

June 30, 2019

Prepared for the California Department of Corrections and Rehabilitation

Authored by: Nena Messina, PhD Stacy Calhoun, PhD



SHU Evaluation Findings



CENTER FOR GENDER AND JUSTICE

HEALING TRAUMA: A BRIEF INTERVENTION FOR WOMEN CALIFORNIA INSTITUTION FOR WOMEN

(Covington, 2012, rev 2016)

Prepared by Envisioning Justice Solutions, Inc.

Acknowledgments:

The Center for Gender and Justice and Envisioning Justice Solutions, Inc. would like to acknowledge retired Captain Rochelle Leonard for her unwavering dedication and facilitation of the *Healing Trauma* program. We would also like to thank Karen Vertti for her voluntary assistance with the delivery of program in the SHU. We are also grateful for CDCR's and CIW's continued support of the program, graduations, research and ongoing navigation of the program in a difficult environment. Finally, we wish to thank the participants who voluntarily agreed to participate in the surveys, sharing their life experiences with us.

Executive Summary

The *Healing Trauma* program was implemented in the Secure Housing Unit (SHU) at the California Institution for Women on July 1, 2017.

The findings from this evaluation show that participation in the *Healing Trauma* program is associated with improvements in 13 out of 29 outcomes assessed in the evaluation. Specifically, significant improvements were found for the following outcomes:

- Depression
- Anxiety
- ❖ PTSD
- ❖ Anger
- Hostility
- Physical Aggression
- Verbal Aggression
- Indirect aggression
- Angry Temperament
- Angry Reactions
- Outward Expression of Angry Feelings
- Instrumental Anger
- Social Connectedness

While there was great interest in this program among the women residing in the SHU, the indeterminate nature of the SHU exit dates made it difficult to identify women who would remain in the SHU long enough to complete the full 6-session program. Thus, almost a quarter of the women were transferred out of the SHU before they were able to complete the program. Nevertheless, 64% of the 58 women who enrolled in *Healing Trauma* during the project period completed and graduated from the program.

The findings from the qualitative portion of this evaluation provide further evidence of the positive impact that this program is having on the women who have participated in this program. Specifically, the *Healing Trauma* participants have noted improvements in their anger, impulsivity, and relationships. For many of the participants, this was the first group to truly engage them and help them understand how their past trauma has been influencing their lives. They specifically noted that the facilitators played an instrumental role in helping them grow and change the behaviors that were leading them to the SHU. The women reported that as a result of participating in this program, they are taking steps to continue on their quest to better themselves by participating in additional programming. While there are several limitations to the study that limit the generalizability of the results, the findings from this evaluation suggest that this program is having a positive impact on the women who have participated in it.

Program Evaluation Services for the CDCR Contract # C5607040

BACKGROUND

Research assessing the needs of women offenders consistently shows extensive histories of trauma and abuse throughout their lives (e.g., physical abuse, sexual abuse, domestic violence, etc.). Trauma and abuse are consistently reported in the literature as critical factors negatively impacting the lives of women (Cauffman, 2008). Furthermore, greater exposure to adverse childhood events (ACEs) has been found to increase the likelihood of physical and mental health problems and antisocial behaviors in a sample of women on parole in California (Messina & Grella, 2006). ACEs may also increase the risk of women perpetrating Intimate Partner Violence (IPV). For instance, Kruttschnitt and colleagues (2002) found that childhood trauma was highly correlated with female-perpetrated violence. Violent and aggressive behavior results in disciplinary actions that can lead to administrative segregation. Researchers have shown that isolation can have negative impacts on women and contend that treatment programs focused on trauma are needed to provide the necessary tools to avoid conflict with staff and other women, which often results in segregation.

The high prevalence of trauma among justice-involved women underscores the importance of multi-modal interventions that address the critical factors associated aggression and other antisocial behaviors (McGuire, 2008). With an increased understanding of the impact of trauma, clinicians are beginning to recognize specific issues for women and their relation to criminal involvement and have been able to establish treatment guidelines for trauma and post-traumatic stress disorder (PTSD). Trauma-related difficulties are best treated in stages with the present-focused first stage focusing on safety, education, and skill building.

Understanding the critical factors surrounding anger, aggression, and conflict is imperative to develop policies and programs to address the needs of those involved in the criminal justice system. This area of research can ultimately result in the delivery of evidence-based interventions, which may create an understanding of the resulting trauma from histories of violence and reduce the reoccurrence of such trauma.

The *Healing Trauma* (HT) Project was designed to provide violence prevention and trauma-informed services to women serving SHU terms in California. The HT program continues to operate in the SHU and is now being facilitated in both women's prisons in California in the general population, in the reception center, and for high need populations (CCCMS and EOP).

PROGRAM DESCRIPTION

HT is a brief (6-session) manualized curricula designed for women who have experienced trauma and violence associated with ACEs. The materials are gender responsive and reflect an understanding of the impact of trauma on women. The intervention focuses on three core elements: (1) an understanding of what trauma is, (2) its process, and (3) its

impact on both the inner self (thoughts, feelings, beliefs, values) and the outer self (behavior and relationships). The programs encompass the risk/need responsivity principle within its creation and content.

Based on the content on trauma and abuse, the HT program is delivered in small groups of 6 to 10 women. The program content specifically addresses the childhood trauma, family/relationship dysfunction and victimization, and challenges antisocial norms to reduce the violence and aggression that has marked the history in many inmate's lives. The HT curriculum includes a variety of therapeutic approaches: CBT, expressive arts, mindfulness, and guided imagery.

HT consists of the following 2-hour sessions: Session 1: Welcome and Introduction to the Subject of Trauma; Session 2: Power and Abuse; Session 3: The Process of Trauma and Self-Care; Session 4: The ACE Questionnaire and Anger; Session 5: Healthy Relationships; Session 6: Love, Endings, and Certificates.

