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Resilience Building Programs in U.S. Corrections Facilities: An Evaluation of Trauma-Informed Practices in Place

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ABSTRACT

Interventions aimed at changing behavior without addressing underlying trauma-based issues may have limited efficacy in rehabilitation in an incarceration setting. Trauma-informed care and therapies can assist in reducing violent and delinquency behaviors but are only recently being incorporated into current rehabilitation practices. This study postulates that one reason for the lack of trauma-informed and responsive rehabilitation programs could be the difficulty in standard evaluation and comparison due to their complex and varied components and methods. This study aimed to examine the programs currently in place and determine shared themes among current practices to help find commonality. Once common themes are identified, program efficacy can be better studied leading to successful methods spreading to other locations or organizations. The primary methodology for finding common themes was interviewing subject matter experts and analyzing their program descriptions. A study sample (n = 12) comprised of experts currently or formerly in roles of implementation for trauma-informed programs in correctional facilities. They were interviewed with key informant questionnaires and their responses were recorded and assessed using constant comparison methods. This study found five common themes within existing programs: recipient mind-set, ancillary relations, program foundations, intentions, and resistance. This led to a generalized practice model with four steps, including identifying societal barriers, initial personal assessment, program implementation, and evaluation.

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Introduction

ACEs

Adverse Childhood Experiences (ACEs) are household or environmental stressors occurring during an individual's childhood that have been recognized to coincide with detrimental health behaviors and disease later in life (Cronholm et al., 2015; Felitti et al., 1998). ACEs are assessed on a 13-item

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scale via a yes/no questionnaire regarding events occurring before the respondent's 18th birthday (WHO, 2018). Individuals with higher scores (i.e., more numerous adverse events) are more likely to have health complications and be at increased health behavior risk and engage in behaviors that negatively affect their health (WHO, 2018).

People who are incarcerated consistently have elevated ACE scores with even low-risk offenders having higher scores than the general population (Stensrud et al., 2018). These individuals are more prone to commit violent acts of behavior and become criminal offenders (Reavis, 2013). Individuals with four or more ACEs are three times more likely to be convicted of violence, theft, and property damage (K. K. Ford et al., 2019). Even more concerning, people who have committed crimes and experiences four or more ACEs are three and a half times more likely to be categorized as prolific offenders, defined as offenders with 16 or more prior convictions and at least eight convictions after the age of 21 (K. K. Ford et al., 2019). In a study of juvenile offenders, there is a positive dose-response relationship of ACE scores to serious, violent, and chronic offenses, along with a positive dose-response of ACE scores to recidivism, the tendency to reoffend (Fox et al., 2015; Wolff et al., 2017).

Prevention

Resilience lessens the effects of adverse ACE scores and prior trauma (Centers for Disease Control and Prevention, 2019). For the purpose of this paper, the term trauma refers to developmental or relational trauma from the chronic exposure to adversity (Kolk, 2005). Resilience factors include close and secure attachments to others, positive relationships, support systems, optimism, healthy coping mechanisms, and perceived control over situations (Riopel, 2019). Resilience building does not fall solely on the individual; rather, there is a wide area outside of their control such as appropriate caregiving and having a protective network (CDC, 2020). While personal and community resilience can mitigate impacts from adversity, it is certainly not the only answer. A systemic approach may be beneficial to include economic support, violence prevention, and access to basic needs such as healthcare, childcare, food, and shelter, and opportunities for quality education and employment (CDC, 2020).

Efforts to prevent ACEs often fall into two categories: primary, which prevents the adversity from ever occurring, and secondary, which targets early detection and dehiscence from progression (Kisling & Das, 2020). The goal for children is primary prevention through ACE preclusion whereas the focus for adults is secondary prevention (Baglivio et al., 2015). As some studies have suggested a pathway from childhood trauma to delinquent behavior, prevention of further harm and mitigation of effects is vital for individuals

who are incarcerated with a history of trauma (J. D. J. D. Ford et al., 2006; Zettler, 2020). This mitigation of consequences from adverse events is tertiary prevention.

Secondary prevention can be done through medical practices such as cognitive behavioral therapy (CBT), counseling, and developing healthy social ties (Nakazawa, 2015). It is equally important to employ these methods with individuals affected by ACEs via trauma-informed approaches to not to retraumatize them and perpetuate ACEs' effects (Stensrud et al., 2018). Trauma-Informed care has 6 principles: (1) safety, (2) trustworthiness and transparency, (3) peer support, (4) collaboration and mutuality, (5) empowerment, voice and choice, and (6) cultural, historical, and gender issues (Substance Abuse and Mental Health Services Administration, 2014). Being trauma-informed does not mean providing services to treat or heal past trauma but rather recognizing how past trauma has an impact on individuals and their surroundings, being able to identify those signs and symptoms of trauma, creating and integrating policies addressing the acknowledgment of trauma, and aiming to avoid re-traumatization (Leitch, 2017; Substance Abuse and Mental Health Services Administration, 2014).

Tertiary prevention treats trauma after it occurs. Prior research has demonstrated that trauma-informed practices and treatment for trauma decrease violence and potentially improves recidivism rates (Zettler, 2020). For example, CBT aims to change thinking patterns to improve coping mechanisms and develop problem-solving skills (American Psychological Association, 2017). It is often used in treating individuals with a history of trauma in efforts to mitigate downstream effects such as antisocial behavior, stress, depression, and anxiety and has even been shown to decrease recidivism in some studies (Aos & Drake, 2013; Silverman et al., 2008). Thinking for a Change (T4C) is a behavioral program from the National Institute of Corrections designed for justice-involved youths and adults that utilizes CBT in its curriculum to instigate social skills development, problem solving, and cognitive restructuring (Bush et al., 1997). Those enrolled in the program had a statistically significant reduction in rearrests than the control group (Willison et al., 2014).

