

Assessing a Faith-Based Program for Trauma Healing Among Jail Inmates: A Quasi-Experimental Study

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Abstract

This paper assesses a faith-based, short-term program for trauma healing among incarcerated individuals, “Correctional Trauma Healing Program” (CTHP). We hypothesized that participation in the CTHP would reduce negative consequences of lifetime trauma: symptoms of PTSD, state depression, state anger, suicidal ideation, and the risk of interpersonal aggression. We also hypothesized that the reduction, if found, would be partly attributable to anticipated program outcomes (a decrease in vengefulness and an increase in religiosity, forgiveness, perceived forgiveness of God, gratitude to God, and perceived positive impact of the Bible). To test our hypotheses, we conducted a quasi-experimental study of 349 jail inmates in Virginia. Manifest-variable structural equation modeling was applied to analyze data from pretest and posttest surveys. As hypothesized, the CTHP reduced the negative consequences of trauma by increasing religiosity and other positive attributes and decreasing vengefulness directly and/or indirectly via increased religiosity. Implications and limitations of our study are discussed.

Keywords

jail inmates, trauma healing, faith-based program, symptoms of PTSD, suicidal ideation, risk of aggression, negative emotions, religiosity

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About 20% of American adults (18 or older) report having a mental illness in a given year, and one of its contributing factors is trauma, particularly, early adverse life experiences (Centers for Disease Control and Prevention, 2018). Individuals incarcerated in jails and prisons report higher rates of lifetime trauma and thus post-traumatic stress disorder (PTSD) and its comorbid psychiatric disorders than the general population (Bronson & Berzofsky, 2017; James & Glaze, 2006). Mental illness among prisoners increases the risk not only of physical health problems (e.g., stroke and heart disease) and various forms of prison misconduct, but also recidivism indirectly by limiting the efficacy of rehabilitation efforts (Baillargeon et al., 2009; Mears & Cochran, 2012).

This paper examines trauma and its consequences among jail inmates, a correctional population understudied by criminologists, by assessing a faith-based program for trauma healing. Specifically, we test whether inmate participation in a short-term program, called the “Correctional Trauma Healing Program,” reduces the negative affective and behavioral consequences of lifetime trauma, including symptoms of PTSD and the risk of interpersonal aggression; and, if so, whether the program’s outcomes (e.g., an increase in forgiveness and a decrease in vengefulness toward a person who caused a traumatic event) partly explain the reduction by mediating the inverse relationship between program participation and trauma consequences. To empirically examine the hypothesized relationships, we collected data from a quasi-experimental study of 349 inmates (210 in a treatment group and 139 in a control group) housed at a regional jail in Virginia between September of 2018 and March of 2020 and applied a structural equation modeling approach to analyze data from pretest and posttest surveys.

Mental Health Problems in Jails and Prisons: A Context

The rates of mental health problems in correctional populations are higher than those found in the general population. Moreover, the prevalence of mental health problems is even higher among jail than prison inmates. For example, according to national surveys, 64.2% of jail inmates, 56.2% of state prisoners, and 44.8% of federal prisoners experience mental health problems compared to 10.6% of adults in the U.S. general population (James & Glaze, 2006).¹ More recent surveys show the same pattern: the prevalence of major depression was 30.6% among jail inmates and 24.2% among state and federal prisoners, whereas it was 6.6% to 7.1% among American adults (Bronson & Berzofsky, 2017; National Center for Health Statistics, 2021; National Institute of Mental Health, 2019). Inmates with mental health problems are more likely than those without the problems to be charged with assault on a correctional officer or another inmate (James & Glaze, 2006). Research has also found that as many as half of all suicides—the leading cause of death in jails—involve inmates with mental health problems (Marcus & Alcabes, 1993).

Prior Research on Trauma, PTSD, and Comorbid Outcomes

A key contributing factor of mental health problems among incarcerated individuals is their exposure to traumatic events during their lifetime, and more than 75% of the

inmates are estimated to have experienced a high degree of trauma (Allely & Allely, 2020; Baranyi et al., 2018; Blaauw et al., 2002; Gibson et al., 1999; Green et al., 2005).² For instance, jail and prison inmates with mental health problems are over two times more likely to have been physically or sexually abused in the past than those without mental health issues (24% vs. 8% and 27% vs. 10%; James & Glaze, 2006).

A major consequence of trauma is post-traumatic stress disorder (PTSD; American Psychiatric Association, 2013). While prevalence rates of PTSD among inmates vary across studies (e.g., Goff et al., 2007), they tend to be consistently higher among jail inmates. For example, the lifetime prevalence of PTSD was found to be 15.9% among jail inmates and 12.5% among state and federal prisoners, whereas it was 6.8% to 7.8% in the U.S. general population (Kessler et al., 1995; National Institute of Mental Health, 2017). In addition, PTSD has a high rate of comorbidity with other psychiatric disorders, such as major depressive disorder and antisocial personality disorder (Allely & Allely, 2020; Gibson et al., 1999; Lynch et al., 2014). Thus, PTSD may co-occur with depression and anger, which tend to be positively related to suicidal ideation and aggression, respectively, among inmates (e.g., Jang, 2020), becoming an obstacle to rehabilitation (Allely & Allely, 2020; Gonzalez & Connell, 2014).

Despite their higher prevalence rates of PTSD and other mental health problems, jail inmates remain less likely to receive treatment than state and federal prisoners (Chari et al., 2016; James & Glaze, 2006). For example, a study conducted by the Bureau of Justice Statistics reported that jail inmates (17.5%) were about half as likely to receive mental health treatment compared with state prisoners (33.8%; James & Glaze, 2006). The lower chance of mental health treatment in jails is likely due to the transient nature of jails, where inmates spend an average of 25 days in a facility (Gonzalez & Connell, 2014; Zeng, 2020). What tends to be missing in most jails are programs designed to address mental health issues of inmates requiring short-term interventions.

Correctional Trauma Healing Program

The Correctional Trauma Healing Program (CTHP) is a faith-based program for incarcerated individuals, which currently operates in 29 states through a partnership between the American Bible Society (ABS) and Good News Jail & Prison Ministry (*Good News*). Founded in 1816, ABS is a U.S.-based non-denominational organization that not only publishes, translates, and distributes the Bible, but also develops and disseminates trauma healing programs around the world. Since 2017, ABS has partnered with *Good News* to train and certify more than 250 chaplains and local volunteers to facilitate the CTHP (American Bible Society, 2021).

A central component of the CTHP is the Bible. The curriculum is grounded in not only scripture-based stories and examples, but also composite real-life stories to help participants relate these stories to their own experiences and circumstances. These stories are combined with best practices for group activities including art and breathing exercises. Specifically, the CTHP curriculum is based on a workbook, *Healing the Wounded Heart: An Inmate Journal* (American Bible Society, 2018), adapted from material developed in Africa to help bring healing to people traumatized by war and

genocide. The original material is presently used in 68 countries and delivered in 173 languages. It consists of five lessons: (1) If God loves us, why do we suffer? (2) How can the wounds of our heart heal? (3) What happens when someone is grieving? (4) Taking your pain to the cross. (5) How can we forgive others?

The first lesson addresses the seeming contradiction between the existence of a loving God and the existential problem of human suffering (i.e., trauma). Lesson 2 encourages participants to pray to God about their pain and talk with someone who knows how to listen. Lesson 3 teaches that grieving a loss of someone or something important to them is a crucial part of the normal process of recovering from loss, as well as putting their trust in God. Lesson 4 challenges inmates to take their pain and to turn it over to God. The last lesson encourages participants to recognize rather than deny what happened to them, and to forgive those who have wronged them. In addition, they are asked to not wait for the other person to apologize, be committed to forgive, and allow time for this process. These five lessons are covered for 5 days, one lesson per day, and 2 hours per lesson. In sum, the CTHP is a 10-hour, five-session curriculum suitable for a transient population such as those incarcerated in jails.