There is a Facilitator Guide and participant Workbook for each program. The materials are on a CD allowing for easy duplication. The workbook is written in both English and Spanish. Antisocial patterns are addressed by building self-management skills through CBT sessions on the connection between thinking, feeling, and behavior (anger and violence). Procriminal attitudes are addressed using a group process with group agreements and creates an opportunity to learn how to be in a prosocial community.

The emphasis on using a closed group model creates the experience of a prosocial support system based on a new value system and the group agreements. Risk factors for dysfunctional relationships are addressed as both abusive and supportive relationship characteristics are explored throughout the content. Due to the educational challenges found among incarcerated populations, the programs also use experiential learning. These are interactive exercises incorporating CBT, mindfulness and social learning theory.

Staff Facilitators: All staff responsible for managing and/or facilitating the HT program in the SHU attended a 1-day in-depth training on the HT curriculum that was facilitated by the program's author, Stephanie Covington, Ph.D. The HT program in the SHU was managed by Rochelle Leonard (a retired annuitant) and Karen Vertti (a Supervising Psychiatric Social Worker). During the first year of the project, two members of Ms. Vertti's social work team facilitated the groups in the SHU. In the second year, Captain Leonard and Ms. Vertti facilitated the groups.

Eligible Inmate Participants: All inmates housed in the SHU at CIW who had enough time remaining in the SHU term to fully complete the 6-week curriculum were eligible to participate in the program.

Objectives

This evaluation study sought to assess the overall effectiveness of the HT curricula to reduce trauma-related difficulties as measured by PTSD symptoms, anger, aggression, depression,

and overall mental health in women housed in the Secured Housing Unit (SHU) at the California Institution for Women.

METHODOLOGY

The following is a summary of the activities related to the HT Program and Evaluation in the SHU at the California Institution for Women (7/1/2018-06/30/2019):

Procedure

Inmates who wished to participate in the HT program verbally expressed their interest in participating to the institutional staff overseeing the program. For the most part, all inmates who expressed a desire to participate and who appeared to have enough time left on their SHU term were accepted and allowed to participate in the program. However, some individuals were transferred back to the general population or another institution before they were able to complete their program. Individuals transferring back to the general population at the CIW could participate in HT in the general population.

All inmates who wished to participate in the HT program were administered a pre-program questionnaire. They were then scheduled to participate in the next available set of HT sessions. Upon completing the intervention, each participant was administered a post-program questionnaire. Change over the course of the intervention on measures of interest were then computed.

Measures

To assess the effectiveness of the HT intervention, data were collected during the pre- and post-assessments on 29 different measures that made up 10 primary outcomes. Below are the primary outcomes and the scales that made up those outcomes.

Anxiety

Patient Health Questionnaire – Anxiety Subscale: The Patient Health Questionnaire Anxiety Subscale is a 6-item subscale that measures anxiety symptoms felt over the past four weeks (Spitzer, Kroenke, & Williams, 1999).

Depression

Patient Health Questionnaire – Depression Subscale: The Patient Health Questionnaire Depression Subscale is a 9-item subscale that measures current depressive symptomology (Spitzer et al., 1999).

PTSD Symptoms

Short Screening Scale for DSM-IV PTSD: The Short Screening Scale for DSM-IV Posttraumatic Stress Disorder is used to assess current symptoms of PTSD. Respondents complete a 7-item scale concerning symptom frequency in the prior four-week period (Breslau, Peterson, Kessler, & Schultz, 1999).

Mental Health

K6 Brief Mental Health Screen: The K6 Brief Mental Health Screen is a 6-item scale that assesses psychological distress (Kessler et al., 2002, 2003).

Aggression (5 Measures)

Buss-Warren Aggression Questionnaire (AQ): The Buss-Warren Aggression Questionnaire (AQ) is a 34-item instrument used to assess anger and aggression. The instrument includes five subscales: Physical Aggression, Verbal Aggression, Anger, Hostility, and Indirect Aggression (Buss & Warren, 2000).

State & Trait Anger (4 State / 7 Trait measures)

State-Trait Anger Expression Inventory—2 (STAXI-2): The STAXI-2 measures the experience and intensity of anger as an emotional state (State Anger) and as an emotional trait (Trait Anger). State Anger refers to the intensity of angry feelings at a particular time; Trait Anger refers to how angry emotions are expressed over time. The State Anger scale assesses the intensity of angry feelings at a particular time and the Trait Anger scale measure how angry emotions are expressed over time (Spielberger, 1999)

- The State Anger scale consists of three subscales: Feeling Angry, Feeling like Expressing Anger Verbally, and Feeling like Expressing Anger Physically. There is also a Composite State Anger scale.
- The Trait Anger scale consists of six subscales: Angry Temperament, Angry Reaction, Anger Expression-Out, Expression-In, Anger Control-Out, and Anger Control-In There is also a Composite Trait Anger scale. Anger Expression scales measure the extent to which respondents express their anger in aggressive behavior directed toward other

persons or objects in the environment or suppress angry feelings rather than expressing them physically or verbally. Anger Control scales measure the extent to which respondents expend energy monitoring and preventing the outward experience and expression of anger or expend energy in calming down and reducing anger.

Interpersonal & Expressive Representation (2 Measures)

Instrumental and Expressive Representation Scale (IERS): Instrumental and expressive anger were assessed through Revised Instrumental and Expressive Representation Scales invented by Campbell and colleagues. The scales had 16 items with 2 subscales (instrumental and expressive) assessing anger expression (Campbell, Muncer, McManus, & Woodhouse, 1999).

Interpersonal Reactivity (6 Measures)

Interpersonal Reactivity Index: The Interpersonal Reactivity Index (Davis, 1983) is a measure of dispositional empathy. Two subscales focus on separate facets of empathy. Perspective Taking measures the reported tendency to spontaneously adopt the psychological point of view of others in everyday life. Empathic Concern assesses the tendency to experience feelings of sympathy and compassion for unfortunate others.

