

AN ISOLATED LIFE: AN ANALYSIS OF RESTRICTIONS, BEHAVIORS, AND  
DAILY LIFE FOR ADMINISTRATIVE SEGREGATION INMATES

by

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## **ABSTRACT**

Between 80,000 and 100,000 inmates in federal and state correctional facilities are currently housed in solitary confinement. Building on literature by Haney, Pyrooz, and others, this study seeks to describe what daily life looks like for these men and the impact segregation has on their mental state. Secondary data analysis of a self-report survey conducted by mail has permitted a unique window into the daily lives of Texas Department of Criminal Justice adults in custody. Most inmates in segregation nationwide are held in solitary for relatively short terms. However, the average duration of isolation for this sample is in excess of six years. This study analyzed the impact of extended social deprivation has on the mental state of the incarcerated persons, in addition to examining the prevalence of additional restrictions. Abusive staff behavior is discussed. These factors were analyzed to investigate any relationships present with self-harm rates and mental wellness. The typical inmate experienced several symptoms of mental illness and an increase in self-harm behaviors while in segregated housing. Nearly three-quarters of inmates reported experiencing at least one additional restriction, which was found to have a moderate, positive, and significant effect on self-harm rates. Abusive behavior by staff also lead to a significant increase in mental health symptoms experienced and self-harm rates of inmates in solitary confinement.



## I. INTRODUCTION

### **Solitary Confinement**

Solitary confinement implementation varies across jurisdiction and specific prison units, but is typically characterized by a small, single-person cell the inmate is locked within for approximately 23 hours per day (Department of Justice, 2016). The adult in custody (AIC) is also faced with an assortment of additional restrictions on how they are permitted to obtain recreation, visitation, and educational opportunities. As of 2014, an estimated 80,000 to 100,000 AICs in federal and state-level correctional facilities are held in solitary confinement (Association of State Correctional Administrators-Liman, 2014). This figure does not include the men, women, and children in segregation within county jails, juvenile detention, mental health wards, or Immigration and Customs Enforcement (ICE) detention facilities. As of 2019, 4,165 people in the Texas Department of Corrections were classified as being housed in administrative segregation (Harding, 2019).

In 2015, the United Nations adopted a set of regulations to address living conditions for prisoners across the world. Recommendations included abolishing indefinite and prolonged solitary confinement, based on the research and findings of the U.N.'s Special Rapporteur on torture (2011). Internationally, under the United Nations Standard Minimum Rules for the Treatment of Prisoners (the "Nelson Mandela Rules"), Rule 43 states that both prolonged and indefinite solitary confinement, in addition to several other conditions of imprisonment, are tantamount to torture and shall be prohibited (United Nations, 2015). Prolonged solitary is defined as, "solitary confinement for a time period in excess of 15 consecutive days" (United Nations, 2015, p.14). Further support for this time limit is provided by the Grassian and Friedman study (1986), which

determined 15 days of isolation was too long to maintain a healthy psychological state; the researcher recommended extreme caution, as their work indicated psychological deterioration began much sooner than anticipated and was notable by two weeks.

In defiance of these recommendations, some inmates can be held for months, years, or even decades in state and federal prisons in the United States (ASCA-Liman, 2018). According to a nationwide survey, 22.7% of the inmates held in segregation were placed there for 15-30 days with no available data for segregation periods less than this prolonged period (ASCA-Liman, 2018). These figures contrast strongly with the duration of segregation for inmates in Texas. Approximately 30% of the Texas sample reported segregation for over six years; only 3% were reported to endure solitary for 15-30 days. Furthermore, the state of Texas' longest duration AIC makes up 68% of the national total of people who are housed in segregation for six years or more (ASCA-Liman, 2018).

Nationally, minorities are overrepresented in both overall composition of prison inmates and inmates held in segregation. While the Texas prison system is nearly racially balanced into one-third white, one-third black, and one-third Hispanic, the administrative segregation population is overrepresented by Hispanic AIC. Approximately 50% of the Texas solitary population is Hispanic, another 25% is white, and the final quarter is composed of both African American prisoners and those with other ethnicities (ASCA-Liman, 2018). Concerns about racial disparities and the decision to assign an inmate to solitary confinement have been documented in both empirical research and lawsuit literature (Logan, et al., 2017; *Ashker v. Governor of California*, 2015). Issues with gang identification have risen across the country in the past 40 years and are intertwined with racial overrepresentation of minorities in segregation units (Pyrooz, 2018).

The assumption is that if someone is placed in isolation, they have earned that enhanced security through exceptionally poor behavior. People in solitary confinement are typically portrayed as “the worst of the worst,” but this is not reflected in the disciplinary records of many held in segregation (Arrigo & Bullock, 2008). The state of Texas offers four main categories of administrative segregation, with several subdivided categories beneath each (Texas Department of Corrections Administrative Plan, 2012). Pre-hearing detention and temporary detention are expected to be short-term housing designations while an someone is transferred to another prison unit or awaits a court hearing. Protective custody is a housing categorization for someone seeking shelter from credible threats, like rival gangs or fear or reprisal due to offense or cooperation with the authorities; protective custody is the only form of isolation requested by an AIC and typically comes with slightly more privileges. The last main categorization is the most prevalent. Security detention tends to function as a catch-all for AIC. Under the ‘Security Detention’ umbrella, inmates can be classed as escape risks, threats to physical safety of staff or inmates, or they can simply be noted as potential threats to the function of the prison, based on previous disciplinary records or suspected gang membership (Texas Department of Corrections Administrative Plan, 2012).

The Texas Department of Corrections recognizes and penalizes inmates for belonging to 12 prison gangs they have identified as the most dangerous to inmates and staff. These top 12 gangs have been designated Security Threat Groups (STG) and any inmate who is investigated and found to be an active member is subject to STG status and resulting administrative segregation until they denounce the gang entirely (Texas Department of Criminal Justice, 2007). An STG inmate can be placed in administrative

segregation prior to any specific disciplinary violation; they are placed in indeterminate isolation simply as a result of their assumed relationship with an illicit organization (Pyrooz, 2018). Fong (1994) wrote about the similarities between STG classified inmates and their peers who belonged to other gangs without the security threat group designation. He found the two groups were similar to each other, but different from the general population inmates in offense, time served, custody level, and amount of solitary confinement. Fong accurately predicted that prison gangs would be on the rise in the 1990s and suggested correctional facilities needed to establish strict policies to monitor the growth and development of security threat groups.

While an inmate can be placed in long-term isolation for misconduct, the process to extricate themselves can be complicated. While it is possible to leave administrative segregation as an STG inmate, the process is lengthy, difficult, and dangerous. The inmate must denounce the gang, successfully complete the Gang Renouncement and Dissociation (GRAD) program, and obtain ex-STG status before returning to the prison's general population (Texas Department of Corrections Administrative Plan, 2012).