The Present Study

We examine whether participation in the CTHP helps jail inmates—who were victimized by interpersonal violence and other traumatic events—experience healing, including reductions in the symptoms of PTSD, the negative emotional states associated with comorbid psychiatric disorders (depression and anger), suicidal ideation, and the risk of interpersonal aggression. Figure 1 shows a theoretical model visualizing relationships among our key variables: participation in the CTHP, the program's anticipated outcomes, and the consequences of trauma.

The model's key exogenous variable is participation in the CTHP, that is, whether inmates *completed* the CTHP (treatment group) or did not participate in the program (control group). Estimating a baseline model without the program's anticipated outcomes included, we first examine the relationship between the program participation and the trauma consequences, which we hypothesize to be negative in direction (Hypothesis 1). Controlling for trauma consequences at Time 1 ($T1$), an inverse relationship between program participation and trauma consequences at Time 2 ($T2$; the causal path a in the figure) would indicate the CTHP's healing effects, that is, decreasing trauma consequences between Times 1 and 2.

We expect the healing effects to be attributable, in part, to the program's anticipated outcomes. Among them, a primary outcome is an increase in religiosity since the CTHP is a faith-based program (the causal path b_1). The program is also expected to generate other outcomes (the causal path b_2). Specifically, the CTHP is designed with the goal that inmates will forgive those who have hurt them and leave the issue of judging others to God. Inmates also learn that forgiving others allows them to receive God's forgiveness for their own wrongdoing. As a result of increased interactions with the Bible throughout the program, inmates are expected to experience a sense of gratitude to God and other positive changes (e.g., feeling a sense of connection to God). Thus, we hypothesize that participation in the CTHP increases

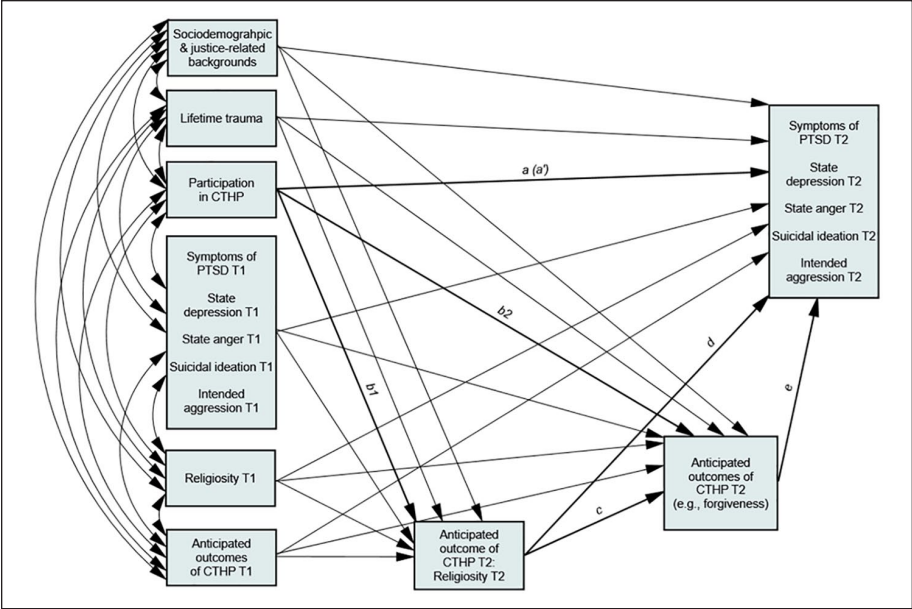


Figure 1. A theoretical model of lifetime trauma, participation in CTHP, anticipated outcomes of CTHP, and consequences of trauma.

religiosity and its associated outcomes of the program (i.e., forgiveness, forgiveness of God, gratitude to God, and perceived positive impact of the Bible) and decreases vengefulness (Hypothesis 2a). In addition, the primary outcome of religiosity is expected to contribute to other outcomes (the causal path *c*) as religion promotes virtue and discourages vice (Johnson et al., 2021). So, we hypothesize that religiosity increases those positive outcomes and decreases the negative outcome of vengefulness (Hypothesis 2b).

Finally, the program’s positive outcomes are hypothesized to decrease the consequences of trauma, whereas the negative outcome is expected to increase them (the causal paths *d* and *e*; Hypothesis 3a). The relationships between participation in the CTHP and the trauma consequences are also hypothesized to decrease in size (from *a* to *a'* in the figure) once the anticipated program outcomes are added to the baseline model, as the relationships are partly mediated by those program outcomes (Hypothesis 3b).

Methods

Research Design and Sample

To assess the effectiveness of the CTHP, we conducted a quasi-experimental study, approved by Baylor University’s Institutional Review Board (IRB Reference #:1239846), utilizing surveys with inmates housed at the Riverside Regional Jail in North Prince George, Virginia. The CTHP was offered throughout the facility on a rotating basis

ensuring that inmates of every security classification level and all housing units (each of which consists of five “Pods” with a capacity of 60–90 inmates) had access to the program. On average, two CTHP groups were offered monthly, one for females and another for males.

About a week before the start of a CTHP, a Pod was chosen for that month’s group, and a flyer was posted at the Pod. The flyer mentioned that the CTHP was a Bible-based program, but that it was open to all inmates regardless of whether or not they had any religious affiliation or background. On recruitment day a verbal announcement was made inviting interested inmates to attend a presentation, where the jail chaplain affiliated with *Good News*, or a local volunteer explained the CTHP and how inmates might benefit from it. After the presentation, inmate questions were answered, and those expressing interest were given an application form. Afterwards, applicants were screened based on their response to question, “Write why you would like to attend this group.” If applicants gave an answer in any way related to having experienced trauma *and* indicated they would be able to attend all five sessions (which was required to receive a certificate), they were given priority over those who gave other reasons (e.g., looking for something to take to court), who were admitted only if space was available. For a small group, on average, 12 inmates were chosen to participate along with two to four alternates.

About 3 days before a CTHP started, the chosen inmates and alternates were “called out” to confirm their acceptance into the program. At that time, they were invited to participate in the current study. Those who agreed to participate were asked to sign a consent form and complete a pretest survey. The CTHP ran for five consecutive days, and within, on average, 2 weeks after the program completion a posttest survey was conducted with program graduates. Although two follow-up surveys were also conducted with these inmates about 1 and 3 months after the posttest, respectively, we analyzed data from the first two surveys for our hypothesis testing because of high attrition at the last two surveys (see below for details), while the follow-up data were used for supplemental analysis (see the Results section). Recruitment for the treatment group began in September of 2018 and ended in February of 2020. During the 18-month period, 22 healing groups of 210 inmates (10 male and 12 female groups of 106 and 104 inmates, respectively), participated in the pretest survey, and 178 of them (95 males and 83 females) completed the posttest (response rate: 84.8%).

A control group was created based on random sampling of 240 inmates (120 males and 120 females) that were likely to be typical inmates who had not participated in the CTHP. Specifically, we first randomly selected 4 of 12 male Pods and then drew a random sample of 120 from a list of 345 male inmates housed at the selected Pods (i.e., 30 inmates per Pod). On the other hand, 120 female inmates were randomly selected from a list of 199 housed at all three female Pods. Only two surveys were conducted with the control group inmates: a “pretest” survey in February of 2020 and a “posttest” about 2 weeks (the average time interval between the two tests of the healing groups) later in March. More than half of each random sample (72 males and 67 females, 60.0% and 55.8% of 120, respectively) completed the pretest survey, resulting in a control group of 139 inmates, and 111 of them (60 males and 51 females) returned to complete the posttest (response rate: 79.8%).

