Sex Differences in the Effects of Adverse Childhood Experiences on Institutional Misconduct among Adults in Prison

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Abstract

Research from the past few decades has highlighted the long- and wide-reaching effects of adverse childhood experiences (ACEs). These experiences can negatively affect mental and physical health, as well as behaviors and interpersonal relationships well into adulthood. While it is generally understood that ACEs are prevalent in correctional populations, no prior studies have measured this issue using a large representative and racially and ethnically diverse sample of both male and female adult correctional populations in the United States. The data used for this study were collected via an assessment administered to more than 2,100 adults in Minnesota's prison system. Descriptive findings revealed that multiple and varied forms of ACEs were common in the histories of this state's incarcerated population, particularly among females and incarcerated persons who identified as Black, White/non-Hispanic, and American Indian/Alaskan Native. The multivariate results revealed that past exposure to ACEs increased the likelihood and speed of disciplinary convictions after admission to prison for males, but not for females. Overall, the results underscored the importance of assessing for responsivity factors upon admission to prison, including ACEs.

Introduction

It has been 25 years since researchers from the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente (Kaiser) published their landmark study on the long- and wide-reaching consequences of exposure to potential childhood trauma (Felitti et al., 1998). Based on survey data from more than 9,500 adults receiving routine care from the Kaiser Health System, Felitti and colleagues (1998) found that the accumulation of adverse childhood experiences (ACEs) significantly increased the likelihood of engagement in risky behaviors, self-reported addiction issues, poor mental health, and chronic health conditions in adulthood.

Since the time of that study, an additional wave of data has been added to the original CDC-Kaiser ACEs study, as well as questions about emotional and physical neglect (Dube, 2020; Dube et al., 2001). The CDC-Kaiser sample grew to include more than 17,000 respondents covering the following 10 forms of ACEs: three forms of abuse (emotional, physical, and sexual); two types of neglect; and five forms of household dysfunction (the presence of domestic violence, substance use disorders, mental illness, parental separation or divorce, and parental incarceration). While exposure to ACEs does not necessarily constitute a traumatic experience, the research has been clear that the self-reported experience of ACEs is associated with several negative outcomes (Dube, 2020).

The original study of the CDC-Kaiser data (Felitti et al.,1998) as well as several subsequent studies (e.g., Bellis et al., 2019; Dong et al., 2004; Green et al., 2010; Hillis et al., 2010; McLaughlin et al., 2012) have revealed that ACEs are common and interrelated among adolescents and adults in the United States. Only 36 percent of adults in the CDC-Kaiser (2016) data did not experience any of the 10 categories of ACEs measured in the survey. That leaves 64 percent of adults who experienced at least one of these events; nearly 38 percent experienced two or more of these events. Experiencing one of the ten categories of ACEs significantly increased the likelihood of experiencing another (Dong et al.,

2004). However, only 12.5 percent of respondents in the CDC-Kaiser data reported experiencing four or more of the ten events.

While ACEs are common, the risk of ACEs—and especially the risk of experiencing multiple ACEs—is not evenly distributed throughout the population. Biological sex, race and ethnicity, and economic disadvantage are all associated with exposure to ACEs (Felitti et al.,1998; Merrick et al., 2018; Mersky et al., 2021; Strompolis et al., 2019). Females, individuals who identify as racial or ethnic minorities, and individuals from economically disadvantaged communities often report experiencing more ACEs (Cronholm et al., 2015; Felitti et al., 1998; Kenney and Singh, 2016). To be clear, ACEs are not likely caused by race, ethnicity, and socioeconomic status (Bradley and Corwyn, 2002; Brooks-Gunn and Duncan, 1997; Ports et al., 2020). Rather, marginalized communities may lack stability or access to resources, which could both increase the likelihood of adverse events and make these populations more vulnerable to the effects of ACEs.

Given that ACEs increase the likelihood of engagement in risky behaviors and substance use disorders, it should come as no surprise that ACEs also increase the risk of involvement in the juvenile and criminal justice systems (Craig, Baglivio et al., 2017; Craig, Piquero et al., 2017; Elklit et al., 2013; Fox et al., 2015; Mersky, Topitzes, and Reynolds, 2012; Pierce and Jones, 2022; Roos et al., 2016). Multiple studies have found that varied forms of ACEs are common in justice-involved populations (e.g., Drury et al., 2017; Friestad, Åse-Bente, and Kielsberg, 2014; Jones et al., 2021; Stensrud, Gilbride, and Bruinekool, 2019). In a study of more than 64,000 young people involved in Florida's juvenile justice system, Baglivio et al. (2014) found that half of the sample reported four or more ACEs; less than three percent did not report any ACEs. Messina et al. (2007) found that more than 30 percent of the drug-dependent incarcerated adults they interviewed reported four or more of the nine ACEs included in their study.

The fact that varied forms of ACEs are common in incarcerated populations is particularly troubling because custodial facilities can be rife with potential psychosocial triggers (Gibbons and

deBelleville Katzenbach, 2006). Between unclothed searches, the threat of physical or sexual assault, and separation from loved ones, among several other "pains of imprisonment" (Sykes, 1958), institutional adjustment may be more difficult for individuals exposed to multiple forms of ACEs (Wolff and Caravaca-Sánchez, 2019).

There is a substantial and growing body of literature on ACEs and justice-involved populations, but no existing studies have measured the prevalence of the 10 common forms of ACEs in a general sample of adults incarcerated in prisons in the United States. Previous studies have relied on samples limited to juveniles (Baglivio et al., 2014), individuals incarcerated for certain types of offenses (Drury et al., 2017; Messina et al., 2007; Stensrud et al., 2019), or incarcerated females (Friestad et al., 2014; Jones et al., 2021). Moreover, few studies have examined how past exposure to ACEs affects the prison experience. This study had two purposes. First, this study measured the prevalence of ACEs in Minnesota's entire adult incarcerated population using a large, racially and ethnically diverse, and representative sample of both male and female incarcerated persons. Second, this study examined the impact of ACEs on institutional adjustment measured in the form of disciplinary convictions (DCs) incurred while incarcerated.

