

The Jail Datablitz Screening Project

Chippewa Valley Justice Action Team: Working to Transform Poverty, Incarceration, and Mental Healthcare

Ruth Cronje, Luke Fedie, Sarah Ferber, Jeffrey Goodman, Pamela Guthman, Natalie Lasinski, Audrey Nelson, Allison Schwarz, Mackenzie Shay, Becky Stendahl, Callie Vogel, Tom Wirth, & Christine Zielinski

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Background

This project was born in the basement of Grace Lutheran Church in Eau Claire, Wisconsin where the Clear Vision Eau Claire Poverty Summit convened its initial meeting in October 2016. Clear Vision Eau Claire is a community organization dedicated to fostering citizen participation by helping citizen groups from the Chippewa Valley (the counties of Eau Claire, Chippewa, and Dunn) directly solve significant problems in their communities. Many of the individuals who participated in creating and sustaining this project were attendees of the 2016 Clear Vision Poverty Summit. We have since been joined by other citizens interested in working to address poverty associated with mental illness and incarceration, remaining coalesced in a citizen action group called the Clear Vision Mental Health and Incarceration Justice Action Team.

Poverty is a problem in the Chippewa Valley: in Eau Claire and Dunn Counties, 42% of households are income-insecure, while 36% of Chippewa County households are income-insecure.¹ Poverty is associated with both mental illness and criminal activity. In the Chippewa Valley, mental health professionals are in short supply: while Eau Claire County has a mental health provider for every 320 residents, in Dunn County there is only one mental health provider for every 640 residents, while Chippewa County has only one mental health provider for every 1110 residents.² Mental health care in the Chippewa Valley is difficult to access and can be cost-prohibitive for income-insecure individuals who are uninsured, underinsured, or who have high co-pays on their insurance coverage. The overall lack of mental health care in our region can keep individuals from receiving the care they need to prevent mental health crises, which in turn can result in contact with the criminal justice system.

Even without mental illness, poverty can contribute to incarceration.³ In turn, incarceration—which brings lasting stigma and civil rights restrictions that can impair individuals' ability to secure housing and employment—also contributes to poverty.^{3,4} The interplay of these factors can influence multiple generations: incarceration of a parent is a known risk factor for childhood trauma and can contribute to a cycle of intergenerational poverty and incarceration.⁴

The United States imprisons more people than any other country in the world.⁵ Furthermore, it is widely recognized that our penal system now serves as a means to warehouse, rather than treat, individuals with mental illness.⁶ Currently, roughly 2.3 million people are being held by the American criminal justice system in state and federal prisons, correctional facilities, and local jails,⁷ at an approximate cost of \$182 billion.⁸ Nor does this expense in taxpayer dollars and social cost guarantee public safety: 75% of people who have been incarcerated return to jail within five years.⁹

Given the conditions of widespread poverty and lack of mental health services that prevail in the Chippewa Valley, our community urgently needs insight into how these factors may be associated with criminal behavior and reoffending, data that could enable our leadership to make evidence-based decisions to prevent crime and reduce incarceration. The Jail Datablitz screening project was initiated to meet this data need.

References

¹ Hoopes S, Abrahamson A, Leonard M, Treglia D. ALICE: A Study of Financial Hardship in Wisconsin. The United Way ALICE Project;2018.

² County Health Rankings & Roadmaps. Wisconsin 2020 Rankings: Chippewa County. University of Wisconsin Population Health Institute. https://www.countyhealthrankings.org/app/wisconsin/2020/rankings/chippewa/county/outcomes/overall/snapshot. Published 2020.

³ Rabuy B, Kopf D. Prisons of Poverty: Uncovering the pre-incarceration incomes of the imprisoned. Prison Policy Initiative. https://www.prisonpolicy.org/reports/income.html. Published July 9, 2015.

⁴ Lake J. Criminal Records Create Cycles of Multigenerational Poverty. Center for American Progress. https://www.americanprogress.org/issues/poverty/news/2020/04/15/483248/criminal-records-create-cycles-multigenerational-poverty/. Published April 15, 2020.

⁵ Wagner P, Sawyer W. States of Incarceration: The Global Context 2018. Prison Policy Initiative. https://www.prisonpolicy.org/global/2018.html. Published June 2018.

⁶ Roth A. Insane: America's Criminal Treatment of Mental Illness. New York, NY: Basic Books; 2018.

⁷ Sawyer W, Wagner P. Mass Incarceration: The Whole Pie 2020. Prison Policy Initiative. https://www.prisonpolicy.org/reports/pie2020.html. Published March 24, 2020.

⁸ Equal Justice Initiative. Mass Incarceration Costs \$182 Billion Every Year, Without Adding Much to Public Safety. Equal Justice Initiative. https://eji.org/news/mass-incarceration-costs-182-billion-annually/. Published February 6, 2017.

⁹ Durose MR, Cooper AD, Snyder HN. Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010. Bureau of Justice Statistics; April 24, 2014.

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Data cannot be collected from jailed individuals without extensive cooperation, support, and advice from the staff and administrators of our county jails. Thank you to Tiana Glenna, Rose Baier, Sara Benedict, Dan Bresina, Curt Dutton, Brenda LaForte, Josh Moskel, Jennifer Lyons, Heather Pyka, and Dave Riewastahl for your patience, generosity, and help. Thank you, as well, to the numerous jail staff in all three counties for their extra work in moving individuals into the visitor areas to be screened. Thanks to Dana Swanstrom in Eau Claire County for providing additional public data.

Ex-Incarcerated People Organizing (EXPO) has offered crucial support and insight throughout this project. We thank all EXPO members for their help in creating screening questions that capture the lived experience of incarceration and reentry into the community, and for their cooperation in analyzing our data. We also thank Joining Our Neighbors Advancing Hope (JONAH) for their support of EXPO and for their work toward criminal justice reform in the Chippewa Valley.

Thank you to the University Honors Program at the University of Wisconsin—Eau Claire for providing the space and resources to offer innovative courses that can involve undergraduates directly in data capture and analysis in community-based action research. A very particular thanks goes out to Pamela Golden, who has provided steadfast support and problem-solving throughout our initiative. And thank you to all the undergraduates who chose to enroll in these courses and become the co-creators of our jail screening project.

Thank you to N428 Spring 2020, Section 315 Senior 1 nursing students at the University of Wisconsin-Eau Claire, College of Nursing and Health Sciences, guided by Dr. Pam Guthman, DNP, RN for listening and centering the voices of the population who have experienced incarceration and their journey when returning to the community. Most importantly, thank you to the participants who shared their time and experiences returning to the community after incarceration.

Our gratitude is due, as well, to the University of Wisconsin—Eau Claire's Office of Research and Sponsored Programs, which has provided funding and forums for us to report our findings at regular intervals as our project has matured.

Executive Summary

The Jail Datablitz Screening project brings together partners from multiple sectors of the Chippewa Valley community. Together, we compiled a screening instrument from validated pre-existing screening tools, and also asked about the lived experience of individuals with conviction histories. We used the resulting screening instrument to capture data relevant to the mental and physical health of individuals incarcerated in Chippewa Valley jails, screening any consenting individual incarcerated over long weekend periods in October 2019 and again in early March 2020. Screenings were conducted by undergraduates from the University of Wisconsin—Eau Claire, who read each question aloud and recorded the response in an online survey program. In total, 123 incarcerated individuals complete the screening process: 83 participants were screened in October 2019 in Chippewa, Dunn, and Eau Claire Counties, and 40 were screened in March 2020 in Chippewa and Eau Claire Counties. After analyzing the data from the separate screening weekends, we merged the October and March datasets and the data from all three counties; the results in this report reflect this merged dataset.

We found that a history of significant childhood trauma was common among the individuals who participated in our screenings: 63% had adverse childhood experience (ACE) scores of 4 or more, indicating they had been exposed to significant trauma as children.

One significant source of childhood trauma is having a parent/guardian incarcerated. Thirty percent of the individuals we screened indicated they'd been removed from their custodians as children. Incarceration has a "ripple effect" on the families of jailed individuals. Of the individuals we screened, 69% have kids. Of those with children, 19% reported they had lost custody of child(ren) under their guardianship. In the screening held in March 2020, we learned 17% of the individuals who participated had lost their parental rights.

The impact of childhood trauma on adult health and wellbeing can be mitigated by factors that protect the individual and help them develop resilience. However, 50% of the individuals we screened had low resilience and a further 24% had only moderate resilience.

A sizeable majority (78%) of the individuals we screened with the Brief Jail Mental Health Screen had results that flag the need for a comprehensive mental health diagnostic workup.¹⁰

Compared to the 8.5% of the general population that has reported a traumatic brain injury (TBI), 60% of all individuals released from incarceration screen positive for TBI. 11 Of the 123 jailed individuals we screened in the Chippewa Valley, 79% reported a history of a TBI consistent with a need to receive a full diagnostic workup.

Unfortunately, many of the individuals we screened may lack adequate preventive healthcare. Of the 123 people we screened, 56 (45%) indicated they had used an emergency room within the year prior to their arrest; 17% of these individuals had used an emergency room more than once in that year, suggesting that they may lack a stable relationship with a primary healthcare provider. The individuals who qualified for a mental health diagnostic workup were significantly more likely to have used an emergency room at least once within the year prior to their arrest, suggesting that unmet mental healthcare needs in our community might be driving up the expensive use of emergency rooms as primary care facilities.

Individuals with conviction histories face powerful stigmas upon reentry that seriously hamper their ability to find jobs and housing; in turn, un/underemployment and housing instability are potential contributors to criminal behavior. According to our operational definition,76% of the individuals we screened were housing insecure. Only 24% of the individuals we screened indicated they had secure housing; 37% of those screened indicated they have no place to go upon release. Fourteen (11%) of screened individuals reported that they didn't feel safe in the housing they had available at the time of their arrest, and 44 (36%) indicated they didn't believe their belongings were safe.

Our data suggest that a constellation of disadvantageous circumstances driven by current system inequalities—low educational attainment, poverty, childhood trauma, mental ill-health, and brain injuries—dominate the lives of most of the people we screened in our jails, and notably so when compared to the rates of these problems in the general (un-incarcerated) population. For many of these jailed individuals, these disadvantages emerged very early in their lives. Our data strongly support the likelihood that unmet social needs are a major factor contributing to the rate of incarceration in our community. The preponderance of our data strongly supports the need for increased healthcare resources, particularly for mental health, to better prevent the risk for criminal behavior. Our data also strongly demonstrate the need for additional resources for individuals in jail and those who have incarceration histories to

bolster their material, physical, and mental well-being to prevent recidivism. Our community can improve public safety and save tax revenue by adopting a systems approach and working toward structural equity to end poverty, increase educational attainment, provide more jobs that offer a living wage, and ensure more and better access to mental health resources.

¹⁰ Policy Research Associates. Brief Jail Mental Health Screen. Policy Research Associates. https://www.prainc.com/?product=brief-jail-mental-health-screen. Published June 1, 2015.

¹¹ Faul M, Xu L, Wald MM, Coronado V, Dellinger AM. Traumatic brain injury in the United States: national estimates of prevalence and incidence, 2002-2006. *Injury Prevention*. 2010;16(1):A268.

The Partnership

The Jail Datablitz Screening Project is the product of a collective of individuals and agencies hailing from a variety of social sectors. Our partnership includes people with conviction histories, private citizens, Department of Justice staff of all three counties in whose jails we screened, Eau Claire County Department of Human Services staff, as well as faculty and students at the University of Wisconsin—Eau Claire. Many of us are lending our talents and time to the Datablitz Jail Project without prospect of compensation; our motivation is a sense of civic responsibility and the opportunity to make needed change in our communities. Together we represent an assemblage of experience, expertise, talent, and abilities all vital to the success of our project.

Members of EXPO bring vital lived experience of incarceration, the criminal justice system, and life after release to our project. Their insights informed questions we asked about housing conditions and our analysis and interpretations of all our data.

Staff of the Eau Claire County Human Services Department have played a vital role in grounding this project in the realities of the local conditions, programs, and policies that drive our communities' response to the resource needs of individuals who become involved in our criminal justice system.

Likewise, several private citizens, each with niche expertise in an issue integral to the work of this project, have offered not only their intellectual capital but their social capital to our work. These partners have labored tirelessly to provide theoretical guidance to our methodological and analytical approaches and to ensure that word of our project and what we're learning gets out into the community to propel change.

The undergraduates from the University of Wisconsin—Eau Claire who have been involved in this project have provided vital information and literacy skills, as well as research skills, to the project. This collective of students has worked diligently to perfect our screening instrument, collect the data, and make sense of our results, thus serving as the essential "glue" making sure the actual work got done. Students also collaborated to create presentations to place our data into the hands and minds of individuals who need it to make evidence-informed decisions. Most importantly, students represent a "unofficial" and nonthreatening ear for the individuals we screened, empowering us to receive information and insights that might otherwise go unspoken.

The Jail Datablitz screening project partnership represents a bright example of participatory democracy at work: we are a group of people who recognize a problem exists in our community and are committed to bringing our multiple abilities and talents together into a cohesive effort to make change.

Our Methods

Ruth Cronje, Pam Guthman, & Allison Schwarz

Datablitz Screenings

In close consultation with our partners, as well as key stakeholders in the Departments of Justice of the three counties in which we screened and the Department of Human Services in Eau Claire County, we developed a screening instrument that integrated validated pre-existing screening tools for

- adverse childhood experiences (ACEs) (we used the Wisconsin ACEs module of the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System)¹²;
- resilience (we used the Adult Resilience-Measure-Revised [ARM-R] screen developed by Dalhousie University)¹³;
- traumatic brain injury (we used the Ohio State University Traumatic Brain Injury Identification Method-Short Form, designed to identify individuals who should receive a more complete diagnostic workup);¹⁴ and
- signals of possibly serious mental illness (we used the Brief Jail Mental Health Screen advocated by the Stepping Up Initiative). This instrument is not intended to be or validated as a diagnostic tool; rather, it is designed to rapidly screen for signals of serious mental illness and identify individuals who should receive a complete mental health diagnostic workup.

Also, working collaboratively with EXPO members who have lived experience with incarceration, we developed new screening items to investigate housing security, living and family conditions, and healthcare access for incarcerated individuals. These items were integrated into a single survey in QualtricsTM, an online survey software.

An early version of the screening instrument was pilot tested by University of Wisconsin—Eau Claire Honors students enrolled in a course taught by Dr. Ruth Cronje during Spring 2019 on individuals incarcerated during a 4-day weekend in March 2019 and over another 2 days in April 2019; analysis of these data suggested important revisions and augmentations that were incorporated into the instrument for data capture in October 2019. In time for our March 2020 screening, in consultation with Department of Justice staff from all three counties, we added a few more items to clarify the incarceration and parental status of individuals. Appendix A shows our final, complete instrument.

We used this screening instrument to gather data from adults currently incarcerated in one of the three county jails (Chippewa, Dunn, or Eau Claire) in the Chippewa Valley. To recruit participants, we placed a message on the "Kiosk" message systems in all three jails (Appendix B) inviting incarcerated individuals to participate in the screening. In addition, jail staff in all three counties, as well as the jail social worker in Eau Claire County, personally invited jailed individuals to take part in the screening process. Any consenting individual who was incarcerated during the four-day data-capture periods in any of the three county jails was eligible for the screening.

Screenings were conducted by undergraduates from the University of Wisconsin—Eau Claire University Honors Program enrolled in a course taught by Dr. Ruth Cronje (October 2019), or undergraduate research collaborators mentored by Dr. Cronje (March 2020). Over a 4-day weekend in October 2019 (in Chippewa, Dunn, and Eau Claire Counties) and again over a 4-day weekend in early March 2020 (in Chippewa and Eau Claire Counties), students entered the jail visitor areas; jail staff escorted individuals who had agreed to participate in the screenings to the visitor area one at a time. After being informed of the purpose of the study, its risks and benefits, and their freedom to elect whether to participate (Appendix C), students requested each individual's consent to participate. Individuals who did not consent were thanked and the session was ended. Individuals giving consent were read each question, and students recorded their response into QualtricsTM on laptops.