In sum, our total sample included 349 (178 males and 171 females) and 289 inmates (155 males and 134 females) at the pretest and posttest, respectively (response rate: 82.8%).

Measurement

The key exogenous variable, participation in the *CTHP*, is dichotomous (0=not participated, 1=completed). To measure an inmate's *lifetime trauma*, we used Schnurr et al.'s (1999) 10-Item Brief Trauma Questionnaire, which asked whether the inmate had experienced any of 10 types of traumatic events, including interpersonal violence, directly (physically or sexually abused) or vicariously (witnessing interpersonal violence; see Appendix). Since responses were either "Yes" (=1) or "No" (=0) for each type, the sum of items ranged from 0 to 10.

To measure *symptoms of PTSD*, we used Connor and Davidson's (2001) Short Post-Traumatic Stress Disorder Rating Interview (SPRINT), which is brief and self-report, thereby being suitable for our study of jail inmates, though not an instrument for a diagnosis of PTSD. We modified the 8-item instrument by making one item that was, in our judgment, a triple-barreled question ("To what extent have you *lost enjoyment for things, kept your distance from people, or found it difficult to experience feelings?*"; *emphasis added*) into three (see Items 3, 6, and 9 in Appendix). Exploratory factor analysis (EFA) showed that the 10 items had moderate-to-high loadings, ranging from 0.638 to 0.765 at the pretest and from 0.573 to 0.805 at the posttest, and they had excellent inter-item reliability ($\alpha = .910$ and $.921$). Two scales of negative emotional states were created. *State depression* was the average of five items from the CES-Depression Scale (Radloff, 1977). The items loaded on a single factor with moderate-to-high loadings, ranging from 0.522 to 0.870 and from 0.597 to 0.869 at the pretest and posttest, and had high internal reliability ($\alpha = .833$ and $.842$). *State anger* was the average of two items about feeling angry and frustrated, which had good-to-high inter-item reliability ($\alpha = .817$ and $.779$).

Next, *suicidal ideation* was measured by an item asking how often a respondent had "felt suicidal" during the past week prior to the survey (1=never, 2=rarely, 3=sometimes, 4=often, 5=very often). An inmate's risk of engaging in interpersonal aggression (i.e., *intended aggression*) was measured using the vignette method. That is, inmates were given a hypothetical situation where an inmate gets into an argument with another inmate over a seat in jail dayroom (see Appendix) and asked how likely they would be to act in the same way as the character does in the vignette, using a 6-point scale (1=not likely at all [0%], 2=very unlikely, 3=unlikely, 4=likely, 5=very likely, 6=certainly [100%]).³

The *CTHP*'s anticipated outcomes were measured mostly by using two or more items. To measure *religiosity*, a scale was created by summing standardized scores of five items: two items of subjective religiosity (perceived closeness to God and importance of religion or relationship with God) and three items of objective religiosity (frequency of religious service attendance, praying outside of religious services, and reading the Bible or other sacred text in private). The items had a single-factor solution with moderate-to-high loadings, ranging from 0.589 to 0.801 at the pretest and from 0.600 to 0.797 at the posttest, and high internal reliability ($\alpha = .826$ and $.839$).

After having inmates think about a person who caused a traumatic event that was particularly stressful or disturbing for them, we asked about their *forgiveness* and *vengefulness* toward the person. Specifically, we used a single item to measure forgiveness (Krause & Hayward, 2013) and two items to measure vengeful rumination (McCullough et al., 1998; see Appendix), which had good internal reliability at the pretest and posttest ($\alpha = .748$ and $.780$). An inmate's perception of *God's forgiveness* was measured by an item asking how strongly he or she agreed or disagreed that God could forgive him or her, which was used in Krause and Ellison's (2003) study. To measure an inmate's *gratitude to God*, we averaged Krause's (2006) two items asking how grateful he or she was for all God had done for (1) him or her and (2) his or her family members and close friends. The items had high inter-item reliability at both tests ($\alpha = .856$ and $.889$). We measured an inmate's perceived *positive impact of the Bible* in terms of changes in the inmate's relationships with God and other people using six items that loaded on a single factor with high loadings (ranging from 0.749 to 0.921 and from 0.804 to 0.926) and had excellent reliability ($\alpha = .934$ and $.951$) at the pretest and posttest (see Appendix).

Finally, we controlled for background variables found to be related to the endogenous variables (American Psychiatric Association, 2013; Baranyi et al., 2018; Lee, 2019). Sociodemographic controls included *age*, *sex* (0=female, 1=male), *race* (0=Black, 1=White), *marital status* (dummy variables of *married*, *divorced*, and *widowed* with "single" being the reference category), and *religion* (dummy variables of *Protestant*, *Catholic*, *Muslim*, *Jewish*, *Eastern religion*, and *other religion* with "no religion" being the omitted category). We also controlled for several criminal justice-related characteristics: total number of *admissions to jail*, *sentencing status* (0=detained, 1=sentenced), *security classification* (1=minimum, 2=medium, 3=maximum), and *current offense* (dummy variables of *property offense*, *drug offense*, *other offense*, and *technical violation* with "violent offense" being the reference category). Finally, a methodological control, *time interval* between the pretest and posttest, was also included because the interval varied among the CTHP groups.

Analytic Strategy

To test our hypotheses, we applied a manifest-variable structural equation modeling approach to analyze data from the pretest and posttest, which enabled us to not only simultaneously estimate for multiple endogenous variables, but to also test the statistical significance of the hypothesized mediation. For model estimation, we employed Mplus Version 8.5 (L. K. Muthén & Muthén, 2017) that incorporates Muthén's (1983) "general structural equation model" and full information maximum likelihood (FIML) estimation. As concepts were measured by ordered categorical (e.g., PTSD) and continuous (e.g., age) variables, we used the estimation option of MLR, which generates maximum likelihood estimates with standard errors that are "robust to non-normality and non-independence of observations" (L. K. Muthén & Muthén, 2017, p. 668). To treat missing data, we used FIML, which tends to produce unbiased estimates similar to multiple imputation (Baraldi & Enders, 2010; Graham, 2009). No

model fit index is reported as the model was saturated. Finally, statistical significance ($\alpha = .05$) was assessed using two-tailed tests, but we also applied one-tailed tests for relationships that were a priori predicted or hypothesized.

Results

Table 1 presents descriptive statistics of lifetime trauma as well as sociodemographic and justice-related backgrounds for the total sample and separately for the treatment and control groups. It also reports results from *t*-tests and crosstabulation analyses conducted to compare the two groups. Study participants were, on average, about 37 (37.36) years old, with the youngest and oldest being 19 and 66, respectively. Treatment and control group inmates were not significantly different in age (37.79 vs. 36.71). The total sample was almost evenly split between males (51.0%) and females (49.0%) and between whites (48.3%) and blacks (51.7%). The two groups did not differ in sex (50.5% vs. 51.8% male) but were different in race with more white inmates in the treatment than control group (53.3% vs. 40.6%). About 8 out of 10 (79.2%) study participants were single, and about 1 out of 6 to 7 (15.2%) of them reported they had no religion. The control group inmates were more likely than their treatment group counterparts to be single (86.7% vs. 72.8%) and to report no religious affiliation (23.0% vs. 9.7%).⁴

In addition, study participants had been admitted to jail, on average, five to six times, and two thirds (65.6%) were serving a sentence at the time of the study with the control group inmates being more likely to be detainees waiting for sentence than the treatment group. The treatment and control groups differed only in violent offenses: program participants were more likely to be violent offenders than non-participants (31.9% vs. 20.9%).

