

Evaluation of a Violence- and Trauma-Prevention Program in Secure Housing Units

by Nena P. Messina and William M. Burdon*

Adverse Childhood Experiences and Justice-Involved Men

Men who have witnessed or endured violence, abuse, and other adverse experiences as children may suffer from the effects of trauma physically, mentally, and/or emotionally as adults (Horwitz et al., 2001; Hyman, Garcia & Sinha, 2006). These effects may manifest themselves on a spectrum of behaviors. At one end, men may avoid relationships and lead lives of isolation, disconnection, and dissociation. At the other end, men may engage in violent and abusive behaviors toward others to feel powerful, safe, and in control. Numerous

studies have also shown that abuse in childhood increases the likelihood of aggression, violence, and arrest in adulthood (Andrews & Bonta, 2016; Hyman, Garcia & Sinha, 2006; Liu, Lewis & Evans, 2013).

Approximately seven in ten incarcerated men report childhood physical abuse, sexual abuse, or neglect (also known precursors to posttraumatic stress disorder [PTSD]) (Wolff & Shi, 2012). More than half of 616 incarcerated men in California self-reported the occurrence of adverse childhood experiences (ACEs) as follows: 67% of the men reported verbal abuse; 64% reported physical abuse; 29% reported sexual abuse; 50% reported

The high rates of men currently incarcerated in the United States (1.3 million by year end 2019), combined with their high rates of trauma exposure and resulting PTSD and related substance use and mental health disorders, suggests a significant need for trauma-specific and gender-responsive treatment for men in correctional settings. With a deepening understanding of the impact of trauma, clinicians are beginning to identify specific issues that need to be addressed in developing effective treatment for men. These include the silence that surrounds the abuse these men suffered and the resulting fear and shame they may feel as a result,

At the other end, men may engage in violent and abusive behaviors toward others to feel powerful, safe, and in control.

**Nena P. Messina, Ph.D., is a criminologist at the University of California, Los Angeles, Integrated Substance Abuse Programs and the CEO of Envisioning Justice Solutions, Inc. She is the principal investigator for the California Department of Corrections and Rehabilitation statewide training for the Integrated Substance Use Disorder Program's standardization of care and is currently conducting randomized controlled trials in two women's prisons and three men's prisons assessing the efficacy of trauma-specific programs. She can be reached by email at Nena@envisioningjusticesolutions.com. William M. Burdon, Ph.D., is an independent research consultant at Envisioning Justice Solutions. He can be reached by email at wburdon@outlook.com.*

Envisioning Justice Solutions, Inc. would like to acknowledge the following individuals for their support of and contributions to the Exploring Trauma brief intervention program. At Pelican Bay State Prison: Warden James Robertson, Warden Clark Ducart, Chief Deputy Warden Rodney Bell, and Correctional Counselor II Thomas Hutzell. At California State Prison, Corcoran: Warden Ken Clark, Warden Michael Sexton, Retired Warden Dave Davies, Chief Deputy Warden Martin Gamboa, Correctional Counselor III Shawn Rocha, Correctional Counselor II Josh Phelps, Correctional Counselor II Veronica Plata, and Retired Deputy Warden and EJS Program Coordinator, Michael Tann. We are especially grateful to Dr. Covington and Rob Rodriguez, the authors of the trauma-specific Exploring Trauma: A Brief Intervention for Men. Finally, we are grateful to the men for volunteering their time to participate in the program and the evaluation.

This pilot project was funded by the California Department of Corrections and Rehabilitation, Contract #C5608743, to the Center for Gender and Justice to implement the program training and curricula. The Center for Gender and Justice provided a subcontract to Envisioning Justice Solutions, Inc. to conduct an independent program evaluation.

emotional abuse; 33% reported feeling unloved/neglect; 71% had divorced parents; 38% witnessed domestic violence; 64% had alcohol/drug use in their home; 32% had mental illness in their home; and 44% had an incarcerated family member (Messina & Schepps, in press).

Another study assessing the impact of ACEs among 427 incarcerated men in California showed that those who reported five or more ACEs also reported the earliest and most serious involvement in drugs and crime (e.g., age of first arrest, age of first lockup, age of first alcohol and drug use) and had an increased likelihood of having adult mental health issues (Messina et al., 2007). Additional research reports that the cumulative negative psychological effects of ACEs for boys includes increased likelihood of later PTSD, major depression, anxiety disorders, substance use disorder, and suicidal ideation (Holmes & Slap, 1998; Horwitz et al., 2001). Without caring adults to buffer children, the unrelenting stress caused by extreme poverty, neglect, and/or abuse in early life can weaken the developing brain and have long-term consequences for behavior and physical and mental health (Center on the Developing Child, 2007).

the impact of men's response to the abuse they suffered on their socialization, and the risk of male victims becoming victimizers (Black, Sussman & Unger, 2010).

