looking at page 4 of your CV staying under the Peer Reviewed Publications, I see the third listing from the top is "Quantitative synthesis of the effects of administrative segregation on inmates while being published in psychology, public, policy and law." And would this be your 2016 meta-analysis study?

A. Yes, that's correct.

Q. Are there any other peer reviewed publications regarding administrative segregation in your CV?

A. No.

Q. The next section of your CV starting on page 9 is "Books," correct?

A. Yes.

Q. And I've counted here 11 books that you have published. The first one is listed as the "Stepping Up,

A. No.
Q. -- besides those three?
"Invited addresses," do any of your invited addresses that you've listed here pertain to segregation in prisons?
A. No.
Q. And then if we turn to page 21 of your CV, you've listed research funding, right?
A. Correct.
Q. Did any of these research grants pertain to studying segregation in prison?
A. No.
Q. Have you ever applied for funding to perform studies on segregation in prisons and been denied funding?
A. Yes.
Q. Can you please describe that grant application to me, please?
A. Yeah, there's been a few. They were all centered around the same issue, trying to further understand and further assess mental health effects, health effects as well, that result from the use of segregation.
Q. What funding sources did you apply to?
A. National Institute of Justice.
Q. And is that the research arm of the Department of

Justice?

A. Yes.

Q. Did you apply for funding from NIJ to do the Kansas longitudinal study that we were talking about?

A. The published?

Q. (Nodding head.)

A. No.

Q. Did you apply to NIJ to do the meta-analyses?

A. No.

Q. Can you describe the research that you proposed to NIJ in a little bit more detail? For example, was there a specific prison system that you planned to study?

A. I submitted a couple of different applications, and it was a longitudinal study to follow people over time. One was proposed to be completed in Kansas. I might have had a couple that were proposed for Kansas. I can't remember if they were outside of Kansas or just Kansas.

Q. And when did you -- when was the latest decision that you received indicating that the NIJ wouldn't be able to fund the research?

A. On the issue of segregation?

Q. Yes, please.

A. I believe my last proposal for that was 2017.

Q. And were you informed of the reasons why they decided they couldn't fund your grant application?

A. Yes.

Q. And what were those reasons?

A. I would have to look at the reviews. I submit a number of grants. I don't -- I don't recall. In a general sense, I know there were some methodological concerns. Beyond that, I don't recall the specifics of concerns that were raised.

Q. Is there a peer review process when you submit a grant for funding from the NIJ?

A. Yes.

Q. And so the decision not to fund would come after the proposal had been reviewed by a group of peers?

A. Correct.

Q. Were the longitudinal studies that you proposed doing reliant on self-scoring instruments?

A. That would have been part of it, yes.

Q. And were they generally proposed studies to look at control groups in prison over time to assess the effect of segregation?

A. Yes.

Q. If I could draw your attention to the contract section of your CV on page 23, it looks to me that you have a contract with the Crosby County Community

Supervision and Corrections Department to provide substance abuse and mental health services to Crosby County probationers?

A. Yes.

Q. And is that a contract that you supervise your students in administering those services?

A. Yes.

Q. And the services are being provided to folks who are out in the community, correct?

A. Two -- there's two settings. One is a regular probation office, so the clients are seen in the community. The other is a residential treatment facility, so the services are provided while they're in that placement.

Q. None of the services are provided to people in segregation in prison, right?

A. Correct.

Q. If we turn to "Professional Experience and Positions" section of your CV, Dr. Morgan, beginning on page 24. I see here that last year, you were appointed to the Board of Directions (sic.) for the National Commission on Correctional Health Care Educational Foundation. Can you describe what the National Commission on Correctional Health Care is?

A. Yes. And actually there's a typo. That should

say 2019. That appointment was just in the last six weeks or so.

The National Commission on Correctional Health Care provides training and resources to individuals involved in correctional healthcare, broadly speaking, to include mental health. That's the primary mission.

Q. Would you agree that it's the preeminent organization for mental healthcare professionals working in corrections?

A. Say that one more time?

MS. FILLER: Could you repeat it back?

COURT REPORTER: "Would you agree that it's the preeminent organization for mental healthcare professionals working in corrections?"

THE WITNESS: I wouldn't disagree with that.

Q. (BY MS. FILLER:) Is there another organization that is also an organization of mental health professionals working in the correction setting?

A. Not -- not at the scale of NCCHC, but a psychiatric -- the American Psychiatric Association, the American Psychological Association certainly provides resources, education, legal assistance, things of that nature. But that's -- that's a broader scope for those organizations. So if you're looking just specifically

at individuals providing health and mental healthcare, again, I wouldn't disagree that NCCHC is the preeminent body.

Q. And what is the Education Foundation?

A. That is a foundation that is just being developed, and they've just appointed the board of directors. Well, actually I don't know if they've appointed everybody. I know they appointed me to the board of directors. The president called and asked if I would serve and appointed me. So it's going to be a group -- a foundation that furthers the educational mission of NCCHC.

Q. And I see that since 2013 you've been a consultant for WellPath, which, as you said, is formerly Correct Care Solutions, in Nashville, Tennessee. Is that the headquarters of WellPath, Nashville?

A. Yes.

Q. And what is the nature of your contract with WellPath?

A. In 2013 when it was Correct Care, I was again assisting them, as I mentioned earlier, with reviewing mental health services in segregation in Kansas. Post that, it's been mainly providing training services to their employers -- or employees.

Q. And which state systems have you provided those

services to?

A. Maine and Massachusetts?

Q. And I see you were also at one time from 2013 to 2015 a consultant with the State of California Department of Justice. Was that in relation to the lawsuit regarding Pelican Bay?

A. Yes, it was.

MS. FILLER: Let's take a five-minute break.

THE WITNESS: Okay.

VIDEOGRAPHER: We're now off the record at 10:28.

(Break.)

VIDEOGRAPHER: We're now back on record at 10:34.

THE WITNESS: May I revisit one of our previous questions --

Q. (BY MS. FILLER:) Yes.

A. -- regarding authors of entries regarding segregation in the Encyclopedia?

Q. Uh-huh.

A. I believe one was written by Dr. Paul Chandrow (phon.). I believe one was written by Dr. Jeremy Mills. I submitted one. And I believe there were maybe one or two other entries, but I don't recall who authored those.

Q. How about Craig Haney, did he submit anything regarding segregation?

A. No.

VIDEOGRAPHER: Do you have your mike on?

MS. FILLER: I do not.

Q. (BY MS. FILLER:) I didn't have my mike on for that question, so I'll repeat it. Did Dr. Craig Haney submit any of the entries regarding segregation to your Encyclopedia?

A. No, he did not.

Q. Did you ask him to do so?

A. Not on segregation. I asked him on at least one other entry, but not on segregation.

Q. What entry was that?

A. Death penalty.

Q. Thank you for that clarification. Dr. Morgan, if we could look at the professional experience and position section of your CV again, staying on page 24, you have listed here that from 2001 to the present you've had your own practice doing Criminal Forensic Psychology here in Lubbock, Texas; is that right?

A. Yes.

Q. Is that primarily competency exams for criminal defendants?

A. It would include competency exams, criminal

responsibility and criminal risk.

Q. All pertaining to criminal cases, correct?

A. Correct.

Q. And that work in your private practice doing Criminal Forensic Psychology does not include assessing the effects of solitary confinement or segregation, correct?

A. Well, that would include my work on the various cases that I've been an expert in.

Q. So when you list your crim -- your Criminal Forensic Psychology practice, you're listing the work you've done on behalf of criminal defendants, as well as the work you've done in cases such as this one?

A. Correct.

Q. How many hours per week do you devote to your private forensic practice evaluating criminal defendants?

A. It varies, but I've reduced that aspect of my correctional practice. I would say now on average two to three hours a week, but I don't have cases every week. So it's a matter of taking -- I'll take six to ten cases a year. So I would say it averages out to two to three hours per week.

Q. When did you begin reducing that aspect of your practice?

A. In 2012 when I left -- I left Regional Mental Health and Mental Retardation, now known as Starcare, when I left that agency, I significantly reduced my number of hours per week.

Q. And I see where that's listed here in your CV that from 2002 to 2012 you were the Director of Forensic Services and the Director of Post-doctoral Fellowship Program in Forensic Psychology at the Lubbock Regional Mental Health Mental Retardation Center.

A. Correct.

Q. And what was that center?

A. That's the local community health provider.

Q. And I can't help but notice that in 2005 you were a consultant for the Dallas Cowboys?

A. I was a consultant for Brain Power, which was a private company providing services for the Dallas Cowboys at the NFL Combine.

Q. That's very cool.

A. It's a -- that's a cool item to have on the vitae.

Q. Was that Sports Psychology, or what was the nature of your work there?

A. Yes. I signed a non-disclosure agreement, but in a general sense, it was trying to help identify good fit for NFL prospects.

Q. So let's talk specifically about your work inside of prisons. I understand that after you received your undergraduate degree you took a psychology internship at a federal prison in Leavenworth; is that right?

A. That was during my master's program. That was the first summer actually of my master's program.

Q. Hence, your description of it as an internship?

A. Correct.

Q. And so were you working under the supervision of a psychologist at that time?

A. Yes.

Q. And did your work at the federal prison in Leavenworth, Kansas involve working with people in segregation?

A. No.

Q. Then after you received your master's degree but before receiving your doctorate, you started working as a mental health professional in two state prisons in Kansas; is that right?

A. Yes.

Q. And I notice that you referred to the position as "Mental Health Professional" as opposed to "Psychologist." Is there a reason for that distinction?

A. Yes, two. Mental Health Professional was the professional title that we all had. And when I say "we

all," I mean my colleagues who were hired to provide mental health services. "Psychologist" is a protected term, and I wasn't licensed in the State of Kansas at the master's or doctoral level, so I couldn't call myself a psychologist. And the professional term title -- the professional title was Mental Health Professional.

Q. And I understand that states sometimes give waivers to their licensure requirements for people who work in prisons?

A. Yes.

Q. Was that -- was there a waiver for you to do the work of a psychologist but without the licensure?

A. That's correct. The work of a master's level psychologist in Kansas at the time was called RMLP, Registered Master's Level Psychologist. I was allowed to work at that level without pursuing the actual licensure.

Q. And did you begin at El Dorado prison?

A. Yes, El Dorado.

Q. El Dorado?

A. Yes.

Q. Not an obvious pronunciation.

A. No.

Q. How long did you work there?

A. I worked for the department for two years. I was at El Dorado all total approximately one and a half years.

Q. And was that from 1992 to 1993 period?

A. Yes. I was at El Dorado for about a year and roughly two months, and then I was transferred to Winfield Correctional Facility. And prior to leaving for a return to school to go for my PhD, they were going to need to replace me at Winfield Correctional Facility, and I asked to go back to El Dorado to finish out my time.

Q. Staying with El Dorado for a moment, did you work with a prison population in segregation?

A. Yes, I did.

Q. And what was your role?

A. I was the designated mental health professional for one of the two segregation units.

Q. At that time, were you aware of any risks to segregation -- any risks of segregation to prisoners' mental health?

A. Yes.

Q. What were the risks that you were aware of at that time?

A. That -- that placing an inmate in segregation could -- could contribute to deterioration in mental

health functioning.

Q. Did you serve on the segregation review board at El Dorado?

A. I did.

Q. You mentioned that at the earlier -- at the start of our deposition?

A. Yes.

Q. What was your role on the segregation review board?

A. My role was to assess mental health functioning and provide information to the review board with regard to an inmate's mental health functioning while placed in segregation. The review board could then use that information in decision-making.

Q. Why was there a mental health perspective included in the segregation review board's work?

A. That was policy.

Q. Do you agree with that policy?

A. Yes.

Q. And why, in your opinion, is that important?

A. Because placing somebody in segregation presents risk for mental health decompensation.

Q. And so if there's evidence of mental health decompensation, you want to be able to present that to the segregation review board?

MR. DICKMEYER: Objection. Form.

Q. (BY MS. FILLER:) Is that fair?

A. Yes, that's fair.

Q. So that they can make a decision to transfer that person out of segregation or provide additional mental health services, whatever the need may be?

MR. DICKMEYER: Objection. Form.

THE WITNESS: Yes, there would be -- there would be a -- it would be to identify what -- what interventions would be most appropriate and helpful for the inmate.

Q. (BY MS. FILLER:) Would one of those interventions possibly be transfer out of segregation?

A. Yes.

Q. How often did the segregation review board meet?

A. Every 30 days.

Q. Was it every 30 days for --

A. I'm sorry, inmates were reviewed, I believe, every 30 days. The board met -- I think we met every week.

Q. That was precisely my followup question, so thank you for the clarification.

A. Yes.

Q. And did the prisoner appear before the segregation review board?

A. That was their option. They were presented the opportunity. Some came and some did not.

Q. What was the average stay of prisoners in segregation at the El Dorado facility when you were there?

A. There were two different units, one was what we referred to as the short-term unit, and the other was the long-term. Those weren't the official designations. Those were -- that was our language, and the time different at both.

Q. Could you give me the average stay for the short-term unit?

A. That included both disciplinary, administrative segregation. The disciplinary segregation, the average length of stay would have been relatively short, 30 to 60 days. The longer term, the admin segregation would have been, I'd say, an average of a year.

Q. And how about the long-term unit?

A. That was -- that was substantially longer. I would estimate an average of two to three years.

Q. Are you aware of any changes in El Dorado's use of segregation since you were there in 1992 to 1993?

A. Yes.

Q. And what are those changes?

A. They had made some changes prior to the

consultation work I did with Correct Care in 2013. They had implemented group therapy. They were working to reduce the segregation population. They had changed the structure of El Dorado as a facility with the priority or emphasis on reducing segregation. I don't know of any changes in policy.

Q. Do you agree that the El Dorado facility and the Kansas Department of Corrections was attempting to limit their reliance on segregation?

A. They were when I was contracting with Correct Care in 2013.

Q. Going back to the 1992 to 1993 period when you were working there, what percentage of the prisoners in the units you worked with had a serious mental illness?

A. I would estimate 20 to 30 percent.

Q. And how many suicides occurred in segregation during your tenure there?

A. None.

Q. And did you work in the short and long-term segregation units or just one of those?

A. I was the primary mental health person, professional, designated to the short-term. I provided backup coverage in the long-term.

Q. How often were you actually working in the long-term segregation unit?

A. Not that often. I would say a few times a year.

Q. And --

A. No, it would be a little bit more than that. I don't know. I would say eight to ten times a year.

Q. And you mentioned that you also worked at the Winfield Prison in Kansas, but for roughly six months; is that right?

A. Correct.

Q. And did you do any work with the population in segregation when you were at Winfield?

A. Yes.

Q. And what was the average length of stay for that segregation population?

A. Two to three days.

Q. And I understand you also completed a predoctoral internship in Correctional Psychology at FCI Petersburg; is that right?

A. Yes.

Q. So that would have been while you were in pursuit of your doctoral degree?

A. Yes. It was an academic requirement to complete a year long full-time APA, American Psychological Association, accredited internship.

Q. And was that -- was it from 1998 to 1999 roughly?

A. Yes.

Q. And what was the nature of your work during that internship?

A. I served three different rotations and a one-day out placement. The one-day out placement was at a forensic hospital, a secure forensic hospital. So I would assist on competency to stand trial evaluations, treatment of people acquitted of -- by way of not guilty by reason of insanity, things of that nature.

The three rotations I did inside the institution was a general correctional mental health rotation, a forensic rotation where we provided competency and again criminal responsibility evaluations for federal courts. As part of that rotation, and that was a four-month rotation, I also provided services to inmates in segregation.

And then my third rotation was a substance abuse treatment rotation. And as part of that rotation, I also provided services -- FCI Petersburg was a medium secure facility. They had a minimum security camp. And as part of the substance abuse rotation, I would provide certain -- general mental health services out in the minimum security camp.

Q. Did the minimum security camp have a segregation unit?

A. No, it did not.

Q. How long was the rotation during which you provided some treatment to prisoners in segregation?

A. Four months.

Q. And were you exclusively working in the segregation unit during those four months?

A. No.

Q. How many days per week did you spend in the segregation unit?

A. Probably one. There would be times where it would be more, but on average one.

Q. And what was the nature of the work that you did with the prisoners in segregation?

A. Mental health rounds and crisis intervention.

MS. FILLER: Let's take a quick five-minute break.

THE WITNESS: Okay.

VIDEOGRAPHER: We're now off the record at 10:55.

(Break.)

VIDEOGRAPHER: We're back on the record at 11:04.

Q. (BY MS. FILLER:) Dr. Morgan, right before the break, we were talking about your time working in the federal prison in Virginia as an intern during your doctoral studies, right?

A. Yes.

Q. And you described as part of one of your rotations performing some mental health rounds in a segregation unit; is that right?

A. Yes.

Q. And did you perform rounds on everyone in the segregation unit or only those prisoners who were already on a mental health caseload?

A. No, when I did rounds, it was for everybody in the segregation unit.

Q. And was the goal of those rounds to identify prisoners who were deteriorating in segregation conditions?

A. It was to identify inmates that might be deteriorating, but also if they just had any general mental health needs that were going unmet or unattended to.

Q. So as I understand it, your work working in segregation units in prison was in Kansas between 1992 and 1993 and in a federal prison in Virginia for a rotation between 1998 and 1999; is that right?

A. That -- yes, that's correct, and then consulting with Correct Care in 2013. And then as part of my practice here when I do forensic mental health evaluations, many times they're at the jails and many

be evaluating inmates that were awaiting trial a couple of years, and a significant portion, if not all of that, might have been in segregation. Segregation in jail for a couple of years would be longer than some folks in prisons. It would be comparable to some inmates in prisons, and it would be shorter than many inmates serving segregation time in prisons.

Yeah, usually in my forensic mental health work, if an inmate was in segregation they'd been there for a bit of time.

Q. And did that forensic mental health evaluation involve assessing the effect of segregation on their mental health?

A. They were forensic mental health evaluations for purposes of a legal matter. It would include an assessment of mental health functioning, but not specific to the issue of segregation.

Q. And what we've just covered in terms of your work in prison facilities, is that the prison experience that you are relying on in giving opinions in this case?

A. Actually no, I'm missing a couple of key experiences. My work on matters such as this. So touring and meeting with inmates in Pelican Bay State Prison, touring facilities in Alabama, touring facilities in Canada, also interviewing inmates in

Canada. Those experiences as well.

Q. Let's talk about some of those cases then.

A. Sure.

Q. If you turn to Attachment B of your CV, I see that you've listed cases where you've testified over the past four years?

A. Yes.

Q. And several of these appear to pertain to competency evaluations, such as we were discussing. So State of Texas versus Rudolfo Gill and State of Texas versus Marcus Gonzales; is that right?

A. Correct.

Q. And I see a couple of cases here from Canada, the first matter Christopher Brazo?

A. Brazeau.

Q. Brazeau. And the third listing, Corporation of the Canadian Civil Liberties Association. Were those both cases from Canada?

A. Yes, that's correct.

Q. So looking at the Brazeau Case, what was your involvement in that matter?

A. I was retained to give expert opinion on the issue of effects of segregation in a class action. Yeah.

Q. Did your assignment in that case change over

right?

A. Correct.

Q. It goes onto say that, nevertheless, you were extensively cross-examined on this work and heavily critiqued by Drs. Grassian and Haney for your review article. Do you recall being questioned about the meta-analysis as part of this case?

A. Yes, I do.

Q. And do you recall the critiques from Drs. Grassian and Haney?

A. Yes.

Q. And then in the next paragraph, 182, the court says, "Essentially, I do not give much weight to Dr. Morgan's meta-analysis conclusions." Were you aware of the court's view of your meta-analysis?

A. I was aware of that.

Q. Do you know why the court decided not to give much weight to your meta-analysis in this Brazeau Case?

A. I do not.

Q. And if you could flip ahead to page 53, which is Bates labeled Vermillion 4422?

A. I'm there.

Q. Okay. This section describes another expert for the defense, a Dr. Glancy. Do you -- are you familiar with the work of Dr. Glancy?

the effects of segregation and to review the expert reports of Dr. Kupers and Mr. Pacholke and provide any expert opinions in relation to those reports.

Q. Did your assignment change at any point?

A. No, it did not.

Q. And what methodology did you use to come to the conclusions expressed in your report?

A. Oh, a review of the literature, a review of all of the documents provided to me, an analysis of those documents, and that was pretty much it. An analysis -- let me, I guess -- an analysis of those documents in relation to my experience as well.

Q. And as I understand it, you didn't go to the great State of Indiana in connection with this case?

A. No.

Q. You did not go to any Indiana prisons?

A. I did not.

Q. Have you ever been inside of an Indiana prison?

A. I have not.

Q. And you did not interview any Indiana correctional staff?

A. I did not.

Q. Did not interview any Indiana mental health staff?

A. I did not.

Q. And you did not interview the Defendants in this case, meaning Mr. Levenhagen, Mr. Brennan, Ms. Nowotski (phon.) or Mr. Myers (phon.)?

A. I did not.

Q. And you also did not interview the Plaintiff in this case, Jay Vermillion?

A. That's correct.

Q. In looking at the materials that you've listed here, it appears that you didn't review any literature specific to Indiana segregation, such as Dr. Kupers' Cold Storage Report?

A. No.

Q. No you did not review that literature, correct?

A. Correct.

Q. Sometimes there's a double negative. I just want to check.

And so as I understand your testimony and your report, you evaluated Dr. Kupers' opinion as to the effect of solitary confinement on the Plaintiff, Jay Vermillion; is that right?

A. Yes.

Q. You did not reach your own opinion as to the effects of segregation on the Plaintiff?

A. Oh, that's correct, yes.

Q. Because in order to do that, you would have

wanted to interview Mr. Vermillion, right?

A. Absolutely.

MR. DICKMEYER: Objection. Form.

THE WITNESS: Sorry. Absolutely.

Q. (BY MS. FILLER:) Do you agree that a mental health professional has to evaluate someone to reach a conclusion as to their mental health?

MR. DICKMEYER: Objection. Form.

THE WITNESS: Yes.

Q. (BY MS. FILLER:) You wouldn't be able to testify as to a criminal defendant's competency unless you evaluated them in person, right?

A. Correct.

Q. Did you ask to evaluate Jay Vermillion?

A. No.

Q. Was it ever the plan for you to evaluate Mr. Vermillion?

A. It was discussed, but it was not the plan.

Q. Why didn't you evaluate him?

A. Primarily, time.

Q. I take it that part of your critique of Dr. Kupers' opinion in this case is that he did not have any psychological testing done to assess the possibility of malingering; is that fair?

A. That's fair.

Q. And why didn't you yourself perform any psychological testing to assess malingering of Mr. Vermillion?

A. I didn't conduct any assessment of Mr. Vermillion.

Q. And I believe your response before was primarily time?

A. Yeah, I did not have opportunity.

Q. Do you agree that the conditions in segregation vary across facilities in prison systems?

A. I do.

Q. Do you agree that those conditions are important in assessing the effects of segregation on prisoners?

A. I do.

Q. For example, do you agree that the degree of isolation varies across prison segregation units?

MR. DICKMEYER: Objection. Form.

THE WITNESS: I do.

Q. (BY MS. FILLER:) And is it important in evaluating a segregation unit to be aware of the degree of isolation?

A. Yes.

Q. So why is it that you did not tour the prison where Jay spent most of his time in segregation -- sorry, Jay Vermillion?

A. I was not given any specific opinions with regard to Mr. Vermillion's mental health functioning, mental state or his psychological functioning.

Q. Would it have been helpful in formulating your opinions to inspect the prison where Mr. Vermillion spent most of his time in segregation?

A. Not the opinions as offered. If I were to -- well, I'll stop.

Q. Please go ahead.

A. If -- if I had been asked to give an opinion as to Mr. Vermillion's mental state as it pertained to the effects of segregation, then absolutely it would have been important to tour the facility and interview and evaluate Mr. Vermillion.

Q. Do you know the name of the prison at issue in this case?

A. Not off the top of my head, but it's in the records. I was not famil -- familiar with that prison prior to my involvement in this case.

Q. And your report doesn't describe the segregation unit at issue in this case, correct?

A. Correct.

Q. Do you know any of the unique characteristics of the segregation unit where Mr. Vermillion was housed?

A. No, not beyond what was reported in Dr. Kupers'

and Mr. Pacholke's report.

Q. And what were the characteristics that they identified?

A. The structure, the nature of the structure of the environment, temperature, things of that nature.

Q. Temperature. What about the structure?

A. The nature of doors that limits communication, things of that nature.

Q. Would that be the boxcar doors?

A. Yes.

Q. Do you agree that some segregation units have open steel barred doors?

A. I have not seen that, but yes.

Q. You're familiar with the general idea that some segregation units have more or less isolating door structure?

A. Yes, I am.

Q. Are you familiar with the unique characteristics of the prison where Mr. Vermillion was held with regard to access to the outdoors?

A. Just as described by Dr. Kupers and Mr. Poche --

Q. Pacholke?

A. Pacholke.

Q. And how did they describe that?

A. That they're very limited in nature. Basically,

A. Yes.

Q. And would you say that you're a member of the school of thought that suggests that solitary confinement in facilities meeting basic standards has relatively little adverse effect?

A. Can you repeat that last part of that question?

COURT REPORTER: "And would you say that you're a member of the school of thought that suggests that solitary confinement in facilities meeting basic standards has relatively little adverse effect?"