Inmates reported that they had been exposed to, on average, about 3 (3.41) types of traumatic events in their lifetime, while 49 (14.0%) said that they experienced none of the listed events (not shown in the table). About 9 (87.6%) out of 10 treatment group inmates had experienced one or more traumas in the past, whereas, interestingly, almost the same percentage (83.5%) of those who did not sign up for CTHP reported at least one trauma. The treatment and control group inmates were exposed to a similar degree of traumatic events, whether the events were examined individually or collectively. About 6 out of 10 (60.2%) inmates said they had witnessed someone being seriously injured or killed (or feared that someone would be), whereas half (50.4%) experienced criminal victimization. Also, 1 in 3 inmates were physically abused in childhood (33.0%), and almost 3 out of 10 (28.7%) experienced unwanted sexual contact.

Table 2 shows our baseline model without the mediators of program outcomes, where the five variables of trauma consequences measured at the posttest, specified to be correlated via residuals, were regressed on inmate's participation in the CTHP, controlling for lifetime trauma and the pretest measures of trauma consequences as well as sociodemographic and justice-related background variables.⁵ The table presents parameter estimates (i.e., unstandardized coefficients) except for coefficients in

Table 1. Descriptive Statistics of Trauma and Sociodemographic/Justice-Related Background Variables for Total Sample and Subsamples of Treatment and Control Groups.

Variables	Total sample (n = 349)					Treatment group (n = 210)					Control group (n = 139)				
	n	M/ſ	SD/%	Minimum	Maximum	n	M/ſ	SD/%	Minimum	Maximum	n	M/ſ	SD/%	Minimum	Maximum
Age	349	37.36	10.57	19	66	210	37.79	10.52	19	65	139	36.71	10.66	19	66
Sex (1 = male, 0 = female)	349	0.51	0.50	0	1	210	0.51	0.50	0	1	139	0.52	0.50	0	1
Race (1 = white, 0 = black)	348	0.48	0.50	0	1	210	0.53*	0.50	0	1	138	0.41*	0.49	0	1
Admissions to jail	349	5.60	4.69	1	29	210	5.81	4.80	1	29	139	5.27	4.51	1	23
Sentenced (1 = yes, 0 = no)	349	0.66	0.48	0	1	210	0.72*	0.45	0	1	139	0.56*	0.50	0	1
Violent offense (1 = yes, 0 = no)	349	0.28	0.45	0	1	210	0.32*	0.47	0	1	139	0.21*	0.41	0	1
Property offense (1 = yes, 0 = no)	349	0.36	0.48	0	1	210	0.35	0.48	0	1	139	0.38	0.49	0	1
Drug offense (1 = yes, 0 = no)	349	0.26	0.44	0	1	210	0.26	0.44	0	1	139	0.26	0.44	0	1
Other offense (1 = yes, 0 = no)	349	0.35	0.48	0	1	210	0.33	0.47	0	1	139	0.38	0.49	0	1
Technical violation (1 = yes, 0 = no)	349	0.65	0.48	0	1	210	0.67	0.47	0	1	139	0.61	0.49	0	1
Time interval (days)	285	14.35	6.59	5	49	174	15.26*	8.31	5	49	111	12.91*	0.39	11	14
Lifetime trauma	349	3.41	2.33	0	9	210	3.45	2.26	0	9	139	3.36	2.44	0	9
A war zone/war-related casualty	349	0.06	0.24	0	1	210	0.06	0.24	0	1	139	0.06	0.23	0	1
A serious accident	349	0.48	0.50	0	1	210	0.50	0.50	0	1	139	0.45	0.50	0	1
A major natural/technical disaster	349	0.20	0.40	0	1	210	0.23	0.42	0	1	139	0.17	0.37	0	1
A life-threatening illness	349	0.14	0.34	0	1	210	0.13	0.34	0	1	139	0.15	0.36	0	1
Childhood physical abuse	349	0.33	0.47	0	1	210	0.33	0.47	0	1	139	0.33	0.47	0	1
Criminal victimization	349	0.50	0.50	0	1	210	0.53	0.50	0	1	139	0.47	0.50	0	1
Unwanted sexual contact	349	0.29	0.45	0	1	210	0.29	0.46	0	1	139	0.28	0.45	0	1
Any other dangerous situation	349	0.24	0.43	0	1	210	0.22	0.42	0	1	139	0.27	0.45	0	1
A close one's violent death	349	0.57	0.50	0	1	210	0.54	0.50	0	1	139	0.61	0.49	0	1
Vicious victimization	349	0.60	0.49	0	1	210	0.62	0.49	0	1	139	0.58	0.50	0	1

(continued)

Table 1. (continued)

Variables	Total sample (n=349)				Treatment group (n=210)				Control group (n=139)			
	n	Mif	SD/%	Minimum Maximum	n	Mif	SD/%	Minimum Maximum	n	Mif	SD/%	Minimum Maximum
Marital status												
Single	190		79.2%		118		72.8%		72		86.7%	
Married	36		15.0%		31		19.1%		5		6.0%	
Divorced	11		4.6%		11		6.8%		5		6.0%	
Widowed	3		1.3%		2		1.2%		1		1.2%	
	240		100.0%		162		100.0%		83		100.0%	
Religion												
Protestant	202		61.2%		137		70.3%		65		48.1%	
Catholic	35		10.6%		17		8.7%		18		13.3%	
Muslim	30		9.1%		13		6.7%		17		12.6%	
Jewish	4		1.2%		4		2.1%		0		0.0%	
Eastern religion	0		0.0%		0		0.0%		0		0.0%	
Other religion	9		2.7%		5		2.6%		4		3.0%	
No religion	50		15.2%		19		9.7%		31		23.0%	
	330		100.0%		195		100.0%		135		100.0%	
Security classification												
Minimum	219		62.9%		126		60.3%		93		66.9%	
Medium	109		31.3%		74		35.4%		35		25.2%	
Maximum	20		5.7%		9		4.3%		11		7.9%	
	348		100.0%		209		100.0%		139		100.0%	

Note. Crosstabulation analysis revealed that the treatment and control groups were different in marital status ($\chi^2=8.31$, $df=3$, $p=.04$) and religion ($\chi^2=16.7$, $df=6$, $p=.01$) but not in security classification ($\chi^2=5.26$, $df=2$, $p=.07$).

* $p<.05$.

Table 2. Estimated Baseline Model of Participation in the CTHP and Negative Consequences of Lifetime Trauma ($n = 349$).