Secure Housing Units (SHUs)

Trauma theory suggests that early life trauma often results in the formation of anger, which is further theorized to be confounded with emotional pain and often lacks healthy expression, leading to the continual repression of both the anger and pain that may ultimately be manifested in assaultive and violent behavior (Black, Sussman & Unger, 2010; Thomas, 2005). Violent and aggressive behavior in prison often results in disciplinary actions that can lead to isolation and segregation. Secure housing units (SHUs) are used as a disciplinary tool for serious crimes that take place during incarceration (often referred to as prison "jail"). Segregation in a SHU becomes a secondary sentence imposed by the correctional facility that is unrelated to the conviction for which the person is incarcerated (Browne, Cambier & Agha, 2011; Owen, Wells & Pollock, 2017).

See *TRAUMA-PREVENTION*, next page

Confinement in a SHU is considered the second highest level of security in a prison, second only to confinement on death row. SHU confinement is reserved for the most dangerous and violent men and is designed to minimize human contact. Men are housed in solitary confinement cells for up to 23 hours per day, and their single hour of recreation occurs alone typically in a small outdoor area that is enclosed by concrete or secured fencing. Research on segregation during imprisonment has concluded that these circumstances can be correlated with adverse psychological affects (Haney, 2008;

security risks, programming in the SHU is rarely permitted.

The purpose of this pilot study was to assess the efficacy of a brief trauma-specific intervention (i.e., *Exploring Trauma*) to improve the psychological well-being and decrease anger and aggression among a population of men incarcerated in the SHUs of two California state prisons.

Program Description

Exploring Trauma (ET), a six-session brief intervention, is a new, innovative trauma-specific program for men (Covington & Rodriguez, 2016). *ET* is specifically designed for settings requiring brief

instrumental anger (0.63), and depression (0.62) (Messina, Zwart & Calhoun, 2020). The current study is a replication of the women's SHU pilot research using the brief trauma-specific intervention developed for men who have histories of ACEs (Covington & Rodriguez, 2016).

Study Procedures

Data for this evaluation were collected from 2016 to 2018 as part of the pilot project for the California Department of Corrections and Rehabilitation (CDCR). Protocols were reviewed and approvals were obtained from the Office of Human Research Protections, U.S. Department of Health and Human Services following the *Federal Policy for the Protection of Human Subjects*, 45 CFR 46, Subpart C, Additional Protections for Prisoners; and the CDCR's Research Oversight Committee prior to any contact with participants. Because the data were collected as part of a CDCR pilot program, the findings here are considered secondary data analysis.

Study Hypothesis

Based on the positive results of the pilot study that tested the effectiveness of the trauma-specific and gender-responsive *Healing Trauma (HT)* brief intervention among women confined in a SHU (Messina, Zwart & Calhoun, 2020), it was hypothesized that the male SHU participants in *ET* would exhibit statistically significant improvement on the psychological and anger and aggression outcomes over the course of their participation in the brief intervention. This is not to say that the findings from the women are being extrapolated to the men; however, *ET* and *HT* were specifically created to be gender-responsive in that they focus on how trauma affects men and women differently over their lifetime. Thus, the hypothesis is formulated based on the fact that the program was developed to address trauma as it relates to men similar to *HT* for women.

Facilitators and Session Logistics

The *ET* program was facilitated by program coordinators experienced in conducting programs with incarcerated men. All staff responsible for managing and/or facilitating the *ET* program in the SHUs attended a two-day in-depth training on the curriculum that was conducted by the program's authors. The curriculum was delivered over six weekly 2½-hour sessions. Facilitators coordinated the program delivery, graduations, and acted as liaisons between the

Program participants were required to receive all programming while confined in portable single-occupant caged segregation cells that are the approximate size of a phone booth.

Haney & Lynch, 1997). Some research has specifically noted that many of the negative affective conditions experienced by residents in the SHU are analogous to those of trauma victims, such as poor impulse control, random outbursts of violence, anxiety, depression, insomnia, and suicide ideation (Arrigo & Bullock, 2008; Grassian, 2006). The American Psychological Association (APA) has further suggested that segregation and isolation exacerbate existing psychological vulnerabilities and can trigger trauma symptoms such as flashbacks, chronic hypervigilance, and a pervasive sense of hopelessness (APA, 2016; Kaba, et al., 2014). Prisoners with preexisting mental illnesses are thus especially vulnerable to the destructive psychological effect of such forms of incarceration. (Arrigo & Bullock, 2008; Smith, 2006).

Clinicians have been able to establish treatment guidelines for trauma and PTSD, which suggest that trauma-related difficulties are best treated in stages with a present-focused first stage focusing on safety, education, and skill building. One of the first steps toward healing is taken when men work to free themselves from denial and acknowledge the effects of trauma in their lives. Despite this critical awareness and the fact that state and federal funding streams frequently require the use of evidence-based practices in custody settings, there remain limited interventions designed to address trauma in men's lives and its relationship to aggression and violence. Moreover, due to

interventions, such as jails, prison reception centers, community corrections, and substance use treatment programs. *ET* consists of a facilitator guide and a participant workbook. The curriculum specifically addresses trauma that occurs as a result of men experiencing toxic stress, abuse, violence, and other adverse experiences. Session topics include: The Subject of Trauma; Exploring Trauma; Thinking, Feeling, and Acting; Beyond Guilt, Shame, and Anger; Healthy Relationships; Love, Endings, and Certificates. The *ET* curriculum is a present-focused group intervention that is psychoeducational and emphasizes skill-building. There is a strong emphasis on grounding skills and cognitive behavioral techniques. Based on the content on trauma and abuse, the curriculum is designed for small groups (i.e., six to ten individuals).