Social Connectedness

Social Connectedness Scale-Revised: The Social Connectedness Scale-Revised assesses experiences of closeness in interpersonal contexts, as well as difficulties establishing and maintaining a sense of closeness (Lee & Lee, 2001).

Emotional Regulation (6 Measures)

Difficulties in Emotional Regulation Scale (DERS): The DERS is a multidimensional self-report measure assessing individuals' characteristic patterns of emotion regulation (Gratz & Roemer, 2004). The 18-item short version was used for this evaluation. It contains six subscales that were theoretically formulated and confirmed through factor analysis: (1) Nonacceptance of Emotional Responses, (2) Difficulties Engaging in Goal-Directed Behavior, (3) Impulse Control Difficulties, (4) Lack of Emotional Awareness, (5) Limited Access to Emotion Regulation Strategies, and (6) Lack of Emotional Clarity. Total score for each

subscale ranges from 1 to 30 with higher scores indicating more difficulties in emotion regulation.

Statistical Analysis

Paired-sample *t*-tests were conducted to assess changes in the main outcomes across time. Paired-sample *t*-tests allow us look at change over time per individual but report the findings for the group. Thus, we do not need to control for other variables (e.g., age or race, etc.) because each person is their own control case and demographic variables will not vary over time. Statistical significance is represented by the "p-value." This value represents the probability that the observed results would have occurred if the program indeed did <u>not</u> have an impact on the participants. The commonly accepted minimal p-value that represents statistical significance is p<.05. Thus, a p-value of <.05 means that there is only a .05 percent probability that the observed difference between the pre- and post-test means for an item would have occurred if the program did not have an impact on the participants.

Participant Characteristics

A total of 58 women participated in HT during the project period with 64% graduating from the program (i.e., completing at least 5 sessions). Of the 21 women who did not graduate, early release/transfer was the main reason for their noncompletion (62%). Other reasons for noncompletion included not being ready to deal with past trauma (24%) and scheduling conflicts (14%). Tables 1 – 4 below provide background information on the 58 women who enrolled in the HT program during the 2017-2019 project period. Table 1 contains demographic statistics. Table 2 contains criminal background statistics. Table 3 contains drug-use background statistics, Table 4 contains adverse childhood event statistics, and Tables 5 contain victim-perpetrator statistics.

Demographics (Table 1). The SHU participants had a mean age of 34 years. A little over a third of the participants self-identified as Latina, about 27% as Black, 22% as multiracial, and 14% as White. Over half of the participants reported that they were never married. Finally, over half of the participants completed some high school, about 16% had a high school diploma or GED, 10% had a vocational certificate, 17% had completed some college, and 3% had a college degree. Of the 30 women who responded to the questions about education they received while in prison, approximately 7% reported that they obtained a GED while in prison, and another 7% reported completing some college courses while in prison.

TABLE 1: Demographics

Age (n=58)	Mean: 33.50 (SD=8.82)
Race/Ethnicity (n=58)	
Latino	36.2%
White	13.8%
Black	27.6%
Multiracial	22.4%
Marital Status (n=58)	
Never Married	63.8%
Legally Married	8.6%
Living Together	12.1%
Separated/Divorced/Widowed	13.7%
Education (n=58)	
No High School	6.9%
Some High School	51.7%
High School Diploma	5.2%
GED	10.3%
Vocational Certificate	5.2%
Some College	17.2%
College Degree	3.4%
Obtained GED in Prison (n=30)	6.9%
Any College in Prison (n =30)	6.9%

Criminal Background (Table 2). On average, HT participants were 16 years old at the time of their first arrest. They reported being arrested 15 times on average and the mean number of years they spend incarcerated was 12 years. These participants reported that they have completed 4 prior SHU terms on average and the mean number of months they have spent in the SHU over their lifetime was 29 months. Of the 34 women who provided information about their conviction, the most common offense that led to their current incarceration was larceny (i.e., theft, burglary, robbery) followed by "death of another" (i.e., homicide, murder, manslaughter), and assault. It is important to note that data relating to "Offense Leading to Current Incarceration" were based solely on self-report.

TABLE 2: Criminal Background

Arrests & Incarcerations (n=56)	<u>M (SD)</u>
Lifetime Arrests	14.6 (19.45)
Age of First Arrest	16.4 (4.72)
Lifetime Years of Incarceration	11.6 (8.42)
SHU Incarcerations (n=58)	
Number of times incarcerated previously in SHU	4.3 (3.55)
Number of months spent in SHU confinement in lifetime	29.2 (25.83)
Offense Leading to Current Incarceration(n=34) 1	
Homicide/Murder/Manslaughter	17.6%
Assault	17.6%
Theft/Burglary/Robbery	35.3%
Carjacking	5.9%
Kidnapping	8.8%
Drugs	2.9%
Other	11.8%

¹ Based on self-report.

Drug Use Background (Table 3). Slightly over 91% of the participants reported using alcohol or drugs in the 12 months prior to the arrest that led to their current incarceration. The most prevalent drugs used during that 12-month period were alcohol (94%), marijuana (60%), and amphetamines (55%). Of particular interest is the frequency of alcohol and drug use in the 12-months prior to arrest. With respect to alcohol usage, the largest proportion of participants reported using alcohol 2 to 3 times per week. However, with respect to drug use, the largest proportion of participants reported using drugs nearly every day or daily.

TABLE 3: Drug Use Background

Used Alcohol or Drugs in 12 Months Prior to Arrest (n=58)	91.4%
Alcohol/Drugs Used in 2 Months Prior to Arrests (n=53) ¹	
Alcohol	94.3%
Marijuana	60.4%
Cocaine	26.4%
Heroin	24.5%
Amphetamines	54.7%
Prescription Drugs	18.9%
Designer Drugs	13.2%
Hallucinogens	13.2%
Frequency of <u>Alcohol</u> Use in 12 Months Prior to Arrests ¹	
Never	3.8%
About once a month	11.3%
About once a week	15.1%
2-3 times per week	22.6%
Nearly every day	17.0%
Every day	17.0%
Frequency of Drug Use in 12 Months Prior to Arrests ¹	
Never	13.2%
About once a month	1.9%
About once a week	7.5%
2-3 times per week	5.7%
Nearly every day	20.8%
Every day	37.7%

¹Reported as a percent of those who reported using alcohol and/or drugs in the 12 months prior to arrest.