Corrections officials also assume that short-term solitary is a helpful strategy when used to deter previously violent prisoners from future misconduct. However, research suggests solitary confinement has no effect on the timing or likelihood of future misbehaviors (Morris, 2016). In 2017, in response to public pressure and a nationwide push to reduce the number of people held in isolation, the Texas Department of Corrections abolished punitive solitary confinement (Clarke, 2018). The choice to eliminate disciplinary isolation was widely hailed as a great success; however, only 76 AIC were released back into their unit's general population (Clarke, 2018).

## **Mental Health and Solitary Confinement**

Most contemporary literature seeks to understand the drastic effects prolonged isolation has on a person's mental health status (Haney, 2006). Qualitative studies featuring interviews, case studies, and anecdotes typically find severe impacts due to segregation (Arrigo & Bullock, 2008). While no causal link has been firmly established, the vast majority of research indicates negative psychological responses to long-term isolation including depression, anxiety, sleep disturbances, appetite changes, abnormal aggression and rage, cognitive differences, hallucinations, and increased self-harm (Haney & Lynch, 1997; Cloyes et al., 2006; Grassian, 2006, Smith, 2006).

Opposing research suggests that prolonged isolation has no ill effects (O'Keefe et al., 2010; O'Keefe et al., 2013). All participants of the study had heightened mental states in segregated housing, both in general population and segregated housing. This led the researcher to conclude it wasn't isolation that led to mental health disturbances. Shockingly, some subjects were found to show improved mental health despite the difference in their housing assignments (O'Keefe et al., 2013). These results run contrary to most work in this field.

The resilience of some people to withstand isolation remains undetermined, but several factors can positively or negatively impact the AIC's experience while in segregation. Grassian and Friedman (1986) determined the totality of daily conditions greatly impacted inmates' tolerance. The amount and type of light or sound available impacted the survival of segregation; the more intense the isolation from people, the more psychological damages someone incurred (Grassian & Friedman, 1986). The presence of constant bright light deprives people of the ability to sleep well and throws off a person's

internal body clock (Grassian & Friedman, 1986). The presence of external stimuli (such as carrying on a conversation or passing notes to nearby friends) could help buffer some of the psychological damage created by prolonged isolation. Also vital to the AIC's mental wellbeing was a belief that the isolation was reasonable and just, rather than a feeling they had been singled out for no reason. Healthy inmates were less likely to believe they were placed in segregation as the result of a conspiracy or elaborate plot to punish them for unknown infractions.

The removal of social stimulation has significant consequences for prisoners held in isolation. Permanent changes take place in the brains of inmates who are held in isolation (Haney, 2006). The hippocampus, a part of the brain that controls emotional responses, anxiety, stress levels, and encoding memory, shrinks as a result of stress or anxiety due to the isolation of solitary confinement (Lobel & Akil, 2018). The ability to meaningfully engage and communicate with others is a skill, and without practice some inmates retreat inward, even while their craving for interaction steadily grows (Arrigo & Bullock, 2008). The removal of all external stimuli can also encourage people to create vivid alternate lives eventually culminating in hallucinations and full-blown psychosis (Arrigo & Bullock, 2008). People held in segregation often lose the ability to gauge the amount of time that has passed (Haney, 2006); an hour can feel like a day but sometimes an entire week can feel like 30 seconds.

The austere conditions can be especially traumatic for people who have been previously diagnosed with mental illness (Arrigo & Bullock, 2008). People with mental illness make up and estimated one-third and one-half of the solitary confinement population nationwide (Arrigo & Bullock, 2008). Inmates with severe mental illness are

more likely to be placed within segregation cells, due to their inability to adequately adapt to the rigid demands of institution life (Arrigo & Bullock, 2008). If an inmate does not have a mental illness before solitary, they are more likely to develop one while in segregation than they were while in general population (Haney, 2006).

Grassian (1983) conducted interviews with inmates who spent two months in solitary confinement. Participants displayed trouble with impulse control, memory and perception issues, difficulty thinking and expressing themselves, and issues with inappropriate affect. After enduring the extreme sensory deprivation of solitary confinement, some people post-segregation may develop a hypersensitivity to external stimuli (Grassian, 1983). While in segregation, many reported severe hallucinations or fantasies of revenge against their captors. Many of these symptoms remain after their time in segregation had concluded. Grassian (1983) named this new mental illness Secure Housing Unit (SHU) Syndrome. These conditions and impacts last well beyond the time of incarceration, leading to much higher rates of Post-Traumatic Stress Disorder diagnoses for people who were held in isolation (Hagen et al., 2017).

### **Self-harm and Suicide in Solitary Confinement**

Mental illness plagues a large portion of American prison populations and can cause people who are unwell to engage in horrendous acts of self-mutilation (Haney, 2006; McCorkle, 1995). This trend is even more pronounced among the solitary confinement population (Grassi et al., 2017). A majority of completed suicides involving AIC take place while the inmate is housed in isolation (Mumola, 2005). After controlling for age, ethnicity, sex, severe mental illness and duration of imprisonment, self-harm

rates increased as a result of solitary confinement (Kaba et al., 2014). Time in isolation increased the chances of suicide (Roma et al., 2013).

People housed in segregation may engage in self-harming behaviors to manipulate a situation or attempt to leave their unit, but many attempt and complete suicide because they cannot see an end to their suffering (Kaba et al., 2014). When AIC in solitary receive visitors, they are often subjected to no-contact visits where all communication takes place behind a glass or mesh barrier to prevent any physical touch from the incarcerated person and their loved ones (Bennett, 2016). The amount of time between injuries is shorter for people held in administrative segregation than those in the general prison population (Lanes, 2009).

Some states have specific legislation designed to address the growing rate of suicide attempts and completions, such as Texas' Sandra Bland law (Barajas, 2019). These laws typically establish expectations for routine safety checks, requirements that guards visually inspect each inmate regularly and conduct more extensive surveillance of any inmate believed to be a danger to themselves. These standards may not go far enough to keep mentally ill people safe while incarcerated (Grassi et al., 2018).

### **Additional Restrictions Commonly Experienced While in Segregation**

There is a dearth of knowledge in this arena. Conditions for people held in segregation are already draconian, yet additional restrictions can be levied against an inmate who refuses to conform their behavior. Typically, AIC are assigned to certain custody levels; the higher the level, the more privileges they are afforded. If an inmate's behavior continues to decline as a result of mental illness, unchecked rage, or simple disinterest in conforming with the stringent expectations of the prison system, they can



receive additional restrictions. These restrictions are typically earned by being charged in disciplinary cases relating to weapons, aggression, or assaultive behavior (Texas Department of Criminal Justice, 2012). An inmate's level determines their accessibility to communication with the outside world, library and mail access, educational programs, and recreation time (Texas Department of Criminal Justice, 2012).