We used SPSS Version 24TM to analyze the data, using Chi-squared tests of association for categorical variables to determine whether responses to key items from our October 2019 data set differed from those collected in March 2020. We found no significant differences in those key indicators, so we merged the October and March datasets, which included individuals incarcerated in the jails of all three counties for a total sample of 123 completed screens. All further Chi-square tests of association and t-tests were performed on the combined dataset.

We wished to investigate the housing status of individuals incarcerated in Chippewa Valley jails as a means to gather more valid data regarding this important predictor of criminal behavior and signal of income insecurity. Although each county asks individuals their home address during the booking process, many people are afraid to reveal their

status as housing-insecure in fear of being labelled a flight risk and subject to a higher bond. Because our screenings were anonymous and de-identified and conducted by students operating independently of county agencies, our approach removed much of the incentive for individuals we screened to misrepresent their housing status.

Housing instability is a difficult term to define. While outright homelessness is a factor, it is an underrepresentation of all those who still suffer the consequences of marginal housing and, therefore, experience the same risks as those who are homeless. For the purposes of our screening instrument, we defined a person as being "housing insecure" if they reported any of the following:

- they had 0 residences in the 12 months prior to arrest,
- they lived in 3 or more places in the 12 months prior to arrest,
- they did not have their name on the lease or mortgage of the place that they were staying,
- they did not have a place to go upon release from jail,
- they reported being homeless at some point during the 2 months prior to arrest, or
- they lived in a hotel/motel for at least part of that time.

Qualitative Interviews

In February 2020, Dr. Pam Guthman and three of her Nursing Leadership students initiated the Returning to the Community project^{15,16} in partnership with Ex-Incarcerated People Organizing, the Eau Claire County Department of Human Services, and University of Wisconsin-Eau Claire College of Nursing and Health Services (UW-Eau Claire CONHS). The objective of this quality-improvement population-health project was to collect narrative data about the experiences of people returning to the community after having experienced incarceration during their life. These qualitative data provide helpful information both to understand the challenges individuals face upon reentry into the community and to offer nuance that we used to interpret the data we captured from Datablitz screenings.

Nursing students used a storytelling method combined with a modified photo-voice technique to learn from people's lived experiences what barriers they encountered as they returned to the community after release. Six participants' narratives were obtained between February and May 2020 and shared with the partnership to provide evidence-based support for quality improvement initiatives in future programming.

Limitations of the Study

Our project has a number of methodological limitations:

- Given the transitory nature of the incarcerated population in the three counties, recruiting a random sample
 of this population was impossible. We thus used a "convenience" sample, screening anyone in jail during
 our 4-day point-in-time "datablitz" periods who was willing to be screened. We have no way to determine
 whether and to what extent the individuals we screened represent the entire population of incarcerated
 individuals in the Chippewa Valley.
- Our response rate was low; in none of the counties did we succeed in screening 60% of the individuals incarcerated during our screening weekends.
- Our study relies on self-reported data; we have no way to know the extent to which individuals we screened could be inadvertently or deliberately misrepresenting themselves.
- In the case of questions about childhood trauma and traumatic brain injury, participants were being asked to recall events from their past; in some cases, respondents were asked to remember events from childhood. Such memories are obviously vulnerable to inaccurate recall.
- In general, it should be noted that the associations mentioned in this report are based on a small sample size and low response rate; our results should not be extrapolated to the larger population of incarcerated/exincarcerated individuals. Future research could explore sampling techniques to maximize participation rates, though this is admittedly difficult with the population under consideration.

- ¹² Wisconsin Department of Health Services. Resilient Wisconsin: Adverse Childhood Experiences. Wisconsin Department of Health Services. https://www.dhs.wisconsin.gov/resilient/aces.htm. Published June 24, 2020.
- ¹³ Resilience Research Centre. Child and Youth Resilience Measure (CYRM-R) & Adult Resilience Measure (ARM-R) Manual 2.2. Resilience Research Centre. https://cyrm.resilienceresearch.org/measures/. Published 2019.
- ¹⁴ The Ohio Valley Center for Brain Injury Prevention and Rehabilitation. Ohio State University TBI Identification Method Interview Form. Ohio State University Wexner Medical Center. https://wexnermedical.osu.edu/-/media/files/wexnermedical/patient-care/healthcare-services/neurological-institute/departments-and-centers/research-centers/ohio-valley/osu_tbiform_july2013.pdf. Published 2007.
- ¹⁵ Duellman M, Fredrickson E, Kaldenberg P, Guthman P. Returning to the community: A quality improvement project [Presentation]. University of Wisconsin Eau Claire, College of Nursing and Health Sciences;2020a.
- ¹⁶ Duellman M, Fredrickson E, Kaldenberg P, Guthman P. Returning to the community: A quality improvement project [Project Report]. University of Wisconsin Eau Claire, College of Nursing and Health Sciences;2020b.

Demographics

Ruth Cronje, Pam Guthman, Amanda Kellenberger, Erin Mayer, Lizzie Nelson, Emma Panico, Allison Schwarz, Olivia Williams, & Christine Zielinski

Race

Persons of color and those who are poor are disproportionately incarcerated in the United States.^{17,18} In Wisconsin, too, Black, Latinx, and Native American individuals are incarcerated at disproportionately higher rates compared to whites.¹⁷

The individuals we screened in the Chippewa Valley were racially diverse (Figure 1), but were disproportionately nonwhite in comparison to the proportion of white residents in the general population of Dunn County (which is 92% white), Chippewa County (93.5% white), and Eau Claire County (89% white).2

Our screening population was similar to the Eau Claire County jail population but had fewer Black/African American individuals than the Eau Claire County daily jail racial/ethnicity average, and more LatinX and Native American individuals than the Eau Claire County daily jail racial/ethnicity averages (Figure 2).

While for many of our measures, our results did not vary by the race of individuals screened, in the case of potentially serious mental illness, we did note a significant

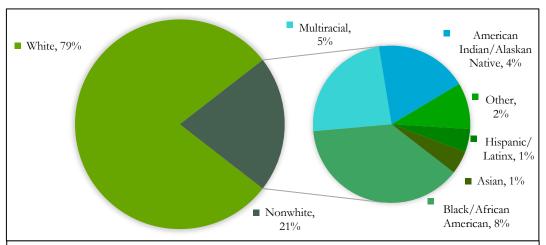


Figure 1. Although our screening population reflected the disproportionate incarceration of people of color in our community, the breakdown of races in the nonwhite categories indicate that our screening sample underrepresented incarcerated Black/African American individuals.

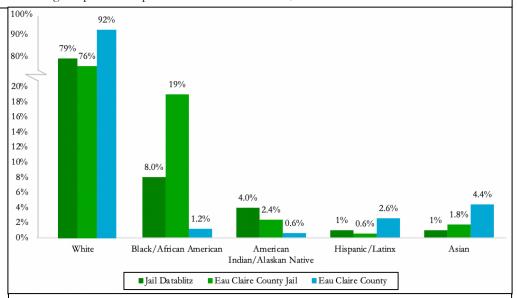


Figure 2. Nonwhite individuals are disproportionately represented in the Eau Claire County jail compared to the general population in Eau Claire County. Furthermore, our Datablitz screenings captured data from a disproportionately low sample of jailed Black/African American individuals, while representing a disproportionately high sample of jailed LatinX and American Indian/Alaskan Native individuals.

racial difference: white individuals were slightly more likely to receive scores on the Brief Jail Mental Health Screen (BJMHS) that qualified them for a mental health diagnostic workup (χ^2 (1) =3.0, P = 0.08) when compared with the scores of those of nonwhite races.

Gender

Of the individuals we screened, 89 (72%) identified as male and 32 (26%) identified as female while 2 (2%) identified as other. This means that we screened a higher percentage of women than the 18% expected daily average in the Eau Claire County jail. The women we screened were no more likely than the other genders to qualify for a mental health diagnostic workup with the BJMHS, as well as no more likely to have a high ACE score than other genders. However, we did note a difference in emergency room usage, with men and nonbinary individuals having a slightly greater likelihood (χ^2 (2) =5.29 P=0.071) to report having used an emergency room in the year prior to their arrest compared to the women we screened (Figure 3).

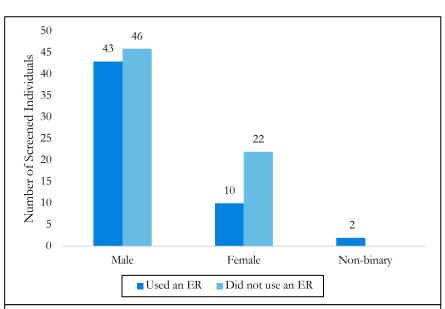


Figure 3. Male and nonbinary participants used emergency rooms at a higher rate than female participants.

Educational Attainment

Generally, the individuals we screened had low educational attainment. Sixty-five (53.28%) had either dropped out of high school or had only a high-school diploma, a level of educational attainment that makes it difficult to find a job that pays a living wage.

Employment Status

Many of the individuals we screened (61%) were unemployed or underemployed in the two weeks leading up to their arrest. Only 48 (39%) of individuals we screened were employed fulltime or more than fulltime, whereas 17 (13.8%) were employed less than full time and 58 (47.2%) were unemployed in the two weeks leading up to their arrest.

Age

Individuals we screened ranged in age from 19 to 65. People in the 30-49 age bracket predominated our screening sample: 58% of the people we screened were between 30 and 49 years old (Figure 4).



Figure 4. In both the general Eau Claire County jail population and in our Datablitz screening sample, most individuals are between 30 and 49 years of age.

Jail Status

In the March 2020 screening, 14 (35%) of the individuals reported they were in jail awaiting trial; 11 (27%) were serving a sentence, and 15 (37%) were jailed on a probation hold (Table 1).

Of the individuals we screened, 110 (89%) had been in jail before. Of these, 65% had been in jail at least four times before, and 41% had been in jail more than six times before.

	Fall 2019	Spring 2020	Spring 2020
	Eau Claire	Eau Claire	Chippewa
Probation hold only	0.0%	13.6%	27.8%
Probation among other offenses	67.5%	63.6%	33.3%
No probation in booking	32.5%	22.7%	38.9%
Table 1. Probation status of screened individuals.			

¹⁷ The Sentencing Project. Report to the United Nations on Racial Disparities in the U.S. Criminal Justice System. The Sentencing Project; April 19, 2018.

¹⁸ National Research Council. The Growth of Incarceration in the United States: Exploring Causes and Consequences. Washington, DC: The National Academies Press; 2014.

Possible Serious Mental Illness: The Brief Jail Mental Health Screen

Hannah Lamack, Allison Schwarz, Mackenzie Shay, Emily Vanderpas, & Christine Zielinski

Coming from some of the most disadvantaged segments of society, many incarcerated individuals enter prison in unsound physical and mental health. Unprecedented numbers of people who are mentally ill are being housed in prisons and jails rather than receiving appropriate mental health treatment. 19,6 Incarceration is costly, and overcrowding in jails stems in part from the fact that criminal justice institutions have become the default placement for individuals with serious mental illness. 20 Incarceration is associated with the overlapping afflictions of substance use, mental illness, and risk for infectious diseases (HIV, viral hepatitis, sexually transmitted diseases, and others), creating an enormous challenge for the provision of health care in jails and prisons. The poor health status of the United States inmate population serves as a basic marker of their social disadvantage and underlines how prisons have become a significant public health institution, however inadvertently and inadequately.

Because incarceration in and of itself triggers mental ill health, and because resources are almost never sufficient to provide even minimal treatment for pre-existing mental illness, most incarcerated individuals are consequently released back into the community in poorer mental health than when they entered the system.⁶ However, incarceration also provides opportunities—however untapped—for screening, diagnosis, treatment, and linkage to treatment after release.¹⁸

Presence of Mental Illness in Jails

The proportion of incarcerated individuals found to be suffering from mental illness varies across studies and according to the operational definition of "mentally ill." In a literature review of studies of mental illness in incarcerated individuals, the proportion of those diagnosed as mentally ill ranged from 12%-43%. Another study found that 56% of imprisoned individuals suffered from mental health problems. 21

Studies with the Brief Jail Mental Health Screen (BJMHS), the instrument we used in our Datablitz screenings, have found that the number of incarcerated individuals with signs of serious mental illness who should receive a complete mental health diagnostic workup range from 31.7%²² to 53.1%.²² The National Institute on Drug Abuse used the BJMHS to evaluate 12,531 detainees across 41,965 individuals being re-admitted to a large, urban county jail in the southeastern United States.²³ This study found that 30.5% of screened individuals qualified for a workup at the first booking, 31.3% at the second, and 31.2% at the third booking, strongly suggesting that, at this facility at least, no remediation of mental illness was occurring during incarceration.²³

Our data, collected in the Chippewa Valley jails, show a high percentage of individuals with initial signals of mental illness when screened with the BJMHS: 78% of the individuals we screened qualified for a full mental health diagnostic workup (Figure 5). That our Datablitz indicates a much higher percentage of individuals needing a diagnostic workup than found in other studies^{19,22,23} is possibly due to the fact that we were administering the BJMHS not at intake but rather after participants had been in jail for a time. None of the three counties participating in the Jail Datablitz project have sufficient resources to offer sufficient mental health therapy to individuals who require it while they are incarcerated in our jails.

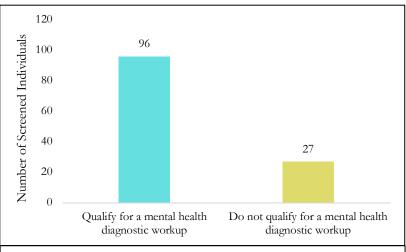


Figure 5. A sizeable majority of the individuals we screened qualify for a mental health diagnostic workup.

BJMHS Qualifications and Reincarceration

Formerly incarcerated individuals with severe mental illness are much more likely to recidivate: in one study, 77% of individuals who had been incarcerated with a severe mental illness returned to prison within 36 months, as opposed to only 62% of individuals who had been incarcerated without a severe mental illness.²⁴ Fragmentation of services, conflicting ideologies, and policy limitations have all been found to make the provision of health care difficult for incarcerated and ex-incarcerated individuals.²⁵ Although there is an association between mental illness and re-offending (except for formerly incarcerated black individuals),²¹ it has been found that maintaining continuous care of individuals with mental health issues before, during, and after incarceration can prevent mental health relapse.²⁵

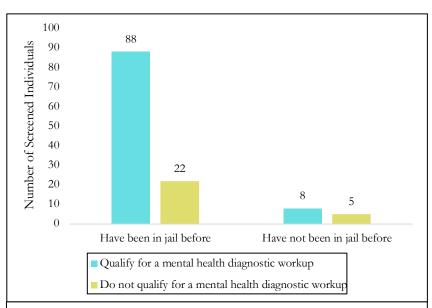


Figure 6. Individuals whose results on the BJMHS indicate they qualify for a diagnostic workup are slightly more likely to have been in jail before than those who do not qualify.

In the Chippewa Valley, as well, there may be an association between mental illness and recidivism. Among the individuals we screened, those who had been in jail before were slightly more likely to receive a score on the BJMHS indicating a need for a diagnostic workup (χ^2 (1) = 2.31, P = .128) than those in jail for the first time (Figure 6), but this difference was not statistically significant.

Mental Health and Educational Attainment

Mental illness can diminish the quality and duration of life. If someone develops mental illness early in life, it is possible that it will affect their level of educational attainment, and in turn, affect how they are able to conduct the

rest of their life. An individual who is diagnosed with a mental illness before age 25 is much more likely to have a lower educational attainment.²⁵

Our data also suggest a possible association between low educational attainment and possible mental illness (Table 2).

Educational Attainment	Percent that qualified for a mental health diagnostic workup
Did not complete high school	92%
High school diploma only	76%
Some post-high school education	74%

Table 2. Educational attainment of individuals who qualified for a complete mental health diagnostic workup.

Mental Health and Gender

On the whole, women predominantly have more reported mental illnesses than men.^{24,26} However, our data did not show a statistically significant gender difference in the proportion of screened individuals qualifying for a mental health diagnostic workup by the BJMHS.