A previous pilot study conducted among 39 women in a California SHU using a similar program curriculum written for women—*Healing Trauma: A Brief Intervention for Women* (Covington & Russo, 2012, rev. 2016)—showed statistically significant reductions in depression, anxiety, PTSD, physical aggression, verbal aggression, uncontrolled anger, hostility, indirect aggression, and instrumental anger. Furthermore, there was a significant increase in social connectedness. The mean change from pre- to post-intervention showed moderate to large effect sizes. The strongest effect size was found for physical aggression (0.87), followed by anxiety (0.74),

See *TRAUMA-PREVENTION*, page 17

September 2013. Available at <https://info.nicic.gov/nicrp/system/files/028172.pdf>.

Latessa, E.J., Smith, P., Schweitzer, M., & Labrecque, R.M. (2012). *Evaluation of the Effective Practices in Community Supervision Model (EPICS) in Ohio*. Cincinnati, OH: University of Cincinnati.

Manchak, S.M., Skeem, J.L., & Douglas, K.S. (2008). Utility of the Revised Level of Service Inventory (LSI-R) in predicting recidivism after long-term incarceration. *Law and Human Behavior, 32*(6), 477–488.

Ollive, M. (2016). Elderly inmates burden state prisons. *Stateline*, March 17, 2016. Pew Charitable Trusts. Available at <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/03/17/elderly-inmates-burden-state-prisons>.

Osher, F.C., D'Amora, D.A., Plotkin, M., Jarrett, N., & Eggleston, A. (2012). *Adults with Behavioral Health Needs under Correctional Supervision: A Shared Framework for Reducing Recidivism and Promoting Recovery*. New York: Council of State Governments Justice Center. Available at https://csgjusticecenter.org/wp-content/uploads/2020/02/9-24-12_Behavioral-Health-Framework-final.pdf.

org/wp-content/uploads/2020/02/9-24-12_Behavioral-Health-Framework-final.pdf.

Pennsylvania Department of Corrections (2007). Principles of effective intervention. Office of Planning, Research, Statistics and Grants. Unpublished manuscript, February 2007.

Skeem, J., & Manchak, S. (2010). Final outcomes of the longitudinal study: “What really works!” for probationers with serious mental illness. Paper presented at the final meeting of the MacArthur Research Network on Mandated Community Treatment, in Tucson, Arizona, October 2010.

Skeem, J., & Peterson, J. (2011). Major risk factors for recidivism among offenders with mental illness. Risk-Resilience Research, University of California, Berkeley. Available at http://risk-resilience.berkeley.edu/sites/default/files/journal-articles/files/major_risk_factors_for_recidivism_among_offenders_with_mental_illness_2011.pdf.

Skeem, J., Winter, E., Kennealy, P., Eno Loudon, J., & Tatar, J. (2014). Offenders with mental disorder have criminogenic needs, too: Toward recidivism reduction. *Law and Human Behavior, 38*(3), 212–224.

Smith, P., Schweitzer, M., Labrecque, R.M., & Latessa, E.J. (2012). Improving probation officers' supervision skills: An evaluation of the EPICS model. *Journal of Crime and Justice, 35*(2), 189–199.

Viglione, J. (2019). The risk-need-responsivity model: How do probation officers implement the principles of effective intervention? *Criminal Justice and Behavior, 46*(5), 655–673.

Van Voorhis, P., Spiropoulos, G., Ritchie, P.N., Seabrook, R., & Spruance, L. (2013). Identifying areas of specific responsivity in cognitive-behavioral treatment outcomes. *Criminal Justice and Behavior, 40*(11), 1250–1279.

Wallace, D., & Wang, X. (2020). Does in-prison physical and mental health impact recidivism? *SSM-Population Health, 20*, 1–16.

Ward, T., & Stewart, C. (2003). Criminogenic needs and human needs: A theoretical model. *Psychology, Crime & Law, 9*(2), 125–143.

Williams, B.A., Goodwin, J.S., Baillargeon, J., Ahalt, C., & Walter, L.C. (2012). Addressing the aging crisis in U.S. criminal justice healthcare. *Journal of the American Geriatrics Society, 60*(6), 1150–1156. ■

TRAUMA-PREVENTION, from page 8

research staff and the facility. Program participants were required to receive all programming while confined in portable single-occupant caged segregation cells (also known as therapeutic holding modules) that are the approximate size of a phone booth, which allow no direct physical contact with other participants or staff facilitating the program (Pelican Bay State Prison, 2014).