In Texas, if the AIC "misbehaves", their level is reduced through the removal of minor privileges and they are effectively placed on ever increasing restrictions. This system is based on guard reports and disciplinary records, which can be seen by inmates as illegitimate (Harding, 2019). While many lawsuits (e. g., *Ruiz vs Estelle*, 1980; *Ashker vs Governor of California*, 2015) challenge the loss of meager privileges afforded inmates held in solitary confinement, currently no empirical research exists to understand the impacts these restrictions may have on daily life experience or mental health.

### **Abusive Guard Behavior**

Prison guards have the ability to establish the tone for every encounter. Empirical research to determine the prevalence of guard abuse is difficult to conduct and dangerous to the subjects. Because of these and other difficulties, few publications exist to describe the prevalence and types of negative behaviors correctional staff exhibit towards inmates. The Prison Rape Elimination Act (PREA) led to a groundbreaking study, designed to uncover the relative frequency with which inmates were sexually assaulted. It tracks sexual contact between guards and inmates as well as inmate on inmate sexual violence. Several of the most prolific units for sexual assault are located within the Texas Department of Corrections (Gammill & Inglis, 2016). A national average of 4.5% of AIC respondents to the PREA survey reported experiencing sexual assault within the last

12 months. Five Texas corrections units were in the top 10 nationwide for high sexual assault rates; Clements, Allred, Mountain View, and Coffield have assault rates ranging from 9.3% to 13.9%. Estelle Unit, which houses disabled and geriatric wards in addition to a supermax facility has the highest rate of prison sexual assault in the nation at 15.7% reporting at least one offense within the past year (Simons & Gavin, 2018).

Theorists are intrigued by the ability of people to engage in dramatically different behaviors than those people typically endorse, such as was seen in Abu Ghraib (Balestrieri, 2004). According to Bandura's theory of moral disengagement (1990), people in power are apt to engage in behavior that they normally would find abhorrent (Weill & Haney, 2017). People are capable of distancing themselves from horrific abuses by wearing a uniform, compartmentalizing, and developing an "us vs. them" mentality (Zimbardo, 2006). The presence of ongoing messaging within prisons and the local culture help to emphasize a belief that people who are in prisons deserve the punishment they receive; intense depersonalization takes place and they begin to believe it is only reasonable to be tough on crime to keep the outside world safe (Weill & Haney, 2017). The men who abused captives at Abu Ghraib were ordinary people; it was the confluence of extraordinary circumstances that lead to them to abuse people (Wargo, 2006).

Research designed to assess the prevalence of guard on inmate violence is rare. Not only does the potential for retribution create ethical concerns, but few prisoners are willing to tell their stories during incarceration knowing the information may escape but they will not. Worley and Worley (2011) wrote about deviance in prison guard subculture, but the focus was more on the successful completion of job expectations than physical or verbal misconduct between corrections officers and inmates. In addition, the

camaraderie formed within correctional staff creates pressure on staff not to report abuse within their ranks (Worley & Worley, 2011). The thin grey line exists much as the thin blue line does for law enforcement on the outside of the gates; rather than report wrongdoing, staff in criminal justice organizations have a noted tendency to close ranks and form a resolute wall of silence. Worley and Worley (2011) asked correctional officers about their own behavior as well as how deviant they perceived the behavior of others to be. While many questions were innocuous, others directly asked about tolerating serious misconduct, including sexual interactions involving inmates and likelihood of reporting guard on incarcerated person abuse. Half of the sample indicated they would actively disregard and fail to report abuse (Worley & Worley, 2011).

Potential for abuse does not end when the shift does. According to Valentine et al. (2012), correctional officers and others in law enforcement have specialized training on how to subdue suspects or unruly inmates that enable them to become proficient abusers both on and off the clock. Furthermore, it has been hypothesized that as a result of their training and expectations of strict obedience, rates of domestic violence are higher in those working in law enforcement than similar groups with alternative careers. If guards and peace officers are abusing their families in their own time, it seems highly likely they are also engaging in negative behaviors while on the clock.

### **Current Study**

Due to public outcry and legal mandates some jurisdictions are improving prison conditions or releasing inmates from isolation. Other jurisdictions continue to rely on segregation heavily despite the excess costs to taxpayers and concerns about lasting impacts on an interpersonal and societal levels which lead to higher than average

recidivism (Mears, 2009). Texas is one such jurisdiction with exceptionally long stays in solitary confinement. Solitary confinement is expensive for the state and has been established as harmful in prior literature. Investigating the impacts prolonged solitary confinement has on the mental state of someone is vital. This study is designed to investigate how daily conditions, featuring common restrictions and abusive guard behaviors, impact AIC mental health and self-harm rates. Further replication studies should be conducted to further determine the veracity of these or other findings before conclusions can be drawn.

## **II. METHODS**

### **Data**

This study was conducted using a secondary data source obtained from a private, non-profit civil rights legal advocacy group. The data was initially collected through the use of a mixed methods survey mailed to inmates on a mailing list, which led to a convenience sample of inmates the organization was already acquainted with. 197 incarcerated men in a Texas Department of Criminal Justice prison completed the mailed survey. Survey responses were anonymized, and then provided to the researcher for this analysis.

### **Procedure**

A packet was mailed to inmates which included a letter describing the goals of the investigation, an informed consent form to read and sign, a copy of the paper survey to complete, and a pre-stamped return envelope. Inmates were not compensated for their participation, nor was any representation promised to anyone who completed the survey. The informed consent was written at a level that the average inmate could comprehend and they all possessed the option to decline to participate in the research or skip any questions they were uncomfortable answering.

This research involves a protected class and several steps were taken to ensure no harm would come to the men who participated. The data was completely anonymized by removing both names and unit identifiers from the data set before it was provided to the researcher

## **Data Analysis**

### ***Measures***

#### **Mental Health.**

Respondents were asked to self-report any previous mental health diagnosis, including bipolar, depression, schizophrenia or other psychotic disorder, antisocial personality disorder, post-traumatic stress disorder, and other mental illnesses to establish an understanding of the inmates' baseline mental state prior to segregation. Due to the difficulty in accessing mental healthcare and obtaining a diagnosis, it is recognized that responses to this question may underestimate the true rate of mental illness prior to segregation. These responses were dummy coded into distinct binary variables (0=No; 1=Yes).

A similar survey question asked respondents to self-report any mental health symptoms they had exhibited since being placed in solitary confinement. This question offered nine possible symptoms and was transformed into dummy binary coded variables (0=No; 1=Yes) (depression, difficulty sleeping, difficulty interacting with other people, anxiety, feelings of paranoia, sensitivity to sights and sounds, oral and/or physical outbursts, feeling disoriented, muscle atrophy, hallucinations, and other symptoms). Many respondents had more than one symptom. To aid in inferential statistics, each respondent's individual mental illness symptoms were added together to create a sum of total symptoms experienced variable with values ranging from 0 to 11.