THE WITNESS: I would say I'm certainly perceived as being in that -- of that school of thought.

Q. (BY MS. FILLER:) Are you -- is that a false perception in some ways?

A. In some ways, yes, absolutely.

Q. Can you elaborate?

A. Yeah. Segregation can have significant effects, harmful effects, it's my opinion and -- that it's not universally experienced. And so there are some people that will go in segregation and not experience harms. And when you look at the totality of the population, the harms will typically be more minor than other people would suggest. But that doesn't mean that segregation can't be and isn't, in some cases, harmful, and quite harmful at times.

Q. We can put that aside. Is your view of the harms of solitary confinement that you've just expressed outside of the mainstream?

MR. DICKMEYER: Objection. Form.

THE WITNESS: Yes.

Q. (BY MS. FILLER:) You are familiar with the Plaintiff's expert, Dr. Kupers, I gather?

A. I am.

Q. And you kindly mention in your report that you do know Dr. Kupers to be a respected psychiatrist; is that right?

A. Yes.

Q. And you mentioned earlier that you are including a chapter from Dr. Kupers on imprisonment and stress in your Encyclopedia; is that right?

A. Yes.

Q. And I gather that your goal as an editor of the Encyclopedia is to collect writings from reputable figures in the field?

A. Most reputable.

Q. And as an editor, you have a responsibility to make sure that the research and views you're including are of a high quality?

A. Yes.

Q. So you feel confident in the quality of Dr.

this be the textbook that you're citing?
A. Yes.
Q. And I want to draw your attention to the Bates stamp as Vermillion 5139, subsection A, "General strategies for detecting feigning of symptoms." Do you see that there?
A. Yes.
Q. So this would be a section on general strategies for detectoring -- detecting malingering, right?
A. Correct.
Q. And it says, "A number of strategies are available for systematically investigating response style. The most common and venerable method is the clinical interview, usually consisting of a mental status examination or other relatively unstructured interview procedure." Did I read that correctly?
A. Yes.
Q. And do you agree then that the most common and venerable method of detecting malingering is the clinical interview?
A. Yes.
Q. If you turn to the next page, this is Vermillion 5140, and it says -- middle of -- let's see, so the second paragraph on the left hand column, the last sentence, and I believe this is what you're referencing

in your report, quote, "Increasingly, mental health professionals have concluded that because interview-based approaches to detecting malingering are of such limited utility, employment of instruments specifically designed for this purpose should be considered the standard of practice whenever there is a basis for suspecting over-reporting of symptoms," end quote. Did I read that correctly?

A. Yes.

Q. And so you agree then that the psychological testing is necessary when there's a basis for suspecting over-reporting?

A. Yes.

Q. Is psychological testing an infallible measure of malingering?

MR. DICKMEYER: Objection. Form.

THE WITNESS: No.

Q. (BY MS. FILLER:) In fact, psychological tests might indicate that a person is malingering when they aren't, right?

A. That can happen.

Q. And a person could also game a psychological test and it not come up that they were in fact malingering, right?

MR. DICKMEYER: Objection. Form.

THE WITNESS: That can happen, yes.

Q. (BY MS. FILLER:) And Dr. Kupers has reported that in his clinical interview, in his experience, Mr. Vermillion was honestly reporting his symptoms, right?

A. Yes.

Q. And, for example, Dr. Kupers found that Mr. Vermillion didn't provide exaggerated descriptions of the symptoms that he suffered, right?

A. I don't recall him being that specific, but he concluded that Mr. Vermillion was honestly responding.

Q. Did Mr. Vermillion -- strike that. When a interview subject is providing very exaggerated descriptions of psychiatric distress, that might be a cue that they're malingering, right?

A. That might be.

Q. But Mr. Vermillion didn't, for example, report that he was hearing voices indicating him -- indicating that he should hurt himself, right?

MR. DICKMEYER: Objection. Calls for speculation. You can answer.

THE WITNESS: Not -- not based on what was presented in Dr. Kupers' report.

Q. (BY MS. FILLER:) He didn't tell Dr. Kupers that he was seeing things like little green aliens, right?

MR. DICKMEYER: Same objection.

THE WITNESS: Dr. Kupers didn't report that, correct.

Q. (BY MS. FILLER:) That kind of really stark description of psychiatric illness might have been a cue that Mr. Vermillion was over-reporting, right?

A. It could be, yes.

Q. And in fact, the constellation of symptoms that Mr. Vermillion described is quite consistent with the literatures, reports of the negative mental health consequences of solitary confinement?

MR. DICKMEYER: Objection. Form.

THE WITNESS: Yeah, as described by Dr. Kupers. It's not inconsistent. I would agree.

Q. (BY MS. FILLER:) And that would also indicate that Mr. Vermillion was being truthful?

MR. DICKMEYER: Objection. Form.

Q. (BY MS. FILLER:) In other words, he described symptoms that make sense given the segregation context and what we know about segregation?

A. That could be an indication of honest responding, yes.

Q. And you have no reason to believe that Mr. Vermillion was malingering, other than the fact that everyone who's -- has a lawsuit has some incentive to win their case, correct?

A. Yeah, generally speaking, I would agree with that.

Q. I just want to make sure there's no extra reason that you think that you've identified why Mr. Vermillion would have been malingering?

A. Yeah. No, that's an accurate summation.

Q. There's no requirement that in order to be -- strike that. There's no requirement that in order to have their findings accepted in a court of law that psychiatrists who perform evaluations in a legal context obtain psychological testing of every person who they evaluate, is there?

MR. DICKMEYER: Objection. Calls for speculation and calls for a legal conclusion. Form. You can answer.

Q. (BY MS. FILLER:) Dr. Morgan, I understand you're the director of forensics here at -- Director of Forensic Psychology, right?

A. I'm Director of the Forensic Science Institute and I teach in the area of Forensic Psychology.

Q. And are you aware of the general legal context in which mental health opinions are admitted in court?

A. I am.

Q. Okay. I'll restate the question. There is no requirement that in order to have their opinions

admitted into a court of law psychiatrists who perform evaluations as part of a lawsuit obtain psychological testing of every person who they evaluate, is there?

A. There is no such requirement.

MR. DICKMEYER: Objection. Form.

THE WITNESS: Sorry, David.

Q. (BY MS. FILLER:) And in fact, that's not the standard practice for psychiatrists either, right?

MR. DICKMEYER: Objection. Form.

THE WITNESS: Actually, I don't know what the standard practice or best practice is for a psychiatrist being as that I'm not a psychiatrist. I can't -- I can't opine on that.

Q. (BY MS. FILLER:) Fair enough. And Dr. Morgan, your other criticism of Dr. Kupers is that his literature review is incomplete; is that right?

A. Yes.

Q. And as a result, in your view, Dr. Kupers has overstated the risk of harm from solitary confinement, right? If that's not correct, please --

A. I would just change it a little bit, overstated the potential risk of harm.

Q. And is that going back to the universality of the harm?

A. Yes.

backwards and I apologize.

Q. That's okay.

A. So then to page 5 the Wolff, Morgan and Shi, 2013. On page 6, Wolff, Morgan, Shi, Fisher and Huening, 2011. And then Morgan and Fisher, et al also on page 6, 2010. So those were controlled studies, but not of an intervention. If -- for controlled studies of an intervention, it would be McDonald, Morgan and Metz, 2016.

Q. Can you give me a page number?

A. On page 4. McDonald and Morgan, 2013 on page 5. And that's -- the last one would be on page 9, Morgan, Winterowd and Fuqua in 1999.

Q. And so you've given us two categories of controlled studies, right, ones involving an intervention and ones without?

A. Yes.

Q. And the difference with an intervention, that the point is to be able to distill the specific effects of that intervention, right?

A. Yes.

Q. Do you hold yourself out as an expert in the design and execution of controlled studies?

A. No.

Q. Do you agree, though, that it's important that

controlled studies are, in fact, controlled?

A. Yes.

Q. And that it's important in performing controlled studies to avoid contaminating the groups you're studying?

A. That's the ideal, yes.

Q. And by "contamination," I'm referring to exposing the control group to the intervention that you're attempting to measure?

A. Correct.

Q. And would you agree that contamination can invalidate a study's results?

A. It can.

Q. Do you agree that it's difficult to perform controlled studies in prison?

A. It certainly can be, yes.

Q. For example, you, as a researcher, cannot keep a prisoner in segregation if the prison says that prisoner doesn't need to be in segregation?

A. Correct.

Q. That would be unethical?

A. Yes, it would.

Q. And the research that's developed on solitary confinement has not, in fact, relied on control studies because of the difficulties in conducting such studies

in prison, right?

A. Yes, that's one of the primary issues.

Q. So let's talk about the Colorado study. You've described it as the gold standard, right?

A. Yes.

Q. The Colorado study studied prisoners in the Colorado State Prison System, right?

A. Yes.

Q. There was no -- as the name suggests, no examination of prisoners outside of Colorado, right?

A. Correct.

Q. And the -- it was a longitudinal study, I understand?

A. Yes.

Q. And so the study lasted for about one year; is that right?

A. Yes.

Q. And the study did not involve clinical interviews, correct?

A. Correct.

Q. And there was no part of the study that looked at the medical records of the prisoners, right?

A. I believe they looked at the medical records but did not report that in the results.

Q. So the results of the Colorado study did not

Q. And are you aware that some of the people who were involved in performing that study have since said that it's been taken out of context?

A. Yes.

Q. Can you describe that -- their views on that subject?

A. Yeah, that some of the authors are concerned that their study is being viewed as a validation of the use of segregation, and that was not the intent, nor their conclusions.

Q. The most serious critique of the Colorado study is that there was fatal contamination of the control group, right?

A. I would agree.

Q. Because if that were true, there would be real questions as to whether the data had any value, right?

A. It certainly could, yes.

Q. And Dr. Haney in his 2018 article has said that every prisoner in the 2010 Colorado study had been exposed to a severe form of segregation right at the start immediately before the study began, right?

A. I don't remember exactly how he phrased it or what he said, but I know the contamination was a criticism.

Q. Are you familiar with how the control group and

the intervention group were identified?

A. Yeah, I mean, generally speaking.

Q. Can you describe for us the basic approach to the study?

A. They pulled participants from general population, psychiatric care unit and segregation to participate in the study.

Q. But are you aware of how they identified those groups? In other words, it wasn't random, right?

A. Right. Right. I'm -- I think I need to look at it to refresh my memory on the actual selection procedure. But yeah, I reviewed it.

Q. So as I understand it, they looked at prisoners who were in the disciplinary process, and those prisoners would be held in a form of segregation, either awaiting the disciplinary hearing or after. And then some prisoners would come out of those disciplinary hearings and go to general population, some prisoners would come out of that process and go to administrative segregation, and that's how they identified the groups. Does that sound right?

A. That -- that sounds right.

Q. So Dr. Haney's point in his 2018 article is that both of those groups would have been in segregation right before the study started then?

article, do you see that in this section, generally he's describing this issue of the initial contamination problem?

A. Yes, I see it.

Q. And on 382 in the second to last paragraph, he says, quote, "It is impossible to know whether or how control group prisoners were damaged by the time spent in punitive segregation and whether those effects continued throughout the study," end quote. Do you agree with that?

A. I don't agree with the basic premise. Do I agree that -- that Dr. Haney could make the argument that that invalidates the study? Sure. But I don't agree that it does. I don't believe that that contaminates the samples and the groups when looking at the conditions of long-term administrative segregation. The psychiatric population, I don't know that we know they had the same level of contamination. I'll have to -- I have to look at it.

Again, they were choosing inmates from the psychiatric unit that had behavioral problems, but I don't know that they were in disciplinary segregation. I would have to review.

Q. So --

A. And if not --

population control group participants spent time in segregation or other non-general population setting during the study, roughly two-thirds of the group?

A. Correct.

Q. And he found that half of the administrative segregation of prisoners, 60 -- about half, 62 of 127, spent an unspecified period of time in general population or elsewhere during the study?

A. Yes, that was his finding.

Q. And the data that was aggregated by the Colorado researchers did not take into account the contamination?

A. They analyzed that data.

Q. How so?

A. See if I can find it. It will take me a second to find it in the document.

Q. Sure. Maybe I can restate the question, and if you'd like to look at it, that's just fine too. But my understanding is that the data from the participants was aggregated whether or not there had been contamination. In other words, they didn't exclude the people who had cross-contamination --

A. Correct.

Q. -- from the aggregate data results?

A. Correct, they did not exclude.

Q. Another problem with the Colorado data is that

determine the effect of segregation on prisoners' health?

A. Yes, and with a particular interest in the magnitude of that effect.

Q. Would you agree that the accuracy of your meta-analysis is only as good as the studies analyzed?

A. I would agree.

Q. As I understand it, there were two meta-analyses included in this 2016 piece, correct?

A. That is correct.

Q. There was Research Synthesis 1 and Research Synthesis 2?

A. Correct.

Q. And is yours RS-2?

A. That's right.

Q. And Paul Gendreau's is RS-1?

A. Yes.

Q. And Paul Gendreau is a Canadian researcher; is that right?

A. Yes, he is.

Q. And he's also worked for the Canadian Prison System, correct?

A. He did for a period of time, yes.

Q. And both of your meta-analyses ruled out the vast majority of the research on solitary confinement and did

Q. So if there's an error in terms of the sample size, then that would effect the weight, which would effect the meta-analyses, right?

A. If there was an error, yes.

Q. And there's another criticism of the Zinger study, right?

A. Yeah, there's been in a couple.

Q. Is one of them that the Zinger study includes people who are in segregation voluntarily?

A. Yes.

Q. Do you agree that whether a prisoner is in solitary voluntarily or involuntarily could effect that prisoner's experience in their confinement?

A. It certainly could.

Q. And by the end of the Zinger study, which lasted 60 days, only ten people were involuntarily in segregation, correct?

A. That sounds right.

Q. And so approximately 80 percent of the prisoners in the segregation group had left by the end of 60 days?

A. Yes. Again, that sounds correct.

Q. Meaning that the experience of the prisoners who had left segregation were not included in the Zinger analysis?

A. I'm sorry, say that again?

VIDEOGRAPHER: We're now back on the record at 3:10.

Q. (BY MS. FILLER:) Dr. Morgan, another of Dr. Haney's criticism of the meta-analyses is that some of the studies included aren't very probative one way or the other, right?

A. Right.

Q. And he noted that the Cloyes, is it, 2006 study --

A. Yes.

Q. -- are you familiar with that study?

A. Yes.

Q. That it did not actually compare segregation populations with general population prisoners?

A. Right.

Q. Is Dr. Haney correct about that?

A. Can I pull up the Cloyes?

Q. Yeah, it was -- so --

A. I believe it's right here.

Q. You've got a tab there. Yeah, it's 3651, Vermillion 3651. And if you look at the page describing the method, it's Vermillion 3655. And it says that the participants included inmates housed in three SMUs at the time of the study. And an SMU, of course, is a special or secure management unit, right?

Q. That's all right. We're on the same page now. And then I wanted to ask as well about the Walters 1963 study, which you've included. This is at Vermillion 3888 or tab 15. This study included all volunteers, right, the prisoners volunteered to participate in the study?

A. That does sound right, but let me just doublecheck.

Q. I can point you to -- it's Vermillion 3888, under "Method, 40 long-term prisoners volunteered for a study."

A. Yes, correct.

Q. And we've already discussed that the nature of participation as voluntary could have an effect on prisoners' experience of those conditions?

A. It could.

Q. And this study also only studied the effects of solitary confinement over a period of four days, correct?

A. Correct.

Q. Would you agree that that's very different than solitary confinement for a period of four years?

A. I would agree.

Q. And if I could direct your attention to the Ecclestone 1974 study, which is Vermillion 3955?

A. Yes.

Q. Are you familiar with this study as well?

A. Yes.

Q. And this study, as I understand it, was also all volunteers? If I could point you to --

A. Potential volunteers.

Q. Yeah.

A. Yes.

Q. "Methods." All volunteers, right?

A. Correct.

Q. And the maximum stay in segregation that was looked at in this study was ten days?

A. I don't doubt that. I don't recall that, but I don't doubt it.

Q. And again, we would expect to see different effects of ten days of solitary confinement versus four years of solitary confinement?

A. We could.

Q. In your report, you opine that -- and this is your words, "the use of restrictive housing, such as AS, will, on average, produce mild to moderate health and mental health effects comparable to the effects of incarceration as a general matter," end quote. Is that correct?

A. That's correct.

Q. And so your point is that that is not so different from the effect sizes that you've identified in your RS-2 study?

A. Correct.

Q. So for example, mood and emotion in RS-2 had an effect size of .55?

A. Right.

Q. Which is a moderate effect?

A. Right.

Q. Which would indicate that people in segregation had negative effects on their mood or emotion?

A. Correct.

Q. And then your -- and that is itself derived from comparing populations in segregation to populations in general population?

A. Correct.

Q. And then you're comparing that to a study from Bonta and Gendreau, a totally different study that wasn't included in your meta-analyses?

A. Right.

Q. The Bonta and Gendreau study, that study was a study of the effects of overcrowded prisons on prisoners' psychological well-being, right?

A. That was one aspect of it, yes. They looked at a few variables, but the effect size I pulled there was

from the overcrowding data.

Q. So what their goal was in establishing this effect size was to isolate a variable, right?

A. Yes.

Q. And the variable in that study was overcrowded prisons?

A. Correct.

Q. Which some prisons are overcrowded, but not all prisons are overcrowded?

A. Right.

Q. So we're comparing the effect sizes of the harms of segregation to the effect sizes of the harms of living in an overcrowded prison?

A. That would be fair.

Q. And I noticed when I was reviewing your report in the CCLA Case that you included a similar bar graph in that case report?

A. Yes.

Q. Do you recall submitting that report?

A. Yes.

Q. And that bar graph had another bar from a different study for physical health?

A. Right.

Q. And that bar was referencing the Heigel study, correct?

A. Correct.

Q. And that is at tab 3 of the big compendium here, Expert Exhibit 5 -- no, Expert Exhibit 6. Should be the third tab there (indicating).

A. Oh, there we go.

Q. Can you read the Bates number there for us?

A. The number at the bottom? Vermillion?

Q. Uh-huh.

A. 003571.

Q. Thank you. And do you mind also referring back to the report that you prepared for the CCLA Case? It was Expert Exhibit 4. I know I told you to not worry about the order, but -- there you go.

A. There (indicating).

Q. Thank you. So the bar chart that you submitted in that case is at Vermillion 4130. Do you have it there?

A. Yes, I have it.

Q. And so here you have your RS-1 effect sizes, the Bonta and Gendreau effect size regarding overcrowding, and then you had the Heigel 2010 study, which showed .18, right?

A. Right.

Q. And the Heigel bar was representing physical health, correct?

A. Correct.

Q. And did you later learn that there was an error in the inclusion of this bar?

A. Yes, had a computational error.

Q. Okay. Can you describe that computational error?

A. I had inverted -- I forget the exact data point or what, but I had it inverted.

Q. So as I understand, and you can tell me if this sounds right, but in this case you had looked at the Heigel study, which measured physical health and given it a negative effect size of .18 -- or negative is maybe not the correct term, but negative health outcomes were associated with general incarceration at a .18 effect size?

A. Right. Right.

Q. And that actually, that was a mistake and it should have been negative .18?

A. Yes, they improved in terms of their physical health functioning.

Q. And so when we compare that study's effect size to, for example, your chart here of physical health, which is .37 effect size from your study, that would tend to show that there was a major difference in the physical health of prisoners in segregation as opposed to the physical health of prisoners in general

about the same is what you're going to get when you take an inmate from general population and put them in segregation.

Q. Are the populations that you're comparing, using for your comparison, the general population here at the Bonta and Gendreau, generally, are you accounting for the fact that those folks might be in segregation at some point?

A. No.

Q. Have you published in a peer review journal your work to compare the effect sizes of segregation that you found in your 2016 meta-analyses with the effect sizes of general incarceration on prisoners' well-being?

A. If I did, it would be in that Corrections Today article. And I don't remember, I think we published a figure, but I don't remember if I had the general pop figure. I'd have to look at it. I think it's in here.

Q. It's okay. That would be the only one that you can think of?

A. That would be the only one, yes.

Q. Okay. Your 2016 meta-analyses study posits that "It could be that prisoners who suffer the most in segregation do so because of a culture of harm." Do you recall that?

A. Yes.

They're asking to be in segregation because there's a threat to them in general population, and they need to be in segregation for safety?

A. Sometimes. Not always, but sometimes.

Q. So for those prisoners, they might improve in functioning because they're not at immediate risk of being killed?

A. Or harmed. For those prisoners, that certainly could be the case.

Q. And then with regards to your clinical experience, are you describing a time in Kansas? What clinical experience have you had where you've witnessed a prisoner who has improved their mental health functioning while they were in segregation?

A. Most specifically, my time in Kansas.

Q. And that was the period we talked about in the early '90s?

A. Yes.

Q. You -- we've referred to this at various times today, but your report cites a recent Kansas study with the lead author Chadick. It was -- it came out in 2018, right?

A. Yes.

Q. And that study relied entirely on self-scoring, correct?

A. Yes.
Q. Did not include clinical evaluations?
A. Correct.
Q. The prisoners completed a psychological instrument called the MCMI-3?
A. Yes.
Q. And as I understand it, that's a 175 question true/false psychological instrument?
A. That's correct.
Q. And in the Chadick study, you had a relatively small sample size of 50; is that right?
A. I think it was 40. Maybe it was 50. It was 40 or 50.
Q. Fair enough.
A. It was small.
Q. And the study noted that the -- it was a small sample size because there wasn't enough funding?
A. Yeah, it was a student project.
Q. Did you or the study authors ever apply for funding for that study?
A. No.
Q. And did the study evaluate prisoners in some of the same segregation units that you yourself had worked in when you were a mental health professional in Kansas?
A. That I don't know. That's a -- I never thought

of that. That's a -- I don't know. I would have to ask the lead author.

Q. And the study did find that "AS was associated with higher scores, which would indicate more severe symptomatology, on every scale as compared to general population, including anxiety, somatoform disorder, dysnea, PTSD and major depression"?

A. Let me look. Is that --

Q. Do you have the Chadick?

A. I don't know if that's an exhibit.

(EXPERT EXHIBIT NO. 19 MARKED.)

Q. (BY MS. FILLER:) Dr. Morgan you've just been passed Exhibit 19. Is this the Chadick study that we've been discussing?

A. Yes.

Q. And if I could draw your attention to Vermillion 4533, please?

A. Yes.

Q. And under "Results," do you see where there was a significant effect on housing location on the scores for the measures that I've just indicated?

A. Yes.

Q. And this article, the Chadick piece, also recommends a series of interventions or best practices, correct?

A. Yes, we did.

Q. And one of them is the Stepping Up, Stepping Out Program that you yourself developed?

A. Yes, we included that simply as an example of something that somebody might use in intervening.

Q. I want to make sure that I understand your criticism of Mr. Pacholke's report, if I could?

A. Yes.

Q. Mr. Pacholke, you understand that he's a longtime corrections professional, right?

A. Yes.

Q. And your work in corrections has always been in the mental health sector, right?

A. That's correct.

Q. You have not worked as a prison administrator or a prison official, correct?

A. Correct.

Q. And I take it you do not hold yourself out as an expert in correctional practices?

A. Correct.

Q. And your criticism of Mr. Pacholke is that he says prison administrators should have let Mr. Vermillion participate in a stepdown program. Because you say it's an unfair criticism, stepdown programs weren't best practices at the relevant period?

Q. And you've described in your report an anonymous prisoner. You call him, I think, Prisoner A?

A. Yes.

Q. And I've reviewed a few of your reports in other cases now, and I feel like I've seen that description also attributed to a prisoner named Jonathan?

A. Yes.

Q. And is that just the same person but a different way of anonymizing the prisoner for purposes of confidentiality?

A. That's correct.

Q. And I read in one of the depositions, I believe, that Jonathan, or Prisoner A, was a real prisoner who you evaluated in Pelican Bay?

A. Correct.

Q. And how many prisoners did you evaluate in Pelican Bay again?

A. Somewhere between 40 and 50.

Q. And was Jonathan the only prisoner who -- well, strike that. Some prisoners, I assume, from that sample described negative mental health effects from segregation?

A. Correct.

Q. And some of those negative mental health effects were severe, some were moderate, and Jonathan would have

been in the low end?

A. Yes.

Q. Was Jonathan the prisoner who had the least negative effects from segregation?

A. I don't recall specifically. He was not one of the class members named. And relative to them, yes. Relative to the others, I would need to go back and look at my -- my notes on that.

Q. One moment. I see you've already got it?

A. Yes.

Q. Expert Exhibit 5, which is the deposition, or as the Canadians call it, cross-examination transcripts, from the Canadian Civil Liberties Association, the CCLA Case?

A. Yes.

Q. And if I could draw your attention to Vermillion 4341, which is page --

A. I'm there.

Q. Okay. And you were asked at line 13, quote, "Dr. Morgan, how does Jonathan, the Jonathan example, relate to the other 150 you interviewed?" Answer, "And just to be clear, it was approximately 150. I don't recall the exact number, somewhere around 130 to 150. Jonathan reported less concerns." And then goes on to say on the next page that essentially, "He expressed no concerns

and no significant distress, whereas the majority of other inmates I interviewed expressed distress and concern resulting from their segregation placement." Does that refresh your recollection some?