ACEs and the Prison Environment

Research on the short- and long-term effects of ACEs is consistent with biosocial and life-course theories of crime (e.g., Laub and Sampson, 2003; Moffitt, 1993; Sampson and Laub, 2005). That is, the interaction of social, biological, and psychological dispositions interact with early life events and circumstances creating effects that ripple throughout one's lifetime. ACEs appear to affect neurodevelopment, which in turn affects decision-making, impulse control, emotional regulation, and ultimately physical and mental health (Dube, 2020). The balance of ACEs research suggests that the type of adversity that young people are exposed to is not as important as the accumulation of multiple and varied ACEs (Chartier, Walker, and Naimark, 2010; Evans, Li, and Whipple, 2013; Pierce and Jones, 2022;

Sheridan and McLaughlin, 2020; Vachon et al., 2015). These effects are acute in the absence of protective factors, such as mental resilience or supportive relationships with families, trusted adults, and peers (Fergus and Zimmerman, 2005; Oshri et al., 2015; Oshri, Rogosch, and Cicchetti, 2013; Patel and Goodman, 2007; Zimmerman, 2013).

Research has not been conclusive on the exact mechanisms that mediate the relationship between ACEs and later life outcomes (Hales et al., 2022). However, there are multiple avenues of promising research (Anda et al., 2006; Sheridan and McLaughlin, 2020). One of the most explored mediating mechanisms is allostatic load or exposure to chronic toxic stress, which can overwhelm and change the architecture of the young brain when it is at peak plasticity through adolescence (Ancelin et al., 2021; Bremner, 2003a, 2003b; Danese and McEwen, 2012; Danese et al., 2009; Eiland and McEwen, 2012; Johnston et al., 2001). Prolonged or repeated exposure to stress early in life may stifle development in areas of the brain that primarily control problem-solving, reasoning, mood, impulse-control, and memory (i.e., the prefrontal cortex and the hippocampus; Anda et al., 2006; Bremner, 2003a, 2003b).

An early-life stress burden may also disrupt development of the brain's stress-response system, making it either over- or under-active (Bremner, 2003a, 2003b; Danese and McEwen, 2012; Machlin et al., 2019; McLaughlin et al., 2016; McLaughlin et al., 2015; Sheridan and McLaughlin, 2020). The constant threat of danger early in life may condition individuals to be hyper aware of their surroundings, which can trigger strong emotional and behavioral responses to real or perceived threats to safety (McLaughlin et al., 2015). Conversely, the over-burdened stress response system could become desensitized to threats, allowing individuals to be more risk-seeking (De Bellis and Zisk, 2014).

The development of emotional regulation is also affected by early-life experiences (Nemeroff, 2016; Sheffler, Stanley, and Sachs-Ericsson, 2020). Children exposed to repeat abuse and other forms of maltreatment are more likely to develop negative cognitive styles (Sachs-Ericsson et al., 2006). A

negative cognitive style is an individual tendency to attribute adversity to personal characteristics or universal circumstances that will plague every facet of life (Alloy et al., 2004). This disposition is also characterized by maladaptive attitudes and antisocial self-identity. The negative cognitive style has been linked to multiple mental health diagnoses, including mood disorders, personality disorders, and posttraumatic stress disorder (Hofmann et al., 2012; Nemeroff, 2016).

Much like stress, deprivation or neglect can also shape the brain (Sheridan and McLaughlin, 2020). Absent or ineffective caregivers do not provide needed social interactions or cognitive stimulation that prime the brain for advanced development (Kantor et al., 2004; Smyke et al., 2007). These environmental deficiencies lead to leaner neural structures that are ill-equipped to learn more complex tasks, including language skills or general executive functioning (Sheridan et al., 2012).

Taken together, a large body of research has found that individuals exposed to multiple ACEs may have some combination of limited cognitive functioning, poor emotional regulation, and hyper- or hypo-active stress response systems. These individuals also comprise large proportions of incarcerated populations (Briere, Agee, and Dietrich, 2016; Caravaca-Sánchez and Wolff, 2020; Debowska and Boduszek, 2017; Driessen et al., 2006; Drury et al., 2017; Ford et al., 2019; Friestad et al., 2014; Levenson, Willis, and Prescott, 2016; Messina and Grella, 2006; Moore and Tatman, 2016; Roos et al., 2016; Stensrud et al., 2019; Wolff and Caravaca-Sánchez, 2019; Wolff and Shi, 2012). Wolff and Shi (2012) found that 45 percent of men incarcerated in an unnamed state's prison system had been physically assaulted prior to the age of 18, and 11 percent had been sexually assaulted. In a non-random sample of 679 incarcerated male sex offenders, Levenson and colleagues (2016) found that 48 percent of the sample reported four or more ACEs, and only 16 percent did not report any of the 10 ACEs included in the CDC-Kaiser study. Based on a sample of women incarcerated in Oklahoma prisons, Jones and colleagues (2021) found that 70 percent of Native women and 57 percent of non-Native women reported five or more ACEs (also similar to the ACEs items used in the CDC-Kaiser study).

Studies have also found that exposure to ACEs is associated with increased psychosocial distress among incarcerated persons (Driessen et al., 2006; Friestad et al., 2014; Messina et al., 2007; Wolff and Caravaca-Sánchez, 2019). Using a sample of more than 900 incarcerated men in Spain, Wolff and Caravaca-Sánchez (2019) found that greater exposure to ACEs was associated with higher levels of depression, anxiety, and stress within the previous week. Messina and colleagues (2007) found that ACEs were associated with symptoms of trauma among drug-dependent incarcerated males and females in California. Each additional ACE reported by incarcerated persons in Messina et al.'s (2007) study was associated with an increase in the score for six out of the seven sub-scales included in the Trauma-Symptom Checklist-40 (Briere, 1996).

Compared to research based on samples of derived from the general United States population (e.g., Dong et al., 2004; Dube et al., 2001; Felitti et al., 1998), the above studies indicate that incarcerated persons report experiencing more ACEs than the general population, and past exposure to ACEs is associated with higher levels of psychological distress. While these studies are useful in understanding ACEs among incarcerated populations, they are limited. These studies generally relied on samples that were not representative of adult prison populations in the United States. Several of these studies used non-random samples or focused exclusively on males or females. None of these studies examined associations between ACEs and prison behaviors, including institutional misconduct. The present study overcame these limitations in the literature by measuring the prevalence of ACEs using a sample of incarcerated persons representative of Minnesota's incarcerated population. The current study's sample included both males and females and was racially and ethnically diverse. In line with prior research on ACEs in correctional populations, we expect to find that ACEs are more common in a representative sample of incarcerated persons than compared to a sample drawn from the general public. Based on this past research, we also expect to find that ACEs are more common in incarcerated

females than incarcerated males, and more common among individuals who identify a racial or ethnic minorities than individuals who identify as white/non-Hispanic.