Adverse Childhood Events (Table 4). HT was designed for women who have been abused or have experienced trauma associated with adverse childhood experiences (ACEs). As part of the pre-program questionnaire, inmates were administered the ACE questionnaire. This questionnaire asks respondents to indicate (Yes or No) whether they had experienced any one of 10 different adverse childhood experiences. Research has shown a direct link between one's ACE score and chronic illness in adulthood adult, as well as depression, domestic violence and suicide. For example, an individual with an ACE score of four or higher was 460% more likely to experience depression and 1,220% more likely to attempt suicide (Felitti et al., 1998). The prevalence of adverse childhood experiences is also a predictor of trauma for many individuals.

Table 4 lists the 10 questions that make up the ACE questionnaire and the mean ACE scores (sum of "yes" answers to the 10 questions) of inmates across all sites in this study. The most common adverse events experienced by the HT participants was parental separation (78%), verbal abuse (74%), household substance abuse (71%), and sexual abuse (62%). SHU participants had a mean ACE score of 5.52 (SD=2.52); 85% of inmates scored higher than a 2, and 53% scored higher than 5.

Table 4: Adverse Childhood Events

1	Did a parent or other adult in the household often or very often swear at you, insult you, put you down, or humiliate you, or act in a way that made you afraid that you might be physically hurt?				
2	Did a parent or other adult in the household often or very often push, grab, slap, or throw something at you, or ever hit you so hard that you had marks or were injured?				
3	have you	Did an adult or person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way, or attempt or actually have oral, anal, or vaginal intercourse with you?			
4	you wer	often or very often feel that no one in your family loved you or thought e important or special, or your family didn't look out for each other, feel each other, or support each other?	59%		
5	Did you often or very often feel that you didn't have enough to eat, had to wear dirty clothes, and had no one to protect you, or your parents were too drunk or high to take care of you or take you to the doctor if you needed it?				
6	6 Were your parents ever separated or divorced? 78%				
7	Was your mother or stepmother often or very often pushed, grabbed, slapped, or had something thrown at her, or sometimes, often, or very often kicked, 29% bitten, hit with a fist, or hit with something hard?				
8	Did you live with anyone who was a problem drinker or alcoholic or who used 71%				
9	Was a household member depressed or mentally ill, or did a household member 45% attempt suicide?				
10			53%		
Number of Childhood Adverse Events Endorsed					
Me	an (SD)	5.52 (2.52)			
Sco	ore > 2	85%			
Score > 5 53%					

Victimization and Perpetrator Statistics (Table 5). As part of the pre-program questionnaire, participants were asked to indicate whether or not they had ever been the victim or perpetrator of 15 different behaviors. These behaviors can be categorized into four major categories: (1) minor physical abuse (three behaviors: pushed, hit, restrained), (2) severe physical abuse (four behaviors: choked, burned, beaten, shot/stabbed), (3) threats and intimidation (seven behaviors: threats of physical harm or death to self, children, family members, or friends), and (4) sexual abuse/assault (one behavior: forced into unwanted sex act). For each behavior, inmates were asked to indicate whether it had ever happened to them in their lives, or if they had ever engaged in the behavior. If the answer to either was yes, they were then asked to indicate whether:

- 1. It happened to them as a child before the age of 18,
- 2. It happened to them as an adult by a romantic partner,
- 3. It happened to them as an adult by someone other than a romantic partner,
- 4. They did it as an adult to a romantic partner, or
- 5. They did it as an adult to someone other than a romantic partner.

Items 1-3 represent instances in which the inmate would have been a victim of the behavior. Items 4-5 represent instances in which the inmate would have been acting as a perpetrator.

Tables 5 and 6 collapse these data down into frequencies relating to whether respondents were (1) victims as children, (2) victims as adults, or (3) perpetrators as adults of each major category of behavior. These tables further report the results of analyses that suggest relationships between being a victim and being a perpetrator for each category of behavior. Prior to the age of 18, 69% of the HT participants reported that they had been victims of minor physical abuse, 72% reported being victims of severe physical abuse, 43% reported forced being victims of sexual abuse/assault, and 78% reported being victims of threats and intimidation. Higher percentages were reported for minor physical abuse, severe physical abuse, and sexual abuse/assault victimization as an adult. With regard to being the perpetrators of these behaviors as adults, 67% reported perpetrating minor physical abuse as an adult, 67% reported perpetrating severe physical abuse as an adult, 3% reported being the perpetrator of forced sex as an adult, and 53% reported being the perpetrator of threats or intimidation as an adult.

Chi-square analyses were performed to examine relationships between being a victim and being a perpetrator for each category of behavior. Results from these analyses show that victimization as an adult was significantly related to being a perpetrator of minor physical abuse, severe physical abuse and intimidation as an adult. Additionally, being sexually abused/assaulted as a child was significantly related to being sexually assaulted as an adult. Receiving threats as a child was also significantly related to receiving threats as an adult.

Minor Physical Abuse

- √ 80% of women who reported being victims of minor physical abuse as a child, reported being the continued victims of minor physical abuse as adults.
- √ 75% of women who reported being victims of minor physical abuse as a child, reported being the perpetrators of minor physical abuse as adults.

✓ **78%** of women who reported being victims of minor physical abuse as an adult, reported also being the perpetrators of minor physical abuse as adults.

Severe Physical Abuse

- √ 91% of women who reported being victims of severe physical abuse as a child, reported being the continued victims of severe physical abuse as adults.
- √ 74% of women who reported being victims of severe physical abuse as a child, reported being the perpetrators of severe physical abuse as adults.
- √ 73% of women who reported being victims of severe physical abuse as an adult, reported also being the perpetrators of severe physical abuse as adults.