Mental Health and Race

Several studies have found that among incarcerated individuals, white people have a higher likelihood than people of any other race to have a mental illness or to require a full mental health diagnostic workup.^{24, 25, 27} In Wisconsin, African Americans are incarcerated at rates greatly disproportionate to their presence in the general population.²⁸ All

of these studies provide support for the possibility that racist law enforcement imposes hyperscrutiny on the race most associated with criminality—blacks—thereby increasing the likelihood that black individuals will be arrested, booked into jail, and ultimately convicted. The preponderance of mental illness in incarcerated white individuals is likely because white individuals are not generally profiled for crime unless they are engaging in behaviors deemed erratic or unruly.

In our data from the Chippewa Valley, we noted the same trend: white individuals were slightly more likely to receive BJMHS results indicating a signal of possible severe mental illness than nonwhite individuals (χ^2 (1) = 3.086, P = .079) (Figure 7). (In our study, it should be noted jailed Black/African American individuals were underrepresented in our screening sample and LatinX and Native American/Pacific Islander individuals were overrepresented.)

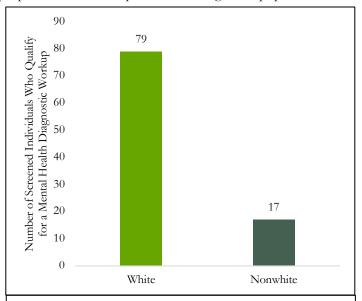


Figure 7. Of the individuals we screened, white participants were slightly more likely than nonwhite individuals to qualify for a mental health diagnostic workup.

Lessons Learned

- A large proportion of the individuals we screened require a complete mental health diagnostic workup.
- Given that proportion, the Chippewa Valley needs more resources to be allocated to preventive mental health care, as well as increased numbers of mental health professionals to work within the jails to provide necessary mental health diagnostic workups and therapies.
- Racial disparities in rates of potential serious mental illness in individuals we screened suggest the possibility of structural racism in the Chippewa Valley criminal justice system.

References

¹⁹ Haney C. "Madness" and penal confinement: Some observations on mental illness and prison pain. *Punishment & Society*. 2017;19(3):310-326. doi: 10.1177/1462474517705389.

²⁰ Campagna MF, Kowalski MA, Drapela LA, et al. Understanding Offender Needs Over Forms of Isolation Using a Repeated Measures Design. *The Prison Journal*. 2019;99(6):639-661. doi: 10.1177/0032885519877356.

²¹ James DJ, Glaze LE. *Mental health problems of prison and jail inmates.* Revised 12/14/06. ed. Washington, DC: Washington, DC: U.S. Dept. of Justice, Office of Justice Programs, Bureau of Justice Statistics; 2006. Cited by: Haney C. "Madness" and penal confinement: Some observations on mental illness and prison pain. *Punishment & Society.* 2017;19(3):310-326. doi: 10.1177/1462474517705389.

²² Graf M, Wermuth P, Häfeli D, et al. Prevalence of mental disorders among detained asylum seekers in deportation arrest in Switzerland and validation of the Brief Jail Mental Health Screen BJMHS. *International Journal of Law and Psychiatry*. 2013;36(3-4):201-206. doi: 10.1016/j.ijlp.2013.04.009.

- ²³ Zottola SA, Desmarais SL, Neupert SD, et al. Results of the Brief Jail Mental Health Screen Across Repeated Jail Bookings. *Psychiatric Services (Washington, DC)*. 2019;70(11):1006. doi: 10.1176/appi.ps.201800377.
- ²⁴ Wilson JA, Wood PB. Dissecting the relationship between mental illness and return to incarceration. *Journal of Criminal Justice*. 2014;42(6):527-537. doi: 10.1016/j.jcrimjus.2014.09.005.
- ²⁵ Dieleman C. Mapping Community Capacity: Identifying Existing Community Assets for Supporting People with Mental Health Problems who Have Been Involved with the Criminal Justice System. *Canadian Journal of Community Mental Health*. 2014;33(3):29-42. doi: 10.7870/cjcmh-2014-021.
- ²⁶ Recovery Across Mental Health. Gender differences in Mental Health. Recovery Across Mental Health. https://ramh.org/guide/gender-differences-in-mental-health/.
- ²⁷ Veeh CA, Tripodi SJ, Pettus-Davis C, Scheyett AM. The Interaction of Serious Mental Disorder and Race on Time to Reincarceration. American Journal of Orthopsychiatry. 2018;88(2):125-131. doi: 10.1037/ort0000183.
- ²⁸ Sakala L. Blacks Are Overrepresented in Wisconsin Prisons and Jails. Prison Policy Initiative. https://www.prisonpolicy.org/graphs/2010percent/WI_Blacks_2010.html. Published May 2014.

Adverse Childhood Experiences (ACEs)

Natalie Lasinski, Allison Schwarz, & Christine Zielinski

Adverse childhood experiences (ACEs) are traumatic occurrences in childhood, before age eighteen, that are associated with many negative outcomes including health risks, developmental and behavioral issues, and higher susceptibility to adult incarceration.^{29,30,31} High ACE scores are significantly associated with clinical risk factors for health outcomes^{29,30,31,32} including sexual risk-taking, alcohol and drug abuse, and self- and other-directed violence, all behaviors that increase the risk of brushes with the law.³⁰ The impact of childhood trauma on incarcerated populations has not been well-studied; most ACEs studies exclude individuals who are incarcerated and/or homeless.

ACES and Incarceration

Households that experience incarceration and encounters with law enforcement are significantly affected, as children with incarcerated parents or caregivers are exposed to nearly five times as many other ACEs as their counterparts

without incarcerated parents.^{31,33} For example, substance abuse disorder is a mental illness (cumulative ACE score: 1), which often occurs simultaneously with the parent's actual use of the substance (cumulative ACE score: 2). A parent's substance abuse can then spiral to other ACEs, such as parental separation, parental incarceration, and/or parental aggression resulting in emotional or physical abuse or neglect of the child, with commensurate increases in cumulative ACE scores. When a parent is incarcerated, it takes a large toll on the other parent or caregiver; this also increases the likelihood of other additional ACEs.^{34,35}

We found a majority of individuals we screened in the Chippewa Valley (63%) had ACE scores of 4 or more, indicating a history of significant childhood trauma (Figure 8). We did not find significant gender or racial differences in ACE scores among the individuals we screened.

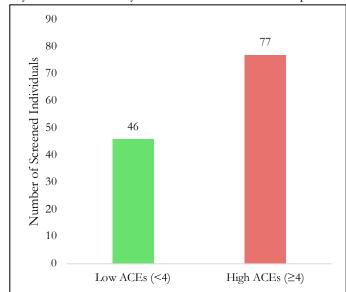


Figure 8. The majority of our participants reported an ACE score of 4 or more, which indicates significant trauma.

Participants in the Datablitz screenings sometimes spontaneously offered additional remarks, including one who reported so many traumatic childhood experiences, there were "too many to count." Another participant reported that being sexually assaulted by a relative as a child was one of the "biggest things that affected" them. They noted that after this traumatic experience,"...drinking was a large issue to help cope" and that, "by 12, I was drunk every day." 15,16

In the interview data collected by student nurses in the Returning to the Community project, several participants describing what their life was like before incarceration:

- "my childhood was traumatic,"
- "would relieve stress by getting high,"
- "was not until like the 78th charge until I got offered treatment." 15,16

Although 61% of the general population reports at least one ACE , only 16% of the general population report ACE scores of 4 or more, according to the CDC.³²

Lessons Learned

- Accumulated childhood trauma takes a toll on a child's health and development, with a high ACE score (4 or more) putting an individual at risk for future physical and mental health issues.
- Individuals with high ACE scores are more likely to engage in behaviors placing them at risk of criminality.
- The majority of individuals we screened in Chippewa County Jails have a history of significant childhood trauma.

- ²⁹ Campbell JA, Walker RJ, Egede LE. Associations Between Adverse Childhood Experiences, High-Risk Behaviors, and Morbidity in Adulthood. *American Journal of Preventive Medicine*. 2016;50(3):344-352. doi: 10.1016/j.amepre.2015.07.022.
- ³⁰ Hughes K, Lowey H, Quigg Z, Bellis MA. Relationships between adverse childhood experiences and adult mental well-being: results from an English national household survey. *BMC Public Health*. 2016;16(224):222. doi: 10.1186/s12889-016-2906-3.
- ³¹ Roos LE, Afifi TO, Martin CG, Pietrzak RH, Tsai J, Sareen J. Linking Typologies of Childhood Adversity to Adult Incarceration: Findings From a Nationally Representative Sample. *American Journal of Orthopsychiatry*. 2016;86(5):584-593. doi: 10.1037/ort0000144.
- ³² Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System ACE Data. U.S. Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/acestudy/ace-brfss.html. Published 2020.
- ³³ Turney K. Adverse childhood experiences among children of incarcerated parents. *Children and Youth Services Review.* 2018;89:218-225. doi:10.1016/j.childyouth.2018.04.033.
- ³⁴ Murphey D, Cooper PM. Parents Behind Bars: What Happens to Their Children. In: Unpublished; 2015. doi: 10.13140/RG.2.1.2444.4243.
- ³⁵ Brown EC. School counselor conceptualizations of the needs of children of incarcerated parents. *Children and Youth Services Review.* 2020;112. doi: 10.1016/j.childyouth.2020.104936.

Resilience

Lauren Heinz, Josie Hunt, Natalie Lasinski, Allison Schwarz, & Christine Zielinski

Resilience can have different definitions in different contexts, but it is generally defined as the ability to adapt and cope with challenging and stressful experiences; to endure adversity; and remain strong prior to, during, and after a transformative event. 36,37,38 Resilience can be thought of as the "psychological immune system." To the best of our knowledge, ours is the first project to use the ARM-R to evaluate resilience in incarcerated populations.

Using the scoring guidelines of the ARM-R, our data show 92 (75%) of participants obtained scores of only "low" or "moderate" resilience (Figure 9).

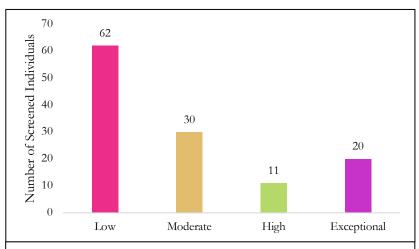


Figure 9. The majority of individuals we screened have low or moderate resilience.

Coping Mechanisms

The development of coping mechanisms is an aspect of resilience that can help any individual deal with the harsh environment they are in. When isolated in a jail cell, it can be difficult to focus on anything other than release and what life will be like back in the community. Although coping and resilience seem to have similar definitions, coping plays a major part in achieving resilience. By focusing on the important things in life, finding positivity in adverse situations, and attempting to better oneself, individuals can cope with the harsh environments of incarceration.³⁶

While in jail, some people are fully focused on making their lives better after release, both for themselves and the important people in their lives. The intrinsic challenges that the incarcerated face drive their resilience and push them towards self-improvement while serving a sentence. Some of our interviewees remarked that in the future they want to avoid conflict and focus on controlling their reactions to certain situations and violent behavior towards others. They explained that jail offered them opportunities to become healthier, both physically and mentally.

The willingness to self-improve aids in boosting self-esteem and mental health of more resilient people.^{39,40} One of our interviewees stated that "jail is just a place for rehabilitation," which implies that he is not likely to participate in activities beyond what is required of him in his sentence.

Among several other protective factors that can help an individual develop resilience is the ability to feel a sense of belonging in one's community. Among the individuals we screened, individuals with low resilience scores were significantly (t(121) = -7.357, P = .001) more likely to report they did not feel they belonged in their community (Figure 10).

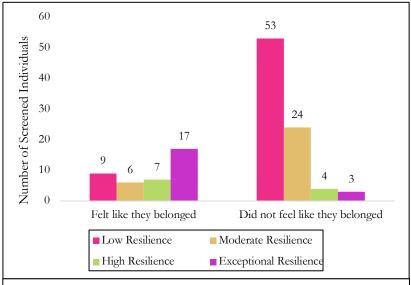


Figure 10. Participants who feel they do not belong in their community have significantly lower levels of resilience.

One individual with a moderate resilience score stated that it "depends on my actions" when asked if they felt like they belonged in the community. In the interview narratives collected by student nurses from individuals who have been released back into the community, we found some additional sentiments of feeling a lack of belonging in the community:

- "they changed their mind when they saw my record,"
- "there's not a day I won't be judged, 15,16"

However, several of these individuals have gained confidence in themselves to continue progressing and some can see the end of a long-fought battle. Among other remarks, these individuals indicated they were

- "finally walking towards the light at the end of the tunnel,"
- "making steps forward," and
- "on top of the world with everyone that needs help."

There is hope and optimism within these participants to keep moving forward. 15,16

Connecting with Others

In a harsh environment it can be easy to fall into an isolating pattern of disconnection from peers. When an incarcerated individual is not open to connecting with others, it is much more difficult to maintain or build resilience. It is clear that making connections with peers helps one become more resilient in an incarcerated setting.

Resilience and Mental Health

Among the individuals we screened, we also noted a significant association between resilience and possible mental illness, with individuals qualifying for a mental health diagnostic workup on the BJMHS significantly (t(121) = 2.823, P = .006) more likely to receive a low resilience score (Figure 11). Some of the individuals who receiving low resilience scores remarked that they are "never treated fairly" and had "no support" from people around them.

Among the individuals we screened, those with low resilience too often feel unsupported by family (Figure 12). However, lack of family support was not universal in the individuals we screened. Some remarked that

- "[my] family knows everything [about me]" and
- "[my] family supports me mentally."

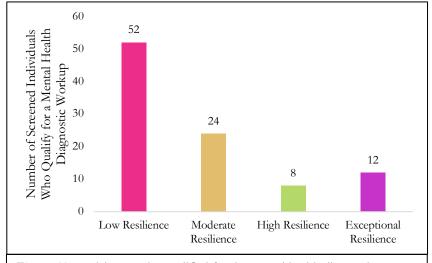


Figure 11. Participants who qualified for the mental health diagnostic workup were significantly more likely to have lower levels of resilience.

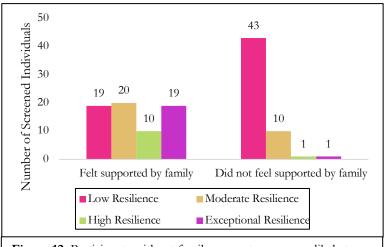


Figure 12. Participants without family support were more likely to have low resilience scores.

Interestingly, we did not note a significant association between resilience scores and ACE scores. Among the participants we screened, 74% of individuals in the "low resilience" category had a high Adverse Childhood Experience (ACE) score of 4 or above, as did 50% of individuals in the "exceptional" resilience category.

Lessons Learned

- Individuals who qualified for a mental health diagnostic workup were significantly more likely to have a "low" resilience score
- A sense of alienation from the community was also significantly associated with a low resilience score; this suggests that improving community support for individuals may provide them with a protective factor that can help them cope with childhood adversity and trauma.
- Because we are the only team using the ARM-R to screen resilience in an incarcerated population, the continuation of this data collection is crucial.

- ³⁶ Karaırmak Ö, Figley C. Resiliency in the Face of Adversity: A Short Longitudinal Test of the Trait Hypothesis. *The Journal of General Psychology*. 2017;144(2):89-109. doi: 10.1080/00221309.2016.1276043.
- ³⁷ Rezaei S, Mousavi SV. The Effect of Monotheistic Integrated Psychotherapy on the Levels of Resilience, Anxiety, and Depression among Prisoners. *Health, Spirituality and Medical Ethics.* 2019;6(1):2-10. doi: 10.29252/jhsme.6.1.2.
- ³⁸ Sandvik AM, Hansen AL, Hystad SW, Johnsen BH, Bartone PT. Psychopathy, anxiety, and resiliency Psychological hardiness as a mediator of the psychopathy—anxiety relationship in a prison setting. *Personality and Individual Differences*. 2015;72(C):30-34. doi: 10.1016/j.paid.2014.08.009.
- ³⁹ O'Donnell I. The survival secrets of solitaries. *Psychologist*. 2016;29(3):184-187.
- ⁴⁰ Oliffe JL, Hanberg D, Hannan-Leith MN, Bergen C, Martin RE. "Do You Want to Go Forward or Do You Want to Go Under?" Men's Mental Health in and Out of Prison. *American Journal of Men's Health*. 2018;12(5):1235-1246. doi: 10.1177/1557988318765923.