A. Yes, it does. Yeah.

Q. And is this deposition testimony that you gave in the CCLA Case regarding Jonathan accurate?

A. Yes, it's accurate.

MS. FILLER: No further questions at this time. Thank you.

THE WITNESS: Thank you.

MR. DICKMEYER: I don't have any questions at this time. So we're off the record.

VIDEOGRAPHER: We're off the record at 4:23.

(End of video part of depo.)

MR. DICKMEYER: Would you like an opportunity to read and sign the transcript or waive?

THE WITNESS: Whichever. I mean, I don't know. I don't think I've ever been asked that.

MR. DICKMEYER: We'll take the signature. You can send it to our office, and I'll get it over to Dr. Morgan.

(Deposition concluded.)

(Signature of witness required.)

EXHIBIT 5

Brazeau v. Canada (2019) excerpts

CITATION: Brazeau v. Attorney General (Canada) 2019 ONSC 1888
COURT FILE NO.: CV-15-53262500-CP
DATE: 2019/03/25

ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:	
CHRISTOPHER BRAZEAU and DAVID KIFT Plaintiffs	*James Sayce* and *Janetta Zurakowski* for the Plaintiffs
- and -	
THE ATTORNEY GENERAL OF CANADA Defendant	*Greg Tzemenakis, Stephen Kurelek, Sean Stynes*, and *Diya Bouchedid* for the Defendant
Proceeding under the *Class Proceedings Act, 1992*	**HEARD**: February 13, 14, 15, 20, and 21, 2019

PERELL, J.

REASONS FOR DECISION

A. Introduction and Overview

[1] Through the Correctional Service of Canada, sometimes referred to as "CSC", the Federal Government operates penitentiaries and related penal institutions across Canada. Pursuant to the *Class Proceedings Act, 1992*,[1] the Plaintiffs Christopher Brazeau and David Kift sue the Federal Government of Canada about the operation of those penitentiaries.

[2] On behalf of a class of inmates who are seriously mentally ill, Messrs. Brazeau and Kift allege that by placing mentally ill inmates in "administrative segregation," the Federal Government has breached the Class Members' rights under the *Canadian Charter of Rights and Freedoms*.[2]

[3] By administrative segregation, the inmate is removed from his or her cell at the penitentiary within the ranges of cells for the general inmate population and isolated in a segregated area in a solitary cell with very limited access to others. Messrs. Brazeau and Kift say that administrative segregation is a euphemism for what is, in truth, solitary confinement, which

[1] S.O. 1992, c. 6.
[2] Part I of the *Constitution Act*, 1982, being Schedule B to the *Canada Act* 1982 (UK), 1982, c 11.

is a type of confinement defined by jurists and by criminologists and penologists, *i.e.*, by social scientists that study the punishment of crime and prison management, to be twenty-two hours or more a day of confinement without meaningful human contact.

[4] In their class action, on behalf of the seriously mentally ill inmates, Messrs. Brazeau and Kift seek *Charter* damages and also punitive damages. They seek these damages in the aggregate to be awarded to the Class. After an aggregate base award to the Class Members, Messrs. Brazeau and Kift propose that there would be individual damage assessments of compensatory damages for each Class Member whose *Charter* rights have been violated and who have suffered pecuniary and non-pecuniary personal injuries.

[5] By the design of Class Counsel, the Class Members are defined as inmates who have very serious mental illnesses. Appendix A of the Class Definition, set out below, uses the Global Assessment of Functioning scale (GAF), which is a numeric scale (1 to 100) used by mental health professionals to rate the social, occupational, and psychological functioning of adults. The lower the score, the worse the functioning. As defined, the Class Members have serious mental diseases, serious impediments, and low GAF scores; they are the sickest of the inmates suffering from mental illness.

[6] In 2016, on consent, the action was certified as a class proceeding.[3]

[7] During the course of the hearing of the summary judgment motion, because they discontinued certain claims that did not involve administrative segregation but were concerned about the CSC's alleged failures in providing health care to the Class Members, Messrs. Brazeau and Kift were granted leave to amend the Class Definition. After the hearing, there was a further amendment on consent to carve out from the Class Definition certain inmates in Québec penal institutions because they are Class Members in a parallel class action.[4] As a result, Messrs. Brazeau and Kift are the Representative Plaintiffs for the following class:

> All offenders in federal custody, who were placed in administrative segregation in a federal institution situated outside Québec after February 24, 2013, or who placed in administrative segregation in a federal institution anywhere in Canada before February 24, 2013 were diagnosed by a medical doctor with an Axis I Disorder (excluding substance use disorders) or Borderline Personality Disorder, who suffered from their disorder, in a manner described in Appendix A, and reported such during their incarceration, where the diagnosis by a medical doctor occurred either before or during incarceration in a federal institution and the offenders were incarcerated between November 1, 1992 and the present, and were alive as of July 20, 2013.

[8] Appendix "A" of the class definition lists the ways in which inmates diagnosed with an Axis I Disorder (excluding substance use disorders) or Borderline Personality Disorder ("BPD"), suffered from their disorder and can be identified as Class Members. Appendix A states:

> (a) significant impairment in judgment (including inability to make decisions; confusion; disorientation); (b) significant impairment in thinking (including constant preoccupation with thoughts, paranoia; (c) delusions that make the offender a danger to self or others); (d) significant impairment in mood (including constant depressed mood plus helplessness and hopelessness; (e) agitation; (f) manic mood that interferes with ability to effectively interact with other offenders, staffs or follow correctional plan); (g) significant impairment in communications that interferes with ability to effectively interact with other offenders, staff or follow correctional plan; (h) significant impairment due to anxiety (panic attacks; overwhelming anxiety) that interferes with

[3] *Brazeau v. Attorney General (Canada)*, 2016 ONSC 7836.
[4] *Gallone c. Procureur Général du Canada* (Court File No. 500-06-00781-167).

> ability to effectively interact with other offenders, staff or follow correctional plan; (i) other symptoms: hallucinations; delusions; (j) severe obsessional rituals that interferes with ability to effectively interact with other offenders, staff or follow correctional plan; (k) chronic and severe suicidal ideation resulting in increased risk for suicide attempts; (l) chronic and severe self-injury; or, (m) a GAF [Global Assessment of Functioning scale] score of 50 or less.

[9] The class action was commenced on July 20, 2015, and the start date of the Class Period is November 1, 1992, which is the date the *Corrections and Conditional Release Act* ("*CCRA*")[5] came into force. The *CCRA* prescribes the current regime of administrative segregation. There is no prescribed end date for the Class Period, and it remains a running Class Period. The July 20, 2013 date by which a Class Member must have been alive is predicated upon the applicable provisions in the *Trustee Act*[6] to maintain actions for torts by executors and administrators. The Federal Government, however, submits that there are federal or provincial limitation periods from two to six years that apply and that would foreclose many claims and shorten the Class Period.

[10] On consent, the following common issues were certified:

> 1. By its operation and management of the Federal Institutions from November 1, 1992 to the present, did the Defendant breach the Class Members' rights under section 7 of the *Charter*?
>
> 2. If so, were its actions saved by section 1 of the *Charter*?
>
> 3. By its operation and management of the Federal Institutions from November 1, 1992 to the present, did the Defendant breach the Class Members' rights under section 9 of the *Charter*?
>
> 4. If so, were its actions saved by section 1 of the *Charter*?
>
> 5. By its operation and management of the Federal correctional facilities from November 1, 1992 to the present, did the Defendant breach the Class Members' rights under section 12 of the *Charter*?
>
> 6. If so, were its actions saved by section 1 of the *Charter*?
>
> 7. If the answer to any of common issues (1), (3), or (5) is "yes", and the answer to any of (2), (4) and (6) is no, are damages available to the Class under section 24 of the *Charter*?
>
> 8. If the answer to common issue (7) is "yes", can the Court make an aggregate assessment of the damages suffered by all Class Members as a part of the common issues trial [summary judgment motion]?

[11] Messrs. Brazeau and Kift bring a summary judgment motion for answers to all of the common issues. With the discontinuance of the claims involving health care but not involving administrative segregation, the summary judgment motion is designed to be dispositive of the action save for the individual issues trials. If Messrs. Brazeau and Kift succeed on their summary judgment motion, then the class proceeding would proceed with individual damages assessments

[5] S.C. 1992, c. 20.
[6] R.S.O. 1990, c. T.23, ss. 38 (1) and (3).

for the Class Members for compensation for their personal injuries.

[12] Messrs. Brazeau and Kift submit that there are no genuine issues requiring a trial because the evidence establishes that every Class Member, all of whom suffer from a diagnosed severe mental illness, are too sick for any time in solitary confinement. They submit that it follows that there no genuine issues for trial that the Class Members' rights have been contravened: (a) under section 7 of the *Charter* to not be deprived of the right to life, liberty and security of the person except in accordance with the principles of fundamental justice, (b) under section 9 of the *Charter* not to be arbitrarily detained or imprisoned; and (c) under section 12 of the *Charter* not to be subjected to any cruel and unusual treatment or punishment.

[13] Further, Messrs. Brazeau and Kift submit that there are no genuine issues requiring a trial that all the Class Members are entitled to both *Charter* damages and also punitive damages, which, damages they submit, the evidence establishes are capable of being calculated and of being awarded in the aggregate pursuant to s. 24 of the *Class Proceedings Act, 1992*.

[14] The Federal Government submits that the case is not appropriate for a summary judgment.

[15] In the alternative, the Federal Government submits that administrative segregation is not the equivalent of solitary confinement. It submits that while in individual cases, administrative segregation may have been used in a way that contravenes an individual Class Member's *Charter* rights, administrative segregation for Class Members was (there is pending legislation that will stop the practice for some seriously mentally ill inmates) never a class-wide *Charter* breach. The Federal Government submits that administrative segregation is a legislatively authorized and appropriate and necessary last resort for managing a difficult and dangerous prison population and in accordance with the principles of fundamental justice. The Federal Government submits that individual cases of maladministration where the Correctional Service violates an inmate's *Charter* rights does not prove that there has been a class-wide or systemic *Charter* breach. Further, the Federal Government denies that the Class Members have any entitlement to *Charter* damages or that damages can be awarded in the aggregate.

[16] For the reasons that follow, I grant the summary judgment motion - in part - and I dismiss it - in part.

[17] The answers to the common issues are as follows:

a. By its operation and management of the Federal Institutions from November 1, 1992 to the present, the Federal Government breached the Class Members' rights under section 7 of the *Charter* by the absence of an adequate review process for placements in administrative segregation. In other words, there is a class-wide breach of section 7 (misdescribed by Messrs. Brazeau and Kift as a breach of s. 9) of the *Charter* because the review process for administrative segregation contravened the *Charter*.

   Without prejudice to any individual Class Member's claim at an individual issues trial to assert that his or her treatment was contrary to section 7 of the *Charter* in his or her particular circumstances, by its operation and management of the Federal Institutions from November 1, 1992 to the present, the Federal Government breached the rights under section 7 of the *Charter* of those Class Members: (a) who were involuntarily placed in administrative segregation for

more than thirty days; and (b) who were voluntarily placed in administrative segregation for more than sixty days.

i. In other words, while individual Class Members may have suffered a violation of section 7 of the *Charter* by his or her placement in administrative segregation for less than thirty days, there was only a common or systemic breach suffered by two subclasses comprised of Class Members: (a) who were involuntarily placed in administrative segregation for more than thirty days; or, (b) who were voluntarily placed in administrative segregation for more than sixty days.

ii. As the discussion below will explain, involuntary placements include both placements made at the request of the inmate (genuine voluntary placements) and also placements in which the inmate contrives or engineers an involuntary placement into administrative segregation.

b. For the subclasses (which may also be represented by Messrs. Brazeau and Kift as representative plaintiffs), the breach of section 7 of the *Charter* is not saved by section 1 of the *Charter*.

c. By its operation and management of the Federal Institutions from November 1, 1992 to the present, the Federal Government did not breach the Class Members' rights under section 9 of the *Charter*.

d. There being no breach, the question of whether the breach of section 9 of the *Charter* is saved by section 1 of the *Charter* need not be answered.

e. Without prejudice to any individual Class Member's claim at an individual issues trial to assert that his or her treatment was cruel and unusual, by its operation and management of the Federal Institutions from November 1, 1992 to the present, the Federal Government breached the rights under section 12 of the *Charter* of those Class Members (a) who were involuntarily placed in administrative segregation for more than thirty days; and (b) who were voluntarily placed in administrative segregation for more than sixty days.

i. In other words, while individual Class Members may have suffered a cruel and unusual treatment by his or her placement in administrative segregation for less than thirty days, there was only a common or systemic breach suffered by the two subclasses comprised of Class Members: (a) who were involuntarily placed in administrative segregation for more than thirty days; or, (b) who were voluntarily placed in administrative segregation for more than sixty days.

f. For the subclasses, the breach of section 12 of the *Charter* breach is not saved by section 1 of the *Charter*.

g. Notwithstanding the principles from *Mackin v. New Brunswick (Minister of Finance)*,[7] vindication and deterrence damages are available to the whole class under section 24 (1) of the *Charter* for the breach of section 7 of the *Charter* regarding the inadequate review procedure for placements in administrative

[7] 2002 SCC 13.

segregation (misdescribed by Messrs. Brazeau and Kift as a breach of s. 9). In any event, vindication and deterrence damages are available to the subclasses that suffered a breach of sections 7 and 12 of the *Charter*.

h. The court can make an aggregate assessment of the *Charter* damages suffered by the whole class for the breach of section 7 of the Charter and of the *Charter* damages of the subclasses that suffered a breach of sections 7 and 12 of the *Charter*. The court assesses those damages as $20 million, which is to be distributed, less Class Counsel's approved legal fees and disbursements, in the form of additional mental health or program resources for structural changes to penal institutions as the court on further motion may direct.

    i. The Federal Government is not liable for punitive damages on a class-wide basis but may be liable for punitive damages after the *Charter* damages are determined at the individual issues trials.

    ii. How the $20 million, less Class Counsel's approved fees and disbursements, shall be distributed for the benefit of the class and the subclasses shall be determined by a distribution motion brought by Class Counsel.

[18] In addition to answering the common issues, as set out above, I conclude that subject to individual Class Members rebutting the statute-bar, there is a six-year limitation period that applies to all claims, and, thus, the start date for the Class Period is July 20, 2009 for all but the Estate claimants, for which the start date is July 20, 2013. This means that without prejudice to the claims of Class Members that have an individual rebuttal to the tolling of the limitation period, Class Members' claims as a class from a placement in administrative segregation before July 20, 2009 are statute-barred.

[19] Having regard to these answers, as I shall explain later in these Reasons for Decision, I recommend that the Representative Plaintiffs consider bringing a motion to amend the class definition. I shall recommend that the words: "All offenders in federal custody who were diagnosed by a medical doctor with an Axis I Disorder …" in the class definition be replaced with the words: "All offenders in federal custody who had an Axis I Disorder …". And I recommend that the words: "where the diagnosis by a medical doctor occurred" be replaced with the words: "where the diagnosis occurred or could have occurred."

[20] As I shall explain, in my opinion, the current Class Definition is under-inclusive. If the Class Member can prove that he or she had an undiagnosed Axis I Disorder or that a medical doctor ought to have diagnosed them as suffering from an Axis I Disorder, he or she should be included in the class unless they opt out of the class action. (While it is highly unlikely that a new Class Member would opt-out, since the class definition is being amended, the new Class Members have a right to opt out.)

[21] There are Class Members that have claims that require individual issues trials for completion. The findings of fact made on this summary judgment motion carry forward as issue estoppels into any individual issues trials. While I shall make some observations in these Reasons for Decision, the procedural nature of those individual issues trials remains to be determined under s. 25 of the *Class Proceedings Act, 1992*. Depending on the quantum of each individual inmate's claim, the principles of proportionality in procedure may require dispute

resolution procedures ranging from a simple claims-qualification procedure to conventional trials pursuant to the *Rules of Civil Procedure*. I direct a motion to settle the procedures for the individual issues trials.

[22] It further follows from the above answers that a distribution scheme is required for the $20 million, less Class Counsel's approved fees and disbursements, awarded as vindication and deterrence *Charter* damages for the class and for the subclasses of Class Members. While I shall make some observations in these Reasons for Decision about the distribution plan, the nature of the distribution plan remains to be determined under s. 26 of the *Class Proceedings Act, 1992*. I direct a motion to settle the distribution plan.

B. Methodology of the Reasons for Decision

[23] To understand these Reasons for Decision, it shall prove helpful at the outset to explain the structure and the methodology of the Reasons for Decision, which must address complex substantive and procedural legal problems, some of them novel and exploratory of unexplored legal territory for class actions.

[24] These Reasons for Decision are structured under the following twenty-six major headings.

- A. Introduction and Overview
- B. Methodology of the Reasons for Decision
- C. The Correctional Service of Canada, Prison Demographics and Culture, the Placement of Inmates, Mental Health Care, and Administrative Segregation
- D. A Survey History and Historiography of Solitary Confinement and Administrative Segregation
- E. *Corporation of the Canadian Civil Liberties Association v. Her Majesty the Queen*
- F. *British Columbia Civil Liberties Association v. Canada (Attorney General)*
- G. *Res Judicata*, Issue Estoppel, and Abuse of Process.
- H. Evidentiary Record
- I. The Correctional Investigator of Canada
- J. The Correctional Investigator's Reports
- K. The Battle of the Experts
- L. Messrs. Brazeau and Kifts' Expert Evidence
- M. The Federal Government's Expert and Correctional Service Evidence
- N. The Nature of Administrative Segregation and its Relationship to Solitary Confinement
- O. Discussion and Analysis: Methodology
- P. Jurisdiction to Grant Summary Judgment
- Q. Did the Federal Government Breach section 7 of the *Charter?*
- R. Did the Federal Government Breach section 9 of the *Charter?*
- S. Did the Federal Government Breach section 12 of the *Charter?*
- T. Limitation Periods
- U. *Charter* Damages and Aggregate Damages

- V. Punitive Damages
- W. The Distribution Plan
- X. Amending the Class Definition
- Y. The Individual Issues Trials
- Z. Summary and Conclusion

[25] Parts A and B are introductory and provide an overview of the outcome.

[26] Part C (The Correctional Service of Canada, Prison Demographics and Culture, the Placement of Inmates, Mental Health Care, and Administrative Segregation) identifies the parties, sets out the legal and factual framework that governs administrative segregation, provides the general factual background of the circumstances of the Class Members and identifies some of the legal and factual disputes between the parties.

[27] Part D provides a survey history and historiography of solitary confinement and administrative segregation.

[28] Parts E to J provide the evidentiary background to the summary judgment motion and resolve a number of issues about the admissibility of evidence. Although Parts E to J contain some findings of fact, Parts C and D, and Parts K to N are the main factual background to the summary judgment motion and include the major findings of fact.

[29] Parts O to V are the legal analysis and the discussion and explanation of the answers to the common issues along with a discussion of the additional matter of limitation periods.

[30] Parts X to Y discuss important consequential procedural matters associated with Messrs. Brazeau and Kifts' action being a class action.

[31] Part Z is a summary and a conclusion.

C. The Correctional Service of Canada, Prison Demographics and Culture, the Placement of Inmates, Mental Health Care, and Administrative Segregation

[32] Canada is a confederation of the federal and provincial governments, and under the *Constitutional Act, 1867,*[8] (formerly the *British North America Act)* legislative authority is distributed between the governments. Pursuant to s. 92, paragraph 6, provincial governments have the legislative authority with respect to "The Establishment, Maintenance, and Management of Public and Reformatory Prisons in and for the Province." Pursuant to s. 91 paragraph 28, the Federal Government has legislative authority for "The Establishment, Maintenance, and Management of Penitentiaries."

[33] Federal Government penitentiaries are currently regulated by the *Corrections and Conditional Release Act* ("*CCRA*") and SOR/92-620 (*Corrections and Conditional Release Regulations*).[9]

[34] Under the *CCRA*, a Commissioner of Corrections is appointed by the Governor in Council (*CCRA* s.6). Under the direction of the Minister of Public Safety and Emergency

[8] 1867 (U.K,), 30 & 31 Vict. c. 3.

[9] Penitentiaries in Canada were formerly governed by the *Penitentiary Act*, R.S.C. 1970, c. P-6 (repealed) and the *Penitentiary Service Regulations*, P.C. 1962-302, S.O.R./62-90 (repealed).

legal issue, I shall come to my own conclusion about the matter.

K. The Battle of the Experts

[177] Messrs. Brazeau and Kift supported their summary judgment motion with expert evidence from Drs. Austin, Chaimowitz, Grassian, Haney, Rivera, and from Professors Jackson and Mendez. The Federal Government supported their defence of the summary judgment motion with expert evidence from Drs. Glancy, Livingston, and Morgan.

[178] I find as a fact that all of the experts are qualified to provide expert evidence and they all provided some relevant and informative evidence. I am not persuaded by the arguments respectively made that Dr. Glancy, Dr. Haney, and Professor Jackson should be disqualified because of partisanship.

[179] However, I place very little weight on Dr. Glancy's review and analysis of the academic literature or on his opinion about the psychiatric effects of solitary confinement. His review of the literature was unreliable and methodologically unsound, and the evidence of Messrs. Brazeau and Kifts' experts persuaded me that Dr. Glancy's opinion about the effects of administrative segregation was not sound.

[180] Among other problems, Dr. Glancy relied heavily on a research assistant who was not trained in scientific research, and he relied on research studies that were not pertinent or that had very serious methodological problems with ultimately unintelligible data and findings. In his review, Dr. Glancy relied on scientists who might be taken to be supporters of the use of administrative segregation as a therapy for some mental illness, which is absurd. Administrative segregation exacerbates and causes mental illness and is not a cure for anything. Dr. Glancy's analysis of the academic literature was flawed, and he failed to note the problems in the studies he relied on, and in other respects, he misread the literature.

[181] Dr. Morgan was retained to give evidence about the quality of psychiatric care for inmates in administrative segregation, and he was not actually called to give evidence about his own research on the effects of administrative segregation or about his own meta-analysis of the academic literature made in a review article entitled *Quantitative Synthesis of the Effects of Administrative Segregation on Inmates' Well Being*.[42] Nevertheless, Dr. Morgan was extensively cross-examined on this work and heavily critiqued by Drs. Grassian and Haney for his review article.

[182] The heavy criticism followed, in part, because Dr. Glancy had relied on Dr. Morgan's studies and so the rebuttal to Dr. Glancy also involved a substantial refutation of Dr. Morgan's meta-analysis. Once again, for the same reasons that I give very little weight on Dr. Glancy's review of the academic literature or to his opinion about the psychiatric effects of solitary confinement, I do not give much weight to Dr. Morgan's meta-analysis conclusions. In cross-examination, while Dr. Morgan defended his research, he also conceded that Dr. Glancy's opinions derived from the meta-analysis were incorrect.

[183] Dr. Haney's and Dr. Grassian's reviews of the academic literature were far more persuasive as were their opinion about the effects of administrative segregation on inmates generally and mentally ill inmates in particular. Their reports and conclusions were based on

[42] (2016), 22 *Psychology, Public Policy and Law* 439-461.

personal extensive research. Their opinions were consistent with the academic literature and with the overwhelming consensus positions of the professional organizations that have taken positions about the effects of solitary confinement. Their opinions were also consistent with the experiential evidence of Messrs. Brazeau and Kifts' affiants who had personally experienced administrative segregation.

[184] However, even with respect to Dr. Glancy or Dr. Morgan, on many issues, the opinions of the rival experts were in accord or not that far apart. During the argument and in the competing factums, it was ironic that an opponent's experts' evidence was frequently relied on at the same time as submissions were made that the expert's evidence should be rejected.

[185] As the discussion below will reveal, I do not reject the totality of the evidence of any of the witnesses. However, some of the opinions expressed or parts of the opinions expressed were not persuasive and I accorded them less weight or no weight.

[186] It will become apparent from the discussion below, what opinions I found persuasive. I foreshadow to say that it was the opinions of Messrs. Brazeau and Kifts' expert witnesses that persuaded me about the adverse effects of administrative segregation on mentally ill inmates who are placed in administrative segregation. For present purposes, I need only add that while the battle of the experts raised genuine issues, none of them required a trial to resolve.

L. Messrs. Brazeau and Kifts' Expert Evidence.

1. Overview

[187] As already noted above, Messrs. Brazeau and Kift supported their summary judgment motion with expert evidence from Drs. Austin, Chaimowitz, Grassian, Haney, Rivera, and from Professors Jackson and Mendez.

[188] Messrs. Brazeau and Kift submitted that their expert evidence established that:

a. It is widely accepted by experts and by reputable professional organizations in the medical community that mentally ill prisoners should not spend any time in solitary confinement because it is not a therapeutic setting and is harmful to the inmates' mental health and to their treatment for their mental health problems.

b. Mentally ill prisoners are psychologically harmed by any time spent detained in solitary confinement. Solitary confinement denies the seriously mentally ill the treatment they require, and solitary confinement poses a particularly acute harm to the seriously mentally ill, who comprise the class in the immediate case.

c. The Federal Government's policies and practices, including the recent changes to CD 709, regarding administrative segregation fall below the accepted standard for this type of confinement because the Federal Government does not exclude serious mentally ill inmates from solitary confinement.

d. The Federal Government's policies and practices regarding solitary confinement fall below the accepted standard because the Federal Government has never placed a limit on the time an individual can spend in solitary confinement

e. The Federal Government's policies and practices regarding solitary confinement fall below the accepted standard because the Federal Government has never

CITATION: Brazeau v. Attorney General (Canada) 2019 ONSC 1888
COURT FILE NO.: CV-15-53262500-CP
DATE: 2019/03/25

ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:

CHRISTOPHER BRAZEAU and DAVID KIFT
Plaintiffs

- and -

THE ATTORNEY GENERAL OF CANADA
Defendant

REASONS FOR DECISION

PERELL J.