An additional survey question asked for the inmate to self-assess how their mental health had changed as a result of solitary confinement (1=Worsened, 2=stayed the same, 3=improved, 4=not sure).

### **Self-Harm.**

Inmates were asked if they had attempted self-harm while in general population or segregated housing; this was coded as two separate binary variables (0=No; 1=Yes).

Inmates were also asked about how often their peers and neighbors attempted self-harm while in solitary confinement (0=self-harm never happens in solitary; 1=self-harm occurs once in a while by others; 2=others commit self-harm frequently; 3=others commit self-harm very frequently).

### **Restrictions.**

Based upon previous research conducted by the designers of the survey, nine of the most common restrictions inmates were identified. The data was dummy coded (0=No; 1=Yes) into nine individual binary variables for analysis, (recreation deprivation, food loaf instead of typical meals, loss of showers, denial of access to water in cell, denial of access to commissary, loss of haircuts, the unnecessary use of full restraints as additional punishment, cell cleaning, and other restrictions). To aid in inferential statistics, each respondent's individual restrictions experienced responses were added together to create a sum of total symptoms experienced variable with values ranging from 0 to 9.

### **Abusive Guard Behaviors.**

Survey respondents were asked to rate abusive staff behaviors (0=not common; 1=common; 2=very common). The behaviors included: physical assault, sexual assault, verbal harassment, racial harassment, threats, abusive pat frisks, turn off electricity or water in cell, retaliation for grievances, false tickets, theft or destruction of property, and failure to protect residents from others. To aid in analysis, the common and very common

responses were collapsed to create a binary response where 0=not common and 1=common and very common. To aid in inferential statistics, each respondent's individual abusive guard behaviors experienced were added together to create a sum of total symptoms experienced variable with values ranging from 0 to 11.

### *Analysis*

The data were analyzed utilizing SPSS and Stata. Descriptive statistics described the demographics of the sample and prevalence of mental health diagnoses, mental health symptoms experienced in segregation, self-harm rates in general population and segregation, additional restrictions, and abusive guard behaviors. Inferential statistics were used to analyze the complex relationships between variables. Relationships are explored between mental health variables, self-harm, restrictions, and abusive guard behaviors using a series of correlations.

#### **Hypothesis 1: Duration in Solitary Confinement Impacts AIC.**

Hypothesis 1a: The longer someone spends in solitary confinement is positively related to an increase in mental illness symptoms experienced. Hypothesis 1b: The longer someone spends in solitary confinement is positively related to an increase in self-harm. Hypothesis 1c: the period someone spends in solitary confinement is positively related to an increase in restrictions. Hypothesis 1d: the longer time period someone spends in solitary confinement is positively related to an increase in abusive guard behaviors.

#### **Hypothesis 2: Mental Health is Related to Solitary Confinement.**

Hypothesis 2a: The number of mental illness symptoms experienced by an AIC is positively related to an increase in self-harm. Hypothesis 2b: The number of mental illness symptoms experienced by an AIC is positively related to an increase in self-harm



restrictions experienced. Hypothesis 2c: The number of mental illness symptoms experienced by an AIC is positively related to an increase in self-harm abusive guard behaviors.

**Hypothesis 3: Self-harm Rates are Impacted by Solitary Confinement.**

Hypothesis 3a: People in solitary confinement partake in self-harm behaviors significantly more often than they did while in general population. Hypothesis 3b: Self-harm rates are positively related to an increase in restrictions while in isolation. Hypothesis 3c: Self-harm rates are positively related to an increase in abusive guard behaviors.

**Hypothesis 4: Restrictions and Abusive Guard Behaviors.**

The more restrictions an inmate is given, the more guard abuses they have also endured.

### III. RESULTS

#### Descriptive Statistics

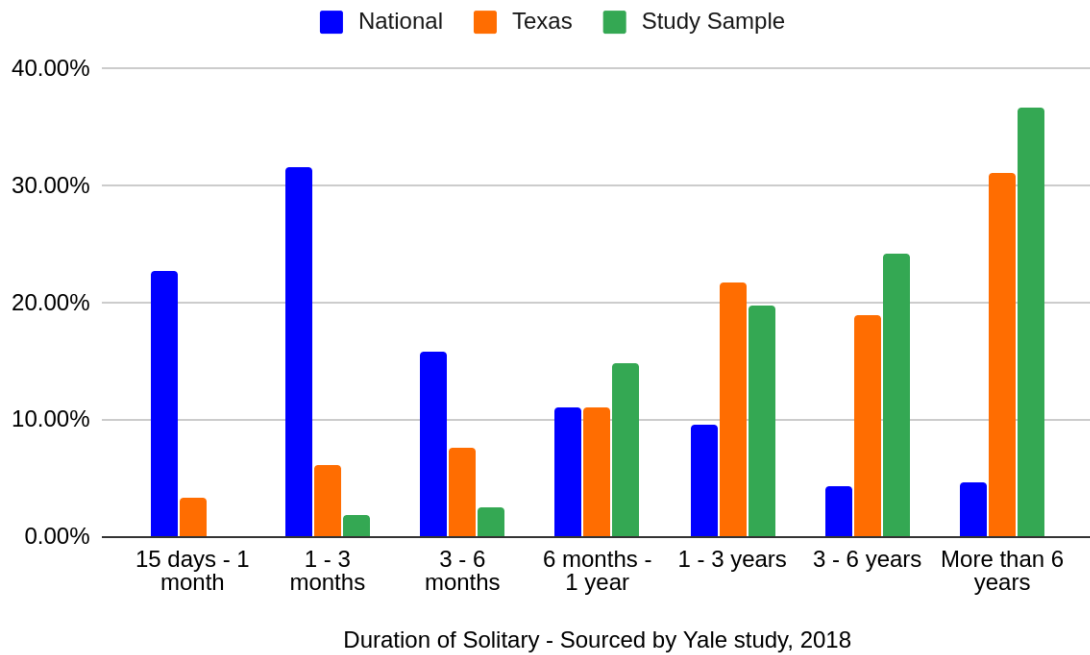
These data set include a sample of 197 male inmates serving time in the Texas Department of Corrections. They were at the time (82.23%) or have in the past (17.77%) been in long-term solitary confinement or administrative segregation for at least one month. The sample includes 20 prison units across the state of Texas, but approximately 70% of inmates surveyed were concentrated at two anonymized units known to house a large concentration of solitary confinement cells.