Head Injury/Traumatic Brain Injury

Natalie Barry, Ashley Benes, Erin Connolly, Mackenzie Shay, Allison Schwarz, & Christine Zielinski

Traumatic brain injury (TBI) is sudden damage to the brain caused by a blow or jolt to the head. The severity of a TBI falls within a spectrum, ranging from mild concussions to severe and permanent brain damage. A moderate to severe TBI almost always requires some form of rehabilitative therapy to recover and relearn skills. According to Mayfield Clinic, about 1.5 to 2 million people suffer from a TBI each year in the United States. Most people who experience a head injury, about 1.1 million, will have a mild injury that does not require hospitalization. Another 235,000 individuals will be hospitalized with a moderate to severe head injury, and approximately 50,000 will die from a brain injury.

Traumatic brain injuries are often underreported due to lack of knowledge about what constitutes a TBI, so it is probable that many of the reported numbers should be higher. Farrer et al. found that TBI prevalence in the general population could reasonably range from 10% to as high as 38.5%.⁴² These incidence values contrast with those resulting from investigation of TBI in an incarcerated population, which found that the average prevalence was 51.1%.⁴³ Another study found that 82% of an incarcerated population met criteria for a previous TBI, with 25.3% having a moderate or severe TBI and 57.6% having a mild TBI.⁴⁴

Traumatic Brain Injury, Aggression, and Incarceration

A traumatic injury to the brain will have lasting effects, much like a traumatic injury to a limb will affect the function of that particular limb. The effects from a TBI can affect the person in the physical, cognitive, affective, and motor domains, ranging from mild disturbances to severe impairments. A 2016 meta-analysis by Horn and Lutz⁴⁵ identified some of the effects of TBI:

- structural damage to the brain,
- reduction in mobility,
- poor concentration and memory,
- elevated chance of receiving psychiatric diagnosis (depression, substance abuse, anxiety),
- being less satisfied with quality of life,
- increase in aggression and anger,
- increased impulsivity and irritability,
- difficulty predicting emotions of others, and
- difficulty imagining someone else's point of view.

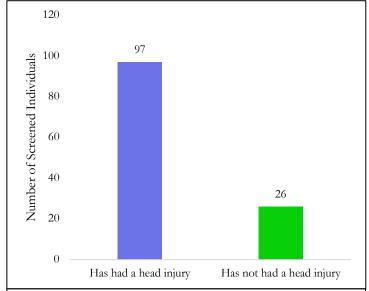


Figure 13. The majority of our participants have reported at least one head injury in their lifetime.

It is well established that damage to the frontal

lobe of the brain is associated with lack of impulse control and an inability to modify behavior, ^{46,47,48,49,50,51,52,53} which can cause an increase in irritability and aggressive tendencies. ^{42,54} Behaviors that could lead to incarceration could also lead to sustaining a TBI. ⁴³ Horn and Lutz found that people with multiple TBIs were more likely to be convicted of a violent offense, received longer sentences, committed more rule infractions, and were more likely to have difficulty while incarcerated. ⁴⁵

In the data we collected in Chippewa Valley jails, we noted similar findings. Among the individuals we screened, 79% reported a history of one or more head and/or neck injuries, requiring further diagnostic evaluation for probable traumatic brain injury (Figure 13).

TBI and Recidivism

The effects of a TBI are long lasting. The initial effects that increase the likelihood of someone being in a state of mind to commit a crime, especially a violent or aggressive crime, do not necessarily diminish after incarceration; thus, these individuals are also at a higher risk of reoffending and re-entering the criminal justice system once released from the initial arrest or incarceration. Horn and Lutz found higher rates of recidivism and longer sentences in incarcerated populations who reported multiple TBIs compared to counterparts without a history of brain injury. Ficcolino and Soldberg found a direct relationship between the probability of post-TBI complications, which is tied to the severity of a TBI, and recidivism: over half of those who were in a group with a high probability of TBIs re-entered the criminal justice system. Additionally, their data showed an association between having a TBI and having been previously incarcerated.

In the individuals we screened, we did not find an association between a history of traumatic brain injury and having been in jail before; however, the number of individuals we screened who were in jail for the first time and did not have a history of traumatic brain injury was so low that our sample size may lack the power to find an association.

Rehabilitation programs may help decrease the rate of recidivism by targeting factors related to TBI. Behavioral therapy may provide skills individuals need to control aggression and impulsive behavior, while other interventions such as exercise and meditation can empower individuals to manage their emotions in a healthy way.

Associations Between TBIs and ACEs

In the individuals we screened in Chippewa Valley jails, a history of TBI was not associated with a high ACE score. The relationship between ACEs and TBI in incarcerated populations, however, is generally under-researched. In a meta-analysis of 8000 articles conducted by Ma,⁵⁵ only three directly related ACEs to TBI, emphasizing the need for more research on this topic. One study discussed by Ma's research team found that males who were incarcerated with a history of TBI had a much higher risk of having a family member abusing alcohol. Another found that an increased risk of head injury without loss of consciousness was associated with drug abuse by their mothers. Yet another found that the incarceration of a household member was associated with a history of TBI.⁵⁵ Additionally, physical abuse during childhood was associated with head injury without loss of consciousness and psychological abuse during childhood was associated with the occurrence of TBI. Sexual abuse during childhood was not significantly associated with TBI.⁵⁵

Overall, in these studies, ACEs increased the likelihood of a history of traumatic brain injury, an association not borne out in the data gathered from individuals we screened. Hypothesizing a relationship between TBI and ACEs is reasonable, however, given that ACEs might cause an increase in risk-taking behavior, childhood abuse makes a person more likely to experience abuse as an adult, and some psychological effects of ACEs may cause decreased attention to one's surroundings that can cause the affected individual to be more prone to accidents.⁵⁵ Continued monitoring of the incarcerated population in the Chippewa Valley for both ACEs and TBI is advisable.

Traumatic Brain injury and Educational Attainment

A study investigating the association between TBI and educational attainment found decreased cognitive status in individuals with TBIs.⁴³ Among the individuals we screened in Chippewa Valley jails, those who reported a history of a brain injury were significantly less likely to have completed high school ($\chi^2(2) = 7.141 P = .028$) (Figure 14). Of the individuals we screened, 96% who reported not completing high school also reported a history of a brain injury; however, we did not ask when their brain injury occurred, so we have no way of knowing if it might have happened during their childhood.

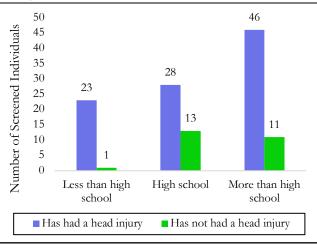


Figure 14. Individuals who reported a history of brain injury were significantly more likely to drop out of high school than those without a traumatic brain injury.

Lessons Learned

- There is a need for better testing and treatment of TBIs in the Chippewa Valley. A significant majority of the people we screened in our jails reported a history of brain injury and require thorough diagnostic follow-up.
- Although TBIs can lead to aggression and recidivism, having a traumatic brain injury does not necessarily mean someone will become violent.
- Individuals should be screened for a history of brain injury upon booking in Chippewa Valley jails.
- Individuals struggling to complete high school should also be tested and, as appropriate, treated for TBI.
- Staff in Chippewa Valley clinics and jails should be trained to record incidents that may indicate TBI, and follow up with individuals who likely have a history of TBI.⁴⁵
- Having some form of rehabilitation that targets traumatic brain injury will very probably decrease the rate of recidivism.^{56,57}

References

⁴¹ Mayfield Clinic. traumatic brain injury. Mayfield Brain & Spine. https://mayfieldclinic.com/pe-tbi.htm. Published July 2018.

- ⁴² Farrer TJ, Frost RB, Hedges DW. Prevalence of traumatic brain injury in Intimate Partner Violence Offenders Compared to the General Population: A Meta-Analysis. *Trauma, Violence, & Abuse.* 2012;13(2):77-82. doi: 10.1177/1524838012440338.
- ⁴³ Farrer TJ, Hedges DW. Prevalence of traumatic brain injury in incarcerated groups compared to the general population: A meta-analysis. *Progress in Neuropsychopharmacology & Biological Psychiatry*. 2011;35(2):390-394. doi: 10.1016/j.pnpbp.2011.01.007.
- ⁴⁴ Piccolino AL, Solberg KB. The Impact of traumatic brain injury on Prison Health Services and Offender Management. *Journal of Correctional Health Care*. 2014;20(3):203-212. doi: 10.1177/1078345814530871.
- ⁴⁵ Horn ML, Lutz DJ. traumatic brain injury in the criminal justice system: Identification and response to neurological trauma. *Applied Psychology in Criminal Justice*. 2016.
- ⁴⁶ Lane KS, St. Pierre ME, Lauterbach MD, Koliatsos VE. Patient Profiles of Criminal Behavior in the Context of Traumatic Brain Injury. *Journal of Forensic Sciences*. 2017;62(2):545-548. doi: 10.1111/1556-4029.13289.
- ⁴⁷Rosenbaum A, Hoge SK. Head injury and marital aggression. Am J Psychiatry. 1989;146 (8):1048-1051. doi:10.1176/ajp.146.8.1048;
- ⁴⁸ Lewis DO, Pincus JH, Feldman M, Jackson L, Bard B. Psychiatric, neurological, and psychoeducational characteristics of 15 death row inmates in the United States. *Am J Psychiatry*. 1986;143(7):838-845. doi:10.1176/ajp.143.7.838;
- ⁴⁹ Slaughter B, Fann JR, Ehde D. traumatic brain injury in a county jail population: prevalence, neuropsychological functioning and psychiatric disorders. *Brain Inj.* 2003;17(9):731-741. doi:10.1080/0269905031000088649;
- ⁵⁰ Dyer KF, Bell R, McCann J, Rauch R. Aggression after traumatic brain injury: analysing socially desirable responses and the nature of aggressive traits. *Brain Inj.* 2006;20(11):1163-1173. doi:10.1080/02699050601049312;
- ⁵¹ Hall KM, Karzmark P, Stevens M, Englander J, O'Hare P, Wright J. Family stressors in traumatic brain injury: A two-year follow-up. *Arth Phys Med Rehabil*, 1994;75(8):876-884. doi:10.1016/0003-9993(94)90112-0;
- ⁵² Baguley IJ, Cooper J, Felmingham K. Aggressive behavior following traumatic brain injury: how common is common? *J Head Trauma Rehabil.* 2006;21(1):45-56. doi:10.1097/00001199-200601000-00005;
- ⁵³ Brooks N, Campsie L, Symington C, Beattie A, McKinlay W. The five year outcome of severe blunt head injury: a relative's view. *J Neurol Neurosurg Psychiatry*. 1986;49(7):764-770. doi:10.1136/jnnp.49.7.764;
- ⁵⁴ Grafman RJ, Schwab MK, Warden MD, Pridgen MA, Brown MH, Salazar MA. Frontal lobe injuries, violence, and aggression: A report of the Vietnam Head Injury Study. *Neurology*. 1996;46(5):1231-1238. doi: 10.1212/WNL.46.5.1231;
- ⁵⁵ Ma Z, Bayley MT, Perrier L, et al. The association between adverse childhood experiences and adult traumatic brain injury/concussion: a scoping review. *Disabil Rehabil.* 2019;41(11):1360-1366. doi:10.1080/09638288.2018.1424957

⁵⁶ Davies CR, Williams HW, Hinder WD, Burgess ACN, Mounce ALT. Self-Reported traumatic brain injury and Postconcussion Symptoms in Incarcerated Youth. *Journal of Head Trauma Rehabilitation*. 2012;27(3):E21-E27. doi: 10.1097/HTR.0b013e31825360da.

 $^{^{57}}$ Williams WH, Mewse AJ, Tonks J, Mills S, Burgess CNW, Cordan G. traumatic brain injury in a prison population: Prevalence and risk for re-offending. {a} Brain Injury. 2010;24(10):1184-1188. doi: 10.3109/02699052.2010.495697.

Housing Instability

Matthew Breuer, Paige Ericson, Allison Schwarz, Callie Vogel, & Christine Zielinski

Jails and prisons provide a service desperately needed by those convicted: a secure place to stay. These individuals face overwhelming barriers that inhibit them from obtaining secure housing and thus safely reentering back into their community. Stable housing is the foundation to finding and maintaining a job, obtaining access to education, building strong familial relationships, and having a meaningful place in one's community.

Metraux and Culhane found that homelessness contributes to a higher risk of incarceration and that, inversely, incarceration contributes to an increased risk of homelessness.⁵⁸ Policies that criminalize the daily activities of homeless individuals such as public urination or sleeping in public spaces further increases their risk of brushes with the law and being reincarcerated simply for not having a secure place to stay. Herbert et al. found that homeless individuals are more likely to engage in activities that will lead them to incarceration, including heavy drinking, stealing money, and stealing food.⁵⁹ Our screening questions, therefore, included asking incarcerated individuals about their housing situations prior to their arrests, as well as about their anticipated housing stability when they were released.

Housing Instability Prior to Incarceration

Studies have found that the rates of homelessness among incarcerated individuals range from 12.4%60 and 15%61 in the year prior to being incarcerated. Additionally, 47% more individuals reported living in unstable or marginal housing (e.g., rooming houses, hotels, or motels) before incarceration.61 Greenberg and Rosenheck reported that 2.9% of incarcerated individuals from their sample of US jail inmates were homeless at the time of incarceration.60

In the "Our Methods" section of this report, we detailed the operational definition of housing instability we used to analyze our screening data. Our definition for housing instability is much broader than that of other studies because we included various factors that can contribute to an unstable housing situation, such as not having their name on the lease or mortgage of where they were staying, living in 3 or more places in the 12 months prior to arrest, or not having a place to go upon release from jail. Our operational definition of housing instability contrasts with other studies that only investigated individuals who had no place to go, which underrepresents those who are truly housing-insecure. Also, studies that rely on data collected by municipal units upon booking will inevitably underreport the true incidence of homelessness among these populations, since individuals have a strong incentive to misrepresent their homeless status when being booked into jail to avoid being regarded as a flight risk by the judge setting their bond.

In contrast to the findings mentioned in the previous paragraph, among the individuals we screened in Chippewa Valley jails, 94 (76%) were housing insecure (Figure 15).

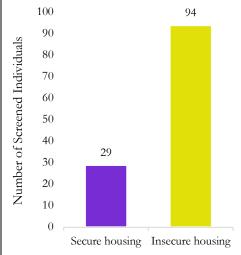


Figure 15. Of our screening participants, 76% were housing-insecure.

Nine percent of individuals we screened had been homeless—without a place to go—at some point during the year prior to their incarceration (Figure 16).

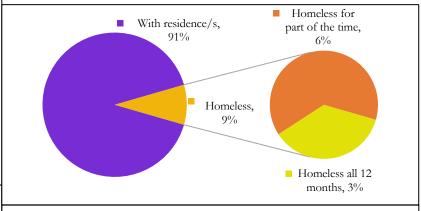


Figure 16. Housing status (left) and specific homeless status (right).

Housing Instability Upon Release/Reentry

The importance of finding and maintaining stable housing is a crucial component to successful reentry after incarceration.⁶² Herbert et al. noted that without stable housing, "it can be difficult for returning prisoners to find and maintain stable employment, maintain family connections, receive physical and mental health care, and avoid substance use.⁵⁹"

The need for housing occurs immediately upon release; these statements from individuals with an incarceration history in the Chippewa Valley collected in the Returning to the Community project demonstrate that our community is not meeting this need:

- "I got released unexpectedly in the middle of a winter night in shorts and a t-shirt, and with no phone or no money. 15,16"
- "Had no housing or support that was needed to not relapse."
- "....was always at risk of relapsing because did not have safe housing, and stayed at a friend's who relapsed."

Other participants indicated that they have been waiting on a housing list for over two years.^{15,16} These remarks exemplify the importance of finding support and helping released individuals avoid situations that can put them at further risk for continuing down the path that initially led them to incarceration.

