EVALUATION REPORT

Anger Management Program at the Nebraska Department of Correctional Services

Acknowledgements

The authors express gratitude to NDCS for accommodating the requirements of the evaluation team during this endeavor and for offering constructive feedback on earlier drafts of this report. We extend our appreciation to Nebraska Parole for facilitating connections with participants in the community. We also want to thank former AMHRN participants for generously sharing their program experiences with us.

Suggested Citation

Campagna, M., Spohn, R., Hamilton, Z., Al Falatah, S., Ursino, J., Gildea, B., Tostlebe, J., Hayes, A., & Towne, K. (2024). Evaluation Report: Anger Management Program at the Nebraska Department of Correctional Services. Nebraska Center for Justice Research, School of Criminology and Criminal Justice, University of Nebraska Omaha.

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Table 1 presents commonly used acronyms in the current report.

Table 1. Commonly Used Acronyms

Acronym	Acronym Meaning
AMHRN	Anger Management High Risk/Need program
CBA	Cost-benefit analysis
CBT	Cognitive-behavioral therapy
CVORT	Clinical Violent Offender Review Team
EBP	Evidence-based program
LB	Legislative bill (Nebraska)
MRT	Moral Reconation Therapy
NCJR	Nebraska Center for Justice Research
NDCS	Nebraska Department of Correctional Services
RCT	Randomized controlled trial
RNR	Risk Need Responsivity model
SAMHSA	Substance Abuse Mental Health Services Administration
SAVORI	Serious and Violent Offender Reentry Initiative
STRONG-R	Static Risk and Offender Needs Guide – Revised
UNO	University of Nebraska – Omaha

Executive Summary

Nebraska's LB 896, signed into law by the governor on April 19, 2022, called for the Nebraska Department of Correctional Services (NDCS) to evaluate the quality of clinical and non-clinical programs funded and implemented by the department. In 2023, the Nebraska Center for Justice Research (NCJR), located within the School of Criminology and Criminal Justice at the University of Nebraska-Omaha, was contracted to conduct these evaluations. NDCS selected its Anger Management High Risk/Need (AMHRN) program as the second and current clinical program for evaluation. This report summarizes the findings of NCJR's process evaluation, outcome evaluation, and cost-benefit analysis of AMHRN.

The NCJR evaluation team completed a process evaluation that included an examination of program materials and administrative documents, site visits, program session observations, staff interviews, and participant interviews. Some major takeaways of the process evaluation include:

- Mental health staff indicated that they face challenges in meeting the needs of their target population due to the limited resources (e.g. adequate staffing, dilapidated programming space, adequate training, and up-to-date research) available for the mental health unit. They also reported that, while the program covers a wide array of important topics, it could benefit from extending the program length to better address participant needs.
- Our program observations revealed that the staff generally adhered to the program curriculum when facilitating the AMHRN program.

Following the process evaluation, NCJR conducted an outcome evaluation that examined the AMHRN program's ability to prevent institutional misconduct and recidivism. Regarding misconduct behavior, we examined rates of violent, serious, and non-serious prison misconducts following programming, by contrast to a comparison group subjects with similar needs and characteristics. NCJR also examined recidivism outcomes following release. Recidivism measures included 1) NDCS reincarcerations, 2) new convictions, and 3) new violent offense convictions. Our analyses revealed:

- No significant differences were observed between the treatment and control groups when examining institutional outcomes separated into 'serious', 'non-serious', and 'violent' types of misconducts.
- When examining community outcomes, return rates differed by type of release, parole releases indicating greater rates of returns.
- Overall, AMHRN did not decrease the rate of institutional outcomes or the instance of community outcomes, including violent convictions.

Additionally, individuals who complete their sentences and are released without parole return to prison less often. This is not because they commit fewer crimes, but because those on parole are more likely to lose their supervision status and be sent back to prison. NCJR also conducted a cost-benefit analysis (CBA) of the AMHRN program, revealing a positive cost ratio. For every dollar invested in AMHRN, the State of Nebraska saved $0.94, primarily attributed to decreased conviction rates. This discrepancy with the outcome evaluation results stems from differences in measurement methodology: the CBA accounted for the number of convictions, while the outcome evaluation examined whether a recidivistic event occurred. Notably, the comparison group exhibited greater numbers of convictions. However, the omission of correctional costs for reincarceration from our estimates suggests potential limitations in the positive cost ratio. Therefore, while the AMHRN program proves cost-effective for NDCS, these findings should be reviewed within the context of measures available for the current evaluation.