Further, this study analyzed the effect of past exposure to ACEs on institutional misconduct, or DCs. Given the known effects of ACEs on decision-making, impulse control, and mental health (Dube, 2020), it is conceivable that individuals who experienced multiple ACEs may have trouble adjusting to the prison environment. While focused on safety and security, the prison environment may be perceived as harsh, with stern corrections officers, exposure to threats to emotional and physical wellbeing, and separation from loved ones (Gibbons and deBelleville Katzenbach, 2006; Sykes, 1958). We expect to find that individuals who had more extensive past exposure to ACEs will be more likely to incur DCs and more quickly after admission to prison. Our measurement of institutional adjustment (DCs) is not a perfect indicator of this construct, but it is an indicator of several maladaptive behaviors, including but not limited to the inability to follow orders, conflict with others, and substance use. Moreover, mental health issues and prior victimization are both risk factors for DCs (Steiner, Butler, and Ellison, 2014). Our analyses examined males and females separately to look for any differences based on sex.

Data and Methods

Sample Collection

This study used a mix of assessment data and official data to estimate the prevalence of ACEs among adults incarcerated in prison, as well as the impact of ACEs on the risk of receiving a DC. The assessment was created by Minnesota Department of Corrections (MnDOC) staff to measure criminogenic needs and responsivity issues. Criminogenic needs are personal characteristics that leave individuals at greater risk of recidivism (Andrews & Bonta, 2010). The criminogenic needs included in the assessment were employment, antisocial cognition, antisocial associates, family discord, antisocial identity, and housing instability. Responsivity issues are individual barriers that may limit the likelihood

for program participation and successful completion (Bonta and Andrews, 2017). Past exposure to ACEs has been identified as a responsivity issue (Baglivio and Epps, 2016; Willis and Levenson, 2022), and it was included in the assessment. In addition to ACEs, other responsivity issues measured by the assessment included motivation for change, learning style, religious faith and spirituality, sexual orientation, gender identity, and race and ethnicity.

This new assessment was piloted in the spring of 2021. Half of the approximately 6,700 male incarcerated persons at Minnesota's 10 all-male prisons at the time of the pilot were randomly selected for participation. Given the relatively small number of females incarcerated at the time of the pilot (400), all individuals housed in Minnesota's only all-female facility were invited to participate. Of the 3,335 male and 400 female incarcerated persons who were invited to participate, 1,774 males and 337 females completed the assessment, resulting in a total sample of 2,100 and a participation rate of 56 percent (53 percent for male incarcerated persons, and 84 percent for female incarcerated persons).

Given that females accounted for less than 6 percent of Minnesota's prison population at the time of the assessment (Minnesota Department of Corrections, 2021), we expected to have more males than females included in the sample. However, we did not expect to have a wide disparity in the response rates between males and females. There are at least two plausible explanations for this disparity. First, with only one female prison that had 400 incarcerated persons at the time, administration of the assessment on the female population was likely easier for staff than compared to administration on the male population. The males were housed at ten different facilities that had total populations ranging from 30 to more than 1,700 incarcerated persons. The second possible explanation is that past research on survey administration has consistently found that males are less likely to respond to surveys than females (Becker, 2022; Becker, Möser, and Glauser, 2019; Slauson-Blevins and Johnson, 2016). The reason for lower participation rates among males compared to females is unclear, but males may be more reluctant to divulge personal information that surveys often ask for. Despite the

disparity in response rates, we ended up with samples of incarcerated males and females that mirrored the state prison population in terms of age, race and ethnicity, type of offense, and several other variables (reference Table 1).

The needs and responsivity assessment was self-administered on a computer. Individuals invited to participate in the assessment pilot were notified in writing about one week prior to assessment administration. The incarcerated persons were advised that their participation in the assessment was completely voluntary and they could refuse to participate or skip any questions that they did not want to answer. The incarcerated persons were offered instant coffee in exchange for their participation. It took an average of half an hour for incarcerated persons to complete the assessment.

Data derived from the assessment pilot were supplemented by official data housed in the MnDOC's Correctional Operations Management System (COMS). COMS is used by the MnDOC to track all information pertaining to incarcerated persons housed in Minnesota's state prisons, including but not limited to basic demographic information (e.g., age, biological sex), offense and sentence information, risk assessment data, prior criminal history, and involvement in security threat groups (i.e., prison gangs).

The final sample was limited to incarcerated persons who were incarcerated for a minimum of one month in a MnDOC facility. While this sample included individuals currently sentenced to terms of more than 30 years, we excluded individuals who had already been in prison for more than 30 years (58 incarcerated persons). The purpose of excluding these individuals was to ensure continuity of record-keeping and disciplinary practices. The sample was also limited to incarcerated persons who had complete information on all measures included in the analyses. These exclusion criteria left a final sample of 2,011 incarcerated persons.

Table 1. Descriptive Statistics for Dependent and Independent Variables for Full Sample and Males and Females Separately