Upon release from incarceration, individuals face overwhelming barriers to obtaining secure housing and thus safely reentering into their community: little to no income, minimal work experience, discrimination by housing authorities and landlords, and affordable housing shortages.^{59,61,63} Dickson-Gomez et al. found that landlords, worrying that individuals with conviction histories may not be able to pay their rent or might be re-arrested, were reluctant to rent to them.⁶⁴

Comments made by individuals in the Returning to the Community project articulated experience of exactly this type of discrimination:

- "because of my record they didn't let me live in certain places"
- "hard to find a place to live with conviction history."
- "family isn't giving support, fall into old habits if [I] return to that place
- "stressful and unhealthy environment."

Family members who live in public housing, too, may be reluctant to permit a released individual to reside with them, given the Department of Housing and Urban Development's (HUD) "One Strike and You're Out" policy that evicts all members of the family if one of them commits a crime.⁶² It also may be the released individual who is unwilling to return to the prior household if conditions or persons there threaten their ability to resist criminal behavior.⁶²

Our data show that while 62% (n = 76) of the individuals we screened do have a place to go upon release, 28% of them (n=21) would prefer not to return to that residence (Figure 17). The majority of the individuals we screened (n=55, 54%) either have no place to go or do not want to return to the housing they have available upon their release.

A participant in the Returning to the Community project described this sort of housing insecurity:

> "Went to my parents' house, went back to drug houses, slept in my van because there was nowhere else to go.^{15,16}"

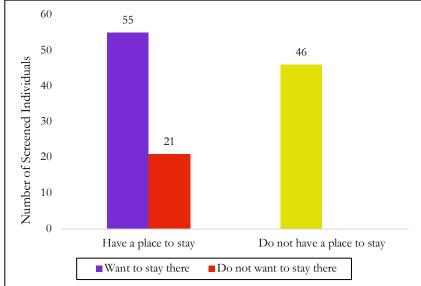


Figure 17. Participants' housing status upon release show that even of the participants with a place, 17% do not wish to return.

Frequent Moves and Housing Instability

The conditions of parole or supervision requiring a released individual to avoid certain people or places also limit their housing options. ⁶² In a study that tracked the frequency of moves of incarcerated individuals who returned to their communities, moves due to intermediate sanctions, treatment or care, prison, or absconding accounted for nearly 60% of all the moves made. ⁵⁹

Studies have noted that the longer a parolee lives in a residence, the less likely they are to leave that residence, ⁶⁵ with half of moves occurring within the first 8 weeks of a parolee's tenancy. ⁶⁵ This research suggests that when a previously incarcerated individual moves, they are put at a heightened risk for another move.

Our data show that 35% of the individuals we screened had lived in three or more places or had no place to go in the year prior to arrest, both indicators of housing instability (Figure 18).

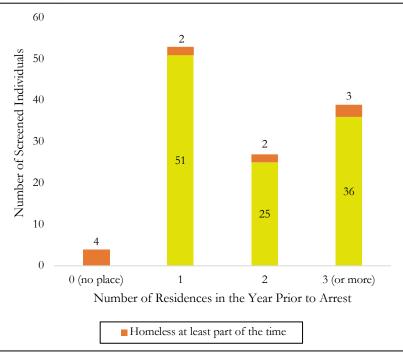


Figure 18. Number of residences reported in the 12 months prior to arrest; 31% had live in 3 or more residences, which indicates housing instability.

Association Between Housing Instability and Mental Illness

Housing instability is associated with mental illness. Greenberg and Rosenheck found mental illness rates to be 10% to 22% higher among homeless inmates. 60 Unstable housing itself puts an individual further at risk for mental illness, substance use, fragile family relationships, challenges finding employment, recidivism, and outright homelessness. 59

In the incarcerated individuals we screened, the 80% who qualified for a mental health diagnostic workup were slightly more likely (χ^2 (1) = 1.827, P = .176) to be housing insecure (Figure 19), although the

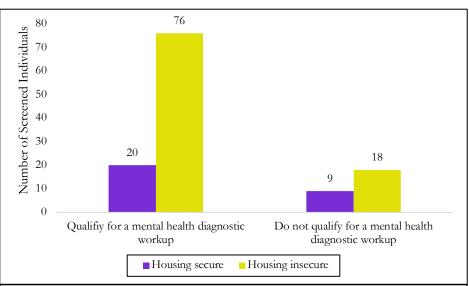


Figure 19. Housing insecure individuals qualified for a complete mental health diagnostic workup at slightly higher rates than those who were housing secure.

difference was not statistically significant.

Association Between Housing Instability and Employment

Studies have shown that unemployment is, not surprisingly, a factor in the likelihood of an individual being housing-insecure prior to arrest. Greenberg and Rosenheck found that individuals employed at the time of their arrest were only half as likely to be homeless in the two weeks before incarceration as those who were unemployed.⁶⁰

Additionally, after release, individuals may have difficulty finding employment, which can lead to housing insecurity and homelessness.⁵⁹ In a study conducted in four major US cities, 60% of employers indicated they were unwilling to hire someone with a criminal record.⁶⁶ Bradley et al. further noted that "Opportunities for networking or obtaining employment referrals and leads are often limited or non-existent in the low-income neighborhoods to which most prisoners return.⁶²"

Even when an individual can find employment, the lack of a living wage remains a barrier to finding safe and stable housing⁶¹; since the 1970s and 1980s, real wages have not kept up with increasing housing prices,⁵⁹ which are mostly cost-prohibitive for individuals with conviction histories.⁶²

In the individuals we screened (Figure 20), however, we did not observe a significant association between housing insecurity and unemployment. Housing-insecure participants were unemployed at only a slightly (χ^2 (3) = 6.172, P = .104) higher rate than housing-secure participants. In the

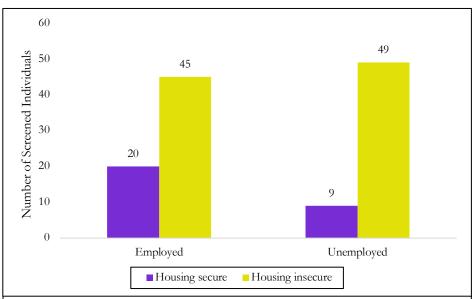


Figure 20. Housing-secure participants were employed at a slightly higher rate than housing-insecure participants.

population we studied, housing stability was common among both unemployed and employed individuals.

Lessons Learned

- The obviously high proportion of individuals we screened who faced homelessness in the year prior to admission into jail indicate that individuals with conviction histories are much more likely to be homeless than the general population.
- Among the individuals we screened, a sizeable majority face housing instability upon release.
- Stable housing is important for successful re-entry into the community and is generally reported to be insufficiently available in the Chippewa Valley to individuals with conviction histories.
- Our data reflect that the Federal Housing and Urban Development regulations put in place by the Clinton Administration have been largely ineffective in preventing discrimination against those with conviction histories in the Chippewa Valley.
- Our data show that released individuals face challenges finding and maintaining the stable housing they need to enable them to find employment, build familial relationships, receive mental health care, and avoid recidivism.

- ⁵⁸ Metraux S, Culhane DP. HOMELESS SHELTER USE AND REINCARCERATION FOLLOWING PRISON RELEASE*. Criminology & Public Policy. 2004;3(2):139-160. doi: 10.1111/j.1745-9133.2004.tb00031.x.
- ⁵⁹ Herbert CW, Morenoff J, D., Harding DJ. Homelessness and Housing Insecurity Among Former Prisoners. *The Russell Sage Foundation Journal of the Social Sciences*. 2015;1(2):44-79. doi: 10.7758/rsf.2015.1.2.04.
- ⁶⁰ Greenberg GA, Rosenheck RA. Jail incarceration, homelessness, and mental health: a national study. *Psychiatric Services (Washington, DC)*. 2008;59(2):170. doi: 10.1176/ps.2008.59.2.170.
- ⁶¹ Couloute L. Nowhere to Go: Homelessness among formerly incarcerated people. Prison Policy Initiative. https://www.prisonpolicy.org/reports/housing.html. Published August 2018.
- 62 Bradley KH, Oliver RBM, Richardson NC, Slayter EM. NO PLACE LIKE HOME: Housing and the Ex-prisoner. Community Resources for Justice.
- $https://pdfs.semanticscholar.org/a734/bbdae284b80eb9598e64ad83a431580e749c.pdf?_ga=2.240550659.1460997870.1593907004-406849990.1593907004. Published 2001.$
- ⁶³ Willging CE, Malcoe LH, St Cyr S, Zywiak WH, Lapham SC. Behavioral health and social correlates of reincarceration among Hispanic, Native American, and white rural women. *Psychiatric Services (Washington, DC)*. 2013;64(6):590. doi: 10.1176/appi.ps.201200120.
- ⁶⁴ Dickson-Gomez J, Convey M, Hilario H, Corbett AM, Weeks M. Structural and Personal Factors Related to Access to Housing and Housing Stability among Urban Drug Users in Hartford, Connecticut. *Contemporary Drug Problems*. 2008;35(1):115-152. doi: 10.1177/009145090803500106.
- ⁶⁵ Harding DJ, Wyse JJB, Dobson C, Morenoff JD. Making Ends Meet After Prison. *Journal of Policy Analysis and Management*. 2014;33(2):440-470. doi: 10.1002/pam.21741.
- 66 Holzer HJ. What employers want: job prospects for less-educated workers. New York: New York: Russell Sage Foundation; 1996.

Children and Incarceration

Ruth Cronje, Daniel Geisler, Ashley Lutzke Allison Schwarz, & Christine Zielinski

Incarceration creates a ripple effect on family, friends, employers, landlords, and anyone else with whom incarcerated individuals have a meaningful relationship. The children of incarcerated individuals are particularly vulnerable to its damaging effects. Indeed, having an incarcerated parent is an acknowledged source of significant childhood trauma.⁶⁷ Of the individuals we screened in Chippewa Valley jails, 84 (69%) had children to look after, indicating that there are numerous children in the Chippewa Valley experiencing this form of trauma.

Incarceration Detrimentally Affects Children

Children with incarcerated fathers suffer. They are more likely to exhibit externalizing behaviors, such as destroying things or demanding a lot of attention.⁶⁸ They are at risk for lower educational attainment, worse academic performance, and more school absences than children whose fathers were never incarcerated.^{68,69} Turney and Goodsell found that the incarceration of a mother, too, results in disadvantage for their children, since it tends to more severely destabilize children's living arrangements.⁶⁸ Detrimental effects—such as higher rates of aggression, suspension from school, antisocial behavior, delinquency, and contact with the criminal justice system—have been observed even in college students whose parents have been incarcerated.⁷⁰ Regardless of the age of the child, parental incarceration also increases risk of chronic health problems, such as obesity, anxiety, and depression, as well as other behavioral/mental illness that heightens the risk for criminal activity.^{69,71}

Limited research has been conducted to examine the theory that children who experience the adversity of parental incarceration are much more likely to experience other ACEs.^{71,72} In addition, most ACE studies exclude incarcerated individuals, so we don't know much about the childhood trauma of incarcerated individuals. However, we know from a meta-analysis⁶⁷ of the ACEs literature that chronic childhood trauma (an ACE score of 4 or more) is associated with higher risk for substance abuse, self- and other-directed violent behavior, and sexual risk-taking, all behaviors that increase an individual's chances for brushes with the law.

Children of incarcerated parents also are more likely to live in poverty. Geller et al. and Arditti et al. found that incarceration rates are highest among the most disadvantaged citizens of our society and that incarceration reduced fathers' labor market performance, diminishing their income.^{71,72} Income-insecure households are put into greater jeopardy when a parent is incarcerated due to loss of income and court costs.⁶⁹ The interaction between poverty and incarceration also reveals one plank of structural racism in Wisconsin, given that African Americans are disproportionately represented in populations of incarcerated persons and 82% of African American households in our community are income-insecure,⁷³ while only 41% of our white households qualify as income-insecure.¹ Race and gender discrimination mean that women and people of color are more likely to have to settle for the low-wage jobs that comprise 61% of jobs in the Wisconsin economy¹; these forms of discrimination are exacerbated for individuals with conviction histories by the stigma attached to involvement in the criminal justice system.⁷¹ Fathers with conviction histories are also more likely to live at a distance from their children.⁷² Children with an incarcerated parent(s) thus have reduced financial support and, resultingly, fewer opportunities.

The offspring of incarcerated parents are also at increased risk for incarceration themselves, particularly the adult children of incarcerated mothers who use drugs.⁷⁴ Parental incarceration is also associated with problematic behavior of individuals during incarceration. Novero et al. report that incarcerated individuals who had parents who were also incarcerated, particularly if they had an incarcerated mother, were more likely than first-generation prisoners to self-report anger, prison violence, and institutional rule-breaking, even after controlling for the high rates of childhood adversity suffered by both groups.⁷⁵ Likewise, incarcerated mothers were 2.5 times more likely to report that their adult children were incarcerated than incarcerated fathers.⁷⁴

Murray et al. found that in both England and Sweden, parental criminality is a strong predictor of criminal behavior in their offspring. However, in Sweden—where sentences tend to be shorter, parents have access to home leave after serving a portion of their sentence, and incarcerated individuals can communicate with their families via uncensored email, telephone calls, and private visits—the impact of parental incarceration on risk of incarceration in their offspring, once criminality is controlled for, virtually disappears. Cyphert also recommends liberal visitation policies to provide children with an opportunity to maintain a relationship with an incarcerated parent.

In a 2013 study in Eau Claire County of 157 frequent users of the jail (defined as more than nine bookings into the jail between 2009 and 2012), 78 (50%) had received services in Eau Claire County as a youth.^{77*} Of these 78 adult individuals with >9 bookings in the jail:

- 38 (48.7%) of had received services at or before age 12†;
- 78 had 290 detentions (the length of detention was not calculated); and
- 78 had 881 contacts with Juvenile Court Services with varied dispositions.

These local data show how parental incarceration increases children's future risk for criminality and incarceration. The cost of incarceration of parents needs to include the likely impact and cost of the future incarceration of their offspring as part of its cost:benefit analysis.

Among the individuals we screened in Chippewa Valley jails, 36 (29%) had been removed from the custody of their parents/guardians when they themselves were children. These data demonstrate the increased risk of incarceration among the offspring of parents who have been incarcerated. Some individuals we screened responded they had not been removed from their parents' custody, but remarked:

- "Not legally, but my grandparents took care of me because my mom was a drug user."
- They "should have [because I had] weedgrowing parents [and my] dad was a heroin addict."
- Another who answered "no" reported they were "the only kid who wasn't out of four."

Although a disproportionate number of individuals we screened in the Chippewa Valley jails had been removed from their parents' custody as children, these individuals were no more likely to have been in jail before (Figure 21).

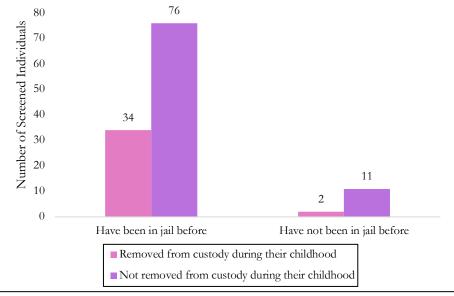


Figure 21. Second-generation incarcerated individuals we screened were no more likely to have been in jail before than those who had not been removed from their parents' custody.

Loss of Custody and Foster Care

When custodial parents are removed to incarceration or lose their parental rights, their children often enter the foster care system, particularly when they are the children of incarcerated mothers. Hage reported that children who are removed from their families and placed in foster care, particularly those placed in group settings, often suffer short- and long-term negative effects, including emotional, behavioral, and academic problems. According to El Hage, children placed in kinship care situations fare better and are less likely to experience psychiatric or behavioral problems.

^{*} Youth data is specific to Eau Claire County only. Therefore, if a child/youth had Child Protective Services or Youth Services from other counties, this is not accounted for.

[†] In 1996 the Juvenile Law was changed to allow youth to be charged as a delinquent at age 10. Prior to 1996, the age was 12 and referrals would have been sent to the Eau Claire County Department of Human Services via Child Protection Services.

Resilience

According to the literature, strong social support systems can buffer the negative effects of having an incarcerated parent: such kids who find social support through grandparents, older siblings, aunts or uncles, coaches, or mentors

have greater success in being admitted to college. 70,78 Our data, admittedly collected among individuals who are incarcerated, suggest that being removed from the custody of parents does not disproportionately diminish the ability of that individual to develop resilience.