The age of inmates sampled ranges from 26 to 70 years old. The mean age is 44.18 years with a standard deviation of 10.12 years. The median of this sample is 42 and the mode is 40 years old. The duration of segregation for inmates within the sample varies widely from one month to 519 months, or 43.25 years in isolation. The mean duration of segregation is 74.95 months (6.25 years) with a standard deviation of 70.48 months. This sample has a median of 48 months and a mode of 60 months. Approximately 5% of the sample were held in segregation in excess of 20 years; these data were collapsed into one item to eliminate outlier impacts on all relationships discussed. Additional racial and demographic information is unavailable in order to further anonymize the inmates and shield them from any potential blowback due to participation in this study.

There are few reasons for administrative segregation in Texas. Temporary detention (1.10% of the sample) is used for inmates as they transfer from one unit to another or are located somewhere out of the ordinary for a minimal amount of time. Protective custody (1.10%) is requested by the inmate because of a credible fear of others

in the general prison population. When inmates are transferred to another venue for court appearances, they can be placed in isolation; this occurred for 1.66% of the sample. 11.60% of the sample are unaware of the reason for their placement in segregation. Security Threat Group (STG) status is assigned to inmates based on interior investigations that confirm a person is an active participant within the top ten most dangerous prison gangs present within the Texas prison system. In this sample, 33.70 % assert they are placed in isolation as a result of STG status. The largest section of prisoners in segregation (50.83%) was classified as Security Detention. This category operates as a catch-all for inmates with a history of deviant behavior while in prison, active aggression or violence towards others, and escape attempts.

While several states are responding to public pressure to decrease the use of long-term solitary confinement, Texas maintains a large percentage of segregated AIC for prolonged durations. An analysis of ASCA-Liman (2018) survey data showcases the trends in the duration of isolation; nationally, AIC in segregation spend less than three months before returning to general population, but Texas AIC spend much longer in isolation. The data in this sample follows the Texas trend; many of the inmates have been held in excess of 6 years and approximately 5% of respondents have been in isolation more than 20 years. See Figure 1.



**Figure 1**

**Duration of Solitary Confinement: National, State, and Sample**

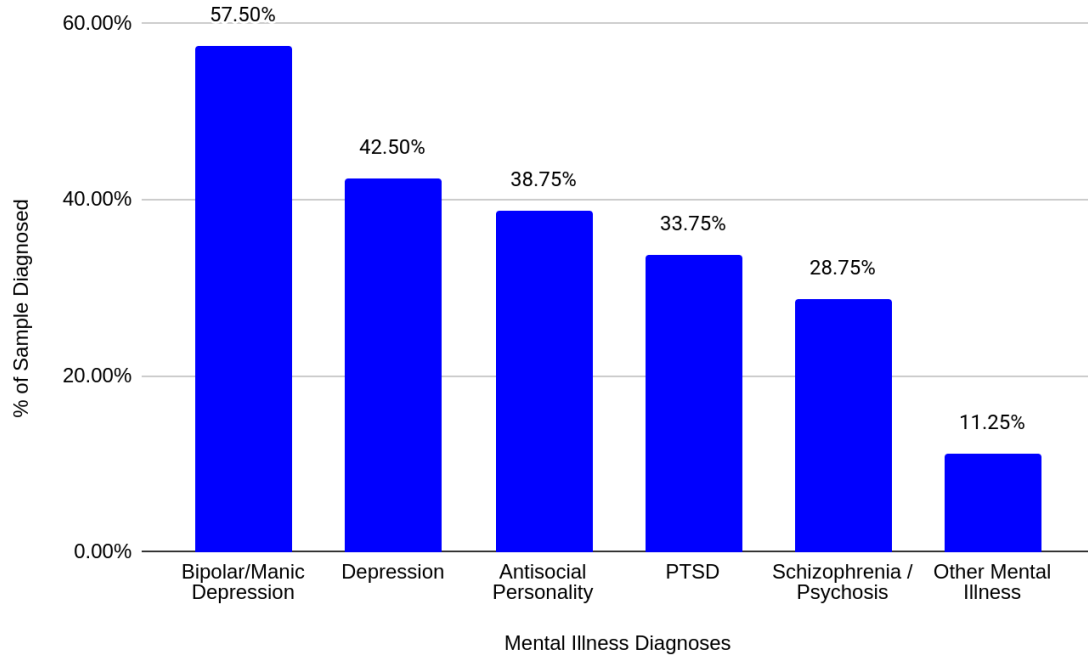
***Mental Health***

A majority of the sample felt their mental health had worsened during their segregation (57.02%), while others responded they felt it had remained the same (14.05%). A very small portion of the sample felt that the isolation had improved their mental health (7.44%). The remaining respondents were not certain how their mental status had changed while in solitary (21.49%).

AIC voluntarily disclosed the following previously diagnosed mental illnesses: major depressive disorder (42.50%); bipolar or manic-depressive disorder (57.50%); schizophrenia or other psychotic disorder (28.75%); antisocial personality disorder

(38.75%); post-traumatic stress disorder (33.75%); other psychiatric disorder (11.25%).

See Figure 2.