	Full Sample (n = 2,011)		*Males (n = 1,683)*		*Females (n = 328)*	
Variable	*Number*	*% or Mean (sd)*	*Number*	*% or Mean (sd)*	*Number*	*% or Mean (sd)*
Dependent Measures						
Any DC	1,310	65%	1,098	65%	212	65%
Any Aggravated DC	467	23%	433	26%	34	10%
Independent Measures						
Binary ACEs Measures						
0 ACEs	298	15%	253	15%	45	14%
1 to 3 ACEs	744	37%	650	39%	94	29%
4+ ACEs	969	48%	780	46%	192	57%
Male	1,736	84%	--	--	--	--
Age at Admission		34.60 (10.06)		34.49 (10.16)		35.14 (9.57)
Race/Ethnicity						
White/Non-Hispanic	948	47%	770	46%	178	54%
Black/African American	641	32%	592	35%	49	15%
American Indian/Alaskan Native	212	11%	140	8%	72	22%
Hispanic or Latino	148	7%	131	8%	17	5%
Asian American or Pacific Islander	62	3%	50	3%	12	4%
Length of Stay						
Less than 1 year	245	12%	162	10%	83	25%
1 to 4 years	976	49%	830	49%	146	44%
5 to 14 years	486	24%	416	25%	70	21%
15 to 29 years	201	10%	181	11%	20	7%
30 or more years	103	5%	94	6%	9	3%
Type of Offense						
Person	863	43%	745	44%	118	36%
Property	150	7%	118	7%	32	10%
Drug	410	20%	289	17%	121	37%
Criminal Sexual Conduct	242	12%	232	14%	5	2%
Driving While Intoxicated	96	5%	72	4%	24	7%
Other	255	13%	227	14%	28	8%
Secondary Education	1,720	86%	1,438	85%	282	86%
Substance Use Disorder Treatment	740	37%	606	36%	134	40%
Mental Health Issue	298	15%	241	14%	57	17%
STG Indicators		0.73 (1.74)		0.85 (1.86)		0.11 (0.55)
Type of Admission						
Release Return	144	7%	126	7%	18	5%
New Commitment	1,867	93%	1,557	93%	310	95%
Prior Felony Convictions		4.84 (3.74)		5.03 (3.822)		3.88 (3.14)
Prior Admissions to Prison		1.66 (2.69)		1.80 (2.83)		0.94 (1.61)
Level of Custody						
Minimum	329	16%	263	16%	66	20%
Medium	1,105	55%	906	52%	199	60%
Close	522	26%	464	29%	58	18%
Maximum	53	3%	48	3%	5	2%
Visited	973	48%	827	49%	146	45%
Social Support		47.36 (10.44)		46.92 (10.61)		49.63 (9.20)

Notes: DC = disciplinary convictions; ACEs = adverse childhood experiences; STG = security threat group

Dependent Variables and Analytical Technique

The outcome examined in this research was time to first DC that occurred after each incarcerated person's most recent admission to prison and up until release from prison or the end of April 2023 for individuals that were still incarcerated. This outcome was operationalized in two ways: (1) time to any type of DC and (2) time to any DC labeled as aggravated. For both outcomes, the DC was coded so that a value of "1" indicated that a DC occurred, and "0" if no DC occurred. The first measure of DCs reflects a wide array of behaviors, ranging from very minor rule infractions (e.g, disorderly conduct) to serious offenses (e.g., assaults on staff or other incarcerated persons). Aggravated DCs are a subset of the first measure (any DCs) and are indicative of more serious institutional offenses. Aggravated DCs are ones that pose a heightened risk to safety and security and are subject to higher levels of discipline (e.g., added days or months to incarceration sentences).

Both measures of DCs are described in Table 1. Because 84 percent of the sample is comprised of males, we presented the descriptive statistics for the full sample and for males and females separately. Sixty-five percent of the full sample incurred any DC during the observation period, and 23 percent incurred an aggravated DC. The same percentage of males and females incurred any type of DC, but a higher percentage of males than females incurred aggravated DCs (26 percent compared to 10 percent).

Because both time and event information were available for the outcome measures, this study used survival analysis (Cox regression) to perform multivariate analyses. This analytical method not only determined whether a DC occurred during the observation period, but also how quickly it happened after admission to a MnDOC facility. Time was measured in months from the date of admission to the date of the DC conviction. For individuals who did not receive a DC, time was measured up until the date of release from incarceration or until the end of April 2023 for individuals who were still incarcerated.

The observation period ranged from one month to just under 30 years, with an average of 53 months. The males and the females were analyzed separately.

Independent Variables

The primary independent variable in this research was ACEs. ACEs were measured using a series of questions adapted from the Family Health History questionnaire developed by Felitti and colleagues (1998). This set of questions included 18 items that measured 10 forms of ACEs. The individual items and the 10 forms of ACEs are displayed in Table 2 along with reported frequencies of each. Frequencies from the CDC-Kaiser (2016) study are also displayed for reference. Because prior research has found that the experience of four or more ACEs is consistently and significantly associated with several negative life outcomes (e.g., Dube, 2020; Felitti et al., 1998), we operationalized ACEs using two dichotomous variables: (1) a binary indicator of four or more ACEs, and (2) a binary indicator of one to three ACEs. In the multivariate analyses, individuals who reported zero ACEs were the reference category.

Descriptive statistics for the ACEs measures are displayed in Table 1. Only 15 percent of all incarcerated persons in the sample did not experience any of the 10 included ACEs, 37 percent reported experience with one to three of the ACEs, and nearly half (48 percent) reported four or more of the ACEs. Similar percentages of males and females did not report any of the 10 ACEs (15 percent and 14 percent, respectively), but a much higher percentage of females than males reported four or more ACEs (57 percent compared to 46 percent, respectively).

Control Variables

The analyses included several variables that are likely associated with institutional misconduct (Clark and Duwe, 2019; Duwe and McNeeley, 2020; Steiner et al., 2014). Most of these variables were drawn from COMS, and they are described in Table 1. The average age at the time of admission was 34.6, and this average was similar for both males and females. As mentioned previously, this sample was

racially and ethnically diverse. Just under half of the sample (47 percent) identified as White non-Hispanic. The remaining half of the sample identified as Black or African American (32 percent), American Indian or Alaskan Native (11 percent), Hispanic or Latino/a (7 percent), and Asian American or Pacific Islander (3 percent).

Table 2. Frequencies of Adverse Childhood Experiences in MnDOC Sample and CDC-Kaiser sample

Adverse Childhood Experiences and Corresponding Survey Items	MnDOC Percent "Yes" Total	MnDOC Percent "Yes" Item	CDC-Kaiser Study
Verbal Abuse	46%		11%
Did a parent or other adult in the household often or very often…			
Swear at you, insult you, put you down, or humiliate you?		43%	
Act in a way that made you afraid that you might be physically hurt?		34%	
Physical Abuse	37%		28%
Did a parent or other adult in the household often or very often…			
Push, grab, slap, or throw something at you?		34%	
Ever hit you so hard that you had marks or were injured?		28%	
Sexual Abuse	24%		21%
Did an adult or person at least 5 years older than you ever…			
Touch or fondle you or have you touch their body in a sexual way?		23%	
Attempt or actually have oral, anal, or vaginal intercourse with you?		19%	
Emotional Neglect	40%		15%
Did you often or very often feel that…			
No one in your family loved you or thought you were important or special?		31%	
Your family didn't look out for each other, feel close to each other, or support each other?		31%	
Physical Neglect	26%		10%
Did you often or very often feel that…			
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?		19%	
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?		16%	
Parental divorce	65%		23%
Were your parents ever separated or divorced?			
Domestic Violence at Home	28%		13%
Was your mother or stepmother…			
Often or very often pushed, grabbed, slapped, or had something thrown at her?		24%	
Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?		22%	
Ever repeatedly hit at least a few minutes or threatened with a gun or knife?		14%	
Substance Use Disorders at Home	48%		27%
Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?			
Mental Illness at Home	40%		19%
Was a household member depressed or mentally ill?		39%	
Did a household member attempt suicide?		17%	
Family Incarceration	25%		5%
Did a household member go to prison?			