Released: March 25, 2019

EXHIBIT 6

CCLA v. The Queen
(Superior Court, 2017)
excerpts

CITATION: Corporation of the Canadian Civil Liberties Association v. Her Majesty the Queen, 2017 ONSC 7491
COURT FILE NO.: CV-15-520661
DATE: 20171218

ONTARIO

SUPERIOR COURT OF JUSTICE

BETWEEN:	
CORPORATION OF THE CANADIAN CIVIL LIBERTIES ASSOCIATION Applicant	*Jonathan C Lisus*, *Michael H Rosenberg*, *Larissa C Moscu*, *Paul J Davis*, *Charlotte-Anne Malischewski* and *Fahad Siddiqui*, for the Applicant
– and –	
HER MAJESTY THE QUEEN as represented by THE ATTORNEY GENERAL OF CANADA Respondent	*Peter Southey*, *Kathryn Hucal* and *Negar Hashemi,* for the Respondent
	HEARD: September 11,13,14 & 15, 2017

MARROCCO A.C.J.S.C.

Introduction

[1] When introduced 200 years ago, isolating inmates was a progressive development in Western prison management. It aimed to supplant practices such as the death penalty and limb amputations. The practice began in the 1820s in the United States where it was believed that the isolation of prisoners would aid in their rehabilitation. The idea was that the prisoners would spend their entire day alone, mostly within the confines of their cells and reflect on their transgressions.

[2] I take judicial notice of the fact that Canada's history of isolating prisoners originates with the *Penitentiary Act* of 1834.

[3] The applicant seeks a declaration that sections 31-37 of the *Corrections and Conditional Release Act,* which permit the Correctional Service of Canada to remove an

inmate from the general population of inmates in a penitentiary for a non-disciplinary reason (i.e. administratively segregate an inmate), are invalid because they infringe sections 7, 11 (h) and 12 of the *Charter of Rights and Freedoms*.

[4] The respondent presents isolating inmates in administrative segregation as an appropriate last resort for managing a difficult and dangerous prison population. The respondent maintains that instances where administrative segregation may have been applied in a manner that violated an individual's rights are cases of maladministration and do not demonstrate that the current legislative regime cannot be administered constitutionally.

[5] This application concerns only administrative segregation. Administrative segregation is distinct from segregation for a disciplinary infraction (i.e. disciplinary segregation). Disciplinary segregation is a sanction imposed at the end of a disciplinary proceeding for a serious offence. It results from a decision made by an Independent Chairperson. It is time limited and may not exceed 30 days for a single offence or 45 days for multiple offences. It is not the subject of this application.

Housekeeping

[6] This proceeding was started by the Corporation of the Canadian Association of Civil Liberties and the Canadian Association of Elizabeth Fry Societies on January 27th, 2015.

[7] The Canadian Association of Elizabeth Fry Societies filed a Notice of Discontinuance of its role as an applicant in this proceeding on February 29th, 2016. As a result, the style of cause has been amended on consent to reflect that it is no longer a party.

[8] The remaining applicant is the Corporation of the Canadian Civil Liberties Association, a national organization established in 1964 to protect and promote respect for and observance of fundamental human rights and civil liberties.

[9] After the close of arguments, the applicant requested leave to submit four quotations from a joint report of the Correctional Investigator of Canada and the Ontario Child Advocate, released October 3rd, 2017. The respondent objected to the admission of the report both because the record was closed and because it was hearsay evidence.

[10] I agree with the respondent that the original submissions by the applicant highlight evidence consistent with evidence already in the record. Given the timing of this evidence, I do not have information on, and the applicant has not sought leave to submit, evidence on the source of the opinions in the report. There has been no cross examination.

recognition over the last half-century that solitary confinement is a very severe form of incarceration and one that has a lasting psychological impact on prisoners."

[88] Section 7 of the *Charter* does not permit infringement of liberty except in accordance with the principles of fundamental justice.

Security of the person

[89] I am also satisfied that the evidence presented by the applicant establishes that placing an inmate in administrative segregation imposes a psychological stress, quite capable of producing serious permanent observable negative mental health effects.

[90] The *Corrections and Conditional Release Act* also recognizes the psychological stress created by administrative segregation and recognizes that prolonged administrative segregation will harm an inmate. Specifically, section 31 (2) provides that an inmate is to be released from administrative segregation at the earliest appropriate time. Section 31 (3) provides that the Institutional Head can only order an inmate into administrative segregation if there is no reasonable alternative. Section 36 (1) directs that an inmate in administrative segregation shall be visited at least once every day by a registered healthcare professional. Section 36 (2) mandates that the Institutional Head visit the administrative segregation area at least once every day and meet with inmates housed there upon request. Finally, after an inmate is placed in administrative segregation a Suicide Risk must be completed.

[91] The evidence adduced by the respondent also recognizes this fact. Specifically, the respondent tendered the affidavit evidence of Dr. Robert Morgan. Dr. Morgan is a psychologist. He was retained to provide expert evidence concerning "the impact of administrative segregation on inmates as practised in Canadian federal penitentiaries, generally and particularly those suffering from mental illness." On cross-examination, the applicant challenged Dr. Morgan's evidence of the extent of harm from administrative segregation, both in terms of the extent of the harm compared to other inmate populations and how common it was for inmates not to suffer harm.

[92] Dr. Morgan accepted that the literature demonstrated that some inmates placed in administrative segregation experienced the negative effects on their mental health described by the applicant's experts, which included sensory deprivation, isolation, sleeplessness, anger, elevated levels of hopelessness, the development of previously undetected psychiatric symptoms, including depression and suicidal ideation.

[93] While I do not accept all of Dr. Morgan's evidence, I find this part of his evidence confirmatory of the adverse effects of administrative segregation.

[94] I do not accept Dr. Morgan's evidence that some will be harmed, and a significant number will not.

[95] I accept this aspect of Dr. Morgan's evidence only to the extent that I agree that it is possible that an individual inmate will not present these serious permanent negative mental health effects. I do not rely on Dr. Morgan's evidence further in this regard and I specifically do not accept his evidence for concluding that some inmates will experience no serious permanent negative mental health effects from prolonged administrative segregation. Specifically, his report that administrative segregation was no more harmful than incarceration in the general prison population was based on an erroneous conclusion that there was a negative association between incarceration in the general population and health outcomes when the opposite was correct.

[96] The harm is recognized not only in the *Corrections and Conditional Release Act* but in International Standards and by reputable Canadian medical organizations like the CMA and the Registered Nurses Association of Ontario. No nurse or doctor currently working with segregated prisoners in Canadian Penitentiaries testified that practice was benign in some or most cases.

[97] I am satisfied that there is no serious question the practice is harmful.

[98] Serious state imposed psychological stress constitutes a breach of security of the person. See *Blencoe v B.C. (Human Rights Commission)* [2000] 2 S.C.R. 307 at para. 56.

[99] Obviously, the imposition of administrative segregation is state imposed and the psychological harm that can result from administrative segregation is serious which leads to the conclusion that the induced stress is serious.

[100] The stress capable of producing the documented negative effects described in the evidence, therefore, exceeds the "ordinary stresses and anxieties that a person of reasonable sensibility would suffer as a result of government action". See Lamer C.J, in *New Brunswick (Minister of Health and Community Services) v G. (J)* [1999] 3 S.C.R. 46 at para.59.

[101] Accordingly, suffering this level of psychological stress infringes the security of the person of the inmate and the issue again becomes whether this infringement is in accordance with the principles of fundamental justice.

The principles of fundamental justice require an independent review of the decision to segregate

[102] The principles of fundamental justice are the basic principles of our judicial system and legal process. They are found in the basic tenets of our legal system. See *Reference Re Section 94 (2) of the Motor Vehicle Act,* [1985] 2 S.C.R. 486. paras. 28-40.

[103] The principles of fundamental justice are not defined in the abstract. They must be interpreted in the context of the alleged infringement. See *Chiarelli v Canada (M. E. I.),* [1992] 1 S.C.R. 711 at 732.

which they are exposed. These changes, if they occur, will affect the maximum time that a person should spend in segregated confinement and would reflect a genuine attempt to apply section 87 (a) in a way that leads to a balancing of the security needs of employees and inmates in a penitentiary with the psychological harm to the administratively segregated inmates.

[235] The respondent relied on a study by Dr. Ivan Zinger in 2001 which concluded that there was no evidence that over a period of 60 days the mental health and psychological functioning of segregated offenders significantly deteriorated. I am not prepared to accept this conclusion because many of the inmates studied had been segregated on more than one occasion prior to being examined and it is impossible to say that the damage had not already been done. If those inmates are removed, the sample size is small. Also, Dr. Zinger states at page 64 in the conclusion: "... the findings of this study should not be used to legitimize the practice of administrative segregation".

[236] The respondent also relied on the O'Keefe study completed in Colorado in 2010. I do not accept that this study is valid in Canada because the system of administrative segregation is different in Canada. Specifically, at page 11 of the study the authors describe the incentive-based Colorado program. This program has three quality-of-life levels. Each level brings with it more privileges which must be earned through appropriate behaviour. At quality-of-life level 3, inmates in administrative segregation are allowed four three-hour visits per month, four 20-minute phone sessions, $25 worth of canteen per week and the opportunity to work as a porter or barber in the institution.

[237] This is not comparable to the Canadian system.

[238] Dr. Kelly Hannah-Moffatt described the following effects of prolonged segregation in the literature:

- Prisoners experience the isolated conditions of solitary confinement, sensory deprivation, and constant 'lock down' status very negatively and stressfully (Toch, 1992);
- Prisoners leave supermax 'deeply traumatized' and 'socially disabled' (Lowen and Isaccs, 2012);
- Segregated prisoners who are already experiencing mental health problems, have a history of suicide attempts, and have high levels of hopelessness, are more likely to report suicidal ideation (Bonner, 2006; Kuper, 2006);
- Long-term segregation may lead to the development of previously undetected psychiatric symptoms (Kupers, 2006);
- Segregation appears to be a significant risk factor for the development of psychiatric symptoms including depression and suicidal ideation (Bonner, 2006), as well as

CITATION: Corporation of the Canadian Civil Liberties Association v. Her Majesty the Queen, 2017 ONSC 7491
COURT FILE NO.: CV-15-520661
DATE: 20171218

ONTARIO

SUPERIOR COURT OF JUSTICE

BETWEEN:

CORPORATION OF THE CANADIAN CIVIL LIBERTIES ASSOCIATION

Applicant

– and –

HER MAJESTY THE QUEEN as represented by THE ATTORNEY GENERAL OF CANADA

Respondent

REASONS FOR JUDGMENT

Marrocco A.C.J.S.C.

Released: 20171218

EXHIBIT 7

CCLA v. The Queen (Court of Appeals) (2019) excerpts

COURT OF APPEAL FOR ONTARIO

CITATION: Canadian Civil Liberties Association v. Canada (Attorney General), 2019 ONCA 243
DATE: 20190328
DOCKET: C64841

Strathy C.J.O., Benotto and Roberts JJ.A.

BETWEEN

Corporation of the Canadian Civil Liberties Association

Applicant (Appellant)

and

Her Majesty the Queen as represented by the Attorney General of Canada

Respondent (Respondent)

Jonathan Lisus, H. Michael Rosenberg, Larissa Moscu and Charlotte-Anne Malischewski, for the appellant

Kathryn Hucal, John Provart and Bradley Bechard, for the respondent

Michael Dunn and Andrea Bolieiro, for the intervener Attorney General of Ontario

Matthew Horner and Nika Farahani, for the intervener Ontario Human Rights Commission

Heard: November 20, 2018

On appeal from the order of Associate Chief Justice Frank Marrocco of the Superior Court of Justice, dated December 18, 2017, with reasons reported at 2017 ONSC 7491, 140 O.R. (3d) 342.

Benotto J.A.:

[1] The distinguishing feature of solitary confinement is the elimination of meaningful social interaction or stimulus. It has the potential to cause serious harm

which could be permanent. Federal legislation permits its use in penitentiaries across Canada. It is called "administrative segregation" and is permitted to maintain safety and security or to conduct investigations. The appellant, the Canadian Civil Liberties Association ("CCLA"), submits that ss. 31-37 of the *Corrections and Conditional Release Act*, S.C. 1992, c. 20 (the "Act"), the legislative provisions authorizing administrative segregation, are unconstitutional.

[2] The CCLA was partially successful in the Superior Court. The application judge found that the legislation authorizing administrative segregation violates s. 7 of the *Canadian Charter of Rights and Freedoms* because it does not provide for an independent review of the decision to place an inmate in administrative segregation. The respondent, the Attorney General of Canada ("AGC"), does not challenge this finding on appeal.

[3] On appeal, the CCLA argues that ss. 31-37 of the Act violate s. 12 and s. 11(h) of the *Charter*. The CCLA also raises a new s. 7 argument. The CCLA seeks a broader declaration from this court banning the practice entirely for certain inmates (those aged 18-21, those with mental illness, and those placed in segregation for their own protection) and otherwise placing a cap of 15 consecutive days on administrative segregation for all inmates.

[4] As I will explain, I accept the conclusions of the application judge with respect to inmates aged 18-21, those with mental illness, and those placed in

segregation for their own protection. However, prolonged administrative segregation of any inmate, which is segregation for more than 15 consecutive days, does not survive constitutional scrutiny under s. 12.

[5] I reach this conclusion because prolonged administrative segregation causes foreseeable and expected harm which may be permanent and which cannot be detected through monitoring until it has already occurred. Legislative safeguards are inadequate to avoid the risk of harm. In my view, this outrages standards of decency and amounts to cruel and unusual treatment. I conclude that the provisions in the Act authorizing prolonged administrative segregation infringe s. 12 and the infringement cannot be justified under s. 1. It follows that a remedy under s. 52(1) of the *Constitution Act, 1982* is appropriate.

[6] To demonstrate my conclusions, I describe administrative segregation, outline the evidence concerning the harm caused and the inability of monitoring or other legislative safeguards to prevent the risk of harm. I explain why ss. 31-37 of the Act infringe s. 12 of the *Charter,* and why the infringement cannot be justified under s. 1. I also briefly address the CCLA's s. 11(h) and s. 7 arguments.

BACKGROUND

The legislative scheme

[7] The *Corrections and Conditional Release Act* permits the Correctional Service of Canada ("CSC") to place an inmate in administrative segregation. The

> effects to manifest in the form of some recognizable observable form of mental decompensation or suicidal ideation before supporting or perhaps removing the inmate. In other words, the person is not removed or supported until it is obvious that they have been harmed. [Emphasis added.]

[80] This is consistent with the evidence of Dr. Robert Morgan, a psychologist and academic from Texas whose testimony was relied on by the AGC. He indicated that monitoring detects harm that has already occurred. He said that "conducting daily health care visits, that include verbal interaction with inmates...provides a high likelihood of detecting inmates that are suffering impaired or decompensated mental health functioning".

[81] In conclusion, the application judge's error in relying on the effectiveness of monitoring undermines his conclusion that ss. 31-37 do not breach s. 12 insofar as they permit prolonged segregation.

(iii) Proper comparator

[82] Section 12, which prohibits cruel and unusual treatment and punishment, involves a comparative approach. In my view, the application judge also erred in his s. 12 analysis in applying the wrong comparative approach.

[83] In this case, the application judge did not determine whether administrative segregation should be considered treatment or punishment. Nor did he need to. As set out below, little in this case turns on the distinction.

the application judge's vetting of issues and reasoned analysis, which are fundamental premises of the appeal process: see *Roach*, at para. 8.

CONCLUSION

[150] I would allow the appeal in part and declare that administrative segregation longer than 15 consecutive days as provided for in ss. 31-37 of the *Corrections and Conditional Release Act* violates s. 12 of the *Charter*, cannot be justified under s. 1, and are of no force and effect to the extent of the violation. This declaration shall take effect 15 days from the date of the release of this judgment.

Released: MAR 2 8 2019

M.L. Benotto J.A.

I agree. G.R. Strathy C.J.O.

I agree. J.B. Roberts J.A.

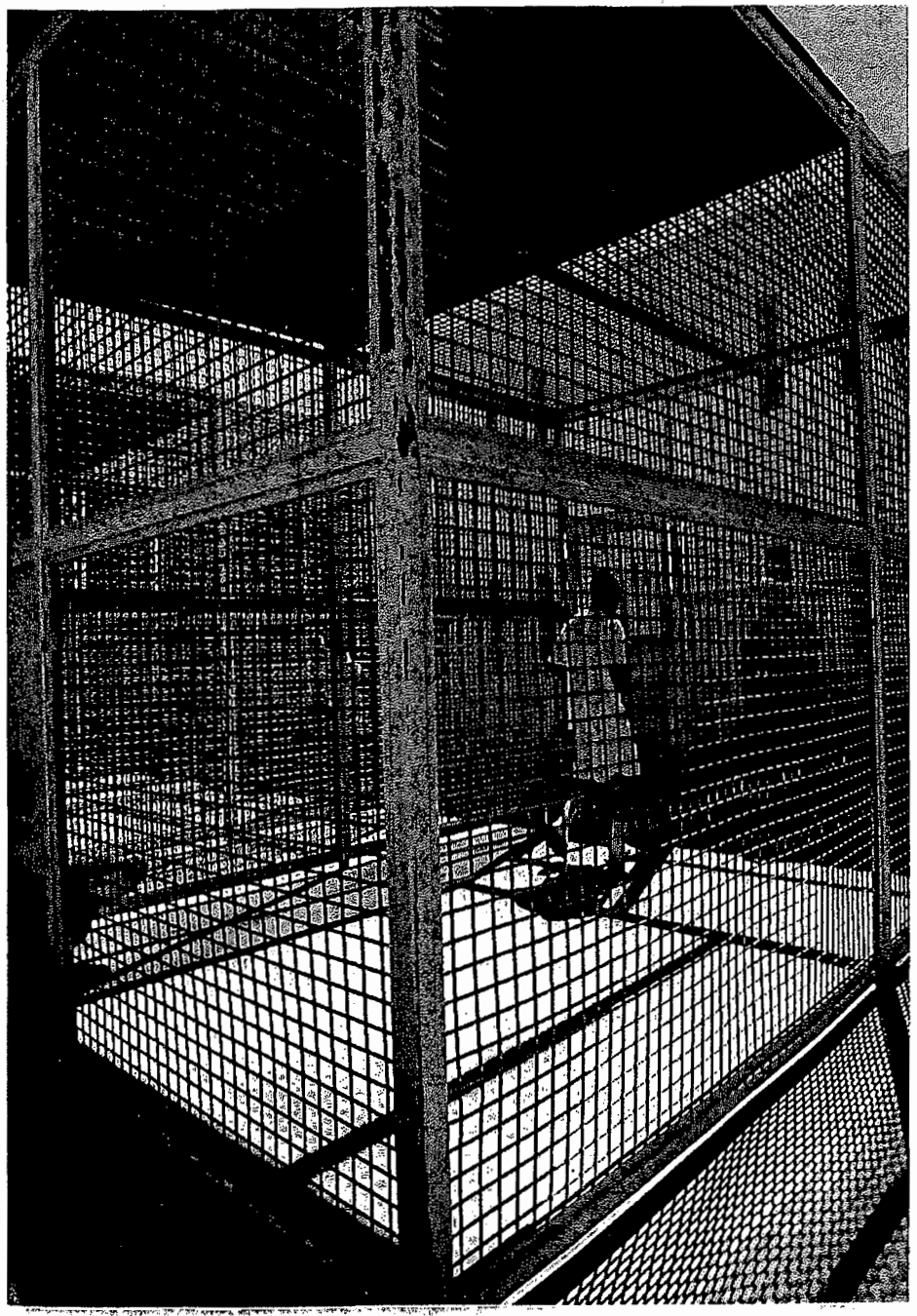
EXHIBIT 8

"Questioning Solitary Confinement" in *Corrections Today*

SPEAK OUT

Questioning solitary confinement

Is administrative segregation as bad as alleged?



Studies vary widely on the effects of administrative segregation.

By Robert D. Morgan, Ryan M. Labrecque, Paul Gendreau, Taylor R. Ramler and Brieann Olafsson

Disclaimer: The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the American Correctional Association.

Administrative segregation (AS) — often referred to as solitary confinement — involves the isolation of an inmate in a setting that provides little opportunity for meaningful contact with other individuals. The use of AS in North American correctional institutions has risen since the 1980s, as have concerns about its effect and utility.[1] Current estimates suggest that nearly one-fifth of all jail and prison inmates in the United States,[2] and one-quarter of those in the Canadian federal prison system, have spent some time in AS.[3] Policymakers and corrections officials insist that the judicious use of AS increases safety, order and control in prison and beyond.[4] Those critical of AS, however, argue that it is an overused correctional practice that produces many damaging effects on inmates, staff, prison life and the communities to which inmates are returned.[5]

Much has been written about the potentially harmful effects of AS. By far, the greatest area of concern involves its purported negative physiological and psychological effects.[6] Numerous reports suggest that AS causes myriad negative mental health problems.[7] Also, it is widely believed that offenders with pre-existing mental illnesses are at an increased risk for suffering the deleterious effects of such placement.[8] Further, it is commonly accepted that inmates who return directly to the community from AS have poorer postrelease outcomes than those who are transitioned from the general prison population.[9]

The collection of studies that are used to support these claims, however, do not paint a complete picture of the effects of AS.[10] It is noted, for example, that the majority of the AS research investigating psychological outcomes consists of case studies of small, non-random or extreme samples of inmates and do not include pre-AS baseline functioning or appropriate comparison groups.[11] Further, much of the behavioral outcome literature is limited to studies employing the weakest type of research methodology, which fails to account for the influence of many theoretically relevant variables (e.g., institutional behavior, violent behavior, criminogenic risk) on such behavioral outcomes.

The need for a research synthesis

Given the conflicting opinions on the effects of AS, it is not surprising that its use has become a hotly debated and litigated issue. In our review, two groups of researchers

AS's use has become a hotly debated and litigated issue

undertook two independent meta-analytic reviews, in an unplanned systematic replication, to determine what effect AS has on inmates' physical and mental health functioning, as well as to determine behavioral outcomes (e.g., recidivism).[12] The statistical results, including methods and calculations, of the two research groups were unknown to each other until the preparation of the final manuscript. The comparison of these two meta-analyses is fortuitous, given that replication is a hallmark of good science[13] — the same goes for meta-analyses.[14] Moreover, due to the sensitivity and controversy related to ethical and legal issues about the humane care of inmates, replication becomes even more critical.

Research synthesis 1

Utilizing meta-analytic techniques, coupled with database and ancestral reference searches, one article identified a total of 14 studies pertaining to AS and inmate well-being that met specified eligibility criteria.[15] Studies were deemed eligible for inclusion if they

- Involved persons experiencing AS as part of legal custody.
- Included a comparison condition and an outcome variable.
- Reported data adequate for an effect size calculation.

Of the 14 studies, the majority was published post-2001, actually took place in the United States and sampled adult, male inmates. Studies meeting the inclusion criteria were subsequently coded for strength of design (i.e., whether each used a comparison group similar to the treatment group in terms of age, criminal history, etc.) as well as the outcome variable(s) examined, including

- Psychological indicators (e.g., anxiety, depression).
- Medical/psychophysiological indicators (e.g., physical health).
- Behavioral indicators (e.g., recidivism rate and institutional infractions).

The impact of AS was examined using a standard effect size (ES) to indicate the magnitude of the effect of AS on behavioral and mental health functioning. Positive effect size values represent a deleterious effect, such that AS was associated with an increase on the outcome variable. In contrast, negative values indicated a beneficial effect, such that AS was associated with a decrease on the outcome variable. A total of 65 effect sizes among the three outcome variables were analyzed: psychological ($k = 50$), medical/psychophysiological ($k = 6$) and behavioral ($k = 9$).

The collective effects examined in this research synthesis suggested AS generally exerts a small detrimental effect upon inmates' mental health

and physical functioning. The ES for psychological outcomes suggests AS placement yields slightly negative to slightly positive effects upon such areas as depression, anxiety and psychosis, depending upon the specific construct. Likewise, AS was shown to contribute negatively to the medical/psychophysiological variables of physical health and sensory arousal, in addition to the behavioral outcome of postrelease recidivism. Nevertheless, AS was also shown to have a suppressive effect upon institutional misconduct, such that inmates placed in AS showed less proclivity to violate rules while incarcerated. Taken together, these findings yield important implications for corrections professionals in the areas of treatment planning, rehabilitative/vocational service provision and administrative policymaking, among others.

Research synthesis 2

A second research synthesis reviewed 19 documents that were published in English, contained outcomes specific for those placed in AS and included sufficient data for effect size calculation.[16] These 19 documents included 9,823 inmates in AS and 131,169 non-AS inmates, and 144 total effect sizes were obtained. Results indicated small effects for social and cognitive impairment as well as moderate effects for impaired behavioral functioning and physical and mental health functioning. There was also a small to moderate effect for increased antisocial indicators (e.g., rearrest, recidivism/revocation, hostility/anger).