Forced Sex

- √ 48% of women who reported being victims of sexual abuse/assault as a child, reported being the continued victims of sexual abuse/assault as adults.
- ✓ Women who reported being victims of sexual abuse/assault as a child or adult did not report being perpetrators of sexual abuse/assault as adults.

Threats/Intimidation

- √ 93% of women who reported being victims of threats or intimidation as a child, reported being the continued victims of threats or intimidation as adults.
- ✓ 60% of women who reported being victims of threats or intimidation as a child, reported being the perpetrators of threats or intimidation as adults.
- √ 61% of women who reported being victims of threats or intimidation as an adult, reported also being the perpetrators of threats or intimidation as adults.

TABLE 5: Victimization and Perpetrator Statistics

	Minor Physical Abuse ¹		Severe Physical Abuse ²		Forced Sex ³		Threats/ Intimidation ⁴	
	n	% Yes	n	% Yes	n	% Yes	n	% Yes
HAPPENED to YOU as a CHILD Before the Age of 18	58	69%	58	72%	58	43%	58	78%
HAPPENED to YOU as an ADULT	58	79%	58	88%	58	31%	58	84%
You DID as an ADULT	58	67%	58	67%	58	3%	58	53%
HAPPENED to YOU as a CHILD & as an ADULT	58	80%	58	91%	58	48%*	58	93%**
HAPPENED to YOU as a CHILD & YOU DID as an ADULT	58	75%	58	74%	58	0%	58	60%
HAPPENED to YOU as an ADULT & YOU DID as an ADULT	58	78%**	58	73%*	58	0%	58	61%**

¹Pushed, hit, restrained; ²Choked, burned, beaten, shot/stabbed; ³All forms of sexual acts; ⁴Threats of physical harm or death to self, children, family members, friends

In sum, these combined descriptive statistics draw a picture of a relatively young population (early 30s) of inmates, who are largely Latina, have at least some high school education, and have never been married. These women were at high risk and in high need of interventions/programs that will help alleviate these risks and address their needs. The women experienced their first arrest at a relatively young age (16 years) and have spent an average of 12 years in prison over the course of their lives. Most are currently incarcerated for the crimes of larceny, murder, or assault. Prior to their arrest, most had a history of drug and alcohol use in the 12 months prior to their arrest (91%), with 59% of those using drugs almost every day or every day during that period. For most, the primary drug of choice (after alcohol and marijuana) was amphetamines. Furthermore, this population of offenders reported a large number of ACEs, which likely contributed to childhood trauma and the adoption of criminal thinking and behaviors later in life. Approximately 79% or more of this population reported being the victims of minor physical abuse and of threats and intimidation as adults and were thus more likely to engage in these same behaviors as adults.

^{***}p<.001; **p<.01; *p<.05

Outcomes

Figure 1 presents the mean changes in the mental health outcomes from the pre- to post-survey. There were significant decreases in depression, anxiety, and PTSD symptomology over time. While there was a decrease in psychological distress from the pre- to post-survey, this change was not significant.

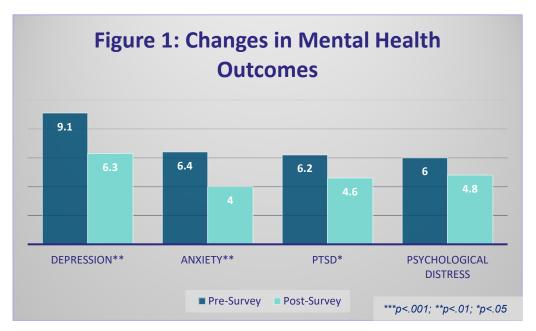


Figure 2 presents the mean changes in the participants' Buss-Warren Aggression subscale scores over time. Overall, there were significant decreases in all of the subscales with the biggest decrease occurring in physical aggression.

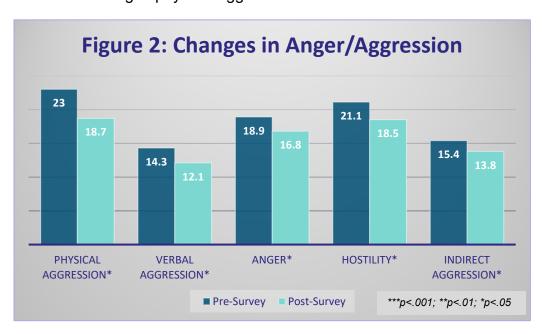
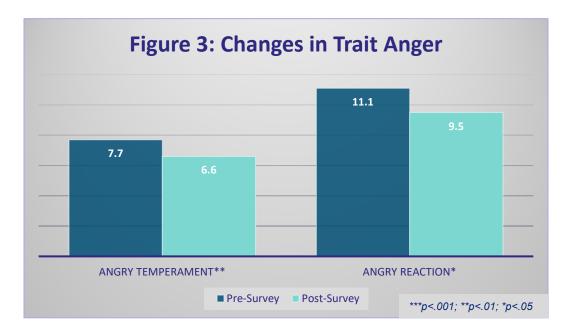
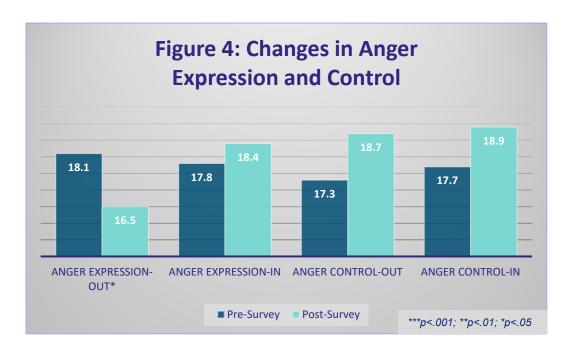


Figure 3 presents mean changes in angry temperament and reaction over time. There was a significant decrease in the participants' disposition to experience anger without provocation and the frequency to which they experience angry feelings in negative situations.