Notes: MnDOC n = 2,011; CDC-Kaiser n = 17,337; CDC-Kaiser statistics collected from: https://www.cdc.gov/violenceprevention/aces/about.html

The racial and ethnic breakdown of the male and female samples varied in a few noteworthy ways. First, a larger percentage of the females than the males identified as White/non-Hispanic (54 percent compared to 46 percent, respectively) or American Indian/Alaskan Native (22 percent compared to 8 percent, respectively). A much larger percentage of the males than the females identified as Black/African American (35 percent compared to 15 percent, respectively) and Hispanic or Latino (8 percent compared to 5 percent, respectively). Given the smaller sample of females, we collapsed two of the race and ethnicity categories (Hispanic or Latino and Asian American or Pacific Islander) to create a an "Other Race/Ethnicity" category to be used in the multivariate analyses conducted on the female sample.

Although time was accounted for in the Cox regression analyses, we still included total length of incarceration in the analyses given that past research has found that it is associated with risk of institutional misconduct. Individuals sentenced to five years or less may be more likely to engage in misconduct (Steiner et al., 2014). This measure was operationalized using four dummy variables representative of individuals sentenced to incarceration periods of one to four years (49 percent), five to 14 years (24 percent), 15 to 29 years (10 percent), and 30 or more years (5 percent). Individuals sentenced to incarceration terms of less than one year were the reference category (12 percent). A higher percentage of the females than the males were sentenced to incarceration terms of less than one year (25 percent compared to 10 percent, respectively), while a higher percentage of the males than the females were sentenced to incarceration terms of 30 years or more (5 percent compared to 3 percent, respectively). Because only a small number of women were sentenced to incarceration terms of fifteen years or more, we collapsed the 15 to 29 years and 30 or more years categories in the multivariate analyses run on female incarcerated persons.

Offense type was operationalized using five dummy variables that indicated whether the individual was incarcerated for a property offense (7 percent), drug offense (20 percent), criminal sexual

conduct offense (12 percent), driving while intoxicated offense (5 percent), or an offense categorized as "other" (13 percent), which includes weapons, escape or fleeing, and crimes against the administration of justice offenses. Individuals sentenced to prison for person (non-sexual violent) offenses were the reference category (43 percent). Larger percentages of the males than the females were in prison for person offenses (44 percent compared to 36 percent, respectively) and criminal sexual conduct offenses (14 percent compared to 2 percent, respectively). A much larger percentage of the females were sentenced to prison for drug offenses (37 percent, compared to 17 percent, respectively). Because only five women were in prison for criminal sexual conduct offenses, we grouped this offense type with person offenses in the multivariate analyses conducted on the female sample.

At the time of admission, most of these incarcerated persons had obtained at least a high school or general educational development (GED) diploma (86 percent), and this percentage was approximately the same for both males and females. By the time of release or until the end of the observation period, more than a third of the incarcerated persons had participated in substance use disorder treatment (37 percent). This percentage was higher for females than for males (40 percent compared to 36 percent, respectively). Fifteen percent of these individuals had a documented mental health issue, including mood disorders or other serious mental health conditions (14 percent for males, 17 percent for females).[1]

We also controlled for involvement in security threat groups (STGs, also referred to as "prison gangs"), given STG involvement is associated with DCs (Pyrooz, 2016). STG involvement is a continuous measure that ranges from 0 to 16. Each indicator is an observed characteristic or behavior that is representative of STG involvement (e.g., the incarcerated person associates with a known STG member, the incarcerated person wears clothing or has a tattoo associated with a STG). The incarcerated persons

[1] The data do not include more descriptive information on mental health diagnoses for the incarcerated persons. Thus, it is not possible to determine the specific types of mental health issues present in this sample.

in this study had an average number of 0.73 STG indicators. This average was higher for males (0.85) than for females (0.11).

Given that several studies have found that prior criminal record is commonly associated with misconduct (Steiner et al., 2014), we included multiple indicators of this measure. Most of the incarcerated persons included in this sample came into prison for a new felony offense conviction (93 percent), while only 7 percent were admitted due to a supervised release violation (used as the reference category). These percentages were similar for males and females. Because only 18 women were admitted to prison for a supervised release violation, we omitted this variable from the multivariate analyses conducted on the female sample.

The incarcerated persons in this study had an average number of 4.84 prior felony convictions and were previously admitted to prison an average of 1.66 times. The males in this sample had lengthier criminal records than females with a higher average number of prior felony convictions (5.03 compared to 3.88, respectively) and more prior prison admissions (1.80 compared to 0.94, respectively).

Custody level was also included in the analyses. Upon admission to Minnesota prisons, each incarcerated person is assessed to determine the appropriate security level for confinement. This assessment considers a number of factors including risk of serious institutional misconduct. Prior research has found greater levels of misconduct in higher custody facilities (Steiner et al., 2014). In the analyses, custody was represented with three dummy variables indicating incarcerated persons classified as medium custody (55 percent), close custody (26 percent), and maximum custody (3 percent). Incarcerated persons classified as minimum level custody were the reference category (16 percent). A larger percentage of the females than the males were considered minimum custody (20 percent compared to 16 percent, respectively) and medium custody (60 percent compared to 52 percent, respectively), while a larger percentage of men were classified as close custody (29 percent compared to 18 percent, respectively). Because only five women were classified as maximum custody,

we grouped these individuals with the close custody individuals in the multivariate analyses conducted on the female sample.