Collectively, the findings from these two meta-analytic reviews indicated that the adverse effects on outcomes of interest resulting from AS ranged from small to moderate for the time periods observed in the included studies. These investigations further revealed considerably smaller ES among studies with stronger research designs compared to those with weaker designs. That is, the stronger the research design (which presumably provides a better evaluation of the phenomena of interest), the lower the ES. Notably, these results are clearly contradictory to much that has been written about the demonstrable effects of AS.[17]

To place these results in context, it is relevant to compare the magnitude of the effects resulting from confinement in AS to the effects resulting from general incarceration (i.e., non-segregated imprisonment). Our results were very similar to results obtained from investigations on the general effects of incarceration.[18] In other words, as a general matter, the quantifiable effects resulting from segregation are comparable to the quantifiable effects resulting from incarceration (see Figure 1).

Discussion

The literature clearly demonstrates that some inmates experience harm as a result of their AS experience;[19] however, these harmful experiences are not universal. Rather, it seems that some inmates in AS will experience negative effects, others will improve and some will remain unchanged. Further, when negative responses do occur in AS, they are typically not as severe as often described by critics of AS. As our meta-analyses revealed, one can expect the experience of AS to produce mild to moderate health and mental health effects comparable to the effects of general incarceration.

Logically, one might ask, "How is it possible to place someone in AS for a lengthy period of time without it causing a harmful effect on the individual?" It is our opinion inmates, like most people, adapt to

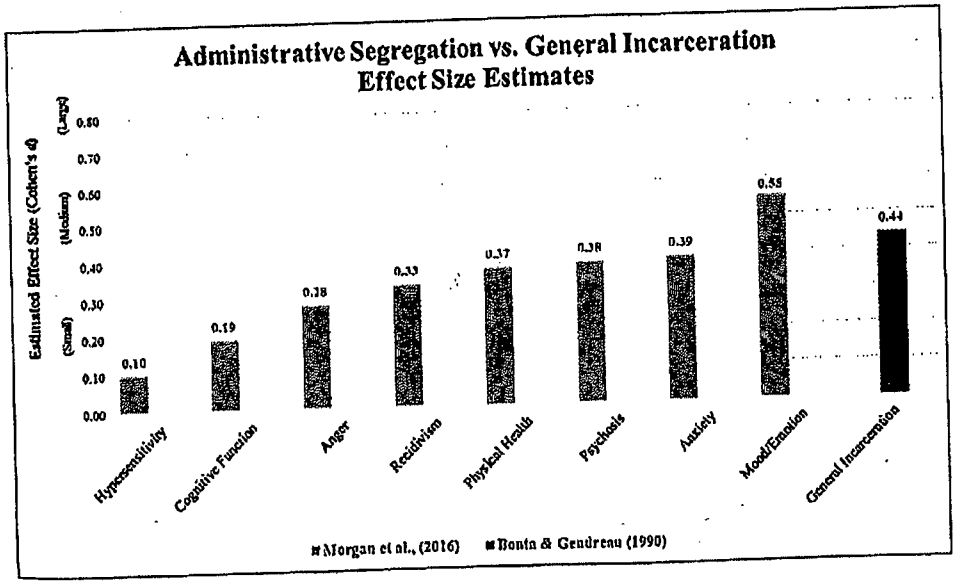


Figure 1.

Chart courtesy of the authors

their environment, whether it be a general prison population setting or an AS environment. This opinion was supported and clearly articulated by an inmate to our lead author, Dr. Robert Morgan. According to this inmate, incarcerated individuals are generally adept at serving time in correctional facilities prior to their AS placement. To anyone unaccustomed to serving time in prison, AS would seem daunting and completely overwhelming; however, experienced inmates are skilled at coping with incarceration. For them, AS is simply another adjustment in the process of confinement.

In support of this coping perspective, one article described and measured changes in the mental health symptoms of segregated inmates over time in three Canadian federal institutions.[20] After 30 days, segregated inmates endorsed more symptoms of depressed mood and anxiety, as well as poorer psychosocial adjustment, than their general population peers. However, segregated and non-segregated inmates all improved over 60 days on measures of depression, psychosocial adjustment, hopelessness and anxiety. The article concluded that segregated inmates may have "generally adapted and coped well with the conditions of today's Canadian federal administrative segregation."[21]

One question in particular that remains largely unaddressed is as follows: What are the effects of long-term AS? The empirical literature to date consists of inmates serving less than one year in segregation. Little is known about the effects of long-term AS incarceration. In fact, in the only

These harmful experiences are not universal

empirical investigation to date that examines AS commitments

greater than one year in duration, one article found that inmates segregated between one and four years evidenced increased symptoms of depression compared to their non-segregated peers; however, scores remained in the sub-clinical range for both groups of inmates.[22] Further, inmates in long-term AS did not demonstrate a worsening of psychological symptoms as time in restrictive housing increased.

Although we believe the effects from AS are not drastically different than those produced by incarceration in general (see Figure 1), this should not be interpreted as an endorsement for the wide-spread and long-term use of AS. Although there are no definitive studies indicating maximum cutoffs, we recommend a general principle of "shorter is better." Furthermore, AS is contraindicated for some inmates and should only be used as a last resort for inmate, staff or institution safety while seeking a transfer or placement in a more appropriate setting. Further, some inmates (e.g., juveniles, individuals with severe mental illness, inmates at risk for suicide) should be closely monitored during very brief periods of segregation. Consistent with correctional psychiatry expert Jeffrey Metzner,[23] we advocate for the development and implementation of best practices in AS to minimize risk and harms where they do occur.

Recommendations

Limit the use of AS for inmates with severe mental illness (e.g., disorders characterized by psychosis or other thought disorder, mania or severe depression) except in extreme instances in which the inmate presents a significant threat to other inmates/staff or the security of the institution. Although we recommend limiting the use of AS for inmates with severe mental illness, we recognize that severe mental illness does not eliminate antisocial tendencies warranting AS placement. The intent here is to eliminate the use of AS as a behavioral management strategy for symptoms of mental illness.

Although research has not demonstrated harm to juveniles placed in segregation, our recommendation is to limit the use of AS for juvenile offenders (i.e., inmates younger than age 18). In fact, although disciplinary segregation may be necessary as a form of behavioral management, we discourage the use of AS with indeterminate placement periods for juveniles except in extreme and rare circumstances.

Provide therapeutic and step-down programs for inmates serving significant time in AS. Examples of therapeutic programs include "Stepping Up, Stepping Out: A Mental Health Treatment Program for Inmates Detained in Restrictive Housing"[24] and "Taking a Chance on

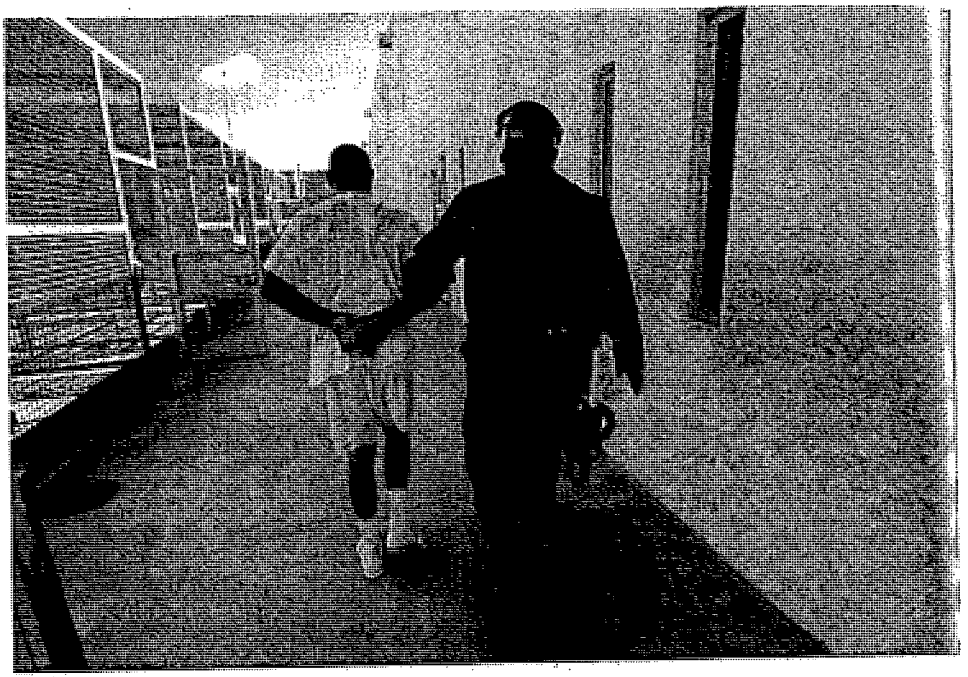
Change."[25]

Transfer inmates scheduled for community release out of AS approximately six months before their release date. Although data does not support a specific transfer time, it is clear that inmates released from AS directly to the community fair worse than inmates not released directly from AS; thus, we hypothesize that six months will allow for a sufficient adjustment period to optimize chances for a successful community reintegration.

Correctional systems remain responsible for providing basic medical and mental health services while housing inmates in AS. To ensure inmates that decompensate during their placement in AS, upon admission, a thorough medical and mental health evaluation should be conducted as a means of providing baseline data.

Transition inmates displaying symptoms of decompensation (physical or mental health) out of AS. Mental health rounds should be conducted on a minimum of a weekly basis (and possibly more frequently for non-AS type of segregation), and rounds should include verbal contact with any inmate who is deemed at risk for decompensation (e.g., inmates with a history of mental illness, inmates placed in AS shortly after their incarceration or who otherwise have a history of more time in AS than in general population, inmates with a history of suicide ideation/gestures).

Little is known about the effects of long-term AS incarceration



When recommending administrative segregation, shorter is better.

Mental health professionals responsible for rounds should consult with correctional staff to identify behavioral changes or possible decompensation in inmate functioning. Inmates placed in AS should receive clearly articulated and specific targets of behavior (e.g., disciplinary free for 60–90 days) that must be met for release consideration. Progress toward these specific behavioral markers should be routinely assessed with results of these ongoing assessments provided to the inmate.

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Taylor R. Ramler, B.A., is a doctoral student of counseling psychology at Texas Tech University.

Brieann Olafsson, B.A., is a doctoral student of counseling psychology at Texas Tech University.

Endnotes on p.78.

Photos courtesy California Department of Corrections and Rehabilitation (CDCR)

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EXHIBIT 9

Corrections Today web page

Corrections Today

Corrections Today is the professional membership publication of the American Correctional Association (ACA). Its international readership includes individuals involved in every sector of the corrections and criminal justice fields. The magazine is published six times a year.

Magazine Highlights

Deciphering inmate communication

By John M. Vanyur, Ph.D. and Moamed Hussein

Transforming lives through service dogs

By Robert Breckenridge II

2019 Winter Conference Policies and Resolutions

- 2015: APEX excellence in magazine issue for Jan/Feb 2015 *Corrections Today*
- 2015: APEX excellence in books for *Preventing and Managing Riots and Disturbances: Using the Incident Command System for Corrections*.
- 2014: APEX excellence in books for *Cage Your Rage: An Inmate's Guide to Anger Control, Second Edition*.
- 2013: APEX excellence in magazine issue for April/May 2012 Reentry Programs issue of *Corrections Today*.
- 2013: APEX excellence in books and eBooks for *Pathways for Offender Reentry: An ACA Reader*.
- 2012: APEX excellence in books and eBooks for *An ACA Reader: Jails*.

Job Bank - Advertise Open Positions

Please click here for details about posting a job ad online and/or in Corrections Today magazine.

Speak Out - Your Opinion Counts

Corrections Today is the perfect space to share your opinions that are relevant to corrections. We invite submissions to the Speak Out column for just this opportunity. Please email your submission as a Word file to submissions@aca.org.

EXHIBIT 10

Morgan et al., "Quantitative Syntheses of the Effects of Administrative Segregation on Inmates' Well-Being"

Psychology, Public Policy, and Law

1076-8971/16/$12.00 http://dx.doi.org/10.1037/law0000089

Quantitative Syntheses of the Effects of Administrative Segregation on Inmates' Well-Being

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There is a widely held belief that the use of administrative segregation (AS) produces debilitating psychological effects; however, there are also those who assert that AS is an effective strategy for reducing prison antisocial behavior and prison violence. Given these conflicting opinions it is not surprising that the use of segregation in corrections has become a hotly debated and litigated issue. To clarify the competing perspectives, two independent meta-analytic reviews, in an unplanned systematic replication, were undertaken to determine what effect AS has on inmate's physical and mental health functioning, as well as behavioral outcomes (e.g., recidivism). Collectively, the findings from these two meta-analytic reviews indicated that the adverse effects resulting from AS on overlapping outcomes ranged from $d = 0.06 - 0.55$ (i.e., small to moderate) for the time periods observed by the included studies. Moderator analyses from both investigations further reveal considerably smaller effect sizes among studies with stronger research designs compared to those with weaker designs. These results do not support the popular contention that AS is responsible for producing lasting emotional damage, nor do they indicate that AS is an effective suppressor of unwanted antisocial or criminal behavior. Rather, these findings tentatively suggest that AS may not produce any more of an iatrogenic effect than routine incarceration. Coding for these meta-analyses also revealed serious methodological gaps in the current literature. Recommendations for future research that will provide a much better understanding of the effects of AS are offered.

Keywords: administrative segregation, solitary confinement, sensory deprivation, meta-analysis

The use of administrative segregation (AS)—also known as solitary confinement—to isolate inmates from harming others or, conversely, being harmed has grown at an alarming rate in North America (Fine & Wingrove, 2014; King, 1999; Makin, 2013; O'Keefe, 2008). Currently, it is estimated that approximately 5.5% of inmates in the United States are maintained in segregated housing (Stephan, 2008), and 18% of all prison and jail inmates have served some time in segregation (A. J. Beck, 2015). Similarly, within the Canadian federal system, which houses all offenders in the country with sentences of 2 years or more, approximately 4% of inmates are in AS (3% are involuntary and 1% voluntary; G. Hill, Correctional Services of Canada, personal communication, May 8, 2015). Clearly the use of AS is one common North American practice for intervening when inmate behavior is deemed a threat to the security of an institution.

There are different forms of segregation used in most North American correctional facilities. Disciplinary segregation typically refers to the use of segregated housing as punishment for a behavioral infraction(s). The duration of disciplinary segregation is usually time specific and contingent upon the nature of the offense committed (e.g., 7 days, 30 days, etc.). AS typically refers to a

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change in inmate classification and is most frequently used to reduce the risk of harm to the inmate or others. Indeterminate sentences are usually associated with AS placement, such that the inmate is unaware of his or her release date. For purposes of this review, AS refers to the use of segregated housing, regardless of the purpose or official classification (e.g., AS, disciplinary segregation, Special Housing Units).

The practice of AS generally includes 23-hour-a-day lockdown, but the physical conditions vary considerably, as do the amenities and the services made available to inmates (Butler, Griffin, & Johnson, 2013; Metcalf et al., 2013; National Institute of Corrections, 1997). However, inmates typically receive their meals in their cell, and are allowed out of their cell three times per week for a shower (approximately 15 min) and for daily exercise (approximately 1 hr per day of solitary recreation outside of their cells in a small enclosed recreational unit). Some correctional facilities allow televisions, radios, and reading materials. Inmates in segregated housing are provided basic health and mental health services, but have limited access to other professional services (e.g., rehabilitative services) and limited visitation consisting of no physical contact and typically held in observation booths with conversation occurring telephonically (see Browne, Cambier, & Agha, 2011; Cloud, Drucker, Browne, & Parsons, 2015).

We now present a brief history on AS from the time it became a contentious issue in the sensation and perception literature and subsequently influenced the field of penology, followed by a review of some of the key research findings and methodological issues that have led to such a heated debate over its reputed effects.

The Administrative Segregation Debate

Various forms of AS have been a central feature of prisons since the 18th century (Gendreau & Goggin, 2014; P. S. Smith, 2006), but it was not until about 60 years ago that the topic became a contentious issue in the penological and sensation and perception literature. In the 1950s, some dramatic results emanated from research, allegedly funded by the U.S. Central Intelligence Agency (CIA), on the effects of extreme conditions of confinement as a psychological tool for interrogation. The research was directed by a world renowned neuropsychologist, Donald Hebb, and a psychiatrist, Donald Cameron, known for his theories on depatterning the mind (Brown, 2007; Klein, 2007; McCoy, 2006). Attracting particular attention were sensory deprivation (SD) experiments led by Hebb, in which sensory input in the environment was restricted. In these studies, volunteer college students were used as test subjects to examine the effect that SD had on various physiological and psychological outcomes during periods of confinement that ranged from a few hours to 3 to 4 days. A typical finding was that participants' cognitive and perceptual abilities deteriorated markedly (e.g., Bexton, Heron, & Scott, 1954). Acceptance of these findings persisted into the late 1960s when they were challenged by researchers who demonstrated that uncontrolled experimenter and setting dynamics introduced response bias in the early SD studies (C. W. Jackson & Kelly, 1962; Orne, 1962; Orne & Scheibe, 1964; Zubek, 1969). The final word on the effects of SD was summarized by Suedfeld (1975), who concluded, from his review of studies involving more than 3,300 subjects of widely varying backgrounds, that "one rarely finds, particularly in more recent studies, extreme emotionality, anger, and anxiety" (Suedfeld, 1975, p. 62; see also Suedfeld, 1980).

The question remains, however, as to whether the results from the *SD* experimental literature apply to prison settings, given the differences in settings and subjects. This subject was addressed by the medical branch of the then Canadian Penitentiary Service. In the 1960s, when the findings from the early SD studies were still popular, this government agency was concerned that their use of AS might produce harmful psychological results on inmates. As it turned out, the results from the random assignment studies conducted on volunteer AS inmates in Canadian federal and provincial prison settings for several days (e.g., Ecclestone, Gendreau, & Knox, 1974; Gendreau, Freedman, Wilde, & Scott, 1968, 1972; Gendreau, McLean, Parsons, Drake, & Ecclestone, 1970; Walters, Callahan, & Newman, 1963) produced strikingly similar effects as the findings from the SD literature (e.g., heightened arousal to sensory stimulation, resting state electroencephalogram (EEG), need for sensory stimulation, slightly lower stress levels, no signs of perceptual dysfunction, and personality disintegration; see Zubek, 1969). This was an important finding; prison AS was a facsimile of SD, thereby making the SD literature relevant to any discussion on the topic of AS (Gendreau et al., 1972; Gendreau & Thériault, 2011). Subsequently, Suedfeld, Ramirez, Deaton, and Baker-Brown (1982) examined 115 inmates who were in AS in three prisons in Canada and two in the United States for at least 90 days. Suedfeld et al. found some measure of psychological upset; however, his summary of the results was that the conditions of AS were not overwhelmingly aversive, stressful, or damaging to inmates. These observations by Suedfeld et al. were later replicated by Zinger, Wichmann, and Andrews (2001). This conclusion, however, was quickly challenged.

In 1983, Grassian described his psychiatric assessment of 14 AS inmates in a Massachusetts prison. Grassian (1983) reported these inmates suffered from massive free-floating anxiety, aggressive fantasies, and paranoia, among other behaviors. He opined that the cluster of symptoms associated with AS confinement formed a "clinically distinguishable syndrome" (p. 1450), which he termed the "SHU Syndrome" (with SHU referring to the Security Housing Unit structure of the California Department of Corrections and Rehabilitation). This study became the impetus for the belief that AS produces debilitating psychological effects. Kupers (2008) further stated that AS produced substantial psychopathological effects that resulted in "lasting emotional damage (p. 1006).

Since the Grassian (1983) publication, a number of investigators have claimed that inmates experienced a myriad of mental health concerns and symptoms, including appetite and sleep disturbance; anxiety, including panic; depression and hopelessness; irritability; anger and rage; lethargy; psychosis and cognitive rumination; social withdrawal; cognitive impairment; and suicidal ideation and self-injurious behaviors (see Andersen et al., 2000; Beven, 2005; Bonner, 2006; Brodsky & Scogin, 1988; Cloyes, Lovell, Allen, & Rhodes, 2006; F. Cohen, 2006, 2008, 2012; Glaze & Herberman, 2013; Grassian, 2006a, 2006b; Haney, 1993, 2003, 2009; Hayes & Rowan, 1988; Hresko, 2006; Kupers, 2008; Lovell, 2008; Metzner & Fellner, 2010; Miller & Young, 1997; P. S. Smith, 2008; Stephan, 2008). Offenders with mental illness are considered particularly vulnerable when placed in AS (Metzner & Fellner, 2010), as they may experience more mental health disturbance (i.e., greater symptomatology) than offenders with mental illness not

placed in AS (O'Keefe, 2007; for a differing view, see Grassian & Friedman, 1986). Lastly, inmates released directly from segregation to the community have shown poorer postrelease outcomes than inmates not released from segregation (Lovell, Johnson, & Cain, 2007), although it is noted these authors did not account for other commonly known situational and criminal risk factors.

Collectively, these reports led to the conclusion that AS results in significant inmate mental health impairment (Haney, 2009; Kupers, 2008; Lovell, 2008; P. S. Smith, 2006; Toch, 2003). Recently, Haney (2012) has stated unequivocally that the "empirical research on solitary confinement has consistently documented its problematic effects" (p. 11). Others, however, have pointed to the serious methodological shortcomings on much of the literature that contributed to these conclusions (e.g., selection bias, reliance on phenomenological methods and qualitative outcomes, failure to control for powerful response bias factors where inmates were encouraged to report pathological symptoms)—these shortcomings limit the credibility of their results (Gendreau & Labrecque, in press; Hanson, 2011; Suedfeld et al., 1982; Zinger et al., 2001).

Furthermore, as noted previously, not all studies have borne out the negative effects of placement in segregation. When examining very brief periods of segregation, almost no deleterious effects are found (see, e.g., Gendreau et al., 1972; Walters et al., 1963). As referenced previously, Suedfeld et al. (1982) and Zinger et al. (2001) examined nonvolunteer inmates who were sent to AS in six prison settings for periods up to 90 days. The respective authors found little mental health decompensation for segregated inmates compared with their peers in the general prison population.

Notably, another study that may be more typical of the use of segregation in large adult prisons in the United States also showed a general absence of adverse effects resulting from placement in AS (O'Keefe, Klebe, Stucker, Sturm, & Leggett, 2010). Participants in this study consisted of 247 men from AS, the general prison population, and a psychiatric care correctional facility. Researchers assessed inmates over a 1-year period on the following domains: psychosis; anxiety, depression, and hopelessness; somatization; social functioning; cognitive functioning; anger; and hypersensitivity. Contrary to the researchers' hypotheses, results indicated that AS was generally not associated with the onset of psychological symptoms or cognitive impairment for mentally ill and nonmentally ill inmates, nor did inmates with mental illness fair worse in AS than their nonmentally ill peers. Specifically, results from this study indicated that only 7% of the AS sample reported an increase in mental health symptomology, whereas 20% improved, and the rest remained stable (Metzner & O'Keefe, 2011).

Although this study was the most sophisticated study to date with markedly significant methodological improvement over previous works examining the effects of AS on inmate functioning (see Berger, Chaplin, & Trestman, 2013; Gendreau & Thériault, 2011), it was criticized on several fronts, including (a) that the researchers deliberately ignored indicators of psychiatric disturbance, (b) that the inclusion criteria resulted in a biased inmate selection process, (c) the questionable validity of the information from the self-report measures used in the study, and (d) the gender of the primary data gatherer (e.g., Grassian & Kupers, 2011). In response to criticisms, O'Keefe and colleagues (2010) commented the multimethod data collection, including, but not limited to, standardized and commonly used clinical self-report measures (e.g., the Beck Depression Inventory; A. T. Beck, Ward, Mendelson, Mock & Erbaugh, 1961) for assessing psychological disturbance, and the relevance of the sample *and* comparison groups for generalizing to other AS units with adult male literate inmates.

The Need for a Research Synthesis

Given the conflicting findings in the literature on the use of segregation, further work was clearly warranted. Relevant to this point, many years prior, Toch (1984) called for a "science of imprisonment as well as a science of inmate reactions to imprisonment" (p. 514), a message that, 30 years later, continues to be ignored at the correctional policy level (Gendreau, 2015). Unfortunately, all the literature reviews on the effects of AS (e.g., P. S. Smith, 2006) to date have relied on narrative summaries, which have frequently been shown to be notoriously unreliable in other areas of psychological study (Beaman, 1991). Thus, further work to clarify current findings on the effects of AS on inmate well-being was clearly needed.

Unbeknownst to the present authors at the time, two independent meta-analytic reviews were being conducted. Although these meta-analyses were conducted almost simultaneously, the respective researchers were unaware of the other group's work until the results were finalized (Research Synthesis 1: primarily based at the University of Cincinnati—Gendreau, Smith & Labrecque, and Research Synthesis 2: primarily based at Texas Tech University—Morgan, Gray, MacLean, Van Horn, Bolanos, Batastini, & Mills). The statistical results of the two research groups were blind to each other's methods and calculations until the preparation of this manuscript. The comparison of these two meta-analyses was fortuitous, because there is a growing recognition in psychology in which a failure to replicate is of grave concern not only for primary studies (Pashler & Wagenmakers, 2012) but also meta-analyses themselves (Rosenthal, 1990). Moreover, when there is a great deal of sensitivity and controversy that affects legal issues about the humane care of inmates, replication becomes even more critical. Here, we present what is known in the literature as a systematic replication, such that general features and goals of research replications—in this case, meta-analyses—remained similar; however, there were differences in some important aspects (e.g., inclusion criteria, number of studies coded, coding procedures, and analytical procedures). It has been proposed that systematic replications offer more information than literal or operational replications for cross-validation and generalization (Schmidt, 2014).