Study Participants

Study participants consisted of 186 volunteers housed in the SHUs of two state prisons. Recruitment began in 2016 and ended in 2018. All men housed in the SHU who had enough time remaining on their SHU term to fully complete the six-week curriculum were eligible to participate in the *ET* program and corresponding evaluation. All men housed in the SHU were asked by the trained facilitator if they wanted to participate in the *ET* program and evaluation. Those who volunteered met with a research staff member prior to the first *ET* session and were administered a pre-program questionnaire. They were then scheduled to participate in the next available set of *ET* sessions. Within one to two weeks of completing the last session of the program, each participant was administered a post-program survey by research staff. Change over the course of the intervention on measures of interest were then computed. Volunteers could participate in the program and decline to participate in the evaluation.

Participants' mean age was 31.7 years (SD = 7.14 years). The largest proportion

of participants were Latino (67.4%). Most participants reported never being married (66.8%). Most reported having attended some high school (32.4%); 16.2% had a high school diploma; 27% had a GED; 16.8% reported having attended some college, although none had a college degree. Participants' mean age of first arrest was 14.3 years (SD = 2.9 years), with a mean number of lifetime arrests of 9.7 (SD = 13.2). Participants' mean number of lifetime years spent incarcerated was 14 years (SD = 7.1 years), with a mean of four of those years (28.6%; SD = 4.8 years) spent incarcerated in a SHU. The most common offense that led to participants' incarceration was “death of another” (i.e., homicide, murder, manslaughter; 27.2%), followed by attempted murder (21.7%). A large majority of participants (88.5%) reported using alcohol or drugs in the 12 months prior to their incarceration. With respect to frequency of usage, 34.8% reported using alcohol every day or nearly every day; 66.1% reported using drugs every day or nearly every day. The most prevalent drugs used were alcohol, marijuana, and amphetamines; 42.6% of participants reported using amphetamines in the 12 months prior to their incarceration.

As part of the pre-program questionnaire, participants were administered the ACE questionnaire (Felitti et al., 1998), which asks respondents to indicate (Yes or No) whether they had experienced any one of 10 different ACEs. Forty-six percent of the *ET* participants reported experiencing verbal abuse under the age of 18; 47% reported physical abuse; 7% reported sexual abuse; 32% reported emotional neglect; 19%

reported physical neglect; 69% reported parental separation/divorce; 25% reported domestic violence; 58% reported substance use in the home; 17% reported mental illness in the home; and 53% reported a household member incarcerated. Participants had a mean ACE score of 3.7 (SD = 2.5); 61.1% of participants scored higher than 2, and 26.1% scored higher than 5.

Study Measures

Standardized instruments included detailed questions about demographics, childhood and adult trauma, mental health, substance use, and criminal justice involvement. To assess the effectiveness of the *ET* intervention, data were collected on 17 different measures that made up the following seven primary outcomes. The feasibility of these measures and procedures were previously found to be effective and valid (Kubiak et al., 2015; Messina, Zwart & Calhoun, 2020; Messina & Zwart, 2021).

Depression (Patient Health Questionnaire Depression Subscale). The Patient Health Questionnaire Depression Subscale is a nine-item subscale that measures current depressive symptomatology. Participants report on the symptoms they have experienced in the preceding two-week period. Responses are based on a 4-point Likert-type scale ranging from 0 (Not at all) to 3 (Nearly every day) and are summed into an overall symptom severity scale score that falls between 0 and 27 (Kroenke & Spitzer, 2002; Spitzer, Kroenke & Williams, 1999).

See *TRAUMA-PREVENTION*, next page

Anxiety (Patient Health Questionnaire Anxiety Subscale). The Patient Health Questionnaire Anxiety Subscale is a six-item subscale that measures anxiety symptoms felt over the past four weeks. Responses are based on a 4-point Likert-type scale ranging from 0 (Not at all) to 3 (Nearly every day) and are summed into an overall symptom severity scale score that falls between 0 and 18 (Spitzer, Kroenke & Williams, 1999).

PTSD (Short Screening Scale for DSM-IV PTSD, Modified Version). The modified version of the Short Screening Scale for DSM-IV Posttraumatic Stress Disorder is used to assess current symptoms of PTSD. Respondents who answered affirmatively to the question “In your life, have you ever had any experience that you considered frightening, horrible, or upsetting?” were then asked to complete a seven-item short screening scale concerning symptom frequency in the prior four-week period. Item responses were based on a Likert-type scale, ranging from 0 (Not at all) to 3 (Nearly every day), and scale scores ranged from 0 to 21 (Breslau et al., 1999).

Mental Health. The K6 Brief Mental Health Screen (Kessler et al., 2002; 2003) is a six-item scale used to assess participant’s overall mental health. Responses, based on a Likert-type scale, ranging from 0 (None of the time) to 4 (All of the time), were summed into an overall scale score ranging from 0 to 24.

Trauma Symptoms. The Trauma Symptoms Checklist (TSC-40) has six subscales: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index (SATI), Sexual Problems, and Sleep Disturbance, as well as a Trauma Symptoms Total Score (Elliott & Briere, 1992).