Current Models

Current structured rehabilitation programs utilize generalized models to create evidence-based frameworks. For example, the risk-need-responsivity (RNR) model assesses an individuals' risk for reoffending through eight criminogenic factors (Andrews et al., 2011). These factors include components of antisocial behavior, family and marital involvement, school and work history, and leisure and recreation activities (Andrews et al., 2006). An example of the RNR model in practice is the Serious and Violent Offender Reentry

Initiative (SVORI). This program effectively reduced reconviction rates but not rearrest rates (Veeh et al., 2017). Cost-effectiveness studies of this program have been inconclusive (Cowell et al., 2010).

Another example is the Social-Ecological Model (SEM), used by the CDC in the understanding and development of violence prevention strategies by addressing four levels: individual, relationship, community, and societal (Centers for Disease Control and Prevention, 2015). This model's application to initiate change often involves social-cognitive theory, which states that people acquire behavior based on their environment and their actions depend on past experiences (LaMorte, 2019). The SEM is currently used in the intervention Beyond Violence, designed by Dr. Stephanie Covington, which integrates a trauma-responsive approach (Kubiak et al., 2017, 2015). Compared to the treatment as usual, which also used CBT but did not address past trauma, Beyond Violence produced higher satisfaction and better mental health outcomes (Kubiak et al., 2015). The long-term evaluation demonstrated lower arrest rates and jail time following release compared to treatment as usual (Kubiak et al., 2016). It was deemed to be cost-effective as it required fewer sessions than treatment as usual (Kubiak et al., 2015).

Using a model such as RNR and SEM allows for evidence-based practices but requires adaptation to the environment and population to create a lasting effect. Additionally, models do not fully consider each individual's unique background and needs. Trauma-informed and trauma-specific programs offered for people who are incarcerated aim to build resilience to decrease recidivism (Craig et al., 2017). This pathway has been mentioned in numerous studies followed by a call to action for implementation, but limited progress has been made in its execution (Baglivio et al., 2015; Kubiak et al., 2017; Levenson et al., 2016). This study aims to examine the trauma-informed programs in existence and understand their successes and barriers to allow for increased implementation in more facilities and organizations.

Methods

Data Collection

This study's data was gathered through a series of key informant interviews (n = 12) conducted over the phone by the principal investigator. Respondents were recruited through non-probability convenience and purposive sampling due to the specific nature of the study. In a few cases, snowball sampling was used as subjects recruited an additional subject for interview. A Google search was performed using the following keywords: ACEs, Adverse Childhood Experiences, Prison, Rehabilitation, Corrections, Program, Mental Health, Trauma-Informed, Resilience, Healing, United States. This search sought to identify rehabilitation programs in practice that incorporated trauma-

informed practices. The researcher then attempted to contact the individuals that designed, evaluated, and implemented found programs via e-mail. The e-mail contained the goal of the study and an invitation to participate in an interview. Over 20 invitations were sent and 12 recipients elected to participate and could accommodate availability for interviews. Participants were professionals working with corrections, evaluating studies on program effectiveness, the creators of the programs, implementing the programs, or directors of program acquisition and implementation at various facilities. Educational background of study participants ranged from bachelor's degree to doctoral level. Specific demographics were not collected in efforts to retain anonymity of the limited respondents and were not deemed necessary for the purpose of this study.

Up to a week before the interview, respondents were given a consent form detailing the purpose of the study and their responsibilities involving a general topic summary of the questionnaire. The interview guide was a semi-structured questionnaire detailing goals of the programs, strengths and weaknesses, personal feedback on the program, and recent changes and developments from its origination. Participants were informed that they could decline answering any question at any time. Before recording, the participants were reminded they would be recorded and their anonymity would be retained for the study. Participants will be referred to as "respondents" hereafter. The interviews were recorded using Google Voice and Quicktime Player and transcribed using the Otter AI dictation application on the researcher's phone. The interviews were reviewed by the principal investigator to ensure accurate transcription and then sent to the respondent for additional review. At that time, any other follow up questions were asked via e-mail to the respondent. Recorded interviews lasted a mean of 38.35 minutes with a SD of 1.05.

Data Analysis

The authors used the constant comparison method under grounded theory to analyze the interviews (Charmaz, 2006). The constant comparison method works by paring down information into manageable categories and units to form a narrative (Glaser et al., 1965). An effective way to analyze interviews, it identifies key concepts and similarities repeated throughout the interviews and groups them into common categories (Memon et al., 2017). Patterns are identified using inductive reasoning and analytic procedures which yields theory to explain the findings (Charmaz, 2006).

Two trained researchers (SM, CC) coded the interviews independently by hand. They coded line-by-line or segment-by-segment to determine key concepts regarding effective rehabilitation and resiliency programs. Keywords and phrases were extracted from the transcripts. The researchers then formulated

similar response aspects into categories. As categories began to appear, each new set of data was compared to the previous categories. If a new data chunk was similar to a previously created category, it was incorporated into the previously created category, otherwise, a new category was created. Once the data was condensed into categories constant comparison helped to identify main themes and subthemes. The researchers met after coding was complete to discuss and finalize the identified themes and subthemes.

This study was subject to IRB-2 approval and was approved by the University of Florida (approval number: IRB201902309).