Additionally, for the purpose of complying with the requirements of LB 896, NCJR developed a three-category effectiveness rating scale, consisting of 1) Effective, 2) Promising, and 3) No Effects. Collectively, our findings suggest AMHRN has the potential to reduce recidivism and therefore provides a ranking of *Promising.*

NCJR also sought a review of the current evaluation from a third-party clinician. NCJR hired Dr. Debra O'Connell, a clinical neuropsychologist with expertise in corrections and mental health, to review the NDCS anger management evaluation report. Dr. O'Connell affirmed the report's evidence-based recommendations, which include environmental improvements, enhanced participant screening, and fidelity monitoring of treatment protocols. She emphasized the need for accommodations ensuring accessibility, the inclusion of objective assessments for risk and readiness, and prioritizing participants based on release dates to maximize impact. Dr. O'Connell further recommended considering participant IQ or reading levels for group suitability, establishing clear and uniformly applied removal criteria, and implementing weekly clinician "huddle" meetings to address facilitation challenges. Her insights underscore the importance of structured evaluation, adherence to best practices, and collaborative approaches to improving outcomes and reducing recidivism in NDCS anger management programming. Dr. O'Connell's review is provided in Appendix IV.

Recommendations: The following are a set of recommendations for future use of AMHRN, or related violence prevention programming. Specifically, we recommend:

1. **Staffing and Resource Enhancement:** Given reported challenges due to staffing shortages and limited resources, NCJR recommends seeking additional State funding to increase wages for new and existing mental health staff, with a focus on those specializing in treating violent offenders. Furthermore, funding should be allocated to renovate or expand the available programming spaces for anger management programs, ensuring conducive environments for therapy.
2. **Program Length Extension:** NCJR recommends extending the length of the AMHRN program to ensure sufficient treatment dosage and teaching time. Research highlights the importance of treatment intensity, with moderate- to high-risk individuals benefiting from 200–300 hours of structured, evidence-based programming.[1,2,3] NCJR suggests piloting a two-month program extension or adding an additional weekly session to align with these dosage recommendations and enhance participant outcomes.
3. **Program Rotation Model:** To enhance responsivity, NCJR proposes implementing a two-month rotation model. This approach establishes a continuous programming loop, assisting participants struggling with a specific stage of change and potentially hindering group progress to temporarily step out for one-on-one sessions with a program provider. After their needs are addressed, these participants can seamlessly rejoin the next cohort, ensuring both individual support and group cohesion.
4. **Participant Readiness Assessment:** To optimize participant engagement and their ability to progress in the curriculum, NCJR advises assessing readiness for change prior to program assignment.
5. **Priority Determination Enhancement:** NCJR recommends prioritizing individuals based on clinical determinations, Stages of Change, and the STRONG-R Violent scale (part of the risk needs assessment adopted by NDCS), to effectively create therapeutic cohorts.
6. **Staff Training and Evaluation:** NCJR recommends that all new staff delivering the program receive a minimum of 40 hours of initial training focused on the program curriculum, principles of the Risk-Need-Responsivity (RNR) model, and effective facilitation strategies. To maintain fidelity and adapt to evolving needs, bi-annual booster training sessions (8–10 hours each) are advised, covering updates in evidence-based practices and addressing challenges observed in program delivery. Evaluation efforts should include both assessments of Behavioral Health Professionals (BHPs) through direct observation and performance reviews, as well as participant surveys to gather feedback on program content, delivery, and perceived outcomes.

Combining these evaluation methods ensures a comprehensive approach to maintaining program quality and effectiveness.[4,5,6]

7. **Interdepartmental Collaboration Improvement:** Greater collaboration and communication between departments within NDCS are advised to align short-term goals with long-term objectives, facilitating rehabilitation and community reintegration.
8. **Misconduct Protocol Review:** NCJR recommends revising misconduct protocols to ensure security measures do not unnecessarily hinder program completion for participants with high rehabilitation needs. Current protocols risk prematurely terminating participants for repeated minor infractions or moderate behavioral issues, disrupting rehabilitation and limiting program effectiveness. Evaluators observed that termination decisions often disproportionately exclude high-need individuals who might benefit most from continued participation.

   To address this, NDCS could implement less severe penalties for non-violent misconducts, such as temporary suspensions, mandatory counseling, or addressing misconduct episodes directly within the program. However, it is essential to balance this flexibility of clear communication with supervision staff to prevent potential resentment or the perception that participants are immune from consequences. Misconduct incidents should be reframed as teaching opportunities that allow participants to practice conflict resolution, accountability, and other key skills in a controlled environment.

   To mitigate resentment, NDCS could involve supervision staff in designing misconduct response protocols, ensuring their concerns about authority and institutional safety are acknowledged. Additionally, framing responses as collaborative interventions rather than leniency may help build trust and reinforce the rehabilitative goals of the program. For participants, it must be emphasized that program engagement does not equate to immunity from consequences; instead, it reflects a structured opportunity for corrective growth. This approach balances institutional safety with rehabilitative goals and staff collaboration.

Benefits of Refinement:

- **Improved Retention**: Reduces unnecessary exclusions, enhancing program completion rates.
- **Balanced Goals**: Ensures safety while prioritizing rehabilitation and skill development.
- **Skill Reinforcement**: Leverages misconduct as a teaching moment, fostering real-time learning.
- **Collaborative Responses**: Engages supervision staff in protocol design, addressing concerns about authority and program leniency.