Method

Research Synthesis 1 (Gendreau, Smith, & Labrecque)

Literature retrieval. In the current investigation, the process for locating relevant studies included searching for the key terms "administrative segregation," "solitary confinement," and "supermax" within the abstracts of articles in several online databases (e.g., Criminal Justice Abstracts, Criminal Justice Periodical Index, Google Scholar, National Criminal Justice Reference Service, PsycINFO, Social Sciences Index, Sociological Abstracts, and SocINDEX), followed by using an ancestry approach (e.g., the reference lists from each identified study were used to locate additional studies). In addition, indexes of all the issues of the

journals that frequently publish segregation related works (e.g., *Canadian Journal of Criminology, Crime & Delinquency, Criminal Justice and Behavior, Criminology, The Prison Journal*) were examined to find any additional studies not discovered through the first step. The annual conference programs for the American Psychological Association, the American Society of Criminology, and the Academy of Criminal Justice Sciences were also reviewed to uncover any related unpublished research. Finally, the ancestry method was used by contacting researchers in the area for leads as to other studies that were not uncovered by the previous methods. These procedures resulted in the identification of 150 documents.

Eligibility criteria. To be included in the meta-analysis, studies had to meet several eligibility criteria. First, the study must have been conducted on prisoners experiencing AS in a custodial setting (i.e., prison or jail). Studies relying on nonoffender samples, or that took place in nonprison laboratory settings, were excluded. Second, the study must have included a comparison group and examined some measure of outcome. Third, the study must have been written in the English language. Finally, the study had to have contained sufficient data to calculate an effect size (i.e., Pearson r or phi coefficient).

A total of 150 studies were reviewed for the purposes of this meta-analysis, including books, published articles, paper presentations, and reports from correctional agencies. Of the 150 studies located, only 14 (or 9.3%) were suitable for analysis according to our inclusion criteria. Note that in the list of references, references marked with one asterisk indicate studies included in the first meta-analysis, references marked with two asterisks were included in the second meta-analysis, and references marked with three asterisks were included in both meta-analyses.

Coding procedures. The coding manual created for this meta-analysis was used to systematically capture the characteristics of the identified studies, such as design quality, sample size, length of time in AS, and outcome type. The dependent variables were grouped into one of three distinct categories: (a) psychological indicators (i.e., anger, hostility, anxiety, depression, psychosis, paranoid ideation, intelligence, cognitive impairment, somatization, coping, negative attitude, hypersensitivity, global functioning); (b) medical/psychophysiological indicators (i.e., physical health and sensory arousal); and (c) behavioral indicators (i.e., postrelease recidivism and serious institutional misconduct). For the purposes of this investigation, stronger designs were defined as those that had comparison groups that were similar to the treatment group on at least five empirically relevant static and/or dynamic risk factors (e.g., age, criminal history, years in prison, institutional behavior, antisocial attitudes). In contrast, weaker designs were those in which either no information was provided on offender characteristics or the two groups were not similar on at least five of the relevant static and dynamic risk factors described above. Multiple publications based on the same sample or data set were treated as a single study for coding purposes.

In Research Synthesis 1 (RS1), two studies were randomly selected and coded by the second and third authors. In these two studies, 132 of the 134 items were coded similarly for an interrater reliability of 98.5%. The two items in question were resolved by a meeting of the two coders. The third author then coded the remaining 12 studies. When questions arose during the coding of these studies, all three authors reviewed the study in question in order to reach a decision on the coding item(s) of concern. There were two meetings held with all three authors to resolve such issues.

Effect size calculation and interpretation. This meta-analysis used r as the effect size metric (ES) with 95% confidence intervals (CIs) to estimate the magnitude of the effect of AS on outcomes. A positive valence in the results indicates an iatrogenic effect (i.e., AS correlates with an increase in the dependent variable), whereas a negative valence in the results indicates a positive effect (i.e., AS correlates with a decrease in the dependent variable). In choosing the ESs for inclusion in the analyses, studies were allowed to contribute more than one ES as long as each represented an estimate for a separate sample of offenders. Whenever a study reported multiple outcome measures for a similar construct, all of the estimates within this domain were averaged within the study in order to produce only one effect size per unique sample for each type of outcome examined.

The effect sizes for each outcome were calculated using a random-effects model. This method is especially useful when the goal of the meta-analysis is to extend the results to the population of studies of which the current sample of studies is only a part, and it cannot be determined with any degree of accuracy that all of the studies are not functionally similar (see Bornstein, Hedges, Higgins, & Rothstein, 2009). Interpretation of the data focused on the CIs of the point estimates to assess the precision and replicability of a finding (see Cumming, 2012; Gendreau, Listwan, Kuhns, & Exum, 2014). The CI provides a robust probability (83%) of a future replication of a finding to plausibly fall within the CI limits (Cumming, 2012). A CI that contains zero does not mean there is no effect; it is just one of the plausible, though highly unlikely, effects within the CI (Schmidt & Hunter, 1997). Based on the rationale provided by Smithson (2003), CIs with a width greater than .10 were considered to be imprecise, thereby warranting further replication (Gendreau & Smith, 2007). The heterogeneity of ESs was determined by the I^2 statistic, which is an intuitive and simple index of the discrepancy of a group of studies results (Higgins & Thompson, 2002). The I^2 statistic is based on the Cochran's Q statistic, but also provides a point estimate of the magnitude of the discrepancy, rather than just a significance test, as is the case with the Q statistic. I^2 is calculated as $100\% \times (Q - df)/Q$. The interpretation of I^2 is the proportion of total variation in the estimates of treatment effect that is related to heterogeneity between studies, which is presented in percentage terms. Higgins and Thompson (2002) proposed that I^2 percentages of around 25%, 50%, and 75% indicate low, medium, and high heterogeneity among the ESs.

Research Synthesis 2 (Morgan, Gray, MacLean, Van Horn, Bolanos, Batastini, & Mills)

Literature retrieval. Two separate methods of article retrieval were utilized to find literature pertaining to AS and mental health outcomes. First, an electronic database search was conducted with the following search terms: "administrative segregation," "segregation," "secure housing," "supermax prison," "supermax facility," and "solitary confinement." The database search yielded 40,589 articles: 5,918 from PsycINFO, 33,035 from MEDLINE, and 1,636 from Criminal Justice Abstracts. Second, the reference sections of literature reviews and other meta-analyses were examined to identify additional journal articles and presen-

tations related to segregation and mental health outcomes. Trained research assistants reviewed the titles and abstracts of these documents to eliminate unrelated articles (e.g., articles related to corrections but not AS), those not available in English, book chapters that did not report the results of original research, and articles that did not evaluate mental health outcomes for inmates in AS resulted in 61 remaining documents.

A trained research assistant then reviewed the 61 remaining documents for inclusion in this research synthesis. The inclusion criteria for this review included: (a) the article/report/dissertation was available in English; (b) the study evaluates outcomes for inmates placed in segregation in a correctional facility (e.g., jail, prison) for research or correctional purposes; and (c) the studies must have included sufficient data or summary statistics that allowed for the calculation of effect sizes. It should be noted that if Criteria 1 and 2 were met, but the document did not provide sufficient data for calculating effect sizes, authors were contacted to request additional information. If the authors were unable to provide the necessary information for purposes of computing effect sizes, the document did not meet inclusion criteria and was excluded. This review process eliminated 42 articles, leaving 19 documents consisting of case-controlled studies that met the inclusion criteria for this research synthesis. Ten of these documents overlapped with RS1.

Coding procedures. A coding manual was developed by the lead author of the research synthesis. The following content areas were included in this code sheet:

1. Study, author, and institutional descriptors.
2. Sample descriptors (e.g., sample size of segregated group, presence and sample size of control group, sample demographics, psychiatric diagnosis, offender risk level, and assessment method).
3. Segregation descriptors (e.g., availability and frequency of mental health treatment, training of service provider, time out of cell).
4. Control group descriptors (i.e., general population or unknown).
5. Research design descriptors (e.g., scientific integrity of study,[1] research design, type of follow-up, type of failure).
6. Effect size descriptors (e.g., type and value of significance test, sample size, significance value, group means and standard deviations, effect sizes).

After the code sheet was developed, the research team reviewed the code sheet and provided revisions for clarifying item coding criteria. One document was then coded by all authors and a conference call was convened to review coder discrepancies, re-review scoring criteria, and correct coding errors.

To complete the coding process, each document was coded by three of the authors or a trained research assistant. Documents were randomly assigned to authors; however, the number of documents coded was generally representative of author order. One author then reviewed the three code sheets for each document and identified scoring discrepancies. A two-thirds majority agreement criterion was utilized to resolve discrepancies, such that agreement of two of the three coders was required for items to be considered accurately scored. Items that did not result in a two-thirds majority agreement were resolved by the three coders reviewing the item and coding via in-person or conference call meeting. In Research Synthesis 2 (RS2), 93% of items met the two-thirds agreement criteria such that only 66 of 950 items had to be resolved by a meeting of the three coders.

Effect Size Calculation and Interpretation

Given that the collection of studies coded for this article assessed a diverse range of physical, mental health, and behavioral outcomes, it would be inappropriate to combine all studies into a single analysis. Instead, the primary statistical procedures consisted of a series of univariate meta-analyses, with a separate meta-analysis reported for each outcome of interest. The outcomes were grouped into 15 general categories: general mental health, mental health functioning, anxiety, mood/emotion, psychosis, anger, hypersensitivity, self-harm, social interaction, victimization, physical health, cognitive, behavioral functioning, recidivism, and antisocial indicators. Note that some studies contributed ESs for more than one of these general outcome categories.

To determine the magnitude of the difference between segregated and nonsegregated offenders for each outcome of interest, the standardized mean difference (i.e., Cohen's d) and its variance was coded from information available within the studies. However, given the upward bias associated with Cohen's d values derived from sample sizes that are less than 20, all d values and their respective variances were converted to Hedges' g using the correction factor J (Borenstein et al., 2009). All effect sizes were coded such that positive values indicated poorer outcomes for segregated offenders.

For each outcome, a weighted mean ES was calculated, in which each weight is the inverse of the estimated variance of the ES, using the random-effects model (see Borenstein et al., 2009; Lipsey & Wilson, 2001). Given that several studies reported multiple effects for the same construct, robust variance estimation (RVE) was employed (see Hedges, Tipton, & Johnson, 2010; Tipton, 2015). RVE is equipped to handle dependent effect sizes without knowledge of their covariance structure, thus allowing for the inclusion of all effect sizes and eliminating the need for averaging effects. All analyses were conducted using the "robumeta" (Fisher & Tipton, n.d.) package developed for R statistical software (http://www.r-project.org/). Due to the small number of studies ($m < 40$ studies) within each analysis, the small sample corrections developed by Tipton (2015) were applied. An important aspect of this type of analysis is the Satterthwaite degrees of freedom. When the Satterthwaite degrees of freedom are less than 4, the probability of a Type I error is much higher than $\alpha = .05$. Therefore, given the risk of falsely rejecting the null hypothesis, all

[1] To examine scientific integrity in RS2, we used the Maryland Scale of Scientific Rigor (MSSR). The MSSR is a metric that was developed to evaluate the scientific rigor of empirical investigations in order to assist in the evaluation of causation among variables (Sherman et al., 1997). The metric and coding used in this meta-analysis is available from the first author.

univariate meta-analyses with degrees of freedom less than 4 were reported as being nonsignificant.

For all analyses, the ρ value was set at 0.8. To determine whether the effect size, standard error, and τ^2 values were robust to fluctuations in the ρ value, sensitivity analyses were conducted across varying values of ρ (i.e., 0.0, 0.2, 0.4, 0.6, 0.8, and 1.0; not reported). Among the 15 meta-analyses conducted, seven analyses exhibited either no change in the estimates across all values of ρ or, once rounded to the second decimal, the estimates across the various values of ρ were identical. For the remaining eight analyses, however, the ρ value was set to 1.0 to account for the degree of fluctuation in the effect size, standard error, and τ^2 values, thus ensuring conservative estimates. Lastly, heterogeneity was examined by way of τ^2 (i.e., between-study heterogeneity) and I^2 values. Reporting of the results was modeled after publications and reports by Tipton and colleagues (Fisher & Tipton, n.d.; Tanner-Smith & Tipton, 2014; Tipton, 2015).

As outlined by J. Cohen (1992), ES values of 0.20, 0.50, and 0.80 were considered to be indicative of small, medium, and large associations.

Results

Research Synthesis 1

Description of sample. From the 14 studies included in RS1, a total of 65 separate effect sizes were tabulated, which included a total of 50 involving psychological indices, six involving medical/psychophysiological indices, and nine involving behavioral indices.

The preponderance of studies examined were journal articles published within the last 14 years. The authors were primarily academics from the disciplines of psychology and criminology. Approximately three quarters of the studies included in this meta-analysis were conducted in the United States. The majority of the offenders drawn from these studies involved adult male inmates (≥80%), although a small proportion had mixed gender (i.e., male and female) samples. Table 1 lists the effect size estimates for the psychological outcomes and includes the rating of design strength, time spent in AS, and the unweighted ES (*r*).

Presented here are the results by outcome domain, which includes the number and magnitude of the *ES* (*k*, *r*), the 95% CI, I^2, and the sample size (*n*) for each category. The ES is weighted by sample size. The I^2 results are presented by their classification as to low, medium, and high dispersion of ESs.

Effect for psychological outcomes. Psychological measures were the most frequently investigated in the AS literature. Six studies with eight samples examined 13 psychological indicators. The data for the ESs and their 95% CIs are presented in Table 1 and graphed in Figure 1.

As seen from Table 1 and Figure 1, the ES values ranged from −.06 to .17. The CIs for both outcome types also overlapped with one another.[2] Nine of the outcome point estimates consisted of an $r < .10$. All 13 of the CIs were rated as imprecise in width ($r > .10$). The between-subjects variability for the ES groups was rated low on the I^2 index for the following: anger, depression, intelligence, paranoid ideation, somatization, coping, and negative attitude. Medium dispersion of ESs was found for anxiety, hypersensitivity, and psychosis, and large dispersion was reported for the cognitive impairment, global functioning, and hostility.

Table 1
Meta-Analysis of the Effects of Administrative Segregation by Outcome Type and Domain

Outcome	Average ES and 95% CI		I^2	*n*	*k*
	r	95% CI			
Psychological					
Anger	−.06	−.17 to .06	0%	315	3
Hostility	.17	−.12 to .43	74%	244	5
Anxiety	.17	.05 to .28	36%	474	6
Depression	.08	−.02 to .18	13%	474	6
Psychosis	.05	−.14 to .24	39%	219	4
Paranoid ideation	.09	−.04 to .23	0%	219	4
Intelligence	.03	−.10 to .15	23%	315	3
Cognitive impairment	.01	−.25 to .27	79%	314	4
Somatization	.04	−.11 to .18	8%	219	4
Coping	.08	−.07 to .22	0%	179	2
Negative attitude	−.05	−.20 to .10	0%	179	2
Hypersensitivity	.17	−.03 to .35	40%	219	4
Global functioning	.15	−.10 to .38	73%	280	3
Medical/Psychophysiological					
Physical health	.10	−.01 to .21	0%	314	4
Sensory arousal	.38	.07 to .63	0%	40	2
Behavioral					
Postrelease recidivism	.06	.02 to .10	25%	4,636	7
Institutional misconduct	.01	−.03 to .06	—[a]	1,830	1

Note. ES = effect size; CI = confidence interval.
[a] I^2 not calculated because $k = 1$.

Effect for medical/psychophysiological outcomes. There were five studies with six unique samples that examined the effect of AS on measures of medical/psychophysiological outcomes ($n = 344$). The data for ESs and their 95% CIs are also presented in Table 1 and in Figure 2. The CIs for both outcomes overlap.

There were three studies with four samples that examined the effect of AS on measures of physical health (i.e., heart rate/blood pressure, plasma cortisol levels; $n = 314$). The ES was $r = .10$, 95% CI [−.01, .21]. There were two studies that produced two effect sizes that examined the effect of AS on measures of sensory arousal ($n = 40$). The dependent variables were EEG levels and visual evoked potentials. The ES was $r = .38$, 95% CI [.07, .63]. The CIs for both outcomes overlapped. The between-subjects variability for each outcome was rated low by the I^2 index. The widths of the two CIs [.22, .56] indicated that the ES estimate was imprecise.

Effect for behavioral outcomes. There were six studies with nine unique samples that examined the effect of AS on measures of behavioral outcomes ($n = 6,540$). The data for ESs and their 95% CIs are presented in Table 1 and Figure 3. The CIs for both outcomes overlap.

There were five studies with seven unique samples that examined the effect of AS on measures of postrelease recidivism ($n = 4,636$), and one study that produced two effect sizes examining the effect of AS on measures of institutional misconduct ($n = 1,904$).

[2] For readers wishing to compare the use of CIs with traditional significance testing conclusions, see Cumming and Finch (2005) and Campbell, French, and Gendreau (2009) for an example in the forensic area.

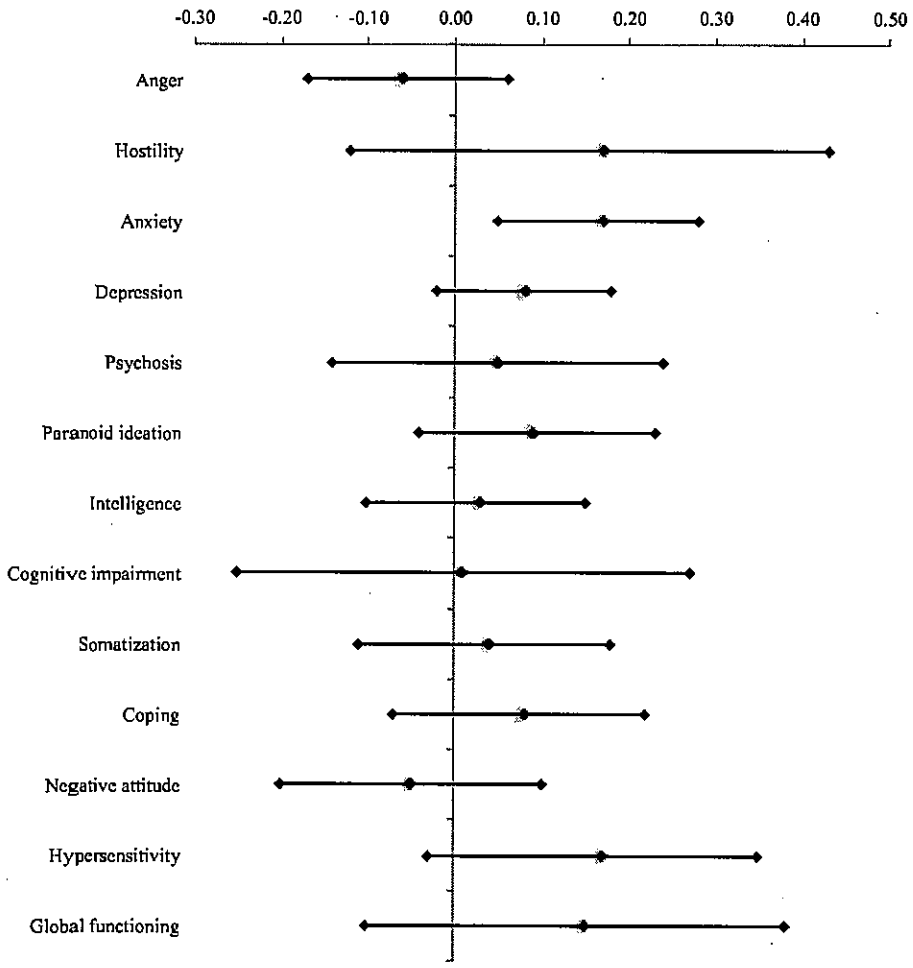

Figure 1. Forest plot of random effect sizes and 95% confidence intervals for psychological measures.

For postrelease recidivism, the ES was .06, 95% CI [.02, .10], pointing to an increase in recidivism for the inmates exposed to the AS condition. The relationship of AS (n = 1,904, k = 2) on misconducts suggests a suppression effect (r = −.08, 95% CI [−.20, .05]). The between-subjects variability (I^2) was estimated to be low and high, respectively, for both outcomes. The width of the CI for recidivism was precise (<.10), but not for misconducts (CI width = .25). Table 2 provides a summary of the effect sizes for all outcome types.

Moderator analysis. This study also attempted to code for factors that would possibly moderate the effect of AS on the dependent variables. With the exception of one moderator, very little information was available in this regard. The 14 studies included samples that were comprised of 80% or more of adult males. The samples were all mixed for the eight studies that reported information on offender race. Only four studies included information on offender risk for recidivism; all of them used static predictors (e.g., age, gender, race, and previous criminal record) to

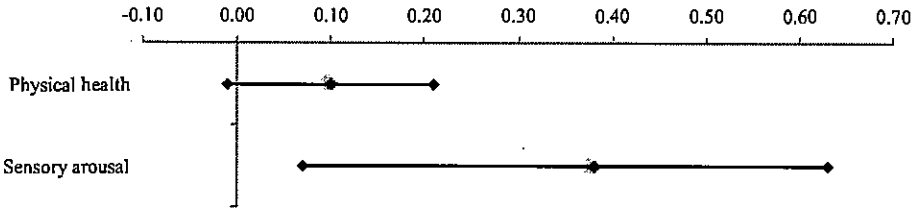

Figure 2. Forest plot of random effect sizes and 95% confidence intervals for medical/psychophysiological measures.

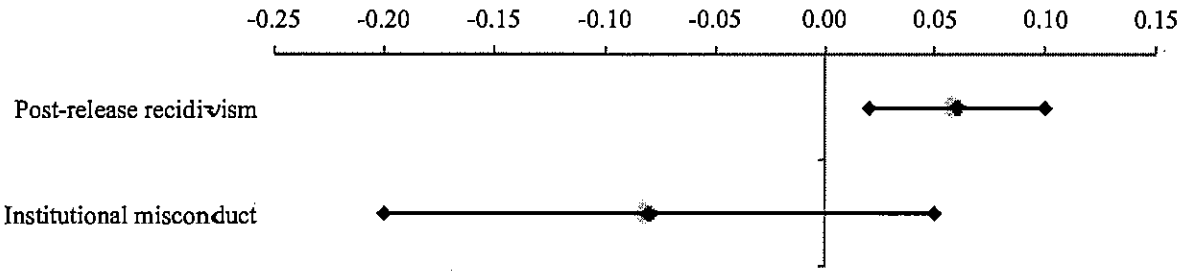

Figure 3. Forest plot of random effect sizes and 95% confidence intervals for behavioral measures.

make comparisons between groups, and none of the studies separated the effects by risk level. Therefore, it was not possible to assess whether AS has a differential impact on outcomes based on any of these offender-level characteristics. Data was virtually nonexistent on situational variables (i.e., reasons for being sent to AS, physical conditions of AS, staff–inmate relations, health care and treatment services, access to outside contacts such as family, parole). It was, however, possible to code studies by design strength. Studies categorized as stronger designs (k = 41) produced an ES of r = .03, 95% CI [.00, .05]. The corresponding data for weaker designs (k = 24) was an ES of r = .21, 95% CI [.12, .29].

Research Synthesis 2

The 19 studies included in this meta-analytic review produced 144 total effect sizes (see Tables 3 and 4).

Description of sample. Of the 19 documents included in this research synthesis, 14 were peer-reviewed journal articles, one was a technical report, one was a published dissertation, one was a government report, one was a conference presentation, and one was a study that was published as a peer-reviewed journal article and as a government report. The documents were produced between 1963 and 2014. The majority of correctional facilities included in this review were a prison setting (n = 18), with the remaining study occurring in a jail. Twenty-one percent of the correctional facilities were designated as supermaximum (lockdown) facilities, whereas 29% were maximum security facilities, 14% were medium security facilities, and 36% were facilities of mixed security levels (five facilities were unknown). Correctional facilities were located predominantly in North America (i.e., 42% United States, 42% Canada), with three studies (16%) occurring in Europe.

Participants from the 19 studies consisted of more than 9,823 inmates in AS and 131,169 inmates in non-AS control groups primarily from general prison populations (n = 131,074). The average age of participants was 29.3 years (SD = 4.1; m = 8) for inmates in AS, and 31.4 for inmates in control groups (SD = 3.8; m = 8). Inmates were generally sent from the general population (m = 10); however, in two studies, inmates were placed in AS in a jail setting upon arrest or while awaiting trial. Inmate location prior to AS placement was unknown for seven studies. Meaningful data regarding race, ethnicity, index offense, sentence length, offender risk of reoffending, and other relevant criminal justice sample descriptors (e.g., history of prior incarceration, disciplinary behavior) of participants were unattainable due to inconsistent or unreported data.