Findings

Interviews yielded five themes with corresponding subthemes that produced a framework for effective rehabilitation and resiliency programs. This included recipient (i.e., program participant) mind-set, ancillary relations, program foundations, intentions, and resistance. The subthemes provide further definition and specific examples, which can be seen in Table 1.

Recipient Mind-Set

The program recipient's mind-set in favor of rehabilitation and growth before participation in any intervention provided was determined to be a significant component in the program's outcome and success. The most critical factors in their mind-set were resilience and motivation.

Resilience. While the ACE study identifies past trauma contributing to later-in-life behavioral and medical issues, it does not account for resilience factors. One respondent referenced factors present in a person prior to participating in rehabilitation programming which contributed to their success including:

> identity and acceptance, support, overcoming adversity journey, and positivity and optimism . . .

Table 1. Summary of Themes and Subthemes.

Themes	Subthemes
Recipient Mind-Set	Resilience
	Motivation
Ancillary Relations	Succor
	Rehumanization
Program Foundations	Trauma Theory
	Models
	Adaptability
Intentions	Introspection
	Skill-Building
Resistance	Personal
	Community
	Political

This respondent encouraged efforts to instill the development of these traits into current programming.

Motivation. Motivation to succeed and return to regular society is a critical driver in establishing investment from imprisoned people. One facility requires completion of the program to be eligible for the parole board. This respondent described:

> And when you're incarcerated, the first thing that you're thinking about is getting out. And so, for these women who . . . were having difficulty getting through the parole board, thinking about this intervention as something that might help them get out was really important.

Respondents also noted the importance of an internal desire to make a difference and that specific programs can offer that opportunity. One reports,

> [I think] that it is fairly central to being a human being to want to make a difference in the world; you want to make a contribution . . . for a lot of people, that means that they want to make a difference in other people's lives.

Ancillary Relations

Ancillary relations encompass the positive supports and sentiment of those assisting with the program's rehabilitation efforts and those who have relationships with the recipient. Two factors comprised these ancillary relations: succor and rehumanization.

Succor. Succor encompasses the recipient's support systems such as family, friends, incarceration faculty, and community assistance that aid in the program participant's rehabilitation. Respondents state that succor came in the form of monetary relief, emotional support, and the implementers' ability to work effectively. Commenting on the likelihood of success, one respondent stated,

And so those healthier people, obviously with more resources, and people who are more stable and have more supportive networks in the community– you're not staying here. The others, they are the people who are staying here (in prison).

According to interviews, the individuals with an already established support system within the community upon release had a more successful reintegration. A respondent further commented:

The most successful program is having a network of nonprofits and cooperative correctional institutions all working together to benefit the incarcerated person and, in effect, the community they return to, you know, because everyone, it's a win-win-win.

Respondents emphasized that resilience is built on external factors, such as community support and caring individuals. Additionally, programs that foster these connections tend to be carried out after the individual has been released, contributing to overall success.

Rehumanization. Rehumanization refers to the act of restoring autonomy. Respondents encouraged efforts to retain some choice and dignity among the people who are incarcerated through facilitating positive interactions between programmers, corrections staff, and recipients. When incarcerated, it is common practice for people to be called by last name or number and have most choices stripped away. One respondent commented,

> There's just a certain kind of human respect, you know, if you're in an institution, especially in prison. Often people aren't called by their names; they're called by their numbers. So, you know, they're dehumanized, or they're disrespected.

When asked about efforts to change these dehumanizing interactions and provide choice in attending the program, one respondent stated,

> So instead of, you know, calling them offenders or ex-offenders, we like to call them returning citizens.

Improving interactions between faculty and imprisoned individuals and fostering some control over their outcome was a way to foster resilience. One respondent commented,

> When you give them back their agency, when they have some, you know, bearing control of some of the decision making, and that they can choose something that they think they can help them grow.

Program Foundations

The foundational methodology provides a framework for current programs that varied significantly with each respondent interviewed. Foundations were broken into three subthemes: trauma-theory, model-based, and adaptability.

Trauma Theory. A frequently used guiding theory that helped shape interventions was trauma-theory. This involves considering a recipient's past trauma in the design and anticipated response to the programming and providing support to move through it. This was usually done through a combination of CBT, reflection, fostering connections, and development of purpose. It involved training of the staff and program facilitators. One respondent commented on their trauma-theory based program,

> It really has a heck of theoretical foundation and trauma theory, relational theory, and cognitive behavioral therapy. And ... the [program] helped them understand how they got to that point of the offense. They had better mastery over, changing the future.

Aside from CBT interventions for trauma treatment, programs require an overall corrections approach. One respondent described,

> The idea is to teach staff about trauma so that they can understand how trauma impacts the feelings, the thoughts, and behaviors of the people they work with, and also have some understanding that some of the basic practices in corrections actually trigger people to behave in ways that you really don't want. It escalates behavior.

Models. Multiple models shaped programs examined in this study and there was no consensus on an effective method. Using formal models in efforts to shape the programs was one avenue of fulfilling this evidence-based requirement. The most frequently addressed models were the RNR Model and the SEM, which each have strengths and limitations. One respondent noted,

> An area that doesn't exactly fall within that risks, needs, and responsivity model would be like possibility, optimism, thinking about like overcoming adversity, or considering the journeys that each individual is coming from.

This speaks to the importance of addressing and building resilience within these programs. Other models strive to incorporate community involvement, similar to the SEM. One respondent stated,

> So one of the really key pieces of the Community Mediation Model is that the mediators come from the communities that are being served and so they represent the diversity of those communities, not only in terms of demographics, age and race and gender, but also in terms of experiences.