Variables	Symptoms of PTSD T2	State depression T2	State anger T2	Suicidal ideation T2	Intended aggression T2
	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
CTHP	-5.145* (1.002)	-0.476* (0.095)	-0.484* (0.108)	-0.370* (0.113)	-0.291+ (0.153)
Age	0.002 (0.048)	0.000 (0.004)	0.000 (0.006)	0.006 (0.005)	-0.007 (0.008)
Male	1.888* (0.956)	0.066 (0.092)	0.147 (0.108)	-0.120 (0.093)	0.143 (0.153)
White	2.883* (0.981)	0.130 (0.090)	0.121 (0.109)	0.201 (0.105)	-0.135 (0.154)
Married	-0.294 (1.372)	-0.007 (0.137)	0.359* (0.180)	-0.131 (0.151)	0.042 (0.227)
Divorced	0.505 (1.204)	-0.021 (0.215)	-0.292 (0.300)	-0.121 (0.292)	-0.420 (0.415)
Widowed	0.991 (5.955)	-0.072 (0.359)	0.320 (0.337)	-0.536 (0.283)	-0.548 (0.639)
Protestant	-1.631 (1.357)	-0.023 (0.113)	-0.003 (0.120)	0.160 (0.125)	-0.251 (0.215)
Catholic	-4.410 (3.499)	-0.241 (0.369)	-0.479 (0.439)	0.304 (0.264)	-0.355 (0.389)
Muslim	-1.004 (2.137)	-0.207 (0.168)	-0.257 (0.207)	0.296 (0.179)	-0.603 (0.333)
Jewish	0.812 (2.641)	0.315 (0.251)	0.250 (0.361)	0.339 (0.316)	0.270 (0.414)
Eastern religion	-2.562 (3.787)	-1.271* (0.237)	-1.307* (0.252)	0.600 (0.486)	-0.027 (0.546)
Other religion	-2.457 (1.813)	-0.198 (0.217)	-0.214 (0.219)	0.078 (0.200)	-0.045 (0.409)
Admissions to jail	0.186 (0.106)	0.003 (0.009)	-0.001 (0.012)	-0.007 (0.009)	0.020 (0.014)
Sentenced	-1.029 (1.040)	-0.124 (0.103)	-0.134 (0.114)	-0.008 (0.113)	-0.118 (0.168)
Security classification	0.422 (0.752)	-0.014 (0.075)	-0.019 (0.086)	0.078 (0.076)	-0.116 (0.124)
Property offense	1.092 (0.966)	0.090 (0.094)	0.222* (0.110)	0.036 (0.100)	-0.361* (0.162)
Drug offense	-1.359 (1.077)	-0.290* (0.093)	-0.221* (0.107)	-0.296* (0.098)	-0.134 (0.156)
Other offense	-0.115 (0.972)	-0.015 (0.091)	-0.055 (0.112)	0.003 (0.098)	0.072 (0.163)
Technical violation	0.880 (0.982)	0.056 (0.092)	0.170 (0.113)	0.186 (0.099)	0.079 (0.162)

(continued)

Table 2. (continued)

Variables	Symptoms of PTSD T2	State depression T2	State anger T2	Suicidal ideation T2	Intended aggression T2
	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
Time interval	-0.012 (0.079)	-0.008 (0.007)	0.005 (0.008)	0.004 (0.008)	-0.006 (0.010)
Lifetime trauma	-0.116 (0.240)	0.014 (0.020)	0.003 (0.024)	-0.015 (0.021)	0.027 (0.038)
Symptoms of PTSD T1	0.329* (0.081)	0.009 (0.008)	0.007 (0.009)	-0.007 (0.008)	-0.013 (0.013)
State depression T1	0.183 (0.916)	0.453* (0.078)	0.149 (0.098)	0.053 (0.092)	-0.307* (0.139)
State anger T1	1.360 ⁺ (0.759)	-0.101 (0.080)	0.270* (0.101)	-0.116 (0.082)	0.244* (0.125)
Suicidal ideation T1	0.858 ⁺ (0.487)	0.004 (0.045)	-0.022 (0.052)	0.397* (0.072)	0.102 (0.094)
Intended aggression T1	-0.174 (0.367)	0.055 (0.035)	0.058 (0.043)	0.015 (0.034)	0.567* (0.057)
State depression T2	0.434* (0.068)				
State anger T2	0.400* (0.059)	0.725* (0.033)			
Suicidal ideation T2	0.266* (0.067)	0.404* (0.071)	0.307* (0.065)		
Intended aggression T2	0.278* (0.069)	0.074 (0.072)	0.118 ⁺ (0.070)	0.089 (0.072)	
R ²	.368 (.047)	.383 (.051)	.322 (.050)	.309 (.064)	.474 (.045)

Note. Parameter estimates (i.e., unstandardized coefficients) are presented except for coefficients in italic that are residual correlations of endogenous variables at the posttest (T2).

* $p < .05$ (two-tailed test).⁺ $p < .05$ (one-tailed test).

italic that are residual correlations of endogenous variables. Pretest and posttest measures are distinguished below by using *T1* and *T2* after a variable's name.

First, Hypothesis 1 was supported as we found evidence of a significant beneficial effect associated with participation in the CTHP. That is, the treatment group inmates reported a significant reduction in symptoms of PTSD, state depression, state anger, suicidal ideation, and intended aggression (-5.145 , $-.476$, $-.484$, $-.370$, and $-.291$, respectively) after completing the program compared to their control group counterparts. As expected, those trauma consequences were positively correlated with a few exceptions (see residual correlations in italic)

Next, we added the six anticipated program outcomes simultaneously as mediators between program participation and the consequences of trauma, and estimated results are presented in Table 3. As hypothesized (Hypotheses 2a), participation in the CTHP was positively related to religiosity *T2* (0.853) and other positive outcomes—forgiveness of God *T2* (0.256), gratitude to God *T2* (0.244), and positive impact of the Bible *T2* (0.260)—and inversely to the negative outcome of vengefulness *T2* (-0.299), while controlling for *T1* measures of the program outcomes. In other words, program participation increased the four out of five positive attributes and decreased vengefulness among treatment group inmates. Although the program had no direct effect on forgiveness *T2* (0.085, $p > .05$), the completion of the CTHP increased forgiveness indirectly via religiosity *T2* ($=0.853 \times =0.128=0.109$, $SE=0.050$; not presented in the table): that is, the CTHP increased religiosity, which in turn enhanced forgiveness, consistent with Hypothesis 2b. In fact, participation in the CTHP also had significant indirect effects on the other three positive attributes via religiosity *T2*: forgiveness of God, gratitude to God, and positive impact of the Bible (.055, .082, and .094, respectively; not presented in the table).

As hypothesized (Hypothesis 3a), we found one or more of the program outcomes were related to the negative consequences of trauma in the expected direction. First, the more an inmate increased involvement in religion, the less likely the inmate said he or she would argue with another inmate over a seat (-0.060). Next, forgiving a person who caused a traumatic event decreased PTSD symptoms (-1.000), whereas being vengeful toward the person increased the symptoms (1.781). Vengefulness also increased state depression (0.093), state anger (0.139), and intended aggression (0.283), whereas inmate's perceived forgiveness of God and positive impact of the Bible decreased state depression (-0.131) and anger (-0.177), respectively. Finally, inmate's gratitude to God decreased suicidal ideation (-0.198), whereas perceived positive impact of the Bible reduced the risk of interpersonal aggression (-0.363).

Consistent with Hypothesis 3b, the baseline relationships between program participation and the trauma consequences (presented in Table 2) decreased in size when the mediators of anticipated program outcomes were added to the model. First, the inverse relationship between CTHP participation and PTSD symptoms decreased by 22.4%, from -5.145 to -3.991 , which was attributable to two significant indirect relationships: CTHP \rightarrow vengefulness *T2* \rightarrow PTSD symptoms *T2* (-0.533 , $SE=0.270$; not presented in the table) and CTHP \rightarrow religiosity *T2* \rightarrow forgiveness *T2* \rightarrow PTSD symptoms *T2* (-0.109 , $SE=0.064$, $p < .05$, one-tailed test). That is, the healing effect of the CTHP

Table 3. Estimated Mediation Model of Participation in the CTHP and Negative Consequences of Lifetime Trauma (n = 349).