Among the individuals we screened in Chippewa Valley jails, there were no significant differences in resilience scores among those who had been removed from their parents' custody as children and those who had not (Figure 22).

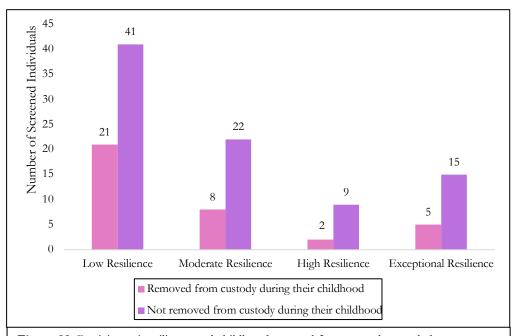


Figure 22. Participants' resilience and childhood removal from custody revealed no statistically significant relationships.

Lessons Learned

- Incarceration of parents has detrimental effects on their offspring.
- Half of the individuals booked nine or more times into the ECC jail had received services from Eau Claire County as youth.
- Visitation policies and alternative courts that provide opportunities for meaningful interactions between incarcerated/convicted parents and their children can mitigate the detrimental impact of parental incarceration on kids.
- Strong social supports for children whose parents are incarcerated, even among those who are removed from their parents' custody, can promote their resilience and may help them avoid brushes with the criminal justice system.

⁶⁷ Hughes K, Bellis MA, Hardcastle KA, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*. 2017;2(8):e356-e366. doi:10.1016/S2468-2667(17)30118-4

- ⁶⁸ Turney K, Goodsell R. Parental Incarceration and Children's Wellbeing. *The Future of Children*. 2018;28(1):147-164. doi: 10.1353/foc.2018.0007.
- ⁶⁹ Cyphert AB. Prisoners of Fate: The Challenges of Creating Change for Children of Incarcerated Parents. *Maryland Law Review*. 2018;77(2):385-427.
- ⁷⁰ Luther K. Examining Social Support Among Adult Children of Incarcerated Parents. Family Relations. 2015;64(4):505-518. doi: 10.1111/fare.12134.
- ⁷¹ Arditti JA, Lambert-Shute J, Joest K. Saturday Morning at the Jail: Implications of Incarceration for Families and Children*. *Family Relations*. 2003;52(3):195-204. doi: 10.1111/j.1741-3729.2003.00195.x.
- ⁷² Geller A, Garfinkel I, Western B. Paternal Incarceration and Support for Children in Fragile Families. *Demography.* 2011;48(1):25-47. doi: 10.1007/s13524-010-0009-9.
- ⁷³ United For ALICE. WISCONSIN 2016 STATE OVERVIEW. United Way of Northern New Jersey. https://www.unitedforalice.org/wisconsin. Published 2018.
- ⁷⁴ Dallaire DH. Incarcerated Mothers and Fathers: A Comparison of Risks for Children and Families. Family Relations. 2007;56(5):440-453. doi: 10.1111/j.1741-3729.2007.00472.x.
- ⁷⁵ Novero CM, Booker Loper A, Warren JI. Second-Generation Prisoners: Adjustment Patterns for Inmates With a History of Parental Incarceration. *Criminal Justice and Behavior.* 2011;38(8):761-778. doi: 10.1177/0093854811406637.
- ⁷⁶ Murray J, Janson C-G, Farrington DP. Crime in Adult Offspring of Prisoners: A Cross-National Comparison of Two Longitudinal Samples. *Criminal Justice and Behavior*. 2007;34(1):133-149. doi: 10.1177/0093854806289549.
- ⁷⁷ Wirth T. E-mail communication. Received October 2013.
- ⁷⁸ ElHage A. Keeping Children in the Family Instead of Foster Care. Institute for Family Studies. https://ifstudies.org/blog/keeping-children-in-the-family-instead-of-foster-care. Published August 18, 2016.

Use of Emergency Rooms

Wesley Boehm, Ruth Cronje, Connor Dolan, Kellee Held, Allison Schwarz, & Christine Zielinski

Emergency rooms are a source of primary care for many individuals, particularly those who are income insecure. Kulkarni et al. found that homeless individuals with an incarceration history were less likely to have a source of medical care than those without a history of incarceration.⁷⁹ Given the associations between income insecurity, mental illness, and the likelihood of incarceration, we were interested to learn whether and to what extent individuals incarcerated in Chippewa Valley jails visit local emergency rooms, to understand the healthcare situations of individuals who come into contact with our criminal justice system, and to explore whether the people the Chippewa Valley incarcerates are able to get their healthcare needs met.

Emergency Room Use Prior to Incarceration

Studies have found that, compared to the 43% of the general population (in the United States generally as well as in Wisconsin) who use an emergency room within a given year,80,81 individuals who are incarcerated are much more likely to use an emergency room in the year prior to their arrest. Chodos et al. found that 73% of the incarcerated individuals they sampled used acute care prior to being incarcerated.82 Similarly, Wang et al. found that 66% of their sample surveyed said that they used the emergency room as their main source of healthcare.83

We found that use of emergency rooms by individuals we screened in Chippewa Valley jails was only slightly higher than the usage rates of the general public in Eau Claire County: 55 (45%) of them had used an emergency room within the

year prior to their arrest (Figure 23).

In a study of ER use among the general population, Niedzwiecki et al. found that 40% of ER visits were from individuals with a mental health diagnosis.84

We observed that, here in the Chippewa Valley, individuals we screened who qualified for a mental health diagnostic workup were significantly (χ^2 (1) = 4.94, P = .026) more likely to have used an emergency room within the year prior to their incarceration than those who did not qualify for a mental health diagnostic workup (Figure 24).

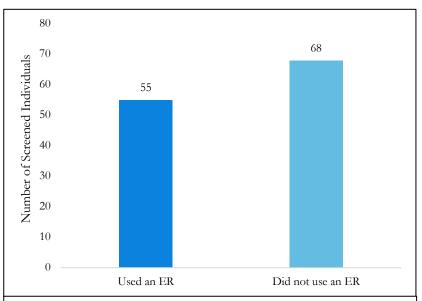


Figure 23. We found that 45% of screening participants used an emergency room in the year prior to their arrest.

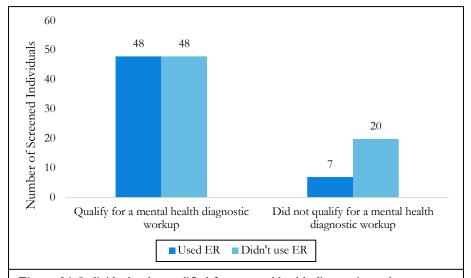


Figure 24. Individuals who qualified for a mental health diagnostic workup were significantly more likely to have used an ER within the year prior to their arrest than those not qualifying.

One of the individuals we screened reported they "took a bunch of pills to commit suicide knowing I was coming to jail. I built something to block the door from them getting in. But I took a bunch of pills so now I have to go to the hospital and not jail."

We were also interested in the number of times the individuals we screened in Chippewa Valley jails had used an ER in the year prior to their arrest. Among the subpopulation of individuals we screened who reported they had used an ER, the majority (60%) had visited an ER more than once (Figure 25), suggesting that this component of our screening population lacked a stable relationship with a primary healthcare provider.

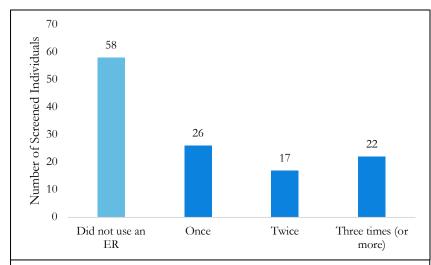


Figure 25. Although most individuals reported not using an ER in the year prior to their arrest, of those who used the ER (32%), the majority used one more than once.

Others reported that their ER visit was for reasons other than mental illness, such as broken bones, kidney infections, accidents, and to bring in another person.

Like our findings, Hiller et al. reported that 35% of an incarcerated population who struggled with mental illness had used the emergency room prior to incarceration.⁸⁵ However, of those individuals, 100% of those who also abused drugs had used the emergency room in the year prior to their arrest, with an average of 2.2 visits per person.

The housing-insecure participants we screened visited an emergency room at marginally higher rates (χ^2 (1) =2.873, P = .09) compared to housing-secure participants (Figure 26).

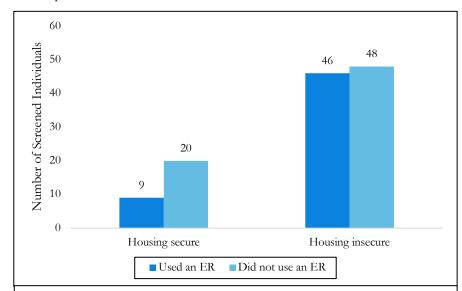


Figure 26. Housing-insecure participants were slightly more likely to have used an ER compared to those who were housing-secure.

Emergency Room Use Post Incarceration

Although we did not have a mechanism to track emergency use post-release, several studies have found that individuals with conviction histories are significantly more likely to use ERs than individuals without histories of incarceration.^{83,86,87} Anywhere from 14% to 74% of individuals who visit ERs post-incarceration are transported there by ambulance.^{86,88} Borschmann et al. reported that a significant number of these transports were due to suicidal ideation, suggesting a "strong association with prior psychiatric problems"; Borschmann recommends that EMTs receive training in the area of self-harm and mental health issues.⁸⁸

Lessons Learned

- Although the proportion of incarcerated individuals we screened in Chippewa Valley jails did not use ERs at a rate higher than that of the general population in WI and the US, in the incarcerated population we screened, individuals in need of a full mental health diagnostic workup were significantly more likely to have used an emergency room in the year prior to their arrest. Increasing the availability of mental health resources to ensure that everyone whose score on the BJMHS indicates they need a diagnostic workup actually receives one, as well as making mental health treatment available, would likely reduce the expense of ER use in the Chippewa Valley.
- Mental illness coupled with substance use seems to bring particularly potent risk of ER use in individuals who are incarcerated; as a top priority, individuals arrested on substance-related crimes whose BJMHS score indicates they need a diagnostic workup should receive one.
- Even individuals we screened whose BJMHS score did not indicate the need for thorough
 mental health diagnosis may be relying on ERs for primary healthcare. The Chippewa Valley
 community should increase resources for healthcare (such as the Chippewa Valley Free Clinic)
 to provide a more cost- effective means of healthcare for income-insecure and underemployed
 individuals.
- Resources allocated to provided more and more effective preventive care—particularly in the areas of mental health and substance abuse—are likely to pay our communities dividends in the form of fewer costly incarcerations.

References

⁷⁹ Kulkarni SP, Baldwin S, Lightstone AS, Gelberg L, Diamant AL. Is incarceration a contributor to health disparities? Access to care of formerly incarcerated adults. *Journal of Community Health*. 2010;35(3):268. doi: 10.1007/s10900-010-9234-9.

80 CDC National Center for Health Statistics. Emergency Department Visits. Center for Disease Control and Prevention. https://www.cdc.gov/nchs/fastats/emergency-department.htm. Published January 19, 2017. Accessed July 3, 2020.

81 Kaiser Family Foundation. Hospital Emergency Room Visits per 1000 Population by Ownership type. Kaiser Family Foundation. https://www.kff.org/other/state-indicator/emergency-room-visits-by-ownership/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D. Accessed July 3, 2020.

⁸² Chodos AH, Ahalt C, Cenzer IS, Myers J, Goldenson J, Williams BA. Older jail inmates and community acute care use. *American Journal of Public Health*. 2014;104(9):1728. doi: 10.2105/AJPH.2014.301952.

83 Wang EA, Hong CS, Shavit S, Sanders R, Kessell E, Kushel MB. Engaging individuals recently released from prison into primary care: a randomized trial. *American Journal of Public Health.* 2012;102(9):e22. doi: 10.2105/AJPH.2012.300894.

84 Niedzwiecki MJ, Sharma PJ, Kanzaria HK, McConville S, Hsia RY. Factors Associated With Emergency Department Use by Patients With and Without Mental Health Diagnoses. *JAMA Network Open.* 2018;1(6). doi: 10.1001/jamanetworkopen.2018.3528.

85 Hiller ML, Webster JM, Narevic E, Staton M, Garrity TF, Leukefeld C. Prisoners with Substance Abuse and Mental Health Problems: Use of Health and Health Services. *The American Journal of Drug and Alcohol Abuse*. 2005;31(1):1-20. doi: 10.1081/ADA-37552.

⁸⁶ Frank J, Linder J, Becker W, Fiellin D, Wang E. Increased Hospital and Emergency Department Utilization by Individuals with Recent Criminal Justice Involvement: Results of a National Survey. *Journal of General Internal Medicine*. 2014;29(9):1226-1233. doi: 10.1186/1471-227X-13-16.

⁸⁷ Humphreys J, Ahalt C, Stijacic-Cenzer I, Widera E, Williams B. Six-Month Emergency Department Use among Older Adults Following Jail Incarceration. *Journal of Urban Health.* 2018;95(4):523-533.

⁸⁸ Borschmann R, Young J, Moran P, et al. Ambulance attendances resulting from self-harm after release from prison: a prospective data linkage study. *Social Psychiatry and Psychiatric Epidemiology*. 2017;52(10):1295-1305. doi: 10.1007/s00127-017-1383-z.

General Recommendations

- Everyone booked into all three Chippewa Valley county jails should be screened at jail intake with the Brief Jail Mental Health Screen (BJMHS).
- Individuals whose results on the BJMHS suggest the presence of severe mental illness should be given a full mental health diagnostic evaluation.
- Individuals diagnosed with a mental illness should begin to receive treatment in jail, including both therapy and medical intervention, which has been shown to speed recovery.^{89,90}
- In-jail treatment should be trauma-informed.
- Individuals diagnosed with mental illness should be given a warm hand-off to ensure their treatment is continued upon release.
- Medicine-assisted treatment, such as methadone, vivitrol, and suboxone, should be provided for individuals with substance addictions.
- Individuals with substance addictions should be prepared in jail to ensure their medicine-assisted addiction treatment can be continued after release.
- All individuals, regardless of their mental health status, should receive help in preparing for their release into the
 community to ensure they have access to the resources that will get their social needs met, including peer
 support from a social network with lived experience of incarceration. Individuals should receive a warm handoff to these services upon release.
- The community should provide resources to train and pay peer-support staff.
- Jail staff, corrections officers, and parole officers should receive training on mental illnesses, trauma-informed care, structural racism and other inequities, and training in crisis intervention.
- Jail staff should have access to peer-support counsellors and other mental health providers to ensure they have the opportunity to debrief from their own trauma.
- Discharge planning for all persons should start at jail admission, or even before for re-admissions. Discharge plans should be complete and comprehensive and address all critical areas such as housing, mental health treatment, health care, transportation, peer support, etc.
- All three counties should reallocate more resources to "upstream" preventive systems such as housing, early childhood, quality daycare, mental health treatment, education and job skill training for living-wage jobs with benefits, health care, transportation support, and other social needs important to improve population health.
- Incarcerated individuals who report they are housing-insecure should be offered housing after release using the Housing First model.
- Peer support may be particularly effective in connecting with another caring person who has lived experience with the criminal justice system. Peer mentors can be role models and coaches.
- Counties should allocate resources to hire the additional staff needed to enact, to support, and to assess these
 recommendations. This staffing effort should also consider and adhere to the recently adopted resolution to
 declare Racism as a Public Health Crisis in Eau Claire County.
- The circumstances of women who are incarcerated should be considered and the system altered to meet their unique needs. They should receive equal employment opportunities while in jail. They should receive appropriate medical care, including an ability to give birth without being shackled.
- Counties should allocate resources to encouraging the acceptance and de-stigmatization of people with incarceration histories, including restoring their right to vote.

• Individuals should receive a brain injury screen upon booking, using an instrument like the Ohio State short screen. Individuals who report a history of a head or neck injury should receive a full diagnostic workup to evaluate them for traumatic brain injury.

References

⁸⁹ Watkins E. Combining cognitive therapy with medication in bipolar disorder. *Advances in Psychiatric Treatment*. 2003;9(2):110-116. doi:10.1192/apt.9.2.110.