Basing a program around a generalized model and building off of its foundation creates a framework for evidence-based practices and ensures that multiple factors are taken into consideration, broadening the scope and impact of the program itself.

Adaptability.Respondents had conflicting views regarding the generalizability of programs, which comes into play when using prior frameworks in the design. For example, a program may be gender-based and require tailoring for men and women. One respondent mentioned,

> It's not just a difference in pronouns, but we approach it differently. The issues have to be approached differently, the activities have to be designed differently.

Contrastingly, another study respondent stated,

> I changed nothing between people serving time for life, between women, between young men, between adolescents who just came out of prison, and who are now in a drug rehab . . . To me, it was always a model that could be replicated and scaled up . . . I developed the program, so that it can be replicated in any institution around the world.

Intentions

The intentional outcomes for individuals partaking in these programs were split into two subthemes: introspection and skill-building. The Department of Corrections (DOC) primarily aims to reduce recidivism, but these resiliency programs broadened this scope. A respondent explained:

> I want the women to be able to manage better to use less substances, less struggles with mental health, adapt, you know. Recidivism, that is only one piece, the fact there's no even one definition, that's just the word everybody uses.

Introspection. Treatment recipients utilized introspection which focused on mental healing, forgiveness, and remorse, allowing for post-traumatic growth. Programs noted the importance of each participant's ability to engage in the reflection process to initiate healing from harm. Harm may have been caused by the individual or occurred to the individual. Another respondent stated,

> It was just thought that that was the main thing, that reflection was really crucial to this, and I think a lot of prisoners avoid that reflection because it's painful.

Skill Building. Another identified outcome of the programs was skill-building. Sometimes skill building could be intertwined with introspection, particularly relating to developing communication skills and coping mechanisms and an understanding of the reasoning behind personal deficits. Skill-building encompassed vocational training, education, and social skills. Skill-building programs were often characterized by providing abilities that the individual could give back to their community upon release. One respondent said,

> My goal was not just to put people through school, but my goal was to put people out there that would make changes in their communities and make their communities better.

According to one respondent, these skills,

> provide this transitional employment. It gives them a sense of creativity, skill, knowledge, empowerment, self-identification, self-determination.

Resistance

When addressing mental health and healing, there may be some resistance to change and obstacles to receptivity. There can be histories of past trauma and attitudinal barriers that need to be addressed before moving forward with any form of intervention. Common types of resistance included personal, community, and political.

Personal. Personal resistance refers to a history of past trauma coupled with a lack of resilience. This combination can work against the positive recipient mind-set previously mentioned. One respondent stated regarding emotional self-awareness in men,

> We're normally labeled as angry or happy. We don't get to be disappointed. We don't get to be sad. We don't get to be, you know, frustrated or a little bit of different things . . . and so I am trying to get those guys to understand, like, you have a lot of emotions, and they're not a bad thing.

Without appropriate coping mechanisms, support systems, and access to treatment, past personal trauma can result in serious health effects that need to be addressed. These adverse histories and challenges involving mental wellbeing can create a barrier to being receptive to services. One respondent discussed efforts to remedy this. They stated,

> You need to get people in a position where they're ready to either just receive and self-reflect and be open to change and be open to receive services.

Community. There may be community attitudinal opposition to previously incarcerated individuals' reintegration into society. Respondents noted the importance of allowing nonviolent individuals to remain connected to the community somehow as it eases the transition. However, there may be hesitancy and pushback from communities to do this. As one respondent described,

> There also is this underlying belief, even though it might not always be said, that once a person is a criminal, they are always a criminal. Once they do that, they'll always do bad.

Frequently, programs strove to address this community hesitancy through providing vocational training. According to another respondent, an approach to overcome this misconception is asking the community the following questions,

> Would you rather that they come back straight out of prison with no sort of help, or would you rather that they come back into your community, knowing that they've gotten some help, and they're learning how to change their life.

Political. Politics function as a systemic barrier as this often determines the funding, requirements for services being implemented, and the perception of need and purpose of incarceration. A respondent noted,

> When you look at staff and administration, there's sort of a split. Some of them really believe in programming and think that's important, but there are a lot of them that think these are bad people that need to be punished. And they see punishment as what needs to happen inside the prison.

Respondents emphasized a focus on rehabilitation versus punishment, but this is challenged by budgetary needs. One respondent said,

> Every prison has that kind of budgetary shortfall, you know, it's all built in. And so, the last thing they want to do is trade-off programs for security.

Finally, respondents agreed that some programming is better than nothing. One reported,

> I don't think that there's anything that hasn't worked. I think anything that doesn't work is much more institutional. It's not the material.

Addressing resistance on an institutional level combined with the individual is argued for effective program approach.

Discussion

This study ultimately aimed to explore current rehabilitation programs in place that both address trauma and focus on resilience building in order to guide the development of a practice model which could be used within correctional facilities. Respondent interviews allowed for a better understanding of current strengths and weaknesses of rehabilitation programs as well as discrepancies between programming methods.

Strengths

Enhancing resilience factors as prevention against and treatment for past trauma have been defined in other studies, often encompassing both personal attitudinal aspects and healthy relationships (Franke, 2014; Iacoviello & Charney, 2014; Levine, 2003; Macedo et al., 2014; Zettler, 2020). As demonstrated in the Mind-Set findings, participants in rehabilitation programming are more successful when they already possess these factors, such as an internal motivation to change, self-awareness, and secure attachments to their community. In particular, external support systems such as those detailed in Ancillary Relations bolster the effects of internal resilience factors in combating trauma impacts and allowing an individual to progress forward. Some resilience factors fall outside of the individual's control, which lends to a more systemic approach (CDC, 2020). According to respondents in this study establishing support mechanisms, whether through the community, family, or even in the correctional facility, creates sustainable community resilience.