Aggression (Buss-Warren Aggression Questionnaire (AQ)). The Buss-Warren Aggression Questionnaire (AQ), formally the Buss Perry Aggression Questionnaire, is a 34-item instrument used to assess anger and aggression (Buss & Warren, 2000). The respondent rates the description on a Likert-type scale, ranging from 1 (Not at all like me) to 5 (Completely like me). The Buss-Warren includes five subscales: Physical Aggression (eight questions 8 to 40 range), Verbal Aggression (five questions, 5 to 25 range), Anger (seven questions, 7 to 35 range), Hostility (eight questions, 8 to 40 range), and Indirect Aggression (six questions, 6 to 30 range).

State-Trait Anger Expression Inventory—2 (STAXI-2). The STAXI-2 is a 57-item instrument used to measure

the experience and intensity of anger as an emotional state (State Anger) and as an emotional trait (Trait Anger). The State Anger Composite Scale assesses the intensity of angry feelings at a particular time, and the Trait Anger Composite Scale measures how angry emotions are expressed over time (Spielberger, 1999). For the 15 State Anger items, participants rate the intensity of their emotions “right now” on a 4-point Likert scale ranging from 1 (Not at all) to 4 (Very much so). For the 10 Trait Anger items, participants rate how they “generally” feel on a 4-point Likert scale ranging from 1 (Almost never) to 4 (Almost always). For the 32 Anger Expression and Anger Control items, participants rated how they generally react in certain situations also on a 4-point Likert scale ranging from 1 (Almost never) to 4 (Almost always).

Anger (Revised Instrumental and Expressive Representation Scales). The Revised Instrumental and Expressive Representation Scales have 16 items with two subscales (instrumental and expressive) assessing anger expression (Campbell et al., 1999). Instrumental anger is a more outward expression of anger that is often used to control others. In contrast, expressive anger is characterized by holding in or suppressing anger until there is an “explosion” of emotion. In the first subscales, respondents answered the degree of agreement about eight items measuring instrumental anger, including “I believe that physical force is needed to get through to some people” and “If I hit someone and hurt them, they were asking for it.” The second subscales assessed expressive anger using eight items such as “During a physical fight I feel out of control” and “After a physical fight I feel drained and guilty.” Participants responded on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Some items were reverse scored so that higher scores indicate stronger anger expression. The eight items from each subscale are summed with a range of 8 to 40 for each subscale.

Data Analysis

Analysis strategies included descriptive and inferential statistics based on background characteristics of participants. Descriptive statistics included percentages, means, and measures of variance. Frequency tables were used to examine cell sizes for categorical variables and non-normality for continuous variables. Where categorical variables had small cell sizes, categories were collapsed to create cells of sufficient size. Paired-sample *t*-tests were conducted to examine change among participants over the six-week period of the *ET* intervention

on 17 measures and submeasures of anxiety, depression, PTSD symptoms, mental health, aggression, trauma symptoms, and anger. Paired-sample *t*-tests allow examination of change over time per individual but report the findings for the group. Thus, there is no need to control for other variables (e.g., age, race, etc.) because each person is his or her own control case and demographic variables will not vary over time. Cohen’s *d* scores were calculated to estimate effect sizes for significant paired differences. Table 1 documents mean changes in these pre- and post-intervention measures.

Study Results: Hypothesis Testing

The hypothesis was substantiated because significant improvement was found for all of the tested outcome measures (see Table 1). Mean scores for the PHQ-Anxiety Subscale, PHQ-Depression Subscale, the Short Screen Scale for PTSD, and the K6 Brief Mental Health Screen all showed significant decreases over the course of the intervention, with small to medium effect sizes (Cohen’s *d* ranged from 0.28 to 0.54). Mean scores for all five subscales of the Buss-Warren Aggression Questionnaire decreased significantly over the course of the intervention, with small to moderate effect sizes (Cohen’s *d* ranged from 0.28 to 0.40). Mean scores for all five subscales of the Trauma Symptoms Checklist (TSC-40) and the TSC-40 total score decreased significantly over the course of the intervention, with small to moderate effect sizes (Cohen’s *d* ranged from 0.29 to 0.43). Finally, the means for State and Trait Anger, as measured by the STAXI-2, decreased significantly over the course of the intervention, with small to moderate effect sizes (Cohen’s *d* ranged from 0.20 to 0.30). The largest mean change effect size was for depression (0.54); trauma severity symptoms (0.43); and anxiety (0.41).