Variable	Religiosity T2	Forgive-ness T2	Vengeful-ness T2	Forgive-ness of God T2	Gratitude to God T2	Positive impact of the Bible T2	Symptoms of PTSD T2	State depression T2	State anger T2	Suicidal ideation T2	Intended aggression T2
CTHP	0.853*	0.085	-0.299*	0.256*	0.244*	0.260*	-30.991*	-0.395*	-0.473*	-0.269*	0.048
Age	0.012	-0.008	0.004	-0.002	-0.005	-0.005	0.000	-0.001	0.000	0.006	-0.011
Male	-0.125	-0.141	0.171	0.196*	0.011	-0.039	10.365	0.066	0.129	-0.158	0.088
White	-0.255	0.070	0.148	0.030	-0.005	-0.084	20.274*	0.118	0.118	0.154	-0.222
Married	-0.158	0.521*	0.032	0.093	0.148	0.357*	0.011	0.075	0.457*	-0.032	0.158
Divorced	-1.000	0.442	-0.200	0.216	-0.043	-0.331	1.163	-0.025	-0.315	-0.126	-0.497
Widowed	-0.424	-0.628	-0.291	0.268	0.073	0.190	1.666	-0.021	0.336	-0.477	-0.430
Protestant	0.170	0.471*	-0.442*	-0.055	-0.031	0.105	-0.298	0.075	0.170	0.186	-0.102
Catholic	1.363	0.195	-0.495	0.179	0.154	0.173	-3.441	-0.089	-0.361	0.287	0.163
Muslim	-0.327	0.946*	-0.303	-0.157	0.095	-0.170	-0.102	-0.179	-0.227	0.261	-0.513
Jewish	-0.998	0.212	-0.069	-0.166	-0.057	-0.102	0.043	0.261	0.228	0.245	0.124
Buddhist	-0.526	1.139*	-0.892*	-0.020	-0.050	0.224	1.678	-1.121*	-1.114*	0.788	0.095
Other religion	0.256	0.902*	0.269	-0.200	-0.010	-0.380	-2.522	-0.251	-0.309	-0.063	-0.106
Admissions	-0.031	0.031*	-0.005	-0.005	0.008	0.014	0.193	0.005	0.002	-0.007	0.024
Sentenced	0.238	0.064	-0.013	-0.101	-0.092	0.087	-0.802	-0.077	-0.067	-0.009	-0.049
Security classification	0.068	0.125	0.076	0.035	-0.016	0.026	0.629	0.025	0.032	0.085	-0.085
Property offense	0.343	-0.008	0.039	0.053	0.085	0.237*	1.367	0.133	0.267*	0.075	-0.244
Drug offense	0.604*	0.291*	-0.186	-0.001	0.092	-0.037	-0.444	-0.225*	-0.187	-0.212*	0.018
Other offense	-0.270	-0.052	0.042	-0.071	-0.168	-0.135	-0.726	-0.063	-0.091	-0.070	-0.050
Technical violation	0.398	0.190	0.003	-0.045	-0.044	-0.070	1.404	0.066	0.199	0.190	0.102
Time interval	0.005	0.003	-0.003	-0.015	-0.015	0.004	-0.008	-0.006	0.009	0.004	-0.006
Lifetime trauma	0.005	-0.007	0.001	-0.008	-0.046*	0.020	-0.070	0.020	0.019	-0.020	0.027
PTSD T1	0.001	0.001	0.009	0.003	0.000	-0.003	0.329*	0.011	0.005	-0.008	-0.012
State depression T1	0.506	-0.122	-0.297*	-0.150*	-0.078	0.061	0.499	0.464*	0.238*	0.035	-0.182
State anger T1	-0.280	0.073	0.196*	0.041	0.104	0.007	0.816	-0.110	0.196	-0.126	0.176

(continued)

Table 3. (continued)

Variable	Religiosity T2	Forgiveness T2	Vengefulness T2	Forgiveness of God T2	Gratitude to God T2	Positive impact of the Bible T2	Symptoms of PTSD T2	State depression T2	State anger T2	Suicidal ideation T2	Intended aggression T2
Suicidal ideation T1	0.037	-0.067	0.026	-0.064	-0.003	-0.089	0.520	-0.018	-0.043	0.371*	0.068
Intended aggress T1	-0.093	-0.068	0.057	-0.015	-0.072*	0.005	-0.322	0.048	0.061	0.001	0.523*
Forgiveness T1	-0.121	0.211*	-0.071	0.086*	0.077	0.077	-0.234	0.027	0.001	0.028	-0.023
Vengefulness T1	0.217	-0.146*	0.461*	0.015	0.047	-0.089	-0.950	-0.088	-0.080	-0.005	-0.195*
Forgiveness of God T1	-0.132	0.026	-0.003	0.196*	0.086	0.093	0.137	0.029	-0.017	0.029	0.125
Gratitude to God T1	0.000	0.132	-0.016	0.127	0.270*	0.095	-0.608	-0.037	-0.100	-0.063	0.182
Impact of the Bible T1	0.346	0.272*	-0.110	-0.054	0.031	0.326*	1.015	0.182*	0.296*	0.108	0.187
Religiosity T1	0.758*	-0.122*	0.020	-0.019	-0.050	-0.058*	0.129	0.000	-0.012	-0.006	0.048
Religiosity T2		0.128*	-0.004	0.064*	0.096*	0.110*	-0.018	0.000	-0.001	0.032	-0.060+
Forgiveness T2							-1.000*	-0.066	-0.067	-0.016	-0.074
Vengefulness T2		-0.090					1.781*	0.093+	0.139*	0.106	0.283*
Forgiveness of God T2		-0.027	-0.175*				-0.537	-0.131+	-0.025	-0.030	-0.069
Gratitude to God T2		-0.045	-0.036	0.413*			-0.164	-0.007	0.162	-0.198*	-0.131
Impact of the Bible T2		0.026	-0.224*	0.371*	0.209+		-0.856	-0.084	-0.177+	-0.109	-0.363*
R ²	.713	.373	.484	.359	.404	.596	.437	.427	.388	.365	.592

Note. Coefficients in italic are residual correlations of mediating endogenous variables at the posttest (T2).

* $p < .05$ (two-tailed test). + $p < .05$ (one-tailed test).

on the symptoms of PTSD was explained by the program reducing vengefulness and enhancing forgiveness via increased religiosity. Next, the inverse relationship between CTHP completion and state depression was reduced by 17.0%, from -0.476 to -0.395 , and the healing effect was explained by inmate's perceived forgiveness of God, which increased as a result of the program (-0.034 , $SE=0.020$, $p < .05$, one-tailed test). While the CTHP-state anger relationship decreased to a lesser extent (from -0.484 to -0.473), the decrease was a result of the CTHP reducing vengefulness (-0.042 , $SE=0.024$, $p < .05$, one-tailed test).

Next, the inverse relationship between the CTHP and suicidal ideation reduced by 27.3%, from -0.370 to -0.269 , and the reduction was attributable to the program increasing gratitude to God, which in turn decreased suicidal ideation (-0.049 , $SE=0.026$, $p < .05$, one-tailed test). Finally, the relationship between the CTHP and interpersonal aggression became not significant (0.048) when the mediators were added to the model. This change was attributable to the CTHP's indirect effect via vengefulness (-0.085 , $SE=0.043$) and positive impact of the Bible (-0.094 , $SE=0.052$, $p < .05$, one-tailed test). Despite the significant relationships that religiosity had with participation in the CTHP (0.853) and intended aggression (-0.060), religiosity's mediation between the two variables was not significant (-0.051 , $SE=0.034$, $p > .05$).

Based on the support for our hypotheses, we conducted a supplemental analysis to explore sex and race differences in the effectiveness of the CTHP given previous findings about the differences in trauma and its consequences (e.g., American Psychiatric Association, 2013; Baranyi et al., 2018; Tolin & Foa, 2006). Specifically, we conducted a multigroup analysis, using equality constraint, to see whether the effect of the CTHP participation significantly differed between males and females and between whites and blacks. We found only 1 out of 10 (5 trauma consequences \times 2 sociodemographic variables) tests was significant (see Supplemental Table 2). The exception was a significant race difference in the effect of the CTHP on PTSD symptoms, where the healing effect was greater among whites than blacks, which is difficult to explain without additional data. Other than that, the effectiveness of the CTHP was found to be equally applicable to males and females and whites and blacks.

In addition, to further explore whether or not the program's impact was short-lived, we combined the pretest and posttest data with data from two follow-up surveys, conducted only with the CTHP graduates, at 1 and 3 months after the program ended. The number of inmates who participated in the first and second follow-up surveys were 118 (64 males and 54 females) and 70 (40 males and 30 females), respectively. Since about 4 out of 10 (43.8%) CTHP graduates did not participate in the first follow-up and only one third (33.3%) of them did the second, our findings are tentative and examined only for exploratory purposes.