There was no change in feelings of anger and angry verbal expression or in physical anger expression.

Figure 4 presents mean changes in anger expression and control over time. The change in participants' anger expression-out (tendency to express angry feelings in verbally or physically aggressive behavior) scores was significant with the scores decreasing over time. There were increases in their anger expression-in (a positive tendency to not express angry feelings), anger control-out (tendency to control outward expression of angry feeling), and



anger control-in (tendency to control angry feelings by cooling down) scores. However, these changes were not statistically significant.

Figure 5 presents mean changes in the participants' instrumental and expressive anger score. While there were decreases in both of these scores over time, the only significant decrease was in instrumental anger indicating that at the end of the program, participants were less likely to feel the need to retaliate against someone who has harmed them.

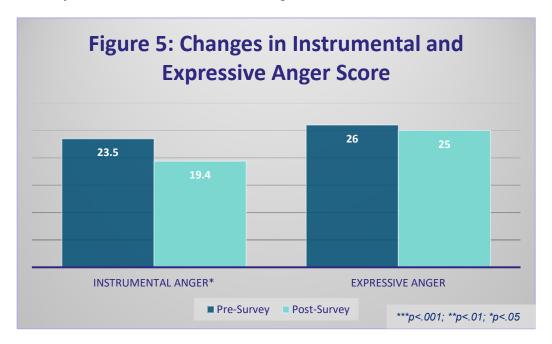
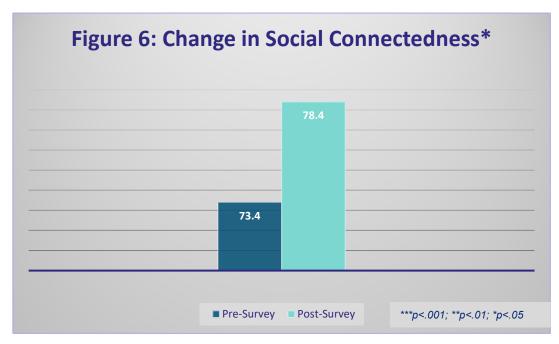


Figure 6 present changes in participants' sense of connectedness to others and the world around them. The findings show a significant change in participants' social connectedness score over time with the mean scores increasing from 73.4 to 78.4.



There were not significant changes in two aspects of empathy: perspective taking (tendency to adopt the point of view of others) and empathic concern ("other-oriented feelings of sympathy and concern for unfortunate others"). While there were increases in both perspective taking and empathic concern, these changes were not significant. Measures of emotional regulation over time were not significant; however, changes were positive and in the predicted direction.

Overall, there was statistically significant improvement in 13 of the 29 measures assessed in the evaluation. While many of the changes in remaining outcomes were in the predicted direction, the small sample size may have limited our ability to detect a significant effect.

Qualitative Findings

As part of the follow-up, participants were asked to take part in a more in-depth qualitative interview to talk about their experience and satisfaction with the HT Program. A total of 21 participants agreed to participate in these qualitative interviews where they discussed their motivation for participating in the program, how HT compares to other programs they have participated in while in prison, what they like best about HT, and how they have benefitted from participating in this program. This section presents key themes for each topic that was discussed.

Table 6: Motivation for participating in the Healing Trauma program

General Themes	Specific Themes	Examples
Self- Improvement	Wanted to address issues Learn something new	 I wanted to be in it just so I could program back here, get some selfhelp. My motivation was my mother's death, like I really need help, like it broke me. I'm really broken. I want to figure out why I'm so angry, because I'm always in SHU, I'm always doing battery on staff. I wanted to understand why I was so angry. And as a child, like I was raped by a relative, so I just needed help. I really needed help and today, today my life, I wanted it, I wanted help so that was my motivation. My motivation was I'm trying to better myself and help my life. I wanted to be in it to see if I could learn something from it.
Observed impact on others	 Saw the positive impact HT had on others 	 I found out about it through another inmate when I've seen them coming out to group. I wanted to be a part of it because it's something I've been through trauma and I wanted to heal from it. And what I wanted to experience was the group.
Recommendation	 Significant other thought would be good for the participant 	I first heard about the group from my wife who came in and graduated. She was on the yard and did <i>Beyond Violence</i> and then came to SHU and graduated this

Positive reviews from previous group members	class, <i>Healing Trauma</i> , and she said that it would be something to look into, something to think about doing because it would definitely strengthen the relationship and help me find a sense of self, a sense of where I've been and what I've come through. I found out through other people talking about how good a group it was. My motivation was to do it with somebody else and my expectation was to find what was causing the trauma, and to find it and to figure out how to break it down and I did that.

Table 7: How the HT program is different from other prison programs

General Themes	Specific Themes	Examples
Creates a safe space	 Leads to openness and sharing Allows participants to be their true selves during the group sessions Group members are like family Allows group members to go deep 	 I think Healing Trauma is the best class I think they have here because the facilitators, they make it great, they make you feel comfortable and safe to where, like I said, you could open up and talk about anything. And to me, I think that's the most important thing is for a person to feel safe and secure to be able to open up and talk freely. But it's like the group, it's like the people that are in the group, that we could trust each other to know that whatever we went through as a child or whatever we went through, just we know that, the ones that are here would not throw it out on the tier and make fun of us. So, it has to be the people that we could trust, you know, because there's a lot of children that are back here in SHU and they repeat stuff in the group but this group that we have was just, it was beautiful. It was beautiful because I really got to let a lot out that nobody repeated. There's more interaction, more people

		are willing to open up because it's a small group so it tends to get to be deeper and people are more willing to share. And once one person shares how deep—once one person shares some deep feelings about what they've been through then it makes you want to share a little bit and then it gets more and more.
Curriculum	• Mix of activities •	Instead of making it all talking and reading, we did arts and crafts, which really captures some people's attention. It captured my attention because I didn't feel like I was just sitting there all day every day. So it made me more proactive.
Facilitators	 HT facilitators are engaged with the materials and group members 	The facilitators who interacted with us are very different compared to other groups because other groups that I've taken in any other place, even here, the facilitators are not so into it.