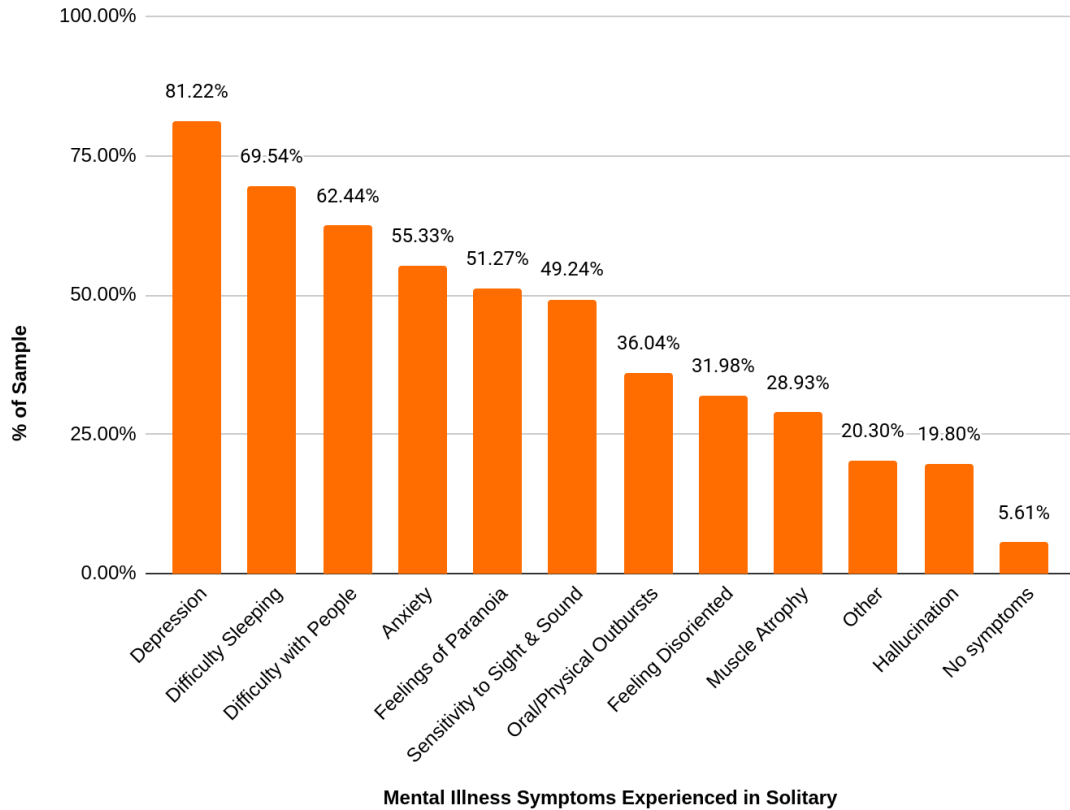


**Figure 2**

### **Inmate Mental Illness Diagnosis Prior to Segregated Housing**

The vast majority of the sample reported experiencing at least one of the 11 psychological symptoms (94.39%), while few reported no symptoms of any kind (5.61%). The mean number of symptoms experienced by AIC in the sample was 5.06, with a standard deviation of 2.92; essentially showing that the average AIC being held in administrative segregation experiences five of the symptoms. Depression was the most prevalent (81.22%). Difficulty sleeping (69.54%), difficulty interacting with people (62.44%), anxiety or panic attacks (55.33%), feelings of paranoia (51.27%), sensitivity to sights and sounds (49.24%), oral or physical outbursts (36.04%), disorientation (31.98%),

muscle atrophy (28.93%), other symptoms (20.30%), and hallucinations (19.80%) make up the remaining symptoms present in the sample. See Figure 3.

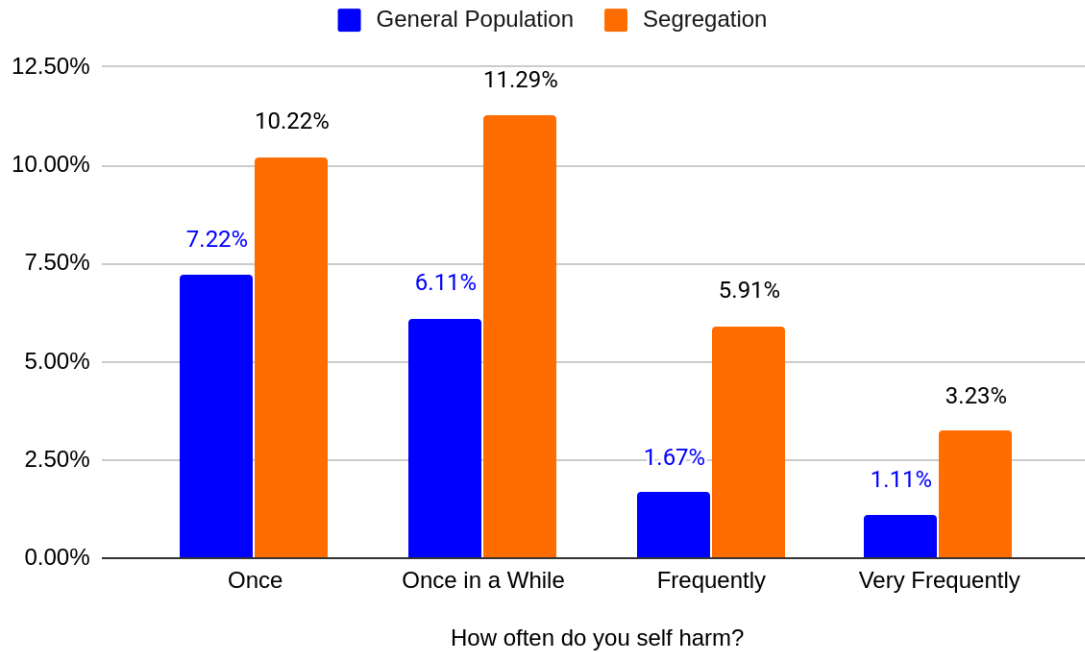


**Figure 3**  
**Symptoms of Mental Illness Experienced by AIC in Segregated Housing**

***Self-harm***

In this sample, 30.65% admitted to attempting suicide at least once while in segregated housing; only 16.11% of respondents engaged in this behavior while housed in general population. Respondents who have self-harmed in the past all indicate these behaviors occur more frequently while in segregated housing. See Figure 4. Additionally, 51.34% of respondents also report that others in their units attempt to harm themselves

very frequently. 25.67% of the sample reported others attempting self-harm frequently and 20.86% suggest it happens once in a while. Only 1.07% of the sample claim that self-harm never occurs around them while housed in solitary confinement.

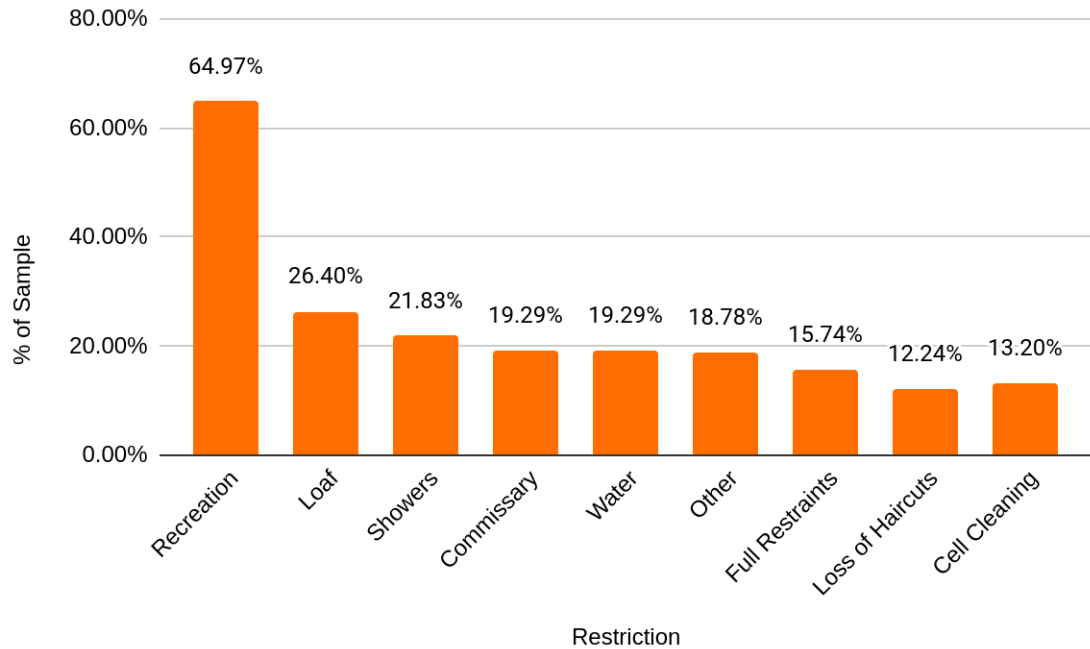


**Figure 4**  
**Self-harm Rates in General Population and Segregated Housing**

***Restrictions***

In this sample 70.81% of AIC surveyed said they have been placed on some sort of restriction while also in isolation. The sample experienced a mean of 2.16 restrictions with a standard deviation of 2.19. The most common restriction was related to recreation; approximately 65% asserted they had some form of recreation restriction during their

time in solitary confinement. The least prevalent took the form of cell cleaning, which only 13.20 % of the men experienced. See Figure 5 for more information.