⁹⁰ Hollon SD, DeRubeis RJ, Fawcett J, et al. Effect of cognitive therapy with antidepressant medications vs antidepressants alone on the rate of recovery in major depressive disorder: a randomized clinical trial. *JAMA Psychiatry*. 2014;71(10):1157-1164. doi:10.1001/jamapsychiatry.2014.1054.

References

Background

- 1 Hoopes S, Abrahamson A, Leonard M, Treglia D. ALICE: A Study of Financial Hardship in Wisconsin. The United Way ALICE Project;2018.
- 2 County Health Rankings & Roadmaps. Wisconsin 2020 Rankings: Chippewa County. University of Wisconsin Population Health Institute. https://www.countyhealthrankings.org/app/wisconsin/2020/rankings/chippewa/county/outcomes/overall/snapshot. Published 2020.
- 3 Rabuy B, Kopf D. Prisons of Poverty: Uncovering the pre-incarceration incomes of the imprisoned. Prison Policy Initiative. https://www.prisonpolicy.org/reports/income.html. Published July 9, 2015.
- 4 Lake J. Criminal Records Create Cycles of Multigenerational Poverty. Center for American Progress. https://www.americanprogress.org/issues/poverty/news/2020/04/15/483248/criminal-records-create-cycles-multigenerational-poverty/. Published April 15, 2020.
- 5 Wagner P, Sawyer W. States of Incarceration: The Global Context 2018. Prison Policy Initiative. https://www.prisonpolicy.org/global/2018.html. Published June 2018.
- 6 Roth A. Insane: America's Criminal Treatment of Mental Illness. New York, NY: Basic Books; 2018.
- 7 Sawyer W, Wagner P. Mass Incarceration: The Whole Pie 2020. Prison Policy Initiative. https://www.prisonpolicy.org/reports/pie2020.html. Published March 24, 2020.
- Equal Justice Initiative. Mass Incarceration Costs \$182 Billion Every Year, Without Adding Much to Public Safety. Equal Justice Initiative. https://eji.org/news/mass-incarceration-costs-182-billion-annually/. Published February 6, 2017.
- 9 Durose MR, Cooper AD, Snyder HN. Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010. Bureau of Justice Statistics; April 24, 2014.

Executive Summary

- 10 Policy Research Associates. BRIEF JAIL MENTAL HEALTH SCREEN. Policy Research Associates. https://www.prainc.com/?product=brief-jail-mental-health-screen. Published June 1, 2015.
- 11 Faul M, Xu L, Wald MM, Coronado V, Dellinger AM. Traumatic brain injury in the United States: national estimates of prevalence and incidence, 2002-2006. *Injury Prevention*. 2010;16(1):A268.

Our Methods

- 12 Wisconsin Department of Health Services. Resilient Wisconsin: Adverse Childhood Experiences. Wisconsin Department of Health Services. https://www.dhs.wisconsin.gov/resilient/aces.htm. Published June 24, 2020.
- 13 Resilience Research Centre. Child and Youth Resilience Measure (CYRM-R) & Adult Resilience Measure (ARM-R) Manual 2.2. Resilience Research Centre. https://cyrm.resilienceresearch.org/measures/. Published 2019.
- 14 The Ohio Valley Center for Brain Injury Prevention and Rehabilitation. Ohio State University TBI Identification Method Interview Form. Ohio State University Wexner Medical Center. https://wexnermedical.osu.edu/-/media/files/wexnermedical/patient-care/healthcare-services/neurological-institute/departments-and-centers/research-centers/ohio-valley/osu_tbiform_july2013.pdf. Published 2007.
- 15 Duellman M, Fredrickson E, Kaldenberg P, Guthman P. Returning to the community: A quality improvement project [Presentation]. University of Wisconsin Eau Claire, College of Nursing and Health Sciences;2020a.
- 16 Duellman M, Fredrickson E, Kaldenberg P, Guthman P. Returning to the community: A quality improvement project [Project Report]. University of Wisconsin – Eau Claire, College of Nursing and Health Sciences;2020b.

Demographics

- 17 The Sentencing Project. Report to the United Nations on Racial Disparities in the U.S. Criminal Justice System. The Sentencing Project; April 19, 2018.
- 18 National Research Council. The Growth of Incarceration in the United States: Exploring Causes and Consequences. Washington, DC: The National Academies Press; 2014.

Possible Serious Mental Illness: The Brief Jail Mental Health Screen

- 19 Haney C. "Madness" and penal confinement: Some observations on mental illness and prison pain. *Punishment & Society*. 2017;19(3):310-326. doi: 10.1177/1462474517705389.
- 20 Campagna MF, Kowalski MA, Drapela LA, et al. Understanding Offender Needs Over Forms of Isolation Using a Repeated Measures Design. The Prison Journal. 2019;99(6):639-661. doi: 10.1177/0032885519877356.

- 21 James DJ, Glaze LE. *Mental health problems of prison and jail inmates.* Revised 12/14/06. ed. Washington, DC: Washington, DC: U.S. Dept. of Justice, Office of Justice Programs, Bureau of Justice Statistics; 2006. Cited by: Haney C. "Madness" and penal confinement: Some observations on mental illness and prison pain. *Punishment & Society*. 2017;19(3):310-326. doi: 10.1177/1462474517705389.
- Graf M, Wermuth P, Häfeli D, et al. Prevalence of mental disorders among detained asylum seekers in deportation arrest in Switzerland and validation of the Brief Jail Mental Health Screen BJMHS. *International Journal of Law and Psychiatry*. 2013;36(3-4):201-206. doi: 10.1016/j.ijlp.2013.04.009.
- 23 Zottola SA, Desmarais SL, Neupert SD, et al. Results of the Brief Jail Mental Health Screen Across Repeated Jail Bookings. *Psychiatric Services (Washington, DC)*. 2019;70(11):1006. doi: 10.1176/appi.ps.201800377.
- Wilson JA, Wood PB. Dissecting the relationship between mental illness and return to incarceration. *Journal of Criminal Justice*. 2014;42(6):527-537. doi: 10.1016/j.jcrimjus.2014.09.005.
- 25 Dieleman C. Mapping Community Capacity: Identifying Existing Community Assets for Supporting People with Mental Health Problems who Have Been Involved with the Criminal Justice System. Canadian Journal of Community Mental Health. 2014;33(3):29-42. doi: 10.7870/cjcmh-2014-021.
- 26 Recovery Across Mental Health. Gender differences in Mental Health. Recovery Across Mental Health. https://ramh.org/guide/gender-differences-in-mental-health/.
- 27 Veeh CA, Tripodi SJ, Pettus-Davis C, Scheyett AM. The Interaction of Serious Mental Disorder and Race on Time to Reincarceration. American Journal of Orthopsychiatry. 2018;88(2):125-131. doi: 10.1037/ort0000183.
- 28 Sakala L. Blacks Are Overrepresented in Wisconsin Prisons and Jails. Prison Policy Initiative. https://www.prisonpolicy.org/graphs/2010percent/WI_Blacks_2010.html. Published May 2014.

Adverse Childhood Experiences (ACES)

- 29 Campbell JA, Walker RJ, Egede LE. Associations Between Adverse Childhood Experiences, High-Risk Behaviors, and Morbidity in Adulthood. American Journal of Preventive Medicine. 2016;50(3):344-352. doi: 10.1016/j.amepre.2015.07.022.
- 30 Hughes K, Lowey H, Quigg Z, Bellis MA. Relationships between adverse childhood experiences and adult mental well-being results from an English national household survey. *BMC Public Health*. 2016;16(224):222. doi: 10.1186/s12889-016-2906-3.
- 31 Roos LE, Afifi TO, Martin CG, Pietrzak RH, Tsai J, Sareen J. Linking Typologies of Childhood Adversity to Adult Incarceration: Findings From a Nationally Representative Sample. American Journal of Orthopsychiatry. 2016;86(5):584-593. doi: 10.1037/ort0000144.
- 32 Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System ACE Data. U.S. Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/acestudy/ace-brfss.html. Published 2020.
- 33 Turney K. Adverse childhood experiences among children of incarcerated parents. Children and Youth Services Review. 2018;89:218-225. doi:10.1016/j.childyouth.2018.04.033.
- 34 Murphey D, Cooper PM. Parents Behind Bars: What Happens to Their Children. In: Unpublished; 2015. doi: 10.13140/RG.2.1.2444.4243.
- 35 Brown EC. School counselor conceptualizations of the needs of children of incarcerated parents. Children and Youth Services Review. 2020;112. doi: 10.1016/j.childyouth.2020.104936.

Resilience

- 36 Karairmak Ö, Figley C. Resiliency in the Face of Adversity: A Short Longitudinal Test of the Trait Hypothesis. *The Journal of General Psychology.* 2017;144(2):89-109. doi: 10.1080/00221309.2016.1276043.
- 37 Rezaei S, Mousavi SV. The Effect of Monotheistic Integrated Psychotherapy on the Levels of Resilience, Anxiety, and Depression among Prisoners. *Health, Spirituality and Medical Ethics.* 2019;6(1):2-10. doi: 10.29252/jhsme.6.1.2.
- 38 Sandvik AM, Hansen AL, Hystad SW, Johnsen BH, Bartone PT. Psychopathy, anxiety, and resiliency Psychological hardiness as a mediator of the psychopathy–anxiety relationship in a prison setting. *Personality and Individual Differences*. 2015;72(C):30-34. doi: 10.1016/j.paid.2014.08.009.
- 39 O'Donnell I. The survival secrets of solitaries. *Psychologist.* 2016;29(3):184-187.
- 40 Oliffe JL, Hanberg D, Hannan-Leith MN, Bergen C, Martin RE. "Do You Want to Go Forward or Do You Want to Go Under?" Men's Mental Health in and Out of Prison. American Journal of Men's Health. 2018;12(5):1235-1246. doi: 10.1177/1557988318765923.

Head Injury/Traumatic Brain Injury

- 41 Mayfield Clinic. Traumatic brain injury. Mayfield Brain & Spine. https://mayfieldclinic.com/pe-tbi.htm. Published July 2018.
- 42 Farrer TJ, Frost RB, Hedges DW. Prevalence of Traumatic Brain Injury in Intimate Partner Violence Offenders Compared to the General Population: A Meta-Analysis. *Trauma, Violence, & Abuse.* 2012;13(2):77-82. doi: 10.1177/1524838012440338.

- 43 Farrer TJ, Hedges DW. Prevalence of traumatic brain injury in incarcerated groups compared to the general population: A meta-analysis. *Progress in Neuropsychopharmacology & Biological Psychiatry*. 2011;35(2):390-394. doi: 10.1016/j.pnpbp.2011.01.007.
- 44 Piccolino AL, Solberg KB. The Impact of Traumatic Brain Injury on Prison Health Services and Offender Management. Journal of Correctional Health Care. 2014;20(3):203-212. doi: 10.1177/1078345814530871.
- 45 Horn ML, Lutz DJ. Traumatic brain injury in the criminal justice system: Identification and response to neurological trauma. *Applied Psychology in Criminal Justice*. 2016.
- 46 Lane KS, St. Pierre ME, Lauterbach MD, Koliatsos VE. Patient Profiles of Criminal Behavior in the Context of Traumatic Brain Injury. *Journal of Forensic Sciences*. 2017;62(2):545-548. doi: 10.1111/1556-4029.13289.
- 47 Rosenbaum A, Hoge SK. Head injury and marital aggression. Am J Psychiatry. 1989;146 (8):1048-1051. doi:10.1176/ajp.146.8.1048;
- 48 Lewis DO, Pincus JH, Feldman M, Jackson L, Bard B. Psychiatric, neurological, and psychoeducational characteristics of 15 death row inmates in the United States. Am J Psychiatry. 1986;143(7):838-845. doi:10.1176/ajp.143.7.838;
- 49 Slaughter B, Fann JR, Ehde D. Traumatic brain injury in a county jail population: prevalence, neuropsychological functioning and psychiatric disorders. *Brain Inj.* 2003;17(9):731-741. doi:10.1080/0269905031000088649;
- 50 Dyer KF, Bell R, McCann J, Rauch R. Aggression after traumatic brain injury: analysing socially desirable responses and the nature of aggressive traits. *Brain Inj.* 2006;20(11):1163-1173. doi:10.1080/02699050601049312;
- 51 Hall KM, Karzmark P, Stevens M, Englander J, O'Hare P, Wright J. Family stressors in traumatic brain injury: A two-year follow-up. *Arch Phys Med Rehabil*, 1994;75(8):876-884. doi:10.1016/0003-9993(94)90112-0;
- 52 Baguley IJ, Cooper J, Felmingham K. Aggressive behavior following traumatic brain injury: how common is common?. J Head Trauma Rehabil. 2006;21(1):45-56. doi:10.1097/00001199-200601000-00005;
- 53 Brooks N, Campsie L, Symington C, Beattie A, McKinlay W. The five year outcome of severe blunt head injury: a relative's view. *J Neurol Neurosurg Psychiatry*. 1986;49(7):764-770. doi:10.1136/jnnp.49.7.764;
- 54 Grafman RJ, Schwab MK, Warden MD, Pridgen MA, Brown MH, Salazar MA. Frontal lobe injuries, violence, and aggression: A report of the Vietnam Head Injury Study. Neurology. 1996;46(5):1231-1238. doi: 10.1212/WNL.46.5.1231
- 55 Ma Z, Bayley MT, Perrier L, et al. The association between adverse childhood experiences and adult traumatic brain injury/concussion: a scoping review. *Disabil Rehabil*. 2019;41(11):1360-1366. doi:10.1080/09638288.2018.1424957
- 56 Davies CR, Williams HW, Hinder WD, Burgess ACN, Mounce ALT. Self-Reported Traumatic Brain Injury and Postconcussion Symptoms in Incarcerated Youth. *Journal of Head Trauma Rehabilitation*. 2012;27(3):E21-E27. doi: 10.1097/HTR.0b013e31825360da.
- 57 Williams WH, Mewse AJ, Tonks J, Mills S, Burgess CNW, Cordan G. Traumatic brain injury in a prison population: Prevalence and risk for re-offending. *Brain Injury*. 2010;24(10):1184-1188. doi: 10.3109/02699052.2010.495697.

Housing Instability

- 58 Metraux S, Culhane DP. HOMELESS SHELTER USE AND REINCARCERATION FOLLOWING PRISON RELEASE*. Criminology & Public Policy. 2004;3(2):139-160. doi: 10.1111/j.1745-9133.2004.tb00031.x.
- 59 Herbert CW, Morenoff J, D., Harding DJ. Homelessness and Housing Insecurity Among Former Prisoners. *The Russell Sage Foundation Journal of the Social Sciences*. 2015;1(2):44-79. doi: 10.7758/rsf.2015.1.2.04.
- 60 Greenberg GA, Rosenheck RA. Jail incarceration, homelessness, and mental health: a national study. Psychiatric Services (Washington, DC). 2008;59(2):170. doi: 10.1176/ps.2008.59.2.170.
- 61 Couloute L. Nowhere to Go: Homelessness among formerly incarcerated people. Prison Policy Initiative. https://www.prisonpolicy.org/reports/housing.html. Published August 2018.
- 62 Bradley KH, Oliver RBM, Richardson NC, Slayter EM. NO PLACE LIKE HOME: Housing and the Ex-prisoner. Community Resources for Justice. https://pdfs.semanticscholar.org/a734/bbdae284b80eb9598e64ad83a431580e749c.pdf?_ga=2.240550659.1460997870.1593907004 -406849990.1593907004. Published 2001.
- 63 Willging CE, Malcoe LH, St Cyr S, Zywiak WH, Lapham SC. Behavioral health and social correlates of reincarceration among Hispanic, Native American, and white rural women. *Psychiatric Services (Washington, DC)*. 2013;64(6):590. doi: 10.1176/appi.ps.201200120.
- 64 Dickson-Gomez J, Convey M, Hilario H, Corbett AM, Weeks M. Structural and Personal Factors Related to Access to Housing and Housing Stability among Urban Drug Users in Hartford, Connecticut. *Contemporary Drug Problems*. 2008;35(1):115-152. doi: 10.1177/009145090803500106.
- 65 Harding DJ, Wyse JJB, Dobson C, Morenoff JD. Making Ends Meet After Prison. *Journal of Policy Analysis and Management*. 2014;33(2):440-470. doi: 10.1002/pam.21741.
- 66 Holzer HJ. What employers want: job prospects for less-educated workers. New York: New York: Russell Sage Foundation; 1996.