Table 8: Best aspects of the HT program

General Themes	Specific Themes	Examples
The facilitator	 Created a safe space Treats them with respect Cares and believes in them Shares their own negative experiences Helped them to understand how they got to where they are and how to move forward. 	 I guess my favorite part was how they ran their class, they made us feel safe and secure to where we were able to open up. Well same thing, making me feel comfortable and safe to where I could open up and speak. That's what made the group so beautiful is because we're able to let our guard down and they shared with us, too, that they're human, too, and that they've gone through traumas as well. So we're able to, they were able to break down barriers. And they care, they really care. It's not like they're coming here, just to answer these questions and then that's it. They were more involved with us and they were involved with each other. But not every group was like that, like some of the other groups are not like that but this group was.
The other group members	 Learning from other group members through sharing experiences Strong bonds Interacting with a supportive group of women outside cell 	 My favorite part was coming out and interacting with other people because we are so isolated back here. And it was good interaction and it was like freeing your brain a little bit and you get to talk about your feelings and express yourself. And you grow from the group, it was like communicating with everybody in the group. We really had a good group. Everybody communicated with each other and really enjoyed the time we spent together in the group and we all look forward to going to group. More for me would be like interacting with other people

		besides being closed in a cell for 23-22 hours a day. So able to interact with other people and be able to share and listen to other people. I felt so comfortable with the women because when you go through something or when you talk about something that's so personal and that's hurtful, that's trauma, you tend to get close to the people that are around you because they've been through it too so they actually know how you feel.
Group Discussion	 Freedom to talk about anything No pressure to speak 	 It was all open book, it was whatever we wanted to discuss that we dealt, that we needed to deal with, and so there wasn't anything specific because it was everything all across the board. Yeah, they didn't make you talk, you just were able to talk and they let you talk, they didn't interrupt you, no matter how long you needed, I liked that part.
The tools	Taught them tools to use when dealing with stressful situations	 My favorite part of Healing Trauma was how they taught us the coping skills and they ran it down to us exactly how to go through things. My best part was the funnel, the funnel part. Yeah, the funnel where you let all your rage and anger out, I liked it, yeah. My favorite part of Healing Trauma is the grounding exercises. I liked the grounding where you had to see five things, hear five things or see five things, smell four things, hear three things, touch two things, and what's the last one? And taste. I like the grounding because it brings be back to here and now. And what I liked the most, I liked when we grounded and, yeah, when we ground in and then

grounding out because it gives me, you know like I can breathe and calm myself, whatever I'm thinking about, to focus here. New Learned about how The best part of the Healing knowledge Trauma was learning about myself trauma has been and finding out that I had trauma influencing their and that I needed to start dealing lives with it. Anger as a Understanding and finding out why secondary emotion I was so angry all the time. I guess my drinking, yeah. Because I had a lot of trauma and I didn't realize that I did. And I did a lot of stuff when I was drunk and didn't realize it. They touched on pretty much any subject that you could kind of expect or even consider to have been some kind of trauma, regardless of your socioeconomic status, regardless of your upbringing, regardless of your race, they touched on relationships, they touched on anger, they touched on every subject, they touched on verbal abuse, emotional abuse, financial abuse, they touched on everything. Exploring I would say more of the feelings and different emotions because I was raised with being angry so I was using my secondary emotion, which is anger, to deal with everything. So we're able to identify different feelings and emotions and what we're really feeling besides that.

Table 9: How participants have benefitted from participating in HT

General Themes	Specific Themes	Examples
Greater self-awareness	 Led to a deeper understanding of their behaviors Helped them to understand how their behaviors impact others Change in perception 	 The first thing I learned about myself was what was my trauma, I don't know how to explain it. But it impacted me because I didn't know I had that, like I didn't know that that was one of my fears and stuff. It's really made me see how much trauma I've really been through in my life and now how to cope with it. That I had trauma because I didn't even know. I was living it so normally growing up I didn't even know that it was—that I had trauma, that it was—that I had trauma, that it wasn't normal. I learned like when I see something that was my old, like something that's not normal to, its hard to explain, it's not right, you know what I mean? I know now that it's not right, so just to recognize and be aware and to just basically be aware. Well it's helped me think differently. It's helped me change my ways of thinking and it helped me learn how to look at things differently and it also taught me that I am not my circumstances. That was a big one.
Improved Relationships	 Setting boundaries Learned how to open up and connect with others in group situations 	 I learned what boundaries mean, and so I'm not going to— I know what to expect, like to set my boundaries now and to go forward. Like in a relationship, if I see that it's going to be toxic, I eliminate myself from that toxic-ness because I'm not going to put myself in something that I do not want to be a part of. I really don't want to curse, I don't want to be

Improved Emotion Regulation Skills	 Learned how to control their anger Accepting and dealing with negative feelings 	hit, I don't want to hit nobody. But I don't have to put up with that, I don't have to put myself in a situation where I know is going to be toxic for me. I'd rather eliminate myself before it even gets to where it's going to get. And before I was very passive and I'd be like, okay and then I'd go into the toxic relationship. Now I know that I can say no. I can say no and leave that person where she's at and I can stay where I'm at and I don't have to put up with it. • I learned that I could be a part of a group without being nervous. And I'm not used to being a part of a group, I'm used to being by myself. So I learned how to be a part of a group, I learned how to open up. • I learned how to, how to take other stuff, like just to calm down like breathing treatments, so calm down more because I get mad easily. • How when I feel the anger coming upon me, to turn around and walk away. When I'm just used to fighting. • I always stayed numb, to not deal with feelings. Now I see that, now that I'm an older woman now I can deal with it, even without being numb.
Improved decision- making capabilities	 Reductions in impulsive behavior 	 I got to learn how to deal with people instead of reacting. Where I would normally react to someone, I learned to just calm myself and breathe.
Letting go	 Moving past negative experiences 	 We're in control of our lives now and our decisions that we make from now and forward are our choices. The past doesn't have a hold of us anymore; it doesn't have a hold on me. Like I could

		finally let that go and just move forward. And I never felt that. I never thought that, I always felt like people, like my past had a hold on me and I could never change to be a better person and now I know I can.
Continued growth	Want to do more programming as a result of participating in HT	 The impact that Healing Trauma had on me is it made me want to go to more groups because the group was so enlightening that it really made me want to research other groups and participate in a lot of groups because it was not what I thought it would be boring but it was very enlightening so therefore that's the impact it had on me, it made me want to group now. I'm going to become a groupie.