Specifically, we conducted one-way repeated measures ANOVA separately for each trauma consequence. We found that all trauma consequences remained at the reduced posttest level for 3 months after the program (see Supplemental Table 3). For example, among 60 inmates who provided data on PTSD symptoms at all four surveys, average PTSD symptoms decreased between the pretest (24.333) and posttest (14.950) by almost 40% (38.6%) and did not significantly change at the first (15.083)

and second follow-up (15.233), remaining significantly different from the pretest level. A test of overall mean differences in the repeated measures indicated statistical significance of the observed L-shaped pattern of change in PTSD symptoms (see Supplemental Figure 1). Similarly, the average risk of interpersonal aggression at the second follow-up (3.220) remained at the posttest level (3.240), being significantly lower than the pretest average (3.680). Not considering a minor increase at the first follow-up (3.360), the pattern across the three waves was also significant: $F(1.920, 107.496) = 4.285$ ($p < .05$).

Discussion

Despite court mandates for access to adequate health care in prisons (including several U.S. Supreme Court decisions), the prevalence of mental illness, such as PTSD and depression, continues to be inadequately addressed (Gonzalez & Connell, 2014). The level of care for mental health problems in jails is almost certainly worse than that found in prisons, partly because inmates in jails are incarcerated for a relatively short period of time—less than a month on average (Zeng, 2020)—which makes it very difficult to provide systematic treatment or program interventions (even if resources were available). This is why the current finding—that a modest intervention (10 hours total) can significantly reduce PTSD symptoms, negative emotional states, suicidal ideation, and the risk of aggression toward another inmate—is so promising.

The observed healing effect was attributable in part to outcomes the program was designed to generate. Not surprisingly, as a faith-based program, the CTHP increased inmate's religiosity. The program also generated other positive attributes directly and/or indirectly via increased religiosity. That is, we found that the CTHP helped inmates become more forgiving toward a person who caused them to suffer from a traumatic event, by increasing their involvement in religion, whereas program participation reduced vengefulness toward the person directly, that is, not mediated by increased religiosity. In addition, the CTHP had both direct and indirect effects on inmate perception of God's forgiveness, gratitude to God, and positive impact of the Bible. These outcomes then contributed to the reduction of PTSD symptoms, state depression, state anger, suicidal ideation, and the risk of interpersonal aggression. The emotional healing effect of enhanced forgiveness (and reduced vengefulness) is consistent with the finding of Forgiveness Therapy ameliorating trauma-associated anger, depression, and anxiety among maximum-security prison inmates as well as non-incarcerated individuals (Enright & Fitzgibbons, 2015; Gueta et al., 2022; Song et al., 2021; Yu et al., 2021). Furthermore, our supplemental analysis revealed the program's healing effect was not only applicable to both males and females and whites and blacks but also unlikely to be short-lived, with the effect remaining significant up to 3 months after completion of the program.

The present findings support the perspective of "positive criminology" in that healing trauma by promoting inmates' positive experiences (e.g., increased forgiveness and gratitude) reduced their negative emotional states (anger and depression) and the risk of aggressive behavior in jail, thereby increasing the likelihood of desisting from crime after release (Ronel, 2015; Ronel & Elisha, 2011). Particularly, our study

provides evidence in support of “spiritual criminology” given that the promotion of positive experiences was facilitated by a faith-based program designed to help inmates heal from their traumatic experiences through spiritual integration, that is, a new or renewed relationship with God (Ronel & Ben Yair, 2018).

Our generally positive results, however, need to be weighed with several things in mind. First, although the program substantially reduced the treatment group’s average PTSD symptoms from 24.333 to 14.950 (38.6% reduction; see Supplemental Table 3), we found about 4 out of 10 (41.7%) CTHP graduates remained PTSD-positive at the posttest after a 35% drop from 76.7% at the pretest.⁶ Second, despite the minimal attrition between the pretest and posttest and our effort to statistically control for self-selection, a concern for selection bias remains as our study was not a randomized controlled trial. For example, about 8 out of 10 treatment group inmates were self-identified Christians who volunteered to participate in the Bible-based program. So, they might have overreported the CTHP’s positive impact although our supplemental analysis was not fully consistent with this suspicion.⁷ In addition, we explored the possibility of the “placebo” or “Hawthorne effect” given that the control group inmates might have become aware of being observed after they participated in the pretest survey and, as a result, provided artificially positive answers to the posttest questions. However, results from a series of paired-samples *t*-test showed little evidence of such reactivity: that is, no statistically significant positive change in the endogenous variables was observed for the control group.⁸ Readers should keep these potential sources of invalidity in mind when they interpret our findings. Third, the present study’s generalizability is also limited since the sample was not representative, being drawn from a single facility. Finally, although we found that the CTHP was likely to be effective for up to 3 months after it ended, we do not know whether its healing effect lasts beyond that point, which is an empirical question for future research.

It is possible that the program impact may dwindle over time without any follow-up, so it would seem prudent to reinforce the progress that CTHP graduates made by recommending healing groups transition to support groups, built on the already established camaraderie. Alternatively, creating new groups can extend the initial work in order to continue the process of healing. Perhaps local volunteers can facilitate such groups, but a peer support group led by an inmate is a viable and potentially better option given that the inmates can function as effective “wounded healers” who possess authentic “lived experiences” that include overcoming the challenges of trauma and offering situational empathy and sense of common purpose (LeBel et al., 2015; White, 2000). Prior research provides empirical evidence for the effectiveness of inmate-led and peer-to-peer programs (Hallett et al., 2017; Jang et al., 2019).

In conclusion, despite the limitations acknowledged above, we believe that this paper contributes to the criminological literature as it examined an understudied topic—trauma and its consequences among jail inmates who have not been studied as often as prison inmates—by assessing a faith-based program for trauma healing. Based on the present findings, we now have preliminary evidence that short-term interventions can be impactful, which provides a rationale for replication and further research. Jail and prison administrators should consider experimenting with programs like the CTHP since trauma is so prevalent among incarcerated individuals.

Appendix. Survey Items Used in Analysis: Factor Loadings and Cronbach's α (in Parentheses).

Item	Pretest	Posttest
Lifetime trauma		
<i>The following questions ask about events that may be extraordinary stressful or disturbing for almost everyone. Please check "Yes" or "No" to report what has happened to you.</i>		
<i>(0 = no, 1 = yes)</i>		
<ol style="list-style-type: none"> 1. Have you ever served in a war zone, or have you ever served in a noncombat job that exposed you to war-related casualties (e.g., as a medic or on graves registration duty?) 2. Have you ever been in a serious car accident, or a serious accident at work or somewhere else? 3. Have you ever been in a major natural or technological disaster, such as a fire, tornado, hurricane, flood, earthquake, or chemical spill? 4. Have you ever had a life-threatening illness such as cancer, a heart attack, leukemia, AIDS, multiple sclerosis, etc.? 5. Before age 18, were you ever physically punished or beaten by a parent, caretaker, or teacher so that: you were very frightened; or you thought you would be injured; or you received bruises, cuts, welts, lumps, or other injuries? 6. Not including any punishments or beatings you already reported above in Item 5, have you ever been attacked, beaten, or mugged by anyone, including friends, family members, or strangers? 7. Has anyone ever made or pressured you into having some type of unwanted sexual contact? (<i>Note. By sexual contact we mean any contact between someone else and your private parts or between you and some else's private parts.</i>) 8. Have you ever been in any other situation in which you were seriously injured, or have you ever been in any other situation in which you feared you might be seriously injured or killed? 9. Has a close family member or friend died violently, for example, in a serious car crash, mugging, or attack? 10. Have you ever witnessed a situation in which someone was seriously injured or killed, or have you ever witnessed a situation in which you feared someone would be seriously injured or killed? (<i>Note. Do not answer "yes" for any event you already reported in Items 1–9</i>) 		