This finding is in line with the Good Lives Model (GLM) of addressing and utilizing "Primary Goods" for motivation and understanding reasons for crime which include relatedness, health, autonomy, creativity, and knowledge (Ward et al., 2007). The GLM is a strengths-based approach created to supplement the RNR model by evaluating motivation (Ward et al., 2007). This model works to restore the individual's autonomy so that they can proceed with the intervention and desist from criminal behavior (Ward et al., 2007). In our study, effective practices with positive outcomes included those that capitalized on the participant's motivation, optimism, temperament, and restoration of autonomy through social support. This is further

supported in another study in that working with the individual to establish a voice and return their humanity was a key component of strength-based programming (Hammond, 2010).

Challenges

In our study, numerous challenges in implementing programs were found and most notable was apprehension from communities in welcoming prior offenders back and attitudes of corrections staff. Some critics of the RNR and GLM have argued that these models are too focused on the individual and not on the larger social construct (Mcneill, 2009). The setting in which the programs are provided and the ability to develop social connections with the probationary staff and the program facilitators also affect the program's outcomes (Mcneill, 2009). Having staff and administration on board for rehabilitative efforts is critical, as previously noted in this study.

Additionally, community resistance must be addressed in order to have a successful program. One paper argues reentry efforts may be hampered by the media as they can "stigmatize and isolate the offender" upon return to society and suggests that this may be an avenue to approach in challenging community perception (McAlinden, 2006). Respondents make a strong push that every effort should be made to reintegrate participants into society. Additionally, community resilience in a trauma-informed and specific approach in addition to internal resilience may ease the transition to society and increase recidivism efforts (Kubiak et al., 2017; Warren, 2007).

Interventions

Approaches to program development varied from trauma-theory to social change models to basic intuition due to a recognition of need in respondent interviews. Models are often too broad, do not always guide the program interventions and may not account for reasons for the crime itself and efforts to desist from this behavior on a fundamental level (Ward & Maruna, 2007). In our study, the programs' methodology varied from mental health treatment to vocational training to step-down programs that impact efficacy evaluation. The ultimate goals of resilience programs addressed in the key-informant interviews were often not just recidivism but were instead mental and emotional healing and skill-building, including appropriate communication and conflict resolution. By having clear goals such as mental health assessments and coming mechanisms aside from recidivism, this may help to frame standard program practices.

Respondents mentioned that recidivism might not have been the program's primary goal but rather a secondary outcome. Instead, rehabilitation efforts were geared toward providing life skills giving the participant the capacity to

change through encouraging resilience building, and in many cases, addressing past trauma. Prior studies correlate a focus on improving mental well-being which led to decreasing recidivism, while focused vocational or educational priorities demonstrated mixed results (James, 2015). Other studies focused on restoring hope through a change in personal perception which would lead to a desistence from crime (McNiell et al., 2013). Changing self-perception is related to trauma-relational theory in that to move forward, the past may need to be addressed. This is disputed in studies, though, aiming toward a future-focused narrative rather than confessional (Farmer et al., 2015). The success of some of the programs that included vocational training in conjunction with emotional healing does seem to provide some meaning and may provide more conventional lifestyles that allow for ceasing criminal behavior (Farmer et al., 2015). Our study urges current models to understand why individuals reoffend and address these personally by instilling hope, capability, and mental healing.

Generalized Practice Model

Based on these findings, this study aimed to cultivate the themes and devise a model to aid in implementing trauma-informed, resilience-based rehabilitation. The Generalized Practice Model (GPM) consists of 4 succeeding steps (see Figure 1).

The first step is to identify and address societal barriers. The challenges section above involves tackling the attitudinal obstacles within the institutional system and the surrounding community with a resolve to implement a rehabilitative goal rather than a punishment-focused one. This can include community education efforts to change perception and institution training trauma-informed principles and practices. The second step is an initial personal assessment upon an individual's introduction to the justice system. Like the RNR model in efforts to identify risk and the GLM model in evaluating and building upon current strengths, this involves determining the individual's existing strengths, including community and familial support and motivation to change. The third step is program implementation. Based on this study, in conjunction with prior research, a multifactorial approach including the combination of introspection and skill-building allows for the most effective programming, which treats underlying issues while providing individuals with an outlet to reengage in society effectively. Interventions only aimed at coping strategies or changing behavior without addressing underlying issues are limited, but focusing on building resilience and treating the underlying cause may also foster receptiveness to additional programming and improve efficacy (Huynh et al., 2015). Finally, the fourth step is evaluation. This study recommends that instead of focusing solely on recidivism, there should be an emphasis on assessing personal readiness for positive engagement upon

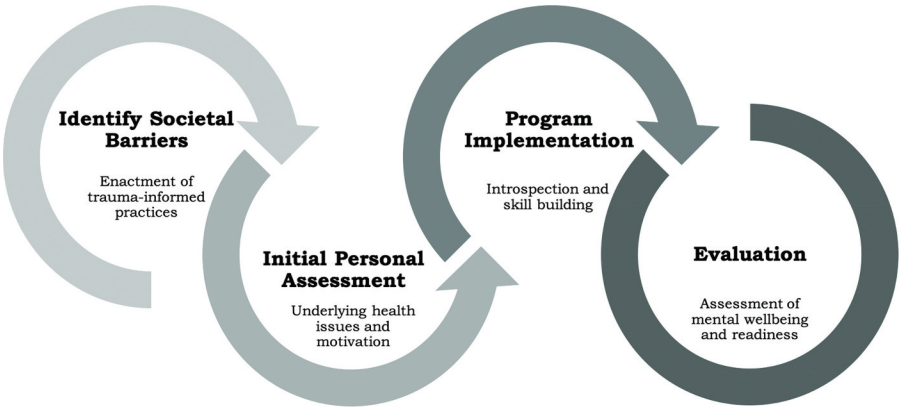

Figure 1. Generalized Practice Model.