Conclusion

The HT intervention was designed to be a brief intervention for incarcerated women who have been abused or have experienced trauma associated with ACEs. The intervention focuses on three core elements: (1) an understanding of what trauma is, (2) its process, and (3) its impact on both the inner self (thoughts, feelings, beliefs, values) and the outer self (behavior and relationships).

A total of 58 woman participated in the HT program while in the SHU with 64% graduating from the program. The participants mean rating of this program was a 9 (out of 10) indicating that the participants overall thought this was an excellent program. The findings from the focus groups provide further support for their satisfaction with the program.

The intervention was associated with positive improvements in 13 out of the 29 outcomes assessed. The small sample size may have limited our ability to detect some positive effects. Findings from the focus groups indicate that many of the women believed the program helped them to become more aware and accepting of their feelings as well as less impulsive. For many of the participants, this was the first group to truly engage them and help them understand how their past trauma has been influencing their lives. They specifically noted that the facilitators played an instrumental role in helping them grow and change the behaviors that were leading them to the SHU. The women reported that as a result of participating in this program, they are taking steps to continue on their quest to better themselves by participating in additional programming.

Although we had a diverse group of participants, the generalizability is limited by the small sample size and attrition. However, the significant positive results with a small sample

demonstrate that this exceptional program had a significant positive impact on the lives of the participants as well as the staff that oversaw them on a day to day basis.

As state and federal funding streams frequently require the use of evidence-based practices in custody settings, the HT program and associated research provide independent documentation on the effectiveness of this curriculum to reduce the reoccurrence of violence and aggression among women, creating a safer custody environment.

This program continues to be implemented as a peer led model with high need women at CIW and in the reception center at CCWF. New contracts ensure that the program will continue at both institutions for the next three years.



References

- Breslau, N., Peterson, E. L., Kessler, R. C., & Schultz, L. R. (1999). Short screening scale for DSM-IV posttraumatic stress disorder. *American Journal of Psychiatry*, *156*, 908-911. Retrieved from http://ajp.psychiatryonline.org/article.aspx?volume=156&page=908.
- Buss, A. H., & Warren, W. L. (2000). *Aggression questionnaire* [Manual]. Los Angeles, CA: Western Psychological Services.
- Campbell, A., Muncer, S., McManus, I., & Woodhouse, D. (1999). Instrumental and expressive representations of aggression: One scale or two? Aggressive Behavior, 25, 435-444.
- Cauffman, E. (2008). Understanding the female offender. Future of Children, 18, 119-142.
- Covington, S, & Russo, E. (2012, rev. 2016). *Healing trauma: A brief intervention for women*. Center City, MN: Hazelden Publishing. www.stephaniecovington.com
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1), 113–126. https://doi.org/10.1037/0022-3514.44.1.113
- Felitti, V.J., Anda, R.F., Nordenberg, D, Williamson, D.F., Spitz A.M., Edwards, V.K., Koss, M.P., and Marks, J.S., (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventative Medicine*, vol 14 (4), 245-258.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of psychopathology and behavioral assessment*, 26(1), 41-54.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959-976. doi:10.1017-S0033291702006074
- Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., Zaslavsky, A. M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, *60*, 184-189. doi:10.1001/archpsyc.60.2.184.
- Kruttschnitt, C., Gartner, R., & Ferraro, K (2002). Women's involvement in serious interpersonal violence. Aggression and Violent Behavior, 7(6), 529-565.
- Kubiak, S., Kim, W. J., Fedock, G., & Bybee, D. (2012). Assessing short-term outcomes of an intervention for women convicted of violent crimes. *Journal of the Society for Social Work and Research*, *3*(3), 197-212.
- Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology*, *48*(3), 310–318. https://doi.org/10.1037/0022-0167.48.3.310

- McGuire, J. (2008). A review of effective interventions for reducing aggression and violence. Philosophical Transactions of the Royal Society B: Biological Sciences, 363(1503), 2577-2597.
- Messina, N., Burdon, W., Hagopian, G., & Prendergast, M. (2006). Predictors of prison TC treatment outcomes: A comparison of men and women participants. American Journal of Drug and Alcohol Abuse, 32(1), 7-28.
- Messina, N., & Grella, C. (2006). Childhood trauma and women's health outcomes in a California prison population. American Journal of Public Health, 96(10), 1842-1848
- Sinclair, V. G., & Wallston, K. A. (2004). The development and psychometric evaluation of the Brief Resilient Coping Scale. *Assessment*, *11*(1), 94–101. https://doi.org/10.1177/1073191103258144
- Spielberger, C. D. (1999). STAXI-2: State—Trait Anger Expression Inventory 2. Professional manual. Odessa, FL: Psychological Assessment Resources.
- Spitzer, R.L., Kroenke, K., & Williams, J.B.W. (1999). Patient health questionnaire study group. Validity and utility of a self-report version of PRIME-MD: The phq primary care study. *Journal of the American Medical Association*, 282, 1737-1744. doi:10.1001/jama.282.18.1737.
- Victor, S. E., & Klonsky, E. D. (2016). Validation of a brief version of the Difficulties in Emotion Regulation Scale (DERS-18) in five samples. *Journal of Psychopathology and Behavioral*, 38(4), 582-589