Discussion

On all measures of interest, participants exhibited statistically significant improvement over the course of their participation in the *ET* brief intervention. Not only does this provide preliminary evidence for a brief trauma-specific violence intervention for incarcerated men, but it also demonstrates the feasibility of implementing programming in the SHU. As hypothesized, the results replicate the significant impact of the brief trauma-specific intervention that was found in the women’s SHU pilot study. The consistent, strong, and positive results for both men and women demonstrate strong

See *TRAUMA-PREVENTION*, next page

Table 1: Outcome Results (N = 186)

	Pre-Program		Post-Program		t	df	P Value	Cohen's d
	Mean	SD	Mean	SD				
PHQ–Anxiety Subscale	3.55	(3.74)	2.32	(3.07)	5.46	178	0.000	0.408
PHQ–Depression Subscale	4.49	(4.76)	2.34	(3.73)	7.26	178	0.000	0.543
PTSD–Short Screen	3.20	(3.97)	1.92	(3.24)	4.52	166	0.000	0.350
Mental Health Screen	2.79	(4.13)	1.88	(3.32)	3.67	176	0.000	0.276
Aggression								
Physical Aggression	21.11	(6.97)	18.83	(6.69)	5.27	177	0.000	0.395
Verbal Aggression	12.60	(4.20)	11.59	(3.89)	3.75	177	0.000	0.281
Anger	14.51	(5.91)	13.12	(4.87)	3.84	177	0.000	0.288
Hostility	17.43	(7.10)	15.53	(6.23)	5.05	177	0.000	0.379
Indirect Aggression	12.88	(4.59)	11.51	(4.12)	4.78	177	0.000	0.358
Trauma Symptoms								
Dissociation	3.86	(3.77)	2.67	(3.09)	5.33	177	0.000	0.399
Anxiety	3.59	(3.85)	2.65	(3.21)	4.35	179	0.000	0.324
Depression	4.09	(4.12)	2.65	(3.08)	5.62	179	0.000	0.419
Sexual Abuse Trauma Index	2.76	(3.00)	1.94	(2.51)	4.58	177	0.000	0.343
Sleep Disturbance	4.76	(4.86)	3.54	(4.02)	3.89	178	0.000	0.291
TSC-40 Total Score	17.57	(16.22)	12.16	(12.45)	5.71	179	0.000	0.426
State-Trait Anger								
State Anger	2.17	(5.76)	1.12	(4.17)	2.71	177	0.007	0.203
Trait Anger	5.60	(5.62)	4.30	(4.74)	4.05	178	0.000	0.303

support for the efficacy of gender-responsive brief trauma-specific interventions for those incarcerated in the highest level of security in state prisons.

As researchers and clinicians have shown, men and women have different pathways into and out of substance use and crime; however, an increasing body of literature has revealed significant histories of ACEs for both justice-involved men and women (Messina et al., 2007; Messina & Schepps, in press). To substantiate the need for gender-responsive programming, which considers how trauma affects men and women differently, it is important to note how the largest areas of impact were similar and different for men and women. Both SHU men and women had large significant changes in depression and anxiety. In contrast, the greatest significant change for men was for their current traumatic distress, and the greatest significant change for women was for physical aggression (Messina, Zwart & Calhoun, 2020). In some respects, one may have anticipated the reverse. However, this finding might call

into question the generalizability of California prison populations to other prison populations nationwide. Post legislative bill AB109 in 2011, California prison populations consist predominantly of serious violent offenders, while lower-level offenders are diverted into county jails or community supervision.

The efficacy of the *ET* intervention has also shown positive outcomes using a peer-facilitated model at other male and female prisons in California encompassing medium- and maximum-security level populations (Messina & Schepps, in press; Messina & Zwart, 2021). Researchers are further implementing randomized control trials in several of these sites. The results of these studies will be reported in future publications.

Study Limitations

This study relied on findings from a relatively small sample of violent male prisoners using a single group pre-test–post-test design and did not include a comparison group of men who did not participate in

ET. It is therefore difficult to judge whether improvements in posttest measures were solely a product of participation in the curriculum. Also, the California population has changed due to recent legislation and may not be generalizable to other state prison populations or to lower-level offenders. Additionally, the current study relied on self-administered survey data. We did not have access to objective measures (i.e., records-based data) to determine reductions in disciplinary infractions or documented conflict with staff and other residents. Finally, due to the lengthy SHU sentences of the participants, we were not able to collect longitudinal data to assess change over time or to explore whether the post-intervention changes were maintained after release from the SHU or returned to the mean.

Study Strengths

There are notable strengths to this pilot project. *ET* is a manualized intervention providing both a detailed facilitator guide

See *TRAUMA-PREVENTION*, next page

and a participant workbook. The use of a manualized curriculum creates the ability to monitor fidelity and to provide reliability of program delivery. There were three *ET* facilitators throughout the course of the pilot project, and they had been trained by the program author, enhancing reliability of facilitation. The *ET* program also uses a variety of therapeutic approaches to address the impact of trauma: cognitive behavioral treatment, expressive arts, mindfulness, and guided imagery. It is also gender responsive in that it reflects an understanding of the realities unique to both men's and women's lives. Moreover, the program facilitator delivered the intervention, and the research staff administered the research survey, reducing the likelihood of social desirability bias. Finally, the participants' program results were not presented to the parole board, and participants were informed that volunteering to take the program would not affect their release from the SHU or prison.