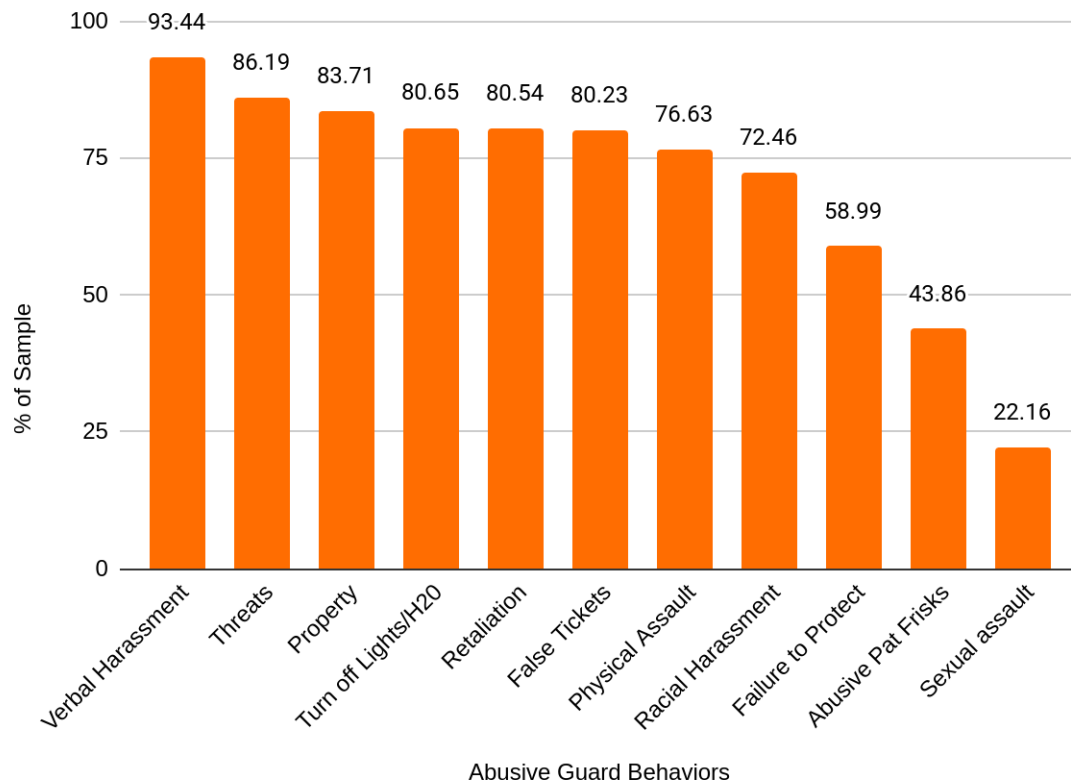


**Figure 5**  
**Restrictions Experienced by AIC in Segregated Housing**

***Abusive Guard Behaviors***

The vast majority of respondents (95.86%) report at least one abusive guard behavior while in isolation. Verbal harassment is the most prevalent with 93.44% of the sample reporting. Only abusive pat frisks and sexual assault occurred in a minority of AIC, with responses of 43.86% and 22.16% respectively. In this sample, AIC report a mean of 7.82 abuses with a standard deviation of 2.81. See Figure 6.





**Figure 6**

**Abusive Guard Behaviors Experienced by AIC in Segregated Housing**

**Inferential Statistics**

**Table 1**

*Sum Total Variable Correlation Table*

	1	2	3	4	5
1. Duration	--				
2. Mental Health Symptoms	0.12	--			
3. Self-Harm	- 0.09	0.36 **	--		
4. Restrictions	0.16 *	0.36 **	0.18 *	--	
5. Abuses	- 0.24 *	0.25 *	0.26 *	0.30 **	--

\*p<.05. \*\*p<.001

***Hypothesis 1: Duration in solitary confinement impacts AIC***

Hypothesis 1a was affirmed. There is a modest, positive relationship between time in months spent in solitary confinement and total mental illness symptoms ( $r=.12$ ). Hypothesis 1b was rejected; in the sample there is a modest, negative relationship ( $r=-0.09$ ) between the amount of time spent in segregated housing and self-harm rates. Hypothesis 1c was affirmed. The period someone spends in solitary confinement was mildly, positively, and significantly related to an increase in restrictions experienced in segregation ( $r=.16$ ). Hypothesis 1d was rejected; a longer time period in isolation was mildly, negatively, and significantly related to an increase in abusive guard behaviors ( $r=-0.24$ ).

***Hypothesis 2: Mental Health is related to solitary confinement***

Hypothesis 2a, 2b, and 2c were confirmed. The number of mental illness symptoms experienced by an AIC was moderately, positively, and significantly related to an increase in self-harm ( $r=.36$ ); restrictions ( $r=.36$ ); and abusive guard behaviors ( $r=.25$ ).

Upon further analysis, the total number of restrictions an inmate experiences in administrative segregation was positively and moderately related to anxiety or panic attacks ( $r=.29$ ), other symptoms ( $r=.25$ ), depression ( $r=.24$ ), feeling disoriented ( $r=.23$ ), difficulty sleeping ( $r=.21$ ), and feelings of paranoia ( $r=.20$ ). There was a positive and modest relationship between the total number of restrictions an inmate in segregated housing experiences and sensitivity to sights and sounds ( $r=.18$ ), difficulty interacting with other people ( $r=.11$ ), muscle atrophy ( $r=.10$ ) and hallucinations ( $r=.09$ ). There was a modest negative relationship between total restrictions and experiencing no mental health symptoms ( $r=-0.19$ ).