Children and Incarceration

- 67 Hughes K, Bellis MA, Hardcastle KA, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*. 2017;2(8):e356-e366. doi:10.1016/S2468-2667(17)30118-4.
- 68 Turney K, Goodsell R. Parental Incarceration and Children's Wellbeing. The Future of Children. 2018;28(1):147-164. doi: 10.1353/foc.2018.0007.
- 69 Cyphert AB. Prisoners of Fate: The Challenges of Creating Change for Children of Incarcerated Parents. Maryland Law Review. 2018;77(2):385-427.
- 70 Luther K. Examining Social Support Among Adult Children of Incarcerated Parents. Family Relations. 2015;64(4):505-518. doi: 10.1111/fare.12134.
- 71 Arditti JA, Lambert-Shute J, Joest K. Saturday Morning at the Jail: Implications of Incarceration for Families and Children*. Family Relations. 2003;52(3):195-204. doi: 10.1111/j.1741-3729.2003.00195.x.
- 72 Geller A, Garfinkel I, Western B. Paternal Incarceration and Support for Children in Fragile Families. *Demography*. 2011;48(1):25-47. doi: 10.1007/s13524-010-0009-9.
- 73 United For ALICE. WISCONSIN 2016 STATE OVERVIEW. United Way of Northern New Jersey. https://www.unitedforalice.org/wisconsin. Published 2018.
- 74 Dallaire DH. Incarcerated Mothers and Fathers: A Comparison of Risks for Children and Families. Family Relations. 2007;56(5):440-453. doi: 10.1111/j.1741-3729.2007.00472.x.
- 75 Novero CM, Booker Loper A, Warren JI. Second-Generation Prisoners: Adjustment Patterns for Inmates With a History of Parental Incarceration. *Criminal Justice and Behavior*. 2011;38(8):761-778. doi: 10.1177/0093854811406637.
- 76 Murray J, Janson C-G, Farrington DP. Crime in Adult Offspring of Prisoners: A Cross-National Comparison of Two Longitudinal Samples. Criminal Justice and Behavior. 2007;34(1):133-149. doi: 10.1177/0093854806289549.
- 77 Wirth T. E-mail communication. Received October 2013.
- 78 ElHage A. Keeping Children in the Family Instead of Foster Care. Institute for Family Studies. https://ifstudies.org/blog/keeping-children-in-the-family-instead-of-foster-care. Published August 18, 2016.

Use of Emergency Rooms

- 79 Kulkarni SP, Baldwin S, Lightstone AS, Gelberg L, Diamant AL. Is incarceration a contributor to health disparities? Access to care of formerly incarcerated adults. *Journal of Community Health*. 2010;35(3):268. doi: 10.1007/s10900-010-9234-9.
- 80 CDC National Center for Health Statistics. Emergency Department Visits. Center for Disease Control and Prevention. https://www.cdc.gov/nchs/fastats/emergency-department.htm. Published January 19, 2017. Accessed July 3, 2020.
- 81 Kaiser Family Foundation. Hospital Emergency Room Visits per 1000 Population by Ownership type. Kaiser Family Foundation. https://www.kff.org/other/state-indicator/emergency-room-visits-by-ownership/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D. Accessed July 3, 2020.
- 82 Chodos AH, Ahalt C, Cenzer IS, Myers J, Goldenson J, Williams BA. Older jail inmates and community acute care use. *American Journal of Public Health*. 2014;104(9):1728. doi: 10.2105/AJPH.2014.301952.
- 83 Wang EA, Hong CS, Shavit S, Sanders R, Kessell E, Kushel MB. Engaging individuals recently released from prison into primary care: a randomized trial. American Journal of Public Health. 2012;102(9):e22. doi: 10.2105/AJPH.2012.300894.
- 84 Niedzwiecki MJ, Sharma PJ, Kanzaria HK, McConville S, Hsia RY. Factors Associated With Emergency Department Use by Patients With and Without Mental Health Diagnoses. JAMA Network Open. 2018;1(6). doi: 10.1001/jamanetworkopen.2018.3528.
- 85 Hiller ML, Webster JM, Narevic E, Staton M, Garrity TF, Leukefeld C. Prisoners with Substance Abuse and Mental Health Problems: Use of Health and Health Services. The American Journal of Drug and Alcohol Abuse. 2005;31(1):1-20. doi: 10.1081/ADA-37552.
- 86 Frank J, Linder J, Becker W, Fiellin D, Wang E. Increased Hospital and Emergency Department Utilization by Individuals with Recent Criminal Justice Involvement: Results of a National Survey. *Journal of General Internal Medicine*. 2014;29(9):1226-1233. doi: 10.1186/1471-227X-13-16.
- 87 Humphreys J, Ahalt C, Stijacic-Cenzer I, Widera E, Williams B. Six-Month Emergency Department Use among Older Adults Following Jail Incarceration. *Journal of Urban Health*. 2018;95(4):523-533.
- Borschmann R, Young J, Moran P, et al. Ambulance attendances resulting from self-harm after release from prison: a prospective data linkage study. Social Psychiatry and Psychiatric Epidemiology. 2017;52(10):1295-1305. doi: 10.1007/s00127-017-1383-z.

General Recommendations

- 89 Watkins E. Combining cognitive therapy with medication in bipolar disorder. *Advances in Psychiatric Treatment*. 2003;9(2):110-116. doi:10.1192/apt.9.2.110.
- 90 Hollon SD, DeRubeis RJ, Fawcett J, et al. Effect of cognitive therapy with antidepressant medications vs antidepressants alone on the rate of recovery in major depressive disorder: a randomized clinical trial. JAMA Psychiatry. 2014;71(10):1157-1164. doi:10.1001/jamapsychiatry.2014.1054.

Appendix A: Datablitz Screening Instrument

Introductory Questions

1. County?

Hi. My name is [name] and I'm a student at the University of Wisconsin – Eau Claire. Thank you for agreeing to participate in this screening process. I'd like to start by getting your consent to use the information you'll give us today. I'll read this to you and then give you a copy, OK?

- 2. Do we have your consent to participate?
- 3. Have you taken this survey before?
- 4. We will not give the information you tell us during this screening to jail staff, jail medical staff, or jail mental health staff. We are not employees of this county or this jail. If there is something that you want them to be aware of, you will need to inform them on your own. Do you understand?

Situation Prior to Arrest

First, I'll ask some questions about your situation prior to your arrest, OK?

- 5. In the 12 months prior to your arrest, how many places had you lived?
- 6. On the day of your arrest, how long had you lived at that location?
- 7. Did you have your name on the lease/mortgage at your last location?
- 8. Were there a lot of people coming and going in and out of that residence?
- 9. Who were you living with at that residence?
- 10. On the day of your arrest, did you have food?
 - a. If no, what did you do?
- 11. On the day of your arrest, did you have running water?
 - b. If no, what did you do?
- 12. On the day of your arrest, did you have heat?
 - c. If no, what did you do?
- 13. On the day of your arrest, did you have electricity?
 - d. If no, what did you do?
- 14. On the day of your arrest, did you have a bed?
 - e. If no, what did you do?
- 15. On the day of your arrest, did you have a toilet?
 - f. If no, what did you do?
- 16. On the day of your arrest, did you have a shower or bathtub?
 - a. If no, what did you do?
- 17. On the day of your arrest, did you have a washing machine?
 - g. If no, what did you do?
- 18. On the day of your arrest, did you have a refrigerator?
 - h. If no, what did you do?
- 19. On the day of your arrest, did you have a stove?
 - i. If no, what did you do?

- 20. On the day of your arrest, did you have a microwave?
 - j. If no, what did you do?
- 21. In your last residence, did you have a room to yourself/shared with a significant other?
- 22. At your last residence, how safe did you feel?
- 23. At your last residence, how safe did you feel your belongings were?
- 24. Did you ever have a physical confrontation with the owner of your last residence?
- 25. Did you ever have a verbal confrontation with the owner of your last residence?
- 26. If you answered yes to either of the previous two questions, please explain how this confrontation affected your living situation.
- 27. Have you ever been evicted?
- 28. Do you have a place to stay on the day you are released from jail?
 - k. If yes, do you want to live there?
 - i. If no, why don't you want to return to that residence?
- 29. Do you know your release date?
- 30. What is your status here?
- 31. Do you have kids under the age of 18 that you are responsible for?
 - l. If yes, do you have your parental rights?
- 32. Has a child in your custody ever been removed from your home?
- 33. Were you ever removed from the custody of your parent/guardian/custodian?
- 34. Prior to your arrest, did you feel like you belonged and were welcome in your town or your community?
- 35. In the 2 weeks prior to your arrest, did you have paid employment?
 - m. If yes, how many hours of paid work did you have per week?
- 36. Have you been in jail before?
- 37. Did you use an emergency room within the year prior to your arrest? This DOES NOT include use of an urgent care clinic.
- 38. How many times in the year prior to your arrest did you use an emergency room? (NOT an urgent care clinic)
- 39. Which emergency rooms did you use in the year prior to your arrest?

ACE Questions

Now I'd like to ask you some questions about events that may have happened during your childhood. Looking back before you were 18 years old...

- 40. Did you live with anyone who was depressed, mentally ill, or suicidal?
- 41. Did you live with anyone who was a problem drinker or alcoholic?
- 42. Did you live with anyone who used illegal street drugs or who abused prescription medication?
- 43. Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
- 44. Were your parents separated or divorced?
- 45. How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?

- 46. Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way (not including spanking)?
- 47. How often did a parent or adult in your home ever swear at you, insult you, or put you down?
- 48. How often did anyone at least 5 years older than you, or an adult, ever touch you sexually?
- 49. How often did anyone at least 5 years older than you, or an adult, try to make you touch them sexually?
- 50. How often did anyone at least 5 years older than you, or an adult, force you to have sex?

Resilience Questions

Now I'd like to ask a few more questions about you. To what extent do you feel the following statements apply to you? There are no wrong answers.

- 51. I cooperate with people around me.
- 52. Getting and improving qualifications or skills is important to me.
- 53. I know how to behave in different social situations.
- 54. My family usually have supported me through life.
- 55. My family knows a lot about me.
- 56. If I'm hungry, I can get food to eat.
- 57. People like to spend time with me.
- 58. I talk to my family/partner about how I feel.
- 59. I feel supported by my friends.
- 60. I feel that I belong in my community.
- 61. My family/partner stand/s by me during difficult times.
- 62. My friends stand by me during difficult times.
- 63. I am treated fairly in my community.
- 64. I have opportunities to show others that I can act responsibly.
- 65. I feel secure when I am with my family/partner.
- 66. I have opportunities to apply my abilities in life (like skills, a job, caring for others, etc.)
- 67. I enjoy my family's/partner's cultural and family traditions.

Head Injury Questions

Now I'd like to ask you about possible brain injuries you may have had, OK?

- 68. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
- 69. In your lifetime, have you ever injured your head or neck in a car accident or from crashing in some other moving vehicle like a bicycle, motorcycle, or ATV?
- 70. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something? (for example: falling from a bike or horse, rollerblading, falling on ice, being hit by a rock, etc.)
- 71. Have you ever injured your head or neck playing sports or on a playground?
- 72. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently, or have you ever been shot in the head?
- 73. In your lifetime, have you ever been nearby when an explosion or blast occurred? If your served in the military, think about any combat- or training-related incidents.

- 74. If you answered yes to any of the last 6 (head or neck injury) questions, were you ever knocked out or did you lose consciousness?
- 75. If you did lose consciousness, for how long?
- 76. If you did not lose consciousness, were you dazed or did you have a gap in your memory from the injury?
- 77. If you were dazed or had a memory gap, how long did that last?
- 78. How many head and/or neck injuries have you had in your lifetime?
- 79. How old were you when the first head/neck injury occurred?

BJMHS Questions

Now I'd like to ask you a few more questions about your current health, OK?

- 80. Do you currently believe someone can control your mind by putting thoughts into your head or taking thoughts out of your head?
- 81. Do you currently feel that other people know your thoughts or can read your mind?
- 82. Have you lost or gained as much as 2 pounds a week within the last several weeks without even trying?
- 83. Have you or your family or friends noticed that you are currently much more active than you usually are?
- 84. Do you currently feel like you have to talk or move more slowly than you usually do?
- 85. Have there currently been a few weeks when you felt like you were useless or sinful?
- 86. Are you currently taking any medication prescribed for you by a physician for any emotional or mental health problems?
- 87. Have you ever been in a hospital for emotional or mental health problems?

Demographic Questions

May I ask you just a few more questions about yourself?

- 88. What is your age?
- 89. What gender do you identify with?
- 90. What race/ethnicity do you identify with?
- 91. What is the highest level of education you have completed?

That's all of our questions. Do you have any questions for me? [If yes, answer]. Remember that if any of these questions has caused you emotional distress or re-trauma, you can seek mental health services by submitting a Kiosk message. Thank you for your help and participation!

Appendix B: Jail Kiosk Message

Your Story is Important!

On March 12-14, 2020, students from the University of Wisconsin-Eau Claire will be visiting the jail to screen willing individuals about their childhood trauma, mental health, and to find out about their living conditions prior to arrest. Your participation will help change how the Chippewa Valley community thinks about folks with conviction histories. The students will **not** ask you to identify yourself during this screening, so your responses will be entirely confidential and anonymous. The students will also not ask you any questions about your charges or any additional charges you may have received while you're here. The confidential information we collect will be shared with Exlocarcerated People Organizing (EXPO) to help them advocate for better treatment of people with conviction histories. The anonymous, confidential information will also be shared with Eau Claire/Chippewa/Dunn County, to help the county understand how to create better support programs to help you. The county will also provide University of Wisconsin-Eau Claire screeners with publicly available information about you but will not reveal your identity to us. The screening process will take about 20 minutes.

Thanks for considering being screened! Please talk to Josh/Jennifer if you would be willing to participate.

Help end stigma against people with conviction histories!

Appendix C: Informed Consent Letter

ACES, Resilience, Mental Health, Head Injury, and Pre-Arrest Living Conditions Screening

You are being recruited to participate in this screening because you are incarcerated in the Eau Claire/Chippewa/Dunn County Jail. The purpose of this project is to screen you for important health conditions and find out about your living conditions immediately prior to your arrest. The information you give us will be used to help us understand what kind of support you'll be needing when you reenter the community after you are released, help us create better programming for you while you are incarcerated, and help us create training opportunities for jail staff.

Your name and other identifying information will not be collected during your screening, so the information you share with us cannot be traced back to you in any way. Your answers will be confidential and will not be used to inform any legal process you are involved in or affect any of your rights. We will not be sharing your specific personal information with any jail staff, jail medical, or jail mental health staff. We are not employees of Eau Claire/Chippewa/Dunn County and aren't permitted to share your specific personal information with them. Eau Claire/Chippewa/Dunn County will provide us with publicly available information about everyone we screen but will not provide us with any identities, so we cannot trace that anonymous information back to you. If there is something you want Eau Claire/Chippewa/Dunn County jail staff made aware of, you will need to inform them on your own.

We will share the anonymous results of these screenings with Ex-Incarcerated People Organizing (EXPO) to support their efforts to benefit individuals with conviction histories. We will also provide our anonymous results to Eau Claire/Chippewa/Dunn County to help them develop and deliver programs to benefit individuals who are incarcerated and who have conviction histories.

During the screening, I will ask you to share information about your childhood, your past and current health status, and your living conditions during the weeks immediately prior to your arrest. The screening shouldn't take more than 20 minutes and your participation is completely voluntary. You are under no obligation to answer a question you would rather not answer, and you are always free to stop participating in the screening process at any time.

Because we will be asking you about your past experience with possibly traumatic events, the screening may cause you emotional distress. If you experience distress or re-trauma during this screening, you may request mental health services by submitting a Kiosk Message.

Your participation in this research project is entirely voluntary and not a requirement or a condition for being the recipient of benefits or services from the County of Eau Claire/Chippewa/Dunn, EXPO, or the University of Wisconsin-Eau Claire or its University Honors Program.

If you have any questions or concerns about your treatment in this study, you may contact

Dr. Ruth Cronje 715-836-5384

cronjerj@uwec.edu