Finally, to account for protective factors that may counteract the adverse effects of ACEs, we included two measures indicative of social support. The first is a binary indicator of whether the incarcerated person received any visits during the current term of incarceration. Prior research has found that receiving visits while incarcerated can reduce the likelihood of institutional misconduct (Cihan et al., 2020; Cochran, 2012). Just under half (48 percent) of the incarcerated persons in this sample received a visit by the end of the observation period. This percentage was slightly higher for males (49 percent) and slightly lower for females (45 percent). Because prior research has found that social support can reduce psychological distress experienced by incarcerated persons (Wolff and Caravaca-Sánchez, 2019), we also included the Multidimensional Scale of Perceived Social Support (MSPSS)(Zimet et al., 1988). This scale was drawn from the same assessment that measured ACEs. The MSPSS includes 12 items that assess social support from friends, family, and a significant other. The scale was coded in a such a way that higher scores indicated higher levels of social support. Total scores ranged from five to 60, and the incarcerated persons in this sample had an average score of 47.36. This average score was approximately the same for males (46.92), but slightly higher for females (49.63).

Results

Prevalence of ACEs in a State Prison Population

The first objective of this study was to examine the prevalence of ACEs in a prison population. Referring back to Table 2, we found that all forms of the 10 ACEs measured in the CDC-Kaiser study (Felitti et al., 1998; Dube et al., 2001) were more common in Minnesota's state prison population than in the general adult population. While this finding is not surprising in light of other research (Briere et al., 2016; Messina et al., 2007; Wolff and Caravaca-Sánchez, 2019), some of the differences between the MnDOC sample and the CDC-Kaiser sample are noteworthy. For example, 46 percent of the MnDOC

sample reported experiencing verbal abuse, compared to just 11 percent of the CDC-Kaiser (2016) sample. Nearly half of the MnDOC sample were exposed to household substance use disorders (48 percent) compared to 27 percent of the CDC-Kaiser sample. A quarter of the MnDOC sample (25 percent) had at least one parent who was incarcerated, compared to only 5 percent of the CDC-Kaiser sample.

Next, in Table 3 we presented the prevalence of ACEs in the male and female incarcerated populations again compared to the CDC-Kaiser (2016) data. Incarcerated males and females reported each form of the 10 ACEs more often than their counterparts in the CDC-Kaiser (2016) study data. Comparing the incarcerated males to the incarcerated females, a larger percentage of the females experienced each form of ACE than the males except for two categories (parental divorce and incarceration), for which the differences were minimal.

Table 3. Frequencies of ACEs in CDC-Kaiser study and MnDOC Population for Males and Females Separately

	Males		Females	
ACEs	CDC-Kaiser	MnDOC	CDC-Kaiser	MnDOC
Abuse				
Verbal Abuse	8%	44%	13%	53%
Physical Abuse	30%	36%	27%	40%
Sexual Abuse	16%	21%	25%	43%
Neglect				
Emotional Neglect	12%	38%	17%	48%
Physical Neglect	11%	25%	9%	29%
Household Challenges				
Parental divorce	22%	65%	25%	63%
Domestic Violence at Home	12%	27%	14%	35%
Substance Use Disorders at Home	24%	47%	30%	56%
Mental Illness at Home	15%	37%	23%	54%
Family Incarceration	4%	25%	5%	25%
Number of ACEs				
0	38%	15%	35%	14%
1	28%	17%	25%	9%
2	16%	12%	16%	10%
3	9%	10%	10%	10%
4 or more	9%	46%	15%	57%
n	7,970	1,683	9,367	328

Notes: CDC-Kaiser = Centers for Disease Control and Kaiser Health study; ACEs = adverse childhood experiences; CDC-Kaiser statistics collected from: https://www.cdc.gov/violenceprevention/aces/about.html

Table 4. ACEs in MnDOC Population Disaggregated by Gender and Race/Ethnicity

Population	Reported ACEs						
	0	1	2	3	4+	Average	N
Males (n = 1,683)							
White/Non-Hispanic	17%	16%	12%	10%	46%	3.6	770
Black/African American	13%	17%	13%	10%	48%	3.8	592
American Indian/Alaskan Native	9%	20%	8%	9%	55%	4.2	140
Hispanic/Latino	19%	15%	12%	17%	37%	3.3	131
Asian American/Pacific Islander	20%	24%	14%	6%	36%	2.9	50
Females (n = 328)							
White/Non-Hispanic	12%	8%	9%	8%	62%	4.6	178
Black/African American	8%	10%	8%	12%	61%	4.7	49
American Indian/Alaskan Native	11%	11%	11%	15%	51%	4.4	72
Hispanic/Latino	--	--	--	--	--	--	17
Asian American/Pacific Islander*	--	--	--	--	--	--	12

Notes: ACEs = adverse childhood experiences; * Percentages and means for Hispanic/Latino and Asian American/Pacific Islander females not reported due to low numbers

Looking at the number of ACEs reported in Table 3, incarcerated males and females reported more ACEs than males and females in the CDC-Kaiser (2016) sample. Forty-six percent of incarcerated males reported experiencing four or more ACEs, compared to 9 percent of males in the CDC-Kaiser sample. Fifty-seven percent of incarcerated females reported four or more ACEs, compared to 15 percent of females in the CDC-Kaiser sample.

In Table 4 we have disaggregated the average number of reported ACEs by biological sex, race, and ethnicity. We found that incarcerated Black or African American females reported the most ACEs, with an average of 4.7 ACEs. The next highest average was reported by incarcerated White/non-Hispanic females, who reported an average of 4.6 ACEs. These groups were followed closely by incarcerated American Indian or Alaskan Native females (average 4.4 ACEs) and males (average 4.2 ACEs). Each one of these groups has reported an average number of ACEs that places them at greatest risk of several negative outcomes (Dube, 2020; Felitti et al., 1998).

The Effect of ACEs on DCs

Hazard ratios (HRs) from the Cox regression models predicting any DCs and aggravated DCs for males and females separately are displayed in Table 5. Hazard ratios equal to 1.00 indicate very little or

no difference in risk of or time to DCs based on the corresponding variable and reference group. Values greater than 1.00 represent increased risk and shorter time to DCs, while values less than 1.00 indicate decreased risk and more time between prison admission and DCs.

Starting with Model 1, the accumulation of four or more ACEs significantly increased the risk and speed of incurring a DC after admission to prison for incarcerated males. Relative to males who reported zero ACEs, males who reported four or more ACEs had a 30 percent increase in the hazard of any type of DC (HR = 1.300, *p* value < 0.01). Males who reported one to three ACEs had an 11 percent increase in risk relative to males who reported zero ACEs, but this HR was not significant (HR = 1.112, *p* value > 0.05). While most men (65 percent) incurred at least one DC during their entire incarceration time, men who experienced four or more ACEs in the past received a DC more quickly after admission to prison.