Overall, abusive guard behaviors are positively and moderately related to the expression of mental illness symptoms while in administrative segregation ( $r=.25$ ). There is a moderate positive correlation between guard abuses and difficulty sleeping ( $r=.27$ ), feelings of paranoia ( $r=.22$ ), anxiety or panic attacks ( $r=.18$ ) and feeling disoriented ( $r=.18$ ). There is a modest positive relationship between guard abuses and muscle atrophy ( $r=.12$ ), other symptoms ( $r=.11$ ), and difficulty interacting with other people ( $r=.10$ ). There is a mild relationship between total abusive guard behavior and depression ( $r=.08$ ), hallucinations ( $r=.08$ ) sensitivity to sights and sounds ( $r=.07$ ), and not experiencing any mental illness symptoms ( $r=.03$ ).

Conversely analyses were also performed to correlate examine the relationship between total mental illness symptoms and specific abuses by correctional officers. There was a moderate positive correlation between mental illness symptoms in administrative segregation and threats and intimidation ( $r=.32$ ), retaliation for grievances ( $r=.24$ ), false tickets ( $r=.22$ ), destruction or theft of property ( $r=.22$ ), and physical assault ( $r=.21$ ) within this sample of inmates. There is a modest positive relationship between mental illness symptoms in administrative segregation and turn off lights or water ( $r=.19$ ), verbal harassment ( $r=.19$ ), racial harassment ( $r=.18$ ), sexual assault ( $r=.16$ ), abusive pat frisks ( $r=.11$ ), and failure to protect inmates from others ( $r=.10$ ).

### ***Hypothesis 3: Self-harm and Solitary Confinement***

Hypothesis 3a, 3b, and 3c were confirmed. Comparing AIC self-harm rates in general population ( $M=.28$ ,  $SD=.06$ ) to self-harm rates in solitary confinement ( $M=.65$ ,  $SD=.08$ ) finds a significant increase in self-harm behaviors based on housing assignment  $t(175) = -4.42$ ,  $p<.001$ . Self-harm while in segregated housing was modestly, positively,

and significantly related to the total number of restrictions ( $r=.18$ ) and abusive guard behaviors experienced ( $r=.26$ ).

***Hypothesis 4: Restrictions and abusive guard behaviors***

The more total restrictions an inmate was given, the more total abusive guard behaviors they report ( $r=.30$ ). There was a moderate positive correlation between inmate restrictions and threats and intimidation ( $r=.31$ ), racial harassment ( $r=.25$ ), physical assault ( $r=.25$ ), turn off lights or water ( $r=.25$ ), and false tickets ( $r=.24$ ). There was a weak positive relationship between inmate restrictions and verbal harassment ( $r=.19$ ), abusive pat frisks ( $r=.18$ ), retaliation for complaints ( $r=.18$ ), failure to protect inmates from harm ( $r=.15$ ), sexual assault ( $r=.13$ ), and destruction or theft of property ( $r=.10$ ).

#### **IV: DISCUSSION**

This study was designed to describe and investigate relationships between mental health, self-harm, and daily conditions for inmates being held in TDCJ administrative segregation cells. This study makes a significant contribution to the literature by focusing on previously unexplored arenas of prison conditions including guard behaviors and daily restrictions. While causation cannot be established based upon this study, it has nonetheless illustrated several relationships previously unexplored in the scientific literature.

Contrary to the Colorado studies (O'Keefe, 2013), but in accordance with the larger plethora of literature published on this subject, the duration of isolation predicts mental illness and self-harm (e.g. Haney, 2018; Arrigo & Bullock, 2008; Lobel & Akil, 2018). This research suggests the need for limits on the duration of segregation to preserve the mental health of the inmates. The heavy use of prolonged segregation creates substantial concern for the mental wellbeing of AIC while they are inside the prison system, but the concern does not evaporate once someone is released. Formerly incarcerated people carry the mental scars of their experiences beyond the prison walls into local communities, where difficulties adjusting contribute to a significantly higher recidivism rate for people previously housed in segregation.

This study is predicated on the assumption that mental illness symptoms or expressions stem from a variety of inputs and causes. The daily conditions of life within a solitary confinement cell all work together to create a living situation which is untenable for many AIC. While the isolation from others plays a large part in the declining mental status of most inmates held in segregation, this is compounded by the loss of safe

physical touch, inability to take part in social or therapeutic programs, and the omnipresent threat of guard abuse.

The relationships discovered between restrictions and mental health indicate a need for potential oversight and enhanced mental healthcare for all AIC in segregation. While officials may feel that the increasingly bare surroundings may inspire conformity and encourage better behavior, based on this sample it seems instead that the additional deprivation is instead related to moderate mental health declines. Anxiety, depression, and other mental health issues present severe consequences for a person's entire life; once being released from isolation, these issues don't dissipate without intense treatment. However, more research is needed before recommending or implementing policy changes.

The increase in self-harm based on housing scenario presents questions for prison administrators. The state has a duty to prevent injury and death for all AIC within the system. Additional research is required to properly interpret and address the factors leading to the increase. Future related research should be done to establish the best practices that can be used to prevent self-harm and suicide from occurring, regardless of housing assignment.

Guard behavior has rarely been studied in the past. Inmates in this study self-report high levels of aggression from the staff. While verbal abuse and racial harassment tend to be discounted as less serious than physical or sexual assault, the prevalence here is concerning in addition to the moderate effects these behaviors have on the overall mental state of AIC held in isolation. Fear of retribution for speaking out against the system further isolates people who feel their restrictive incarceration is unjust.

Perceptions of danger are escalated for most inmates within isolation. Someone may be able to maintain a healthy mental state with one or two of these circumstances for a short duration of time; however, it becomes increasingly difficult to maintain healthy understandings of the world around them as the segregation time increases. The relationship between negative guard behaviors and self-harm was moderate, suggesting guards require additional training and a change in culture to help reduce self-harm reported by segregated AIC.

### **Limitations of the study**

This study presents several limitations regarding generalizable results. This study features a convenience sample of incarcerated people previously known to a civil rights organization. This was not pulled as a representative sample, nor should any conclusions drawn from this study be presented as such. Respondents were literate and English language proficient in addition to being highly motivated to partake in this investigation. The sample size is small, relative to the number of people being held nationally in solitary confinement.

This study utilized secondary data, but the original source promised confidentiality without anonymity. Originally the organization gathered data including AIC name and TDCJ identification numbers. This choice to include personally identifying information may have biased the responses given. People may have felt more guarded about their written responses, knowing their name was provided on the original documentation. When the data was provided for this study, all identifying information had been removed prior to authorization, yet the limitation due to data gathering methods remains.

Despite these limitations, the study provided a description of prison conditions and relationships present for some men being held in supermax units and segregation facilities within the Texas prison system.

### **Future Research**

The data source used for this project is rich and could easily be used for future studies to analyze the descriptions of daily life and further investigate the impacts of solitary confinement. Additional studies using a comparison between official and unofficial data to provide further context and a more thorough understanding of the experiences of inmates in solitary confinement would be illuminating.



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