In total, 15 univariate meta-analyses were conducted, with the total number of effect sizes per analysis ranging from 4 to 81 (see Table 3). Among the meta-analyses, just over half (i.e., 53% or 8/15) had Satterthwaite degrees of freedom greater than 4. This was likely caused by the small number of studies and independent samples included within several of the analyses. Consequently, the ES values of the univariate meta-analyses with degrees of freedom less than 4 have been reported for descriptive purposes and should be interpreted with caution. Likewise, due to the low number of studies identified for several of the analyses, the majority of the findings described below are considered preliminary at this time.

Behavioral functioning. A significant, albeit modest, effect of segregation status was found when overall behavioral functioning was examined (ES = 0.43, 95% CI [0.22, 0.65], p = .001). When broken down by type of behavior, a slightly smaller, yet significant, effect was found between recidivism and segregation status (ES = 0.33, 95% CI [0.10, 0.57], p = .014). With respect to self-harm and victimization, only a small number of studies (m = 2 and 1, respectively) were identified, resulting in the Satterthwaite degrees of freedom falling below 4. As such, the level of significance could not be ascertained for these analyses. However, notwithstanding the low degrees of freedom, the analyses revealed that the effects of segregation status on self-harm was moderate in magnitude (ES = 0.78), whereas the effects of segregation status on victimization fell just below the threshold for a moderate effect (ES = 0.49). Level of heterogeneity for the four analyses ranged from low to high (τ^2 = 0.00 to 0.28, I^2 = 0.0% to 98.93%).

Physical health. A modest effect was found when the association between segregation status and physical health was examined (ES = 0.36, 95% CI [−0.04, 0.75]). Although this analysis was nonsignificant, it appeared to be approaching significance (p = .068). Heterogeneity among the effect sizes was considered moderate (τ^2 = 0.14, I^2 = 62.00%).

Cognitive functioning. Given that there was a small number of studies (m = 2) from which the effect sizes of the association between cognitive functioning and segregation status could be coded, the results pertaining to cognitive functioning are considered preliminary. Results of the analysis revealed a modest, nonsignificant association between segregation status and cognitive functioning (ES = 0.19). Heterogeneity among the effect sizes was considered low (τ^2 = 0.03, I^2 = 35.29%).

Table 2
Descriptive Statistics and Effect Sizes for Studies Included in the Meta-Analysis by Outcome Type

Study and outcomes	Design quality	Time in AS	Sample size	*r*
Psychological outcomes				
Anger				
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.00
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	−.08
Zinger et al. (2001)	Stronger	60 days	136	−.08
Hostility				
Miller & Young (1997; AS)	Weaker	n/a	20	.65
Miller & Young (1997; DS)	Weaker	n/a	20	.09
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	−.07
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	−.12
Suedfeld et al. (1982)	Weaker	*M* = 34 days	25	.40
Anxiety				
Andersen et al. (2003)	Weaker	≥3 months	119	.27
Miller & Young (1997; AS)	Weaker	n/a	20	.23
Miller & Young (1997; DS)	Weaker	n/a	20	.34
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.02
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	.00
Zinger et al. (2001)	Stronger	60 days	136	.26
Depression				
Andersen et al. (2003)	Weaker	≥3 months	119	.24
Miller & Young (1997; AS)	Weaker	n/a	20	.01
Miller & Young (1997; DS)	Weaker	n/a	20	.27
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.02
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	.00
Zinger et al. (2001)	Stronger	60 days	136	.00
Psychosis				
Miller & Young (1997; AS)	Weaker	n/a	20	.15
Miller & Young (1997; DS)	Weaker	n/a	20	.46
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	−.07
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	−.02
Paranoid ideation				
Miller & Young (1997; AS)	Weaker	n/a	20	.15
Miller & Young (1997; DS)	Weaker	n/a	20	.26
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.06
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	.09
Intelligence				
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.15
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	−.09
Zinger et al. (2001)	Stronger	60 days	136	.02
Cognitive impairment				
Andersen et al. (2003)	Weaker	≥3 months	119	.32
Ecclestone et al. (1974)	Stronger	10 days	16	−.38
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	−.09
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	−.02
Somatization				
Miller & Young (1997; AS)	Weaker	n/a	20	.25
Miller & Young (1997; DS)	Weaker	n/a	20	.30
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.04
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	−.09
Coping				
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.07
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	.08
Negative attitude				
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	93	−.12
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	84	.02
Hypersensitivity				
Miller & Young (1997; AS)	Weaker	n/a	20	.31
Miller & Young (1997; DS)	Weaker	n/a	20	.51
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.13
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	.01
Global functioning				
Andersen et al. (2003)	Weaker	≥3 months	119	.21
Suedfeld et al. (1982)	Weaker	*M* = 34 days	25	.40
Zinger et al. (2001)	Stronger	60 days	136	−.06

(*table continues*)

Table 2 (*continued*)

Study and outcomes	Design quality	Time in AS	Sample size	*r*
Medical/psychophysiological outcomes				
Physical health				
Andersen et al. (2003)	Weaker	≥3 months	119	.09
Ecclestone et al. (1974)	Stronger	10 days	16	.44
O'Keefe et al. (2010; NMI)	Stronger	*M* = 373 days	94	.05
O'Keefe et al. (2010; MI)	Stronger	*M* = 361 days	85	.11
Sensory arousal				
Gendreau et al. (1968)	Stronger	7 days	20	.33
Gendreau et al. (1972)	Stronger	7 days	20	.43
Behavioral outcomes				
Postrelease recidivism				
Butler, Steiner, Makarios, & Travis (2013)	Stronger	≥90 days	104	.10
Lovell & Johnson (2004; NMI)	Stronger	≥12 weeks	380	.09
Lovell & Johnson (2004; MI)	Stronger	≥12 weeks	104	−.04
Lovell et al. (2007; direct release)	Stronger	≥12 weeks	110	.19
Lovell et al. (2007; later release)	Stronger	≥12 weeks	252	.02
Mears & Bales (2009)	Stronger	≥91 days	2,482	.02
Motiuk & Blanchette (2001)	Weaker	n/a	931	.10
Institutional misconduct				
Briggs et al. (2003; inmate)	Weaker	n/a	1,143	−.14
Briggs et al. (2003; staff)	Weaker	n/a	761	−.01

Note. NMI = no mental illness; MI = mental illness; AS = administrative segregation; DS = disciplinary segregation; n/a = not available.

Mental health functioning. Results revealed a significant effect of segregation status on mental health functioning, the magnitude of which fell just below the threshold for a medium effect size (ES = 0.47, 95% CI [0.18, 0.76], $p = .007$), with the level of heterogeneity falling within the moderate range ($\tau^2 = 0.13$, $I^2 = 61.07\%$). Subanalyses indicated that when general mental health and segregation status was examined, the association was moderate in magnitude (ES = 0.61, 95% CI [0.14, 1.08], $p = .022$). However, with the exception of anxiety (ES = 0.39, 95% CI [0.08, 0.70], $p = .024$), analyses for the remainder of the mental health outcomes yielded nonsignificant results, with only one medium effect size (mood/emotion [ES = 0.54]; anger/aggression [ES = 0.28]; psychosis [ES = 0.38]; and hypersensitivity/hyperactivity [ES = 0.10]). Heterogeneity among the subanalyses ranged from low to high ($\tau^2 = 0.02$ to 0.70, $I^2 = 18.48\%$ to 91.92%).

Antisocial indicators. Not surprisingly, a significant association was found between segregation status and antisocial indicators; however, the magnitude of the association was small (ES = 0.31, 95% CI [0.13, 0.50], $p = .004$), with a high degree of heterogeneity among the effect sizes ($\tau^2 = 0.05$, $I^2 = 83.68\%$).

Table 3
Mean Weighted Effect Size Values for Segregated Versus Nonsegregated Offenders by Outcome

Outcome	*m* (*s*)	Effect size information			Random-effects model with RVE					
		k	*M* (*Mdn*)	Range	ES (*SE*)	95% CI_{ES}	*t* value (*df*)	*p*	τ^2	I^2
Behavioral functioning	9 (12)	32	2.7 (2.0)	1–5	.43 (.10)	[.22, .65]	4.44 (11.00)	.001	.28	98.93
Recidivism	6 (7)	14	2.0 (2.0)	1–5	.33 (.10)	[.10, .57]	3.47 (5.80)	.014	.04	88.30
Self-harm	2 (3)	4	1.3 (1.0)	1–2	.78 (.15)	[.15, 1.42]	5.33 (1.99)	*ns*	.12	94.57
Victimization	1 (2)	6	3.0 (3.0)	3–3	.49 (.01)	[.35, .63]	44.4 (1.00)	*ns*	.00	0.00
Physical health	7 (8)	13	1.6 (2.0)	1–2	.36 (.16)	[−.04, .75]	2.20 (6.29)	.068	.14	62.00
Cognitive functioning	2 (3)	16	5.3 (6.0)	4–6	.19 (.08)	[−.16, .54]	2.30 (1.99)	*ns*	.03	35.29
Mental health functioning	7 (8)	81	10.1 (5.5)	1–28	.47 (.12)	[.18, .76]	3.86 (6.56)	.007	.13	61.07
General mental health	5 (6)	25	4.2 (3.5)	1–8	.61 (.18)	[.14, 1.08]	3.36 (4.79)	.022	.17	61.49
Mood/emotion	4 (5)	5	2.0 (2.0)	1–4	.54 (.32)	[−.34, 1.42]	1.70 (3.99)	*ns*	.70	91.92
Anxiety	5 (6)	11	1.8 (2.0)	1–3	.39 (.12)	[.08, .70]	3.34 (4.47)	.024	.04	36.12
Anger/aggression	3 (4)	11	2.8 (3.0)	1–4	.28 (.14)	[−.16, .73]	2.10 (2.85)	*ns*	.07	48.11
Psychosis	2 (3)	10	3.3 (4.0)	2–4	.38 (.06)	[.10, .66]	6.63 (1.75)	*ns*	.02	18.48
Hypersensitivity/hyperactivity	1 (2)	8	4.0 (4.0)	4–4	.10 (.08)	[−.96, 1.17]	1.24 (1.00)	*ns*	.04	42.96
Antisocial indicators	9 (11)	29	2.6 (2.0)	1–6	.31 (.08)	[.13, .50]	3.84 (8.66)	.004	.05	83.68
Social interaction	2 (4)	10	2.5 (2.5)	1–4	.02 (.10)	[−.37, .41]	.19 (2.09)	*ns*	.01	42.45

Note. RVE = robust variance estimation; *m* = number of studies; *s* = number of independent samples; *k* = number of effect sizes; *M* = mean number of effect sizes per study; *Mdn* = median number of effect sizes per study; ES = mean weighted effect size (Hedge's *g*); *SE* = standard error of ES; 95% CI_{ES} = 95% confidence interval of ES; *df* = Satterthwaite degrees of freedom; *p* = significance value; τ^2 = τ-square value; I^2 = percentage of variability across effect sizes.

Table 4
Effect Size (ES) Statistics by Study and Outcome

Study and outcome	*N*	ES	Weight
Anger/aggression			
Miller & Young (1997): DS and AD combined			
Hostility	30	.68	4.66
O'Keefe et al. (2010): (a) Nonmentally Ill			
BPRS Hostility-Suspiciousness (Time 1)	60	−.20	2.06
BPRS Hostility-Suspiciousness (Time 5)	60	−.34	2.06
Hostility-Anger Control (Time 1)	93	.37	2.06
Hostility-Anger Control (Time 5)	93	.44	2.06
O'Keefe et al. (2010): (b) Mentally Ill			
BPRS Hostility-Suspiciousness (Time 1)	74	.30	2.06
BPRS Hostility-Suspiciousness (Time 5)	74	.03	2.06
Hostility-Anger Control (Time 1)	83	.13	2.06
Hostility-Anger Control (Time 5)	83	−.06	2.06
Zinger et al. (2001)			
Aggression Questionnaire (Time 1)	60	.65	3.67
Aggression Questionnaire (Time 3)	60	.32	3.67
Antisocial indicators			
Butler, Steiner, et al. (2013)			
Felony Re-arrest	104	.26	6.01
Re-arrest	104	.19	6.01
Lovell et al. (2007)			
Felony Recidivism	362	.16	17.09
Mears & Bales (2009)			
Any Recidivism	2,482	.03	4.15
Drug Recidivism	2,482	−.02	4.15
Other Recidivism	2,482	−.05	4.15
Property Recidivism	2,482	.02	4.15
Violent Recidivism	2,482	.12	4.15
Miller & Young (1997): DS and AD combined			
Hostility	30	.68	5.14
Motiuk & Blanchette (2001)			
Re-admission (Any)	931	.43	9.37
Re-admission (New offense)	931	.30	9.37
O'Keefe et al. (2010): (a) Nonmentally Ill			
BPRS Hostility-Suspiciousness (Time 1)	60	−.20	1.59
BPRS Hostility-Suspiciousness (Time 5)	60	−.34	1.59
Hostility-Anger Control (Time 1)	93	.37	1.59
Hostility-Anger Control (Time 5)	93	.44	1.59
PBRS Anti-Authority (Time 1)	73	.28	1.59
PBRS Anti-Authority (Time 5)	73	−.84	1.59
O'Keefe et al. (2010): (b) Mentally Ill			
BPRS Hostility-Suspiciousness (Time 1)	74	.30	1.52
BPRS Hostility-Suspiciousness (Time 5)	74	.03	1.52
Hostility-Anger Control (Time 1)	83	.13	1.52
Hostility-Anger Control (Time 5)	83	−.06	1.52
PBRS Anti-Authority (Time 1)	66	.26	1.52
PBRS Anti-Authority (Time 5)	66	−.40	1.52
P. Smith (2006)			
Re-incarceration	5,469	.31	10.89
Revocation	5,469	.33	10.89
Thompson & Rubenfeld (2013): (a) Non-Aboriginal			
Supervision Revoked	549	.77	18.01
Thompson & Rubenfeld (2013): (b) Aboriginal			
Supervision Revoked	314	.50	16.23
Zinger et al. (2001)			
Aggression Questionnaire (Time 1)	60	.65	4.31
Aggression Questionnaire (Time 3)	60	.32	4.31
Anxiety			
Andersen et al. (2000)			
Hamilton Anxiety Scale	127	.09	14.95
Miller & Young (1997): DS and AD combined			
Anxiety	30	.67	1.79
Obsessive-Compulsive	30	1.12	1.79
Phobic Anxiety	30	.16	1.79

(*table continues*)

Table 4 (*continued*)

Study and outcome	*N*	ES	Weight
O'Keefe et al. (2010): (a) Non-Mentally Ill			
Anxiety (Time 1)	93	.53	6.21
Anxiety (Time 5)	93	.58	6.21
O'Keefe et al. (2010): (b) Mentally Ill			
Anxiety (Time 1)	83	.18	5.67
Anxiety (Time 5)	83	.15	5.67
Walters et al. (1963)			
Anxiety	39	.57	7.26
Zinger et al. (2001)			
State-Trait Anxiety Inventory (Time 1)	60	.36	4.64
State-Trait Anxiety Inventory (Time 3)	60	.91	4.64
Behavior			
Butler, Steiner, et al. (2013)			
Felony Re-arrest	104	.26	1.58
Re-arrest	104	.19	1.58
Coid et al. (2003): (a) Men			
Victimization	2,368	.45	.66
Prison victim-forced sexual attention	2,368	.47	.66
Prison victim-unwanted sexual attention	2,368	.58	.66
Self-harm	2,368	.56	.66
Visitation	2,368	−.12	.66
Coid et al. (2003): (b) Women			
Victimization	770	.57	.65
Prison victim-forced sexual attention	770	.32	.65
Prison victim-unwanted sexual attention	770	.56	.65
Self-harm	771	.72	.65
Visitation	768	.06	.65
Kaba et al. (2014)			
Self-Harm	244,689	1.06	1.79
Potentially Fatal Self-Harm	244,689	1.01	1.79
Lovell et al. (2007)			
Felony Recidivism	362	.16	3.42
Mears & Bales (2009)			
Any Recidivism	2,482	.03	.71
Drug Recidivism	2,482	−.02	.71
Other Recidivism	2,482	−.05	.71
Property Recidivism	2,482	.02	.71
Violent Recidivism	2,482	.12	.71
Motiuk & Blanchette (2001)			
Re-admission (Any)	931	.43	1.74
Re-admission (New offense)	931	.30	1.74
O'Keefe et al. (2010): (a) Non-Mentally Ill			
Withdrawal (Time 1)	93	.22	1.55
Withdrawal (Time 5)	93	.30	1.55
O'Keefe et al. (2010): (b) Mentally Ill			
Withdrawal (Time 1)	83	.08	1.50
Withdrawal (Time 5)	83	.27	1.50
P. Smith (2006)			
Re-incarceration	5,469	.31	1.78
Revocation	5,469	.33	1.78
Thompson & Rubenfeld (2013): (a) Non-Aboriginal			
Discretionary Release	1,325	1.22	1.73
Supervision Revoked	549	.77	1.73
Thompson & Rubenfeld (2013): (b) Aboriginal			
Discretionary Release	403	.94	1.68
Supervision Revoked	314	.50	1.68
Cognitive functioning			
O'Keefe et al. (2010): (a) Non-Mentally Ill			
PBRS Dull-Confused (Time 1)	69	.06	2.05
PBRS Dull-Confused (Time 5)	69	−.46	2.05
SLUMS (Time 1)	93	.38	2.05
SLUMS (Time 5)	93	.19	2.05
Trails A/B (Time 1)	93	.22	2.05
Trails A/B (Time 5)	93	−.09	2.05

(*table continues*)

Table 4 (*continued*)

Study and outcome	*N*	ES	Weight
O'Keefe et al. (2010): (b) Mentally Ill			
PBRS Dull-Confused (Time 1)	65	.57	1.82
PBRS Dull-Confused (Time 5)	65	.35	1.82
SLUMS (Time 1)	83	.11	1.82
SLUMS (Time 5)	83	.38	1.82
Trails A/B (Time 1)	83	−.21	1.82
Trails A/B (Time 5)	83	.06	1.82
Zinger et al. (2001)			
WAIS Digit Span (Time 1)	60	.33	2.54
WAIS Digit Span (Time 3)	60	.23	2.54
WAIS Digit Symbol (Time 1)	60	.38	2.54
WAIS Digit Symbol (Time 3)	60	.36	2.54
General mental health functioning			
Cloyes et al. (2006)			
BPRS Total	19	1.14	2.54
Miller & Young (1997): DS and AD combined			
Interpersonal Sensitivity	30	.88	3.14
Miller (1994)			
General Severity Index	30	1.11	1.04
Positive Symptom Distress Index	30	.80	1.04
Positive Symptom Total	30	.88	1.04
O'Keefe et al. (2010): (a) Non-Mentally Ill			
BPRS Anxious-Depressed (Time 1)	60	.35	.55
BPRS Anxious-Depressed (Time 5)	60	.50	.55
BPRS Total (Time 1)	60	.27	.55
BPRS Total (Time 5)	60	.23	.55
PBRS Anxious-Depressed (Time 1)	71	.12	.55
PBRS Anxious-Depressed (Time 5)	71	−.36	.55
PBRS Total (Time 1)	71	.21	.55
PBRS Total (Time 5)	71	−.77	.55
O'Keefe et al. (2010): (b) Mentally Ill			
BPRS Anxious-Depressed (Time 1)	74	.26	.53
BPRS Anxious-Depressed (Time 5)	74	.03	.53
BPRS Total (Time 1)	74	.43	.53
BPRS Total (Time 5)	74	.23	.53
PBRS Anxious-Depressed (Time 1)	65	.60	.53
PBRS Anxious-Depressed (Time 5)	65	−.17	.53
PBRS Total (Time 1)	65	.53	.53
PBRS Total (Time 5)	65	−.21	.53
Zinger et al. (2001)			
Brief Symptom Inventory (Time 1)	60	.89	1.05
Brief Symptom Inventory (Time 3)	60	.57	1.05
Holden Psychological Screening Inventory (Time 1)	60	.84	1.05
Holden Psychological Screening Inventory (Time 3)	60	.94	1.05
Hypersensitivity/hyperactivity			
O'Keefe et al. (2010): (a) Non-Mentally Ill			
BPRS Activity (Time 1)	60	−.03	2.78
BPRS Activity (Time 5)	60	−.15	2.78
Hypersensitivity (Time 1)	93	.37	2.78
Hypersensitivity (Time 5)	93	.56	2.78
O'Keefe et al. (2010): (b) Mentally Ill			
BPRS Activity (Time 1)	83	−.01	2.78
BPRS Activity (Time 5)	83	−.03	2.78
Hypersensitivity (Time 1)	74	.03	2.78
Hypersensitivity (Time 5)	74	.08	2.78
Mental health functioning			
Andersen et al. (2000)			
Hamilton Anxiety Scale	127	.09	3.22
Hamilton Depression Scale	127	.01	3.22
Cloyes et al. (2006)			
BPRS Total	19	1.14	2.82
Miller & Young (1997): DS and AD combined			
Anxiety	30	.67	.46
Depression	30	.28	.46
Hostility	30	.68	.46

(*table continues*)

Table 4 (*continued*)

Study and outcome	*N*	ES	Weight
Interpersonal Sensitivity	30	.88	.46
Obsessive-compulsive	30	1.12	.46
Paranoid Ideation	30	.41	.46
Phobic Anxiety	30	.16	.46
Psychoticism	30	.61	.46
Miller (1994)			
General Severity Index	30	1.11	1.90
Positive Symptom Distress Index	30	.80	1.90
Positive Symptom Total	30	.88	1.90
O'Keefe et al. (2010): (a) Non-Mentally Ill			
Anxiety (Time 1)	93	.53	.20
Anxiety (Time 5)	93	.58	.20
BPRS Activity (Time 1)	60	−.03	.20
BPRS Activity (Time 5)	60	−.15	.20
BPRS Anxious-Depressed (Time 1)	60	.35	.20
BPRS Anxious-Depressed (Time 5)	60	.50	.20
BPRS Hostility-Suspiciousness (Time 1)	60	−.20	.20
BPRS Hostility-Suspiciousness (Time 5)	60	−.34	.20
BPRS Thought Disorder (Time 1)	60	.26	.20
BPRS Thought Disorder (Time 5)	60	−.20	.20
BPRS Total (Time 1)	60	.27	.20
BPRS Total (Time 5)	60	.23	.20
BPRS Withdrawal (Time 1)	60	.27	.20
BPRS Withdrawal (Time 5)	60	.26	.20
Depression-Hopelessness (Time 1)	93	.74	.20
Depression-Hopelessness (Time 5)	93	2.80	.20
Hostility-Anger Control (Time 1)	93	.37	.20
Hostility-Anger Control (Time 5)	93	.44	.20
Hypersensitivity (Time 1)	93	.37	.20
Hypersensitivity (Time 5)	93	.56	.20
PBRS Anxious-Depressed (Time 1)	60	.12	.20
PBRS Anxious-Depressed (Time 5)	60	−.36	.20
PBRS Total (Time 1)	71	.21	.20
PBRS Total (Time 5)	71	−.77	.20
Psychosis (Time 1)	93	.44	.20
Psychosis (Time 5)	93	.65	.20
O'Keefe et al. (2010): (b) Mentally Ill			
Anxiety (Time 1)	83	.18	.21
Anxiety (Time 5)	83	.15	.21
BPRS Activity (Time 1)	74	−.01	.21
BPRS Activity (Time 5)	74	−.03	.21
BPRS Anxious-Depressed (Time 1)	74	.26	.21
BPRS Anxious-Depressed (Time 5)	74	.03	.21
BPRS Hostility-Suspiciousness (Time 1)	74	.30	.21
BPRS Hostility-Suspiciousness (Time 5)	74	.03	.21
BPRS Thought Disorder (Time 1)	60	.44	.21
BPRS Thought Disorder (Time 5)	60	.58	.21
BPRS Total (Time 1)	74	.43	.21
BPRS Total (Time 5)	74	.23	.21
BPRS Withdrawal (Time 1)	74	.36	.21
BPRS Withdrawal (Time 5)	74	.16	.21
Depression-Hopelessness (Time 1)	83	.24	.21
Depression-Hopelessness (Time 5)	83	.26	.21
Hostility-Anger Control (Time 1)	83	.13	.21
Hostility-Anger Control (Time 5)	83	−.06	.21
Hypersensitivity (Time 1)	83	.03	.21
Hypersensitivity (Time 5)	83	.17	.21
PBRS Anxious-Depressed (Time 1)	74	.60	.21
PBRS Anxious-Depressed (Time 5)	74	−.17	.21
PBRS Total (Time 1)	65	.53	.21
PBRS Total (Time 5)	65	−.21	.21
Psychosis (Time 1)	83	.17	.21
Psychosis (Time 5)	83	.43	.21
Walters et al. (1963)			
Anxiety	39	.57	4.42

(*table continues*)

Table 4 (*continued*)