Age slightly but significantly reduced the expected risk of incurring any type of DC for males (HR = 0.967, *p* value < 0.001), while race and ethnicity had mixed effects. Relative to White/non-Hispanic males, males who identified as Black/African American or American Indian/Alaskan Native had a significant increase in risk of incurring a DC (HR = 1.293 and 1.461, respectively, *p* value < 0.001). Hispanic or Latino and Asian American or Pacific Islander men had a decreased risk relative to White/non-Hispanic men (HR = 0.779 and 0.751, respectively), but this result was non-significant (*p* value > 0.05).

Other factors that significantly impacted the risk of receiving a DC for males included lengthier incarceration periods. Compared to men who were incarcerated for less than a year, incarceration periods of one to four years (HR = 2.008, *p* value < 0.001), five to 14 years (HR = 2.212, *p* value < 0.001), 15 to 29 years (HR = 2.975, *p* value < 0.001), and 30 or more years (HR = 1.543, *p* value < 0.05) all significantly increased the risk of incurring a DC by large and significant margins. While this finding is inconsistent with prior research on DCs in prison (e.g., Steiner et al., 2014), logic would dictate that incarcerated persons with lengthier sentences would have more time to engage in misconduct.

Table 5. Cox Regression Analyses Predicting any Disciplinary Convictions and Aggravated Disciplinary Convictions during Current Term of Incarceration

	Any Disciplinary Convictions				*Aggravated Disciplinary Convictions*			
	Males (n = 1,683)		*Females (n = 328)*		*Males (n = 1,683)*		*Females (n = 328)*	
	HR	SE	HR	SE	HR	SE	HR	SE
4+ ACEs	1.300**	0.101	1.036	0.216	1.139	0.173	1.481	0.619
1-3 ACEs	1.112	0.102	0.974	0.238	1.200	0.177	1.873	0.673
Age at Admission	0.967***	0.004	1.007	0.008	0.961***	0.006	0.960	0.026
Race/Ethnicity								
Black/African American	1.293**	0.074	1.038	0.213	1.566***	0.121	1.685	0.552
American Indian/Alaskan Native	1.461***	0.115	1.409	0.188	1.836**	0.181	2.547	0.493
Hispanic or Latino	0.779	0.132	--	--	0.816	0.232	--	--
Asian American or Pacific Islander	0.751	0.193	--	--	0.749	0.371	--	--
Other Race/Ethnicity	--	--	1.093	0.256	--	--	4.157	0.616
Length of Stay								
1 to 4 years	2.008***	0.149	3.167***	0.244	4.548***	0.330	13.283 *	1.112
5 to 14 years	2.212***	0.162	2.516**	0.306	4.927***	0.349	5.730	1.216
15 to 29 years	1.975 ***	0.176	1.118	0.404	2.090*	0.363	2.696	1.319
30 or more years	1.543*	0.204	--	--	0.594	0.403	--	--
Type of Offense								
Property	1.097	0.137	0.689	0.346	1.191	0.222	0.485	0.913
Drug	0.811	0.107	0.766	0.235	0.781	0.210	0.613	0.607
CSC	0.838	0.101	--	--	0.815	0.163	--	--
DWI	1.207	0.182	1.209	0.362	1.165	0.378	1.279	0.881
Other	0.840	0.104	1.028	0.285	0.800	0.164	0.724	0.734
Secondary Education	0.745**	0.095	0.850	0.221	0.755*	0.144	0.580	0.534
Substance Use Disorder Treatment	0.775**	0.079	1.032	0.185	0.585***	0.142	1.117	0.508
Mental Health Issue	1.157	0.084	1.139	0.183	1.130	0.136	0.975	0.467
STG Indicators	1.077***	0.017	1.478***	0.104	1.035	0.022	1.381	0.183
New Commitment	1.348*	0.145	--	--	0.672	0.231	--	--
Prior Felony Convictions	1.019*	0.008	1.032	0.029	1.030	0.013	1.035	0.092
Prior Admissions to Prison	1.021	0.014	0.927	0.058	1.003	0.024	0.985	0.136
Level of Custody								
Medium	1.549***	0.111	1.118	0.200	1.936*	0.257	5.311	1.038
Close	2.548***	0.125	1.840*	0.262	6.543 ***	0.262	14.173	1.068
Maximum	3.028 ***	0.198	--	--	10.708***	0.325	--	--
Visited	0.920	0.071	1.081	0.164	0.816	0.005	0.981	0.439
Social Support	0.994*	0.003	0.985	0.008	0.992	0.005	0.972	0.020
Chi-Square	461.842***		72.621***		418.645***		47.663***	

Notes: ACEs = adverse childhood experiences; CSC = criminal sexual conduct; DWI = driving while intoxicated; STG = security threat group; the "Other Race/Ethnicity" category includes both Hispanic or Latino and Asian American or Pacific Islander individuals; for females, the "15 to 29 years" length of stay category includes any sentence 15 years or longer; for females, the "Close" level of custody also includes the maximum level of custody

**** p < .001; ** p < .01; * p < .05*

Having a secondary degree relative to no degree (HR = 0. 745, *p* value < 0.01) and participating in substance use disorder treatment relative to no treatment (HR = 0.775, *p* value < 0.01) both decreased the risk of a DC for incarcerated men. Conversely, having more indicators of STG involvement

(HR = 1.077, *p* value < 0.001) and prior felony convictions (HR = 1.019, *p* value < 0.05) both increased the risk of receiving a DC. Relative to incarcerated persons admitted to prison for a supervised release violation, incarcerated persons admitted to prison as a new commitment were at greater risk of incurring a DC (HR = 1.348, *p* value < 0.05). Unsurprisingly, being classified as medium (HR = 1.549, *p* value < 0.001), close (HR = 2.548, *p* value < 0.001), or maximum (HR = 3.028, *p* value < 0.001) custody all increased the hazard of incurring a DC for men relative to minimum classification.

Finally, for protective factors, receiving a visit while incarcerated did not significantly impact the risk of incurring a DC for men (HR = 0.920, *p* value > 0.05). Social support, on the other hand, slightly but significantly reduced the risk of incurring a DC. Each one unit increase in the MSPSS score reduced the hazard of incurring a DC by just under 1 percent (HR = 0.994, *p* value < 0.05).