reentry into society, relationships, employment, and mental wellbeing. Past research supports this as studies have proposed redefining recidivism as measuring desistance from crime through behavioral change practices (King & Elderbroom, 2014; Klingele, 2019). Of course, these 4 steps should not be done one time and should be repeated periodically to ensure trauma-informed principles are being followed, program efficacy is assessed and changes made based on individual needs.

Limitations

A limitation of this study was that few of the programs discussed with respondents had clear evaluation measures in place and effectiveness was often based on anecdotal evidence of those providing services. With clear evaluation measures in place, a cost-benefit analysis could also be assessed. Future studies could also research the monetary value of each program which was not assessed in our study due to the subjective nature of the interview and that definitive values were difficult to extrapolate.

Additionally, this study did not differentiate between programs implemented to differing populations such as men vs. women and violent vs. nonviolent offenders. Future research would also include responses from recipients regarding their participation in the programs. Another limitation is scope as the sample size was n = 12, representing programs in only six states. The number of respondents was also limited due to the limited resilience-specific or trauma-specific programs found in practice and the interviews' length and depth. A possible next step would be to perform a larger comparative analysis based on respondent experience rather than from solely key informants.

This study also used qualitative analysis which presents challenges upon examination as it is not easily quantifiable. This was addressed through constant comparison methods (Glaser et al., 1965). Its findings may also limit generalizability. A strength of this method did allow for exploration of social constructs and the ability to get real feedback on social issues that cannot be found in a quantitative survey.

Conclusion

This study aimed to understand the current practices in place through the program implementer's lens as well as strengths and weaknesses. From this, a general model for program and implementation and assessment was developed to provide guidance to future researchers and practitioners. This model is designed to be very broad in efforts to encompass this study's findings, including addressing current barriers and capitalizing on strengths. It attempted to combine both the social factors with a personalized aspect. Programs that utilized a strengths-based approach, including focusing on building relationships or strengthening existing relationships, empowering individuals to have a voice within their program, and capitalizing on their motivation, were the greatest common components to rehabilitation, regardless of barriers across this study. There is debate on whether there is a cause and effect relationship of historical trauma on incarceration, but there is a noted correlation (Baglivio et al., 2014). Because of this correlation, it is still essential to consider ACEs and historical trauma in rehabilitation programs.

Of note, many of these programs measured success not based on recidivism but other outcomes such as mental health, decreased substance abuse, coping skills, and relationships. Our model also suggests a change in how program success is measured from solely recidivism to a personal assessment.

Evidence is abundant in demonstrating that punishment and incarceration do not produce lasting change without treatment (Warren, 2007). This is an important concept as it notes the shift of focus on these programs as real, long-term change, and rehabilitation. As opinions shift toward rehabilitation rather than punishment, it is essential to capitalize on these attitudinal changes and implement effective treatment protocols for incarcerated individuals so as not to perpetuate the traumatic cycle and allow for healing and improvement of the growing community.

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References

American Psychological Association. (2017). *What is Cognitive Behavioral Therapy? Division 12*, 1–119. www.apa.org/ptsd-guideline%0AWhat

Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The Recent Past and Near Future of Risk and/or Need Assessment. *Crime and Delinquency*, *52*(1), 7–27. https://doi.org/10.1177/0011128705281756

Andrews, D. A., Bonta, J., & Wormith, J. S. (2011). The risk-need-responsivity (RNR) model: Does adding the good lives model contribute to effective crime prevention? *Criminal Justice and Behavior*, *38*(7), 735–755. https://doi.org/10.1177/0093854811406356

Aos, S., & Drake, E. (2013). Prison, Police, and Programs: Evidence-Based Options that Reduce Crime and Save Money (Doc. No. 13-11-1901). Olympia, WA: Washington State Institute for Public Policy. https://www.wsipp.wa.gov/ReportFile/1396/Wsipp_Prison-Police-and-Programs-Evidence-Based-Options-that-Reduce-Crime-and-Save-Money_Full-Report.pdf

Baglivio, M. T., Epps, N., Swartz, K., Huq, M. S., Sheer, A., & Hardt, N. S. (2014). The Prevalence of Adverse Childhood Experiences (ACE) in the Lives of Juvenile Offenders. *Journal of Juvenile Justice*, *3*(2) . https://www.prisonpolicy.org/scans/Prevalence_of_ACE.pdf

Baglivio, M. T., Wolff, K. T., Piquero, A. R., & Epps, N. (2015). The Relationship between Adverse Childhood Experiences (ACE) and Juvenile Offending Trajectories in a Juvenile Offender Sample. *Journal of Criminal Justice*, *43*(3), 229–241. https://doi.org/10.1016/j.jcrimjus.2015.04.012

Bush, J., Glick, B., & Taymans, J. (1997). Thinking For a Change. *National Institute of Corrections,* U.S. Department of Justice. https://ccoso.org/sites/default/files/import/016672-Curriculum.pdf

CDC. (2020). *Preventing Adverse Childhood Experiences*. National Center for Injury Prevention and Control, Division of Violence Prevention. https://www.cdc.gov/violenceprevention/aces/fastfact.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facestudy%2Ffastfact.html

Centers for Disease Control and Prevention. (2015). *The Social-Ecological Model: A Framework for Prevention*. https://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html

Houry, D., & Mercy, J. (eds.)), & Centers for Disease Control and Prevention. (2019). *Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence*.

Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. SAGE Publications.

Cowell, A. J., Lattimore, P. K., & Roman, J. (2010). *An Economic Evaluation of the Serious and Violent Offender Reentry Initiative*. 230422. National Criminal Justice Reference Center. https://www.ojp.gov/pdffiles1/nij/grants/230422.pdf

Craig, J. M., Baglivio, M. T., Wolff, K. T., Piquero, A. R., & Epps, N. (2017). Do Social Bonds Buffer the Impact of Adverse Childhood Experiences on Reoffending? *Youth Violence and Juvenile Justice*, *15*(1), 3–20. https://doi.org/10.1177/1541204016630033

Cronholm, P. F., Forke, C. M., Wade, R., Bair-Merritt, M. H., Davis, M., Harkins-Schwarz, M., Pachter, L. M., & Fein, J. A. (2015). Adverse Childhood Experiences: Expanding the Concept of Adversity. *American Journal of Preventive Medicine*, *49*(3), 354–361. https://doi.org/10.1016/j.amepre.2015.02.001

Farmer, M., McAlinden, A. M., & Maruna, S. (2015). Understanding desistance from sexual offending: A thematic review of research findings. *Probation Journal*, *62*(4), 320–335. https://doi.org/10.1177/0264550515600545

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. https://doi.org/10.1016/S0749-3797(98)00017-8

Ford, J. D., Chapman, J., Mack, J. M., & Pearson, G. (2006). Pathways from traumatic child victimization to delinquency: Implications for juvenile and permanency court proceedings and decisions. *Juvenile and Family Court Journal*, *51*(1), 13–26. https://doi.org/10.1111/j.1755-6988.2006.tb00111.x

Ford, K., Barton, E. R., Newbury, A., Hughes, K., Bezeczky, Z., Roderick, J., & Bellis, M. A. (2019). *The Prisoner ACE Survey*. www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

Fox, B. H., Perez, N., Cass, E., Baglivio, M. T., & Epps, N. (2015). Trauma changes everything: Examining the relationship between adverse childhood experiences and serious, violent and chronic juvenile offenders. *Child Abuse and Neglect*, *46*, 163–173. https://doi.org/10.1016/j.chiabu.2015.01.011

Franke, H. (2014). Toxic Stress: Effects, Prevention and Treatment. *Children*, *1*(3), 390–402. https://doi.org/10.3390/children1030390

Glaser, B. G., Strauss, A. L., Strauss, A. L., & Strauss, A. L. (1965). The Constant Comparative Method of Qualitative Analysis. *Social Problems*, *12*(4), 4. https://doi.org/10.4324/9780203793206-6

Hammond, W. (2010). Principles of Strength-Based Practice. *Resiliency Initiatives*. http://17963711.s21d-17.faiusrd.com/61/ABUIABA9GAAg5Kyi7AUoo6-vnQM.pdf

Huynh, K. H., Hall, B., Hurst, M. A., & Bikos, L. H. (2015). Evaluation of the Positive Re-Entry in Corrections Program. *International Journal of Offender Therapy and Comparative Criminology*, *59*(9), 1006–1023. https://doi.org/10.1177/0306624X14523385

Iacoviello, B. M., & Charney, D. S. (2014). Psychosocial facets of resilience: Implications for preventing posttrauma psychopathology, treating trauma survivors, and enhancing community resilience. *European Journal of Psychotraumatology*, *5*(1), 23970. https://doi.org/10.3402/ejpt.v5.23970

James, N. (2015). *Offender Reentry: Correctional Statistics, Reintegration into the Community, and Recidivism*. RL34287. Congressional Research Service. https://sgp.fas.org/crs/misc/RL34287.pdf

King, R., & Elderbroom, B., Urban Institute. (2014). *Improving Recidivism as a Performance Measure*. Justice Policy Center Brief. https://bja.ojp.gov/sites/g/files/xyckuh186/files/media/document/UI-ImprovingRecidivism.pdf

Kisling, L. A., & Das, J. M. [Updated 2021 May 9]2020. Prevention Strategies. In *StatPearls [Internet]*. Treasure Island (FL): StatPearls Publishing. 2021 Jan Available from: https://www.ncbi.nlm.nih.gov/books/NBK537222/Ja

Klingele, C. (2019). Measuring change: From rates of recidivism to markers of desistance. *Journal of Criminal Law and Criminology*, *109*(4), 769–817. https://doi.org/10.2139/ssrn.3142405

Kolk, B. A. V. D. (2005). Developmental trauma disorder. *Psychiatric Annals*, *35*(5), 401. https://doi.org/10.3928/00485713-20050501-06

Kubiak, S. P., Covington, S. S., & Hillier, C. (2017 Trauma-Informed Corrections Springer, D, and Roberts, A 4th Edition). . *Social work in juvenile and criminal justice system* (Springfield, IL: Charles C. Thomas), 92–104 https://www.stephaniecovington.com/site/assets/files/1518/soical_work_chapter_7_trauma-informed_corrections_final.pdf.