Study and outcome	*N*	ES	Weight
Zinger et al. (2001)			
Aggression Questionnaire (Time 1)	60	.65	.43
Aggression Questionnaire (Time 3)	60	.32	.43
Beck Depression Inventory (Time 1)	60	.52	.43
Beck Depression Inventory (Time 3)	60	.51	.43
Beck Hopelessness Scale (Time 1)	60	.22	.43
Beck Hopelessness Scale (Time 3)	60	.34	.43
Brief Symptom Inventory (Time 1)	60	.89	.43
Brief Symptom Inventory (Time 3)	60	.57	.43
Holden Psychological Screening Inventory (Time 1)	60	.84	.43
Holden Psychological Screening Inventory (Time 3)	60	.94	.43
State-Trait Anxiety Inventory (Time 1)	60	.36	.43
State-Trait Anxiety Inventory (Time 3)	60	.91	.43
Mood/emotion			
Andersen et al. (2000)			
Hamilton Depression Scale	127	.01	1.38
Miller & Young (1997): DS and AD combined			
Depression	30	.28	1.19
O'Keefe et al. (2010): (a) Non-Mentally Ill			
Depression-Hopelessness (Time 1)	93	.74	.66
Depression-Hopelessness (Time 5)	93	2.80	.66
O'Keefe et al. (2010): (b) Mentally Ill			
Depression-Hopelessness (Time 1)	83	.24	.67
Depression-Hopelessness (Time 5)	83	.26	.67
Zinger et al. (2001)			
Beck Depression Inventory (Time 1)	60	.52	.33
Beck Depression Inventory (Time 3)	60	.51	.33
Beck Hopelessness Scale (Time 1)	60	.22	.33
Beck Hopelessness Scale (Time 3)	60	.34	.33
Physical health			
Andersen et al. (2000)			
General Health Questionnaire	127	.29	5.75
Ecclestone et al. (1974)			
Plasma Cortisol (AM)	16	−.91	1.28
Plasma Cortisol (PM)	16	−.90	1.28
Gendreau et al. (1968)			
Auditory Input	20	.43	1.47
Visual Input	20	.96	1.47
Gendreau et al. (1972)			
EEG	20	2.71	1.17
Visual Evoked Potentials	20	.88	1.17
Miller & Young (1997): DS and AD combined			
Somatization	30	.55	3.46
O'Keefe et al. (2010): (a) Non-Mentally Ill			
Somatization (Time 1)	93	.26	2.68
Somatization (Time 5)	93	.42	2.68
O'Keefe et al. (2010): (b) Mentally Ill			
Somatization (Time 1)	83	.20	2.56
Somatization (Time 5)	83	.17	2.56
P. S. Smith (2008)			
Dyspeptic Problems	1,320	.26	3.98
Psychosis			
Miller & Young (1997): DS and AD combined			
Paranoid Ideation	30	.41	3.16
Psychoticism	30	.61	3.16
O'Keefe et al. (2010): (a) Non-Mentally Ill			
BPRS Thought Disorder (Time 1)	60	.26	3.66
BPRS Thought Disorder (Time 5)	60	−.20	3.66
Psychosis (Time 1)	93	.44	3.66
Psychosis (Time 5)	93	.65	3.66
O'Keefe et al. (2010): (b) Mentally Ill			
BPRS Thought Disorder (Time 1)	83	.44	3.61
BPRS Thought Disorder (Time 5)	83	.58	3.61
Psychosis (Time 1)	74	.17	3.61
Psychosis (Time 5)	74	.43	3.61

(*table continues*)

Table 4 (*continued*)

Study and outcome	*N*	ES	Weight
Recidivism			
Butler, Steiner, et al. (2013)			
Felony Re-arrest	104	.26	6.13
Re-arrest	104	.19	6.13
Lovell et al. (2007)			
Felony Recidivism	362	.16	17.59
Mears & Bales (2009)			
Any Recidivism	2,482	.03	4.30
Drug Recidivism	2,482	−.02	4.30
Other Recidivism	2,482	−.05	4.30
Property Recidivism	2,482	.02	4.30
Violent Recidivism	2,482	.12	4.30
Motiuk & Blanchette (2001)			
Re-admission (Any)	931	.43	9.68
Re-admission (New offense)	931	.30	9.68
P. Smith (2006)			
Re-incarceration	5,469	.31	11.30
Revocation	5,469	.33	11.30
Thompson & Rubenfeld (2013): (a) Non-Aboriginal			
Supervision Revoked	549	.77	18.57
Thompson & Rubenfeld (2013): (b) Aboriginal			
Supervision Revoked	314	.50	16.69
Self-harm			
Coid et al. (2003): (a) Men			
Non-suicidal Self-harm	2,369	.56	7.70
Coid et al. (2003): (b) Women			
Non-suicidal Self-harm	771	.72	7.18
Kaba et al. (2014)			
Potentially Fatal Self-harm	244,699	1.01	4.16
Self-harm	244,699	1.06	4.16
Social interaction			
Coid et al. (2003): (a) Men			
Visitation	2,368	−.12	59.11
Coid et al. (2003): (b) Women			
Visitation	768	.06	39.20
O'Keefe et al. (2010): (a) Non-Mentally Ill			
BPRS Withdrawal (Time 1)	60	.27	3.65
BPRS Withdrawal (Time 5)	60	.16	3.65
Withdrawal-Alienation (Time 1)	93	.22	3.65
Withdrawal-Alienation (Time 5)	93	.30	3.65
O'Keefe et al. (2010): (b) Mentally Ill			
BPRS Withdrawal (Time 1)	74	.36	3.61
BPRS Withdrawal (Time 5)	74	.16	3.61
Withdrawal-Alienation (Time 1)	83	.08	3.61
Withdrawal-Alienation (Time 5)	83	.27	3.61
Victimization			
Coid et al. (2003): (a) Men			
Victimization	2,369	.45	9.70
Prison victim-forced sexual attention	2,369	.47	9.70
Prison victim-unwanted sexual attention	2,369	.58	9.70
Coid et al. (2003): (b) Women			
Victimization	770	.57	8.23
Prison victim-forced sexual attention	770	.32	8.23
Prison victim-unwanted sexual attention	770	.56	8.23

Note. *N* = sample size; ES = effect size; Weight = effect size weight derived from robust variance estimation; DS = disciplinary segregation; AD = administrative detention; BPRS = Brief Psychiatric Rating Scale; SLUMS = Saint Louis University Memory Scale; WAIS = Wechsler Adult Intelligence Scale.

Social interaction. A lack of association was found between segregation status and social interaction (ES = 0.02). Although the heterogeneity among the effect sizes for the analysis was low ($\tau^2 = 0.01$, $I^2 = 42.45\%$), so, too, were the Satterthwaite degrees of freedom ($df = 2.09$).

Moderator analysis and metaregression. Due to missing information, only six moderator variables were analyzed (publication bias [non-peer-reviewed = 0, peer reviewed = 1]; country of origin [other = 0, United States = 1]; type of facility [nonsegregation oriented = 0, segregation oriented = 1]; scientific integrity [indicates no scientific integrity = 0, indicates scientific integrity = 1]; year of publication/completion; and author affiliation [external = 0, internal = 1]). All six moderator variables were simultaneously entered into a multivariate random-effects metare-

gression with RVE. Again, analyses were conducted with the ρ value set at 0.8, with the sensitivity analysis yielding very little variation at the second decimal for estimates of the regression coefficients, standard errors, and the between-study variance estimates. Moreover, all Satterthwaite degrees of freedom exceeded 4, thus reducing the risk of a Type I error.

Among the six moderator variables, there was a significant moderating effect of country of origin, with effect sizes originating from the United States ($k = 99$) being significantly larger compared with effect sizes originating from other countries ($k = 45$, $b = 0.36$, $SE = 0.10$, $t = 3.47$, $df = 4.62$, $p = .020$, 95% CI [0.09, 0.63]). Interestingly, effect size magnitude was significantly lower among segregation specific facilities (e.g., supermax facilities; $k = 86$) versus facilities that included segregated and nonsegregated inmates ($k = 58$, $b = -0.43$, $SE = 0.16$, $t = -2.77$, $df = 5.36$, $p = .036$, 95% CI [−0.82, −0.04]), and among studies with scientific integrity ($k = 11$) versus studies with no scientific integrity ($k = 133$, $b = -0.39$, $SE = 0.14$, $t = -2.91$, $df = 6.35$, $p = .025$, 95% CI [−0.72, −0.07]). The remaining moderator variables (i.e., publication bias, year of publication/completion, and author affiliation) were not significantly associated with effect size magnitude.

Summary

Table 5 presents effect size comparisons for the two research syntheses and highlights that, considered collectively, analyses produced comparable results for nine outcomes of interest that overlapped between the two reviews.

Discussion

The use of AS is a hotly contested issue in North America such that even the White House and Parliament of Canada is commenting on its potential harms (see Fine & White, 2015; Obama, 2016); however, results of studies to date have been mixed. Thus, a meta-analytic review was warranted to bring some clarity to the effects resulting from the use of AS in corrections. Results of two independent meta-analyses with somewhat different methodologies and studies (although 10 studies overlapped in RS1 and RS2) demonstrated considerable agreement as evidenced by the overlapping CIs on nine important outcomes (see Table 5). This means both studies are sampling from the same population parameters (Borenstein, 1994; Cumming, 2012; Schmidt, 1992). The results for these outcomes produced effect sizes ranging from $d = 0.06$ to 0.55. Although attaching descriptive labels to effect sizes is problematic (Reviewer 1, personal communication [via manuscript review], March 25, 2016) it is relevant to note that these results are in the small to moderate range, with no analyses resulting in a large ES, which is clearly contradictory to much that has been written about the demonstrable effects of AS (see, e.g., Haney, 2008, 2009). These results are even more compelling when one considers that primary studies with the strongest designs produced much smaller effects in these meta-analyses. These results are surprising, and possibly even confusing, for many, as they do not fit with people's intuitive analysis of what happens when you isolate offenders in AS. Furthermore, these results are in marked contrast to the "fiery opinions" (Reviewer 3, personal communication [via manuscript review], October 9, 2015) commonly presented in the scientific and advocacy literature in which AS has been likened to torture, with debilitating consequences (M. Jackson, 1983; Kupers, 2008). Notably, the "dosage" of AS in a number of studies in these meta-analyses was for periods (e.g., 60 days or more) considered very harmful.

A disconcerting aspect of the AS debate is that discussions of AS have largely ignored other effects of the criminal justice system. This runs the risk of a lack of social perspective taking on the matter. For example, is the magnitude of the effect resulting from confinement in segregated housing greater than adverse effects resulting from general incarceration (i.e., nonsegregated imprisonment)? This does not appear to be the case when segregated inmates are compared with nonsegregated inmates in our respective analyses (see O'Keefe et al., 2010, as just one example from our analyses). Furthermore, meta-analysis of the adverse effects resulting from the use of incarceration produces results (see Bonta & Gendreau, 1990; Gendreau & Labrecque, in press; Gendreau & Smith, 2012; Jonson, 2010; P. Smith, Goggin, & Gendreau, 2002) comparable with or greater (i.e., more severe) than those obtained in our respective reviews of the AS literature. In other words, the quantifiable effects resulting from segregation are comparable with the quantifiable effects resulting from incarceration, as a general matter, and with various nonsegregated prison conditions.

Two exceptions were found: ES for mood disturbance and self-injurious behavior in RS1 and RS2. Regarding the first ex-

Table 5
Effect Size (d) Comparison of Research Synthesis 1 and Research Synthesis 2

Research Synthesis 1				Research Synthesis 2			
Construct	*d*	95% CI	*k*	Construct	*d*	95% CI	*k*[a]
Anger	−.11	[−.34, .11]	3	Anger/aggression	.28	[−.16, .73]	11
Hostility	.28	[−.26, .82]	5	Anger/aggression	.28	[−.16, .73]	11
Anxiety	.34	[.09, .58]	6	Anxiety	.39	[.08, .70]	11
Depression	.15	[−.05, .35]	6	Mood/emotion	.55	[−.34, 1.43]	5
Psychosis	.07	[−.29, .44]	4	Psychosis	.38	[.10, .66]	10
Intelligence	.06	[−.20, .31]	3	Cognitive Functioning	.19	[−.17, .54]	16
Hypersensitivity	.31	[−.07, .69]	4	Hypersensitivity/hyperactivity	.10	[−.96, 1.17]	8
Physical health	.20	[−.03, .42]	4	Physical health	.37	[−.04, .77]	13
Recidivism	.12	[.03, .21]	7	Recidivism	.33	[.10, .57]	14

Note. *d* = Cohen's *d*; CI = confidence interval; *k* = number of effect sizes.
[a] Includes dependent effect sizes.

ception, RS1 and RS2 obtained markedly different effect sizes for depression (d = 0.15; RS1) and mood/emotion (d = 0.54; RS2). Importantly, however, the indices of mood disturbance (i.e., see Table 5) were very similar regarding the overlap of their CIs, suggesting the real possibility of sampling error inflating results (see Schmidt & Hunter, 2015). Further, the difference in effect sizes for depression and mood/emotion were obtained despite the fact that both research syntheses included the same four studies in computing their effect sizes, such that this difference can be largely attributed to the different coding procedures for the O'Keefe et al. (2010) and Miller and Young (1997) articles. O'Keefe and colleagues used a longitudinal design, and RS1 coded the change in score on an outcome between the first and last time period such that it was a change score analysis; RS2, on the other hand, coded the first and last time points, resulting in one large outlier effect size (2.80) for non-mentally-ill inmates at the last time point of assessment. Although we also used a discrepant coding procedure for Miller and Young, whereby RS2 combined disciplinary and AS groups, and RS1 did not, this discrepancy did not contribute to the differential findings. The coding discrepancy for the O'Keefe et al. study, however, contributed significantly to the different findings on mood outcome between the two research syntheses. Removal of this outlier in RS2 results in a much reduced weighted mean ES = 0.33. Thus, considered collectively, these results suggest that inmates experience mild to moderate mood disturbance while in AS.

Regarding the effect of AS on inmate self-injurious behavior, RS2 found a moderate effect. At first glance, this result appears to suggest that the use of AS places inmates at risk for self-harm; however, upon further scrutiny, this may not necessarily be the case. First, instances of self-harm increase significantly in higher security facilities (and AS is the highest level of security classification). That is, the prevalence of inmate serious self-injury is statistically significantly higher in maximum-security facilities than prevalence rates in minimum, medium, or mixed security level facilities (H. P. Smith & Kaminski, 2011). Even more notable are findings that inmates who self-injure themselves had significantly more disciplinary infractions than inmates who did not (H. P. Smith & Kaminski, 2010); thus, they are more likely to be placed in AS (see Liebling, 1995), especially long-term AS (Lanes, 2011), than inmates who do not self-injure. It is also possible, given that some inmates voluntarily seek AS placement, that self-injury may occur as a purposeful means of remaining in AS. Consequently, rather than AS placing inmates at risk for self-injurious behavior, it seems equally plausible that inmates at risk for self-harm are more likely to be placed in AS. Regardless of the directionality, it does appear to be a truism that AS does not suppress the risk of self-injurious behavior, and this issue certainly warrants further study.

Penological Implications

Beyond examining the effects of AS on inmate physical and mental health functioning, as well as behavioral outcomes (e.g., recidivism), the results of this study also provide penological implications. Opinions vary as to whether AS is an effective punishment strategy that increases safety and promotes order throughout the prison system, or whether it might contribute to an increase in institutional misconduct making prisons less safe over time (see Mears, 2013; Pizarro, Zgoba, & Haugebrook, 2014). Collectively, these two meta-analyses indicate a small increase in postrelease recidivism (ES = .12 and .33 in RS1 and RS2, respectively) and antisocial indicators (ES = 0.31 in RS2); however, the estimate for institutional misconducts (r = −.01) suggests a small decrease in inmate violence because of AS.

These results are not intended to, nor do they, minimize the adverse psychological effects experienced by inmates in AS as demonstrated in both RS1 and RS2; however, as noted above, the magnitude of the adverse effects for AS placement tended to be small to moderate, and no greater than the magnitude of effects for incarceration, generally speaking.

The finding that AS results in small increases in recidivism warrants further consideration. Much has been made in the literature that AS increases criminal behavior. The primary studies in our respective research syntheses could not be disaggregated to sort out this question. Recently, Pizarro et al. (2014) posed the question, why should AS be thought to have any unique features to promote criminogenic behavior (i.e., recidivism)? One possibility is the small increase in anger and aggressive tendencies (see RS2), given that anger is considered by some to be associated with criminal risk (Quinsey, Harris, Rice, & Cormier, 1998); however, level of criminal risk is a key construct in this matter. Prisons are criminogenic, but primarily for low-risk offenders (it should be noted that AS is not likely to house many low-risk offenders, as it is customarily used as a practice for the "worst of the worst" with regard to criminal behavior within correctional settings). This tends to occur because low-risk offenders are more vulnerable, such that they are more prone to incorporate the powerful antisocial values of their higher risk prison peers into their behavioral repertoire. This effect becomes stronger as the duration of confinement increases (Gendreau & Smith, 2012). It is possible that AS isolates inmates from the social learning dynamics that promote criminality for this subgroup of offenders (see Bukstel & Kilmann, 1980). Lastly, the rationale that AS produces criminal behavior because it creates mental health problems fails to recognize that symptoms of alienation, anxiety, depression, and schizoid thinking are among the weakest predictors of recidivism (Andrews & Bonta, 2010; Gendreau, Little, & Goggin, 1996).

In summary, these meta-analyses do not endorse the view that AS is an effective punisher. This point is particularly salient when we consider the strength of the research design, as both meta-analyses indicated that weaker designs contributed to notably higher ESs (i.e., less impairment is noted in studies that incorporated stronger research designs). Nevertheless, our work is not complete. One advantage of a meta-analysis is that it takes stock of the literature by identifying research issues that must be resolved before a trustworthy science of the effects of AS can be drawn (Hunt, 1997; Toch, 1984).

Future Directions for Research

Replication is central to establishing a science of prison effects because it generates precise estimates of the ES. Based on the recommendations by Smithson (2003), our benchmark to satisfy the criterion of precision was a CI < .10 (Gendreau & Smith, 2007). Because a number of ESs in RS1 and RS2 did not meet this standard, more primary studies must be added to the database for future systematic meta-analyses. Second, meta-analyses them-

selves must undergo "systematic" replications in which central features of the original meta-analyses are maintained, but some aspects are changed (e.g., additional studies, measures, method of meta-analysis; French & Gendreau, 2006; Schmidt & Hunter, 1999; Rosenthal, 1995; Schmidt, 2014). Although we had consistent coder agreement across both meta-analyses, it is possible that interrater reliability is problematic. Consequently, future meta-analyses should include chance-corrected agreement scores (e.g., kappa coefficients) rather than relying on global percent agreement, as was done in these two reviews.

Notably, all of the studies included in these meta-analyses consisted of 1 year or less of AS placement. It is important that future studies examine extended periods of AS, as dosage (time) is increasingly of concern in penological practice, given that even small effects over significant periods of time can have a cumulative effect. Such has been the focus in recent litigation of AS practices (see *Madrid et al. v. Gomez et al.*, 1995; *Ashker et al. v. Governor et al.*, 2015; *Silverstein v. The Federal Bureau of Prisons*, 2011). Environmental factors (e.g., overcrowding, prison culture, staff-inmate relations) also warrant increased consideration. Specifically, it is imperative that replication of the current meta-analyses include data from prisons that have, using Haney's (2008) terms, a culture of harm. Our interpretation of this expression is a chronic situation in which correctional staff in AS denigrate, harass, and treat inmates capriciously, and induce uncertainty as to how long they will remain in AS, while providing little in the way of treatment and related services. It has been predicted that under these circumstances, acute psychological pathology will be the result (Gendreau & Bonta, 1984; Gendreau & Labrecque, in press; Gendreau & Thériault, 2011; Vantour, 1975). Thus, the real culprit may be a breakdown in the correctional officer–inmate relationship, rather than placement in a segregated physical environment (Gendreau & Labrecque, in press; Gendreau & Thériault, 2011). M. Jackson (1983) remarked that when the same inmates were transferred from AS in one Canadian prison that had miserable physical AS conditions to another in which the facilities had quite acceptable conditions, complaints still were forthcoming.[3] The same conclusion was reached by Haney (2008) when he declared that it is "naive view . . . suggesting that modest tinkering with its [AS] basic design can produce a meaningful beneficial or palliative response" (p. 982).

A number of research design issues also merit serious consideration in future studies examining effects resulting from AS placement. Previous mental health functioning (i.e., prior to AS placement) must be examined, as it is quite possible that effects observed in AS are preexisting conditions observed in other aspects of confinement or preincarceration. As previously discussed, staff–inmate relations in AS must be measured (e.g., measure of working alliance, videotape samples of behavior) to partial out effects of the human element from the AS physical setting itself. Second, it must be confirmed empirically that the AS setting under study actually restricts sensory input and/or induces perceptual monotony by taking physical measurements of the level of auditory, kinesthetic, and visual stimulation available to inmates (Gendreau & Labrecque, in press). Zinger (2013) has pointed out that many cell accommodations are in fact mislabeled. Some cell conditions may be claimed by prison authorities to not be AS when they actually restrict stimulation, whereas others are identified as AS but do not restrict stimulation. For example, segregated housing units that allow double bunking, such as Security Housing Units in the California Department of Corrections and Rehabilitation, may actually equate to sensory overstimulation found in the general population.

None of the studies included in these meta-analyses took efforts to examine or minimize response bias (e.g., overreporting or underreporting of problems/concerns, social desirable responding), with the exception of the Zinger et al. (2001) study, which examined social desirability but did not control for this variable due to its relationship with risk. Future research should utilize methods designed to reduce response bias when questioning inmates in AS (Orne & Scheibe, 1964). Lastly, we must move beyond relying on single point estimates (and significance testing) in favor of examining clinical change. Assessing clinically meaningful changes involves obtaining a difference score between a participant's pre- and postscores, divided by the standard error of the difference. Cutoff scores are then established for placing an individual in various categories of deterioration, improvement, or no change. For the interested reader, a special edition of *Behavior Research and Therapy* in 1999 (Volume 37, Issue 12) provides an update on the various methods used and the statistical calculations needed for researchers (Hageman & Arrindell, 1999a, 1999b).[4] It is essential that pre- and postbaseline AS measures of inmates' time in prison are available to calculate change, which unfortunately has not been the case in studies published to date.

Summary

In closing, we would be remiss if we did not address our perspectives on the penological practice of AS. First and foremost, we anticipate and encourage replication of our findings. Second, and most importantly, although these meta-analyses indicate that AS has rather modest effects on inmate well-being, the results are not justification for its continued use at current levels or for the extreme length of time (e.g., several years) inmates often spend there (Bauer, 2012; Mears & Bales, 2010; Naday, Freilich, & Mellow, 2008). Furthermore, we do not advocate for long-term placement in AS. We submit that the use of long-term AS is a passive correctional intervention that reinforces short-term thinking and primitive solutions (Gendreau, 2012; F. Porporino, personal communication, June 30, 2012) when there are administrative policies, clinical prediction protocols, and treatment programs that can limit its use while maintaining institutional safety and promoting improved behavior (French & Gendreau, 2006; Gendreau & Labrecque, in press; Gendreau et al., 2014). Finally, although the results of these meta-analytic reviews suggested small to moderate effects resulting from the use of AS, and that these effects are consistent with effects from general use of incarceration, it is nevertheless incumbent upon correctional and mental health professionals to monitor and intervene in instances where inmates are at risk. The restricted nature of AS, however, limits

[3] A specially commissioned review of dissociation in Canada stated that "most segregated inmates complained about the manner in which they were segregated than the physical conditions in which they lived . . . the physical milieu is not as crucial to the inmate as the psychological" (Vantour, 1975).

[4] Before the arrival of statistical methods, the Delphi method (i.e., a structured communication technique that relies on a panel of experts; see Dalkey & Helmer, 1963) and client self-report were used, which can still be useful in defining change categories.

access to comprehensive mental health programming for these inmates. Currently, services typically consist of psychotropic medications, brief check-ins at the inmate's cell front, or infrequent meetings in private with a clinician (Metzner & Fellner, 2010). Further complicating the lack of available mental health resources, there is a paucity of treatment programs specifically developed or tailored to meet the treatment needs of segregated inmates, while allowing for treatment delivery within the structured confines of AS. *Escaping the Cage: A Mental Health Treatment Program for Inmates Detained in Restrictive Housing* (Batastini, Morgan, Kroner, & Mills, 2015) is the only intervention we are aware of that uniquely targets the psychological and behavioral problems of AS inmates, while also accommodating the security constraints common in these units. Further research on this and other treatment options is greatly needed.

It is our recommendation that best practices be developed for the use of AS in penological practice. For example, although data do not yet exist to support a specific recommendation, it seems reasonable to suggest that when indeterminate AS sentences are used, a best-practices model would likely rely on specified targets of behavior that must be met for release consideration. Consistent with recent court findings, a model of best practices would eliminate the use of AS for inmates with mental illness (e.g., *Madrid v. Gomez*) except in extreme circumstances (where the safety of the individual or others is contingent upon short-term AS placement). We submit that this is also true for juvenile offenders who may not have developed the resources for coping with the conditions in segregated housing units. Best practices may also include the implementation of therapeutic step-down programs to facilitate easier transfer in spite of the "overall conclusion . . . that symptoms generally recede and people generally get better when they get out of solitary confinement" (P. S. Smith, 2006, p. 26). Results of these independent meta-analytic reviews found small to moderate increases in recidivism when AS inmates are compared with their non-AS peers; thus, we recommend that inmates in AS be transitioned out of AS several months before their release to the community. Though there is not yet enough empirical data on which to base this recommendation, we opine that inmates be transitioned out of AS at least 6 months prior to community reentry.

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