(continued)

Appendix. (continued)

Item	Pretest	Posttest
Symptoms of Post-Traumatic Stress Disorder (PTSD)		
<i>Among the event(s) that you said had happened to you, think about what was particularly stressful or disturbing for you and answer the following questions.</i>		
<i>(1 = not at all, 2 = a little bit, 3 = moderately, 4 = quite a lot, 5 = very much)</i>		
1. How much have you been bothered by unwanted memories, nightmares, or reminders of the event?	0.716	0.744
2. How much effort have you made to avoid thinking or talking about the event, or doing things which remind you of what happened?	0.660	0.573
3. To what extent have you lost enjoyment for things?	0.733	0.782
4. How much have you been bothered by poor sleep, poor concentration, jumpiness, irritability, or feeling watchful around you?	0.758	0.794
5. How much have you been bothered by pain, aches, or tiredness?	0.691	0.677
6. To what extent have you kept your distance from people?	0.685	0.717
7. How much would you get upset when stressful events or setbacks happen to you?	0.716	0.762
8. How much have the above symptoms interfered with your ability to work or carry out daily activities?	0.750	0.804
9. To what extent have you found it difficult to experience feelings?	0.638	0.695
10. How much have the above symptoms interfered with your relationships with family or friends?	0.765	0.805
(α)	(.910)	(.921)
Intended aggression		
<i>The following scenario describes in detail a hypothetical situation.</i>		
<i>After reading it, please indicate how likely it is that you would do the same that Mike did in the scenario.</i>		
<i>(1 = not likely at all [0%], 2 = very unlikely, 3 = unlikely, 4 = likely, 5 = very likely, 6 = certainly [100%])</i>		
It's Sunday afternoon. Mike is watching a football game in the jail dayroom with other inmates. During a halftime break, Mike goes to the restroom. To reserve his seat, he asks a friend to "hold it down" for him. When Mike comes back, Joe is in his seat. Mike asks Joe to leave because it is his seat. Joe says he can sit anywhere he wants. Mike asks Joe to leave one more time. This time Joe ignores Mike. Everyone is watching what's going on. Feeling not only dissed but also that he is right, Mike gets into an argument with Joe.		

(continued)

Appendix. (continued)

Item	Pretest	Posttest
State Depression		
<i>During the past week, how often have you felt or experience the following?</i>		
<i>(1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often)</i>		
1. I felt I could not shake off the blues, even with the help of others.	0.727	0.745
2. I felt depressed.	0.870	0.869
3. I did not feel like eating, and my appetite was poor.	0.626	0.620
4. My sleep was restless.	0.522	0.597
5. I felt sad.	0.814	0.772
(α)	(.833)	(.842)
Religiosity		
How close do you feel to God most of time?		
<i>(1 = not close at all, 2 = not very close, 3 = somewhat close, 4 = pretty close, 5 = extremely close)</i>		
How often do you <u>currently</u> attend religious services?		
<i>(1 = never, 2 = only on certain occasions, 3 = once a month or less, 4 = a few times a month, 5 = once a week, 6 = several times a week)</i>		
About how often do you <u>currently</u> pray outside of religious services?		
<i>(1 = never, 2 = only on certain occasions, 3 = once a week or less, 4 = a few times a week, 5 = once a day, 6 = several times a day)</i>		
In general, how important is religion (or relationship with God) to you?		
<i>(1 = not at all, 2 = somewhat, 3 = fairly, 4 = very, 5 = extremely)</i>		
Outside of attending religious services, about how often do you <u>currently</u> spend private time reading the Bible, Koran, Torah, or other sacred book?		
<i>(1 = never, 2 = only on certain occasions, 3 = once a month or less, 4 = a few times a month, 5 = once a week, 6 = several times a week)</i>		
(α)	(.826)	(.839)
Forgiveness		
<i>When you think about a person who caused an event that was particularly stressful or disturbing for you, how often do you have each of the following thoughts and feelings about the person?</i>		
<i>(1 = never, 2 = rarely, 3 = sometimes 4 = often, 5 = always)</i>		
I have forgiven him/her.		
Vengefulness		

(continued)

Appendix. (continued)

Item	Pretest	Posttest
<i>When you think about a person who caused an event that was particularly stressful or disturbing for you, how often do you have each of the following thoughts and feelings about the person?</i> (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always)		
1. I want to see him/her hurt and miserable.		
2. I'm going to get even with him/her.		
(α)	(.748)	(.780)
Gratitude to God		
<i>Please indicate how much you agree with each of the statements.</i> (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)		
1. I am grateful to God for all He has done for me.		
2. I am grateful to God for all He has done for my family members and close friends.		
(α)	(.856)	(.889)
Positive impact of the Bible		
<i>How often do you experience each of the following when you use the Bible?</i> (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always)		
1. Feeling a sense of connection to God	0.749	0.871
2. Getting curious to know God better	0.857	0.884
3. Becoming aware of how much I need God	0.921	0.926
4. Becoming more willing to engage in my faith	0.915	0.923
5. Becoming more generous with my time, energy, or financial resources	0.780	0.804
6. Showing more loving behavior toward others	0.814	0.840
(α)	(.934)	(.951)

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. The Survey of Inmates in Local Jails, 2002, and the Survey of Inmates in State and Federal Correctional Facilities, 2004, defined mental health problems by a recent history (i.e., a clinical diagnosis or treatment by a medical health professional) or symptoms based on criteria specified in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). The National Epidemiologic Survey on Alcohol and Related Conditions, 2001 to 2002, also used DSM-IV criteria to estimate the prevalence of a mental health disorder in the general population.
2. While incarceration itself is a trauma to many inmates, particularly, first timers and results in an inmate's exposure to traumatic event(s) in jail and prison, this study focuses on trauma experienced in their lifetime.
3. We acknowledge that intended aggression was not the same as actual aggression since it might have been a biased, that is, socially desirable response. However, the distribution of their answers at the pretest (11.5% not likely at all, 13.6% very unlikely, 22.0% unlikely, 23.8% likely, 15.8% very likely, and 13.3% certainly) implied otherwise.
4. Of the 349 inmates who completed the pretest, 60 did not participate in the posttest (the response rate of 82.8%), including 32 and 28 in the treatment and control groups (the response rates of 84.8% and 79.1%), respectively. To compare the posttest participants and non-participants, we conducted crosstabulation analysis for categorical variables and *t*-tests for others including dummy variables. Attrition was minimal as the only difference was in race: white inmates were less likely to participate in the posttest than blacks (see Supplemental Table 1).
5. As expected, lifetime trauma was positively correlated with symptoms of PTSD, state depression, state anger, suicidal ideation, and intended aggression at the pretest ($\beta = .432, .286, .293, .091, \text{ and } .127$, respectively; not presented in the table). That is, the more different types of traumatic event an inmate experienced, the higher the levels of negative consequences of trauma he or she reported. However, lifetime trauma was not related to their posttest measure ($-.116, .014, .003, -.015, \text{ and } .027$, all $p > .05$; shown below in Table 2) perhaps because the interval between the pretest and posttest was too short to generate significant change.

6. Those who screened positive for PTSD were inmates scoring higher than 17, a modification of its original cutoff.
7. Paired-samples *t*-test revealed that non-Christian as well as Christian inmates equally benefited from the CTHP, reporting a significant decrease in three out of five trauma consequences, using the Bonferroni correction (see Supplemental Table 4).
8. Complete results are presented in Supplemental Table 5.

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