Study Implications

Corrections departments across the nation seek brief but effective interventions. Brief trauma-specific therapies can be used to effect significant changes in participants' behaviors and their understanding of the lifelong impact of ACEs. As a brief intervention designed specifically for men, the results of the *ET* intervention and feasibility of delivery among a SHU population represent a major contribution to the field, even as a pilot study. The results, combined with written feedback obtained from participants in the post-program questionnaire, provided strong evidence that a brief trauma-specific program for men can be effective with those at the highest level of security. Participant feedback was almost universally positive. The most often expressed constructive feedback pertained to a desire to allow more time to be spent on selected session topics (Messina & Burdon, 2018).

The *ET* trauma-specific brief intervention could be effectively used to introduce participants in short-term housing to new skills that can help them deal with psychological

trauma, build healthy relationships, and sustain their recovery. Additionally, the *ET* brief trauma-specific intervention can be used as a method of providing more immediate attention to clients on waiting lists for specialized programs and of motivating individuals to begin to focus on behavior change by client directed means or by seeking additional treatment.

Additional research on *ET* and longer trauma-specific treatment programs for male offenders will further inform the field on interventions and approaches for providing treatment to men who have experienced ACEs, with the goal of attenuating later-life physical, emotional, and psychological maladies. Relatedly, interventions geared toward younger male offenders can help attenuate the trajectory of violence and abuse from victim to victimizer. Future research should focus on multiple research questions such as whether this brief intervention might increase participation in other trauma-specific programs and whether effects continue over time and should include official records data to assess reductions in infractions and



See *TRAUMA-PREVENTION*, next page

documented violence. Future research should also focus on the potential that trauma-specific programs have on reducing recidivism among offenders released to the community.