Model 2 in Table 5 displays results for females. Generally, the HRs in Model 2 follow the same pattern as Model 1, but with HRs closer to 1.00, the effect sizes are smaller, and most are non-significant. Relative to females who reported zero ACEs, females who experienced four or more ACEs (HR = 1.036) had an increased risk of incurring a DC, but this effect was small and non-significant. The HR for one to three ACEs was less than 1.00 for females (0.974), but it was not significant.

Mid-range lengths of stay significantly increased the risk of incurring a DC for females. Relative to females who were sentenced to incarceration terms of less than one year, females who were sentenced to incarceration terms of one to four years (HR = 3.167, *p* value < 0.001) and five to 14 years (HR = 2.516, *p* value < 0.01) were significantly more likely to incur a DC and sooner after admission. The lengthiest sentences (15 or more years) did not significantly impact the risk of incurring a DC. Increased involvement in STGs as well as close or maximum custody classification both significantly increased the risk of incurring a DC. Each additional STG indicator increased the risk of incurring a DC by 48 percent (HR = 1.478, *p* value < 0.001), and close or maximum custody classification increased the risk of a DC by 84 percent (HR = 1.840, *p* value < 0.05) relative to minimum custody among females.

Models 3 and 4 in Table 5 predicted the risk of incurring aggravated DCs for males and females. Models 3, which includes only males, looks nearly identical to Model 1 with a few key exceptions. First, the effect of four or more ACEs is smaller and non-significant (HR = 1.139, *p* value > 0.05). Thus, while the experience of four or more ACEs was associated with an increase in any type of DC—which includes both minor and serious infractions—this level of ACEs was not associated with more serious forms of infractions. The second major difference between models 1 and 3 is that the measure of social support was no longer significantly associated with the risk of an aggravated DC (HR = 0.992, *p* value > 0.05).

Model 4, which includes only females, also looks nearly identical to Model 2 with a few key exceptions. First, the effect of four or more ACEs was larger, but still non-significant (HR = 1.481, *p* value > 0.05). Second, the effect of the binary indicator of one to three ACEs was much larger than 1.00, but also still non-significant (HR = 1.873, *p* value > 0.05).

Discussion and Conclusion

The results of this research are not surprising, but they are alarming. Consistent with prior research (e.g., Briere et al., 2016; Levenson et al., 2016; Wolff and Shi, 2012), ACEs are common among Minnesota's incarcerated population. Given the association between ACEs and risky behaviors, illicit drug use, and stunted self-control found in other research (Chapple, Pierce, and Jones, 2021; Dube, 2020; Felitti et al., 1998), we expected to find that incarcerated persons have more significant histories of ACEs. Nearly half of the incarcerated persons in Minnesota's prisons reported four or more ACEs. Just under half of the state's incarcerated men and well over half of incarcerated women have a history of ACEs that is commonly associated with several negative mental and physical health outcomes (Dube, 2020; Felitti et al., 1998). The findings are even more striking when the sample is disaggregated by race, ethnicity, and biological sex. Nearly two-thirds of incarcerated women who identified as White non-Hispanic (62 percent) or Black/African American (61 percent) reported experiencing four or more ACEs, followed by male (55 percent) and female (51 percent) American Indian or Alaskan Native incarcerated

persons. This research further underscores the importance of using diverse samples, both in terms of biological sex and race and ethnicity.

Incarcerated males with extensive histories of ACEs were more likely to encounter trouble during incarceration, and they encountered this trouble more quickly after admission to prison. Given that ACEs did not significantly impact the likelihood of an aggravated DC for males, these individuals did not engage in behaviors that posed grave risks to institutional safety and security. For females, on the other hand, any level of past exposure to ACEs did not significantly affect any DCs or aggravated DCs. There are two possible explanations for this finding. First, the female sample was much smaller than the male sample, which may have reduced statistical power. This limitation was certainly true for the analyses predicting aggravated DCs, which were relatively rare in the female sample (only 34 out of 328 females incurred an aggravated DC). The second explanation is that ACEs may affect males and females in different ways. The impact of ACEs may manifest in males in the form of impulsive behaviors, which may lead to more DCs. Females may be impacted by ACEs in ways that were not measured in this research. Indeed, prior research has found that exposure to ACEs impedes the development of self-control in both juvenile males and females, but only affected impulsivity for males and not females (Chapple et al., 2021).

We know from other published reports based on Minnesota's incarcerated population that the most common disposition for DCs is restrictive housing (Minnesota Department of Corrections, 2023). Thus, individuals exposed to ACEs who struggle to adjust to the prison environment and incur DCs are likely to spend time in restrictive housing. Research on whether restrictive housing negatively affects mental or physical health is mixed (Kapoor and Trestman, 2016). However, the balance of the research generally indicates that mentally vulnerable populations may be most adversely affected by placement in restrictive housing. Given the known associations between ACEs and diminished mental health (Dube,

2020; Felitti et al., 1998), restrictive housing is not an ideal environment for an incarcerated person with an extensive history of ACEs.

This research comes with some limitations. First, the ACEs measure is a self-reported measure, which has some vulnerabilities. Incarcerated persons may not accurately remember ACEs, or they may not feel comfortable sharing this information. Second, the ACEs measure is by no means a comprehensive assessment of all forms of childhood adversity (Afifi, 2020). The measure used in this study included only 10 types of ACEs. An incarcerated person who did not report any of the 10 ACEs did not necessarily escape adversity as a child. The outcome measure (DCs) is also a shallow measure of institutional adjustment. A more comprehensive measure of institutional adjustment would account for the mental and emotional wellbeing of the incarcerated person. Finally, the data from this study represent only one state's prison population. However, our results are consistent with those from other studies based on limited or non-representative samples.

One final takeaway from this research is the need for more comprehensive assessments for incarcerated persons. Many corrections systems assess for risk of institutional misconduct, risk of recidivism, criminogenic needs, and some responsivity issues. However, aside from the Federal Bureau of Prisons (2022), we are not aware of assessments for ACEs being widely used in adult corrections settings. Given the known effects of ACEs on mental and physical well-being, it would be advantageous for corrections agencies to assess for ACEs (Cullen, 2002). In doing so, corrections agencies would be able to deliver more effective services and programming that are tailored to the strengths, abilities and experiences of people in prison or under supervision.

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