Kubiak, S. P., Fedock, G., Kim, W. J., & Bybee, D. (2016). Long-Term Outcomes of a RCT Intervention Study for Women with Violent Crimes. *Journal of the Society for Social Work and Research*, *7*(4), 661–679. https://doi.org/10.1086/689356

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. https://doi.org/10.1177/1049731514534300

LaMorte, W. (2019). *The Social Cognitive Theory*. Boston University School of Public Health. http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories5.html

Leitch, L. (2017). Action steps using ACEs and trauma-informed care: A resilience model. *Health & Justice*, *5*(1), 5. https://doi.org/10.1186/s40352-017-0050-5

Levenson, J. S., Willis, G. M., & Prescott, D. S. (2016). Adverse Childhood Experiences in the Lives of Male Sex Offenders: Implications for Trauma-Informed Care. *Sexual Abuse: Journal of Research and Treatment*, *28*(4), 340–359. https://doi.org/10.1177/1079063214535819

Levine, S. (2003). Psychological and social aspects of resilience: A synthesis of risks and resources. *Dialogues in Clinical Neuroscience*, *5*(3), 273–280. https://doi.org/10.31887/DCNS.2003.5.3/slevine

Macedo, T., Wilheim, L., Gonçalves, R., Coutinho, E. S. F., Vilete, L., Figueira, I., & Ventura, P. (2014). Building resilience for future adversity: A systematic review of interventions in non-clinical samples of adults. *BMC Psychiatry*, *14*(1), 1–8. https://doi.org/10.1186/s12888-014-0227-6

McAlinden, A. M. (2006). Managing risk: From regulation to the reintegration of sexual offenders. *Criminology and Criminal Justice*, *6*(2), 197–218. https://doi.org/10.1177/1748895806062981

Mcneill, F. (2009). What Works and What's Just? *European Journal of Probation*, *1*(1), 21–40. https://doi.org/10.1177/206622030900100103

McNiell, F., Farrall, S., Lightowler, C., & Maruna, S. (2013, May). How and why people stop offending: Discovering desistance. *University of Glasgow*. http://eprints.gla.ac.uk/79860/1/79860.pdf

Memon, S., Umrani, S., & Pathan, H. (2017). Application of Constant Comparison Method in Social Sciences: A Useful Technique to Analyze Interviews. *Grassroots*, *51*(1), 1–27. https://ci.nii.ac.jp/naid/40021243259/

Nakazawa, D. J. (2015). *8 Ways People Recover From Post Childhood Adversity Syndrome*. Psychology Today. https://www.psychologytoday.com/us/blog/the-last-best-cure/201508/8-ways-people-recover-post-childhood-adversity-syndrome

Reavis, J. (2013). Adverse Childhood Experiences and Adult Criminality: How Long Must We Live before We Possess Our Own Lives? *The Permanente Journal*, *17*(2), 44–48. https://doi.org/10.7812/TPP/12-072

Riopel, L. (2019). *Resilience Skills, Factors and Strategies of the Resilient Person*. Positive Psychology. https://doi.org/10.1080/08873267.2012.643720

Silverman, W. K., Pina, A. A., & Viswesvaran, C. (2008). Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, *37*(1), 105–130. https://doi.org/10.1080/15374410701817907

Stensrud, R. H., Gilbride, D. D., & Bruinekool, R. M. (2018). The Childhood to Prison Pipeline: Early Childhood Trauma as Reported by a Prison Population. *Rehabilitation Counseling Bulletin*, *62*(4) . https://doi.org/10.1177/0034355218774844

Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach: Vol. HHS Public*.

Veeh, C. A., Severson, M. E., & Lee, J. (2017). Evaluation of a Serious and Violent Offender Reentry Initiative (SVORI) Program in a Midwest State. *Criminal Justice Policy Review*, *28* (3), 238–254. https://doi.org/10.1177/0887403415575144

Ward, T., Mann, R. E., & Gannon, T. A. (2007). The good lives model of offender rehabilitation: Clinical implications. *Aggression and Violent Behavior*, *12*(1), 87–107. https://doi.org/10.1016/j.avb.2006.03.004

Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk paradigm*. Routledge.

Warren, R. K. (2007). Evidence-Based Practice to Reduce Recidivism: Implications for State Judiciaries. *Crime and Justice Institute and National Institute of Corrections, Community Corrections Division, U.S. Department of Justice*. https://cdpsdocs.state.co.us/ccjj/Meetings/2009/2009-06-12_Warren-PaperReduceRecidivism.pdf

WHO. (2018). *Adverse Childhood Experiences International Questionnaire (ACE-IQ)*. World Health Organization; World Health Organization. https://www.who.int/violence_injury_prevention/violence/activities/adverse_childhood_experiences/en/

Willison, J. B., Bieler, S., & Kim, K. Urban Institute. (2014). *Evaluation of the Allegheny County Jail Collaborative Reentry Programs*. 029518. Washington, D.C.: National Institute of Corrections. https://nicic.gov/evaluation-allegheny-county-jail-collaborative-reentry-programs-findings-and-recommendations

Wolff, K. T., Baglivio, M. T., & Piquero, A. R. (2017). The Relationship between Adverse Childhood Experiences and Recidivism in a Sample of Juvenile Offenders in Community-Based Treatment. *International Journal of Offender Therapy and Comparative Criminology*, *61*(11), 1210–1242. https://doi.org/10.1177/0306624X15613992

Zettler, H. R. (2020). Much to Do About Trauma: A Systematic Review of Existing Trauma-Informed Treatments on Youth Violence and Recidivism. *Youth Violence and Juvenile Justice*, *19*(1), 113–134. https://doi.org/10.1177/1541204020939645