References

- Andrews, D.A., & Bonta, J. (2016). *The Psychology of Criminal Conduct*. New York: Routledge.
- American Psychological Association (APA, 2016). *Statement on the Solitary Confinement of Juvenile Offenders*. Washington, DC: Author.
- Arrigo, B.A., & Bullock, J.L. (2008). The psychological effects of solitary confinement on prisoners in supermax units: Reviewing what we know and recommending what should change. *International Journal of Offender Therapy and Comparative Criminology*, 52(6), 622–640. Available at <https://doi.org/10.1177/0306624X07309720>.
- Black, D.S., Sussman, S., & Unger, J.B. (2010). A further look at the intergenerational transmission of violence: Witnessing interparental violence in emerging adulthood. *Journal of Interpersonal Violence*, 25(6), 1022–1042. Available at <https://doi.org/10.1177/0886260509340539>.
- 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(6), 908–11. Available at <https://doi.org/10.1176/ajp.156.6.908>.
- Browne, A., Cambier, A., & Agha, S. (2011). Prisons within prisons: The use of segregation in the United States. *Federal Sentencing Reporter*, 24, 46–49. Available at <https://doi.org/10.1525/fsr.2011.24.1.46>.
- Buss, A.H., & Warren, W.L. (2000). *The Aggression Questionnaire Manual*. Los Angeles, CA: Western Psychological Services.
- Campbell, A., Muncer, S., McManus, I.C., & Woodhouse, D. (1999). Instrumental and expressive representations of aggression: One scale or two? *Aggressive Behavior*, 26(6), 435–444. Available at [https://doi.org/10.1002/\(SICI\)1098-2337\(1999\)25:6<435::AID-AB4>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1098-2337(1999)25:6<435::AID-AB4>3.0.CO;2-Q).
- Center on the Developing Child (2007). *InBrief: The Impact of Early Adversity on Child Development*. Available at <https://developingchild.harvard.edu/resources/inbrief-the-impact-of-early-adversity-on-childrens-development/>.
- Covington, S.S., & Rodriguez, R. (2016). *Exploring Trauma: A Brief Intervention for Men CD-Rom*. Center City, MN: Hazelden.
- Covington, S.S., & Russo, R. (2012, rev. 2016). *Healing Trauma: A Brief Intervention for Women CD-Rom*. Center City, MN: Hazelden.
- Elliot, D.M., & Briere, J. (1992). Sexual abuse trauma among professional women: Validating the Trauma Symptom Checklist-40 (TSC-40). *Child Abuse & Neglect*, 16(3), 391–398. Available at [https://doi.org/10.1016/0145-2134\(92\)90048-V](https://doi.org/10.1016/0145-2134(92)90048-V).
- Felitti, V.J., Anda, R. F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & 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 Preventive Medicine*, 14(4), 245–258. Available at [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8).
- Grassian, S. (2006). Psychiatric effects of solitary confinement. *Washington University Journal of Law and Policy*, 22, 325–383. Available at https://openscholarship.wustl.edu/law_journal_law_policy/vol22/iss1/24.
- Haney, C. (2008). A culture of harm: Taming the dynamics of cruelty in supermax prisons. *Criminal Justice and Behavior*, 35(8), 956–984. Available at <https://doi.org/10.1177/0093854808318585>.
- Haney, C., & Lynch, M. (1997). Regulating prisons of the future: A psychological analysis of supermax and solitary confinement. *N.Y.U. Review of Law & Social Change*, 23(4), 477–570. Available at https://socialchangenyu.com/wp-content/uploads/2017/12/Craig-Haney-Mona-Lynch_RLSC_23.4.pdf.
- Holmes, W.C., & Slap, G.B. (1998). Sexual abuse of boys: Definition, prevalence, correlates, sequelae, and management. *Journal of the American Medical Association*, 280(21), 1855–1862. Available at <https://doi.org/10.1001/jama.280.21.1855>.
- Horwitz, A.V., Widom, C.S., McLaughlin, J., & White, H.R. (2001). The impact of childhood abuse and neglect on adult mental health: A prospective study. *Journal of Health and Social Behavior*, 42(2), 184–201. Available at <https://doi.org/10.2307/3090177>.
- Hyman, S.M., Garcia, M., & Sinha, R. (2006). Gender specific associations between types of childhood maltreatment and the onset, escalation and severity of substance use in cocaine dependent adults. *American Journal of Drug and Alcohol Abuse*, 32(4), 655–664. Available at <https://doi.org/10.1080/10623320600919193>.
- Kaba, F., Lewis, A., Glowa-Kollisch, S., Hadler, J., Lee, D., et al. (2014). Solitary confinement and risk of self-harm among jail inmates. *American Journal of Public Health*, 104(3), 442–447. Available at <https://doi.org/10.2105/AJPH.2013.301742>.
- Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.-L.T., Walters, E.E., & Zaslavsky, A.M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959–976. Available at <https://doi.org/10.1017/S0033291702006074>.
- Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J., Normand, S.-L.T., Manderscheid, R.W., Walters, E.E., & Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, 60(2), 184–189. Available at <https://doi.org/10.1001/archpsyc.60.2.184>.
- Kroenke, K., & Spitzer, R.L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, 32(9), 509–515. Available at <https://doi.org/10.3928/0048-5713-20020901-06>.
- Kubiak, S.P., Kim, W.J., Fedock, G., & Bybee, D. (2015). Testing a violence-prevention intervention for incarcerated women using a randomized control trial. *Research on Social Work Practice*, 25(3), 334–348. Available at <https://doi.org/10.1177/1049731514534300>.
- Liu, J., Lewis, G., Evans, L. (2013). Understanding aggressive behavior across the lifespan. *Psychiatric and Mental Health Nursing*, 20(2), 156–168. Available at <https://doi.org/10.1111/j.1365-2850.2012.01902.x>.
- Messina, N., Grella, C., Burdon, W., & Prendergast, M. (2007). Childhood adverse events and current traumatic distress: A comparison of men and women prisoners. *Criminal Justice and Behavior*, 34(11), 1385–1401. Available at <https://doi.org/10.1177/0093854807305150>.
- Messina, N., & Burdon, W. (2018). The Efficacy of the Moving Beyond Violence and Building Resilience Program with Participant Feedback: Final Report. California Department of Corrections and Rehabilitation. July 2018.
- Messina, N., & Schepps, M. (in press). Opening the proverbial “can of worms” on trauma-specific treatment in prison: The association of ACEs to treatment outcomes. *Clinical Psychology & Psychotherapy*. Available at <https://onlinelibrary.wiley.com/doi/abs/10.1002/cpp.2568>.
- Messina, N., & Zwart, E. (2021). Breaking the silence and healing trauma for incarcerated women: Peer-facilitated delivery of a brief intervention. *MOJ Women's Health*, 10, 8–17. Available at <https://medcraveonline.com/MOJWH/MOJWH-10-00280.pdf>.
- Messina N., Zwart, E., & Calhoun, S. (2020). Efficacy of a trauma intervention for women in a Security Housing Unit. *ARCH Women Health Care*, 3(3), 1–9. Available at https://www.researchgate.net/publication/343725672_Efficacy_of_a_Trauma_Intervention_for_Women_in_a_Security_Housing_Unit.
- Owen, B., Wells, J., & Pollock, J. (2017). *In Search of Safety: Confronting Inequality in Women's Imprisonment*. Oakland, CA: University of California Press.
- Pelican Bay State Prison Security Housing Unit Inmate Handbook (2014). Available at <https://www.law.umich.edu/special/policyclearinghouse/Documents/California%20-%20Pelican%20Bay%20Inmate%20Handbook.pdf>.
- Smith, P.S. (2006). The effects of solitary confinement on prison inmates: A brief history and review of the literature. *Crime and Justice*, 34(1), 441–528. Available at <https://doi.org/10.1086/500626>.
- 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). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. *Journal of the American Medical Association*, 282(18), 1737–1744. Available at <https://doi.org/10.1001/jama.282.18.1737>.
- Thomas, S.P. (2005). Women's anger, aggression, and violence. *Health Care for Women International*, 26(6), 504–522. Available at https://www.researchgate.net/publication/7724798_Women%27s_Anger_Aggression_and_Violence.
- Wolff, N., & Shi, J. (2012). Childhood and adult trauma experiences of incarcerated persons and their relationship to adult behavioral health problems and treatment. *International Journal of Environmental Research and Public Health*, 9(5), 1908–1926. Available at <https://doi.org/10.3390/ijerph9051908>. ■

Copyright of Journal of Community Corrections is the property of Civic Research Institute and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.