By aligning misconduct protocols with rehabilitative objectives, involving supervision staff in the process, and reframing behavioral misconduct as opportunities for growth, NDCS can better support participant success while maintaining institutional integrity and staff engagement.

9. **Fidelity Checklist Adoption:** NCJR suggests adopting a standard fidelity checklist for AMHRN to maintain program quality assurance.
10. **Screening Process Enhancement:** The use of specialized scores from the STRONG-R assessment for screening is recommended by NCJR to align with the RNR model and track individual needs effectively.

    Future Directions: Combined, our process and outcome evaluations suggest that AMHRN is a promising program, but not particularly effective at achieving its primary outcomes as currently implemented. This suggests the following options for NDCS:

    - **Refresh AMHRN with Enhanced Fidelity:** NDCS updates the AMHRN based on the recommendations provided, focusing on delivery with a higher degree of fidelity to the intended program model. Emphasis

should be placed on monitoring and evaluation, utilizing tools such as fidelity checklists.[7,8] This would include adherence to program curricula, regular training for facilitators, and structured feedback loops to address implementation challenges. Strengthening fidelity could help realize the potential of AMHRN and improve its effectiveness in reducing violence and recidivism.

- **Replace AMHRN with a Violence-Focused CBI or Comprehensive Program:** NDCS replaces AMHRN with a more evidence-based program that specifically targets violent behavior while also adhering to high fidelity standards. Two promising approaches include:
    - **Violence-Focused CBIs:** Programs like Moral Reconation Therapy (MRT) or Thinking for a Change (T4C), which use cognitive-behavioral techniques to address criminogenic thinking patterns, have a strong track record in reducing recidivism. These programs can be tailored to focus on violent behavior while addressing general criminogenic needs.
    - **Comprehensive Programs:** NDCS could also consider adopting a broader initiative like the Resolve to Stop the Violence Project (RSVP), which integrates therapy, education, and restorative justice practices to target violent behavior holistically. RSVP has demonstrated success in reducing violence both during incarceration and after release.[58]

    This option allows NDCS to prioritize violence reduction with either a targeted or holistic approach, ensuring that the selected program is delivered with high fidelity to maximize its impact.
- **Replace AMHRN with a Generalized CBI Addressing Criminogenic Thinking: Finally,** NDCS can consider replacing AMHRN with a generalized cognitive-based intervention designed to address criminogenic thinking more broadly, which would still include violent behavior but might also tackle other risk factors such as impulsivity or antisocial attitudes. Programs like the six brief cognitive behavioral interventions or Texas Christian University's brief interventions,[62] which are used in conjunction with NDCS's 5-keys program is strong candidate, but the focus here would be on the versatility of the intervention rather than its specificity to violence. This broader focus may align better with NDCS's overall goals if violence is only one of several key concerns. Further, NDCS is currently providing a Achieving Change Through Values-Based Behavior program (ACTV), which is an evidence-based program focusing on domestic violence but can be applied more broadly for anger management and violence prevention [61].

Introduction

Violence exacts a significant human toll and fiscal burden on both the community and government agencies tasked with responding to violent offenders.[9] As such, acts of violence have implications for the criminal justice system. Indeed, the majority of individuals incarcerated in state prisons are serving time for violent crimes.[10] Violence and other aggressive behaviors are theoretically and empirically considered the manifest consequences of impulsivity and unregulated anger.[9,11] Therefore, completion of treatment programs or counseling geared toward recognizing

feelings of anger, learning the causes of anger, and dealing with these causes is often a prerequisite for parole or release to the community.[12] However, the content and methods used to respond to anger and aggression vary greatly across states and facilities. Common interventions include cognitive behavioral therapy, relaxation treatments or meditation, individual counseling, social skills training, and family therapy.[11,13,14,15,16,17] While many correctional institutions provide anger management interventions with varying forms and modalities, the effects of these programs are largely mixed or unknown.

The Nebraska Department of Correctional Services (NDCS) introduced programming geared toward the reduction of violence in 2007. The Anger Management High Risk/Need program (AMHRN) is a branded (i.e., proprietary) and manualized (i.e., has a manual) clinical treatment program designed to address antisocial attitudes to reduce feelings of anger and the risk of aggressive behavior in the community. It is currently designed to be provided to persons in custody, including both adults and youth.

In 2022, Nebraska's State Legislature modified the previously enacted LB 896 to provide evaluation resources for NDCS programs to ensure the effectiveness of institutional programs serving Nebraska's incarcerated population. LB 896 defines structured programming as clinical treatment programs, non-clinical programs, and other non-recreational interventions administered within NDCS's secure facilities. The statute requires structured programming to be evaluated for quality, including whether program participation reduces recidivism. In late 2022, NDCS contracted with the University of Nebraska at Omaha's Nebraska Center for Justice Research (NCJR) to evaluate these programs. The primary goal of the evaluation was to determine if programs were being delivered with fidelity and achieving intended outcomes. LB 896 also required that the evaluation provide "a rating on the effectiveness of the program".

The primary goals of this evaluation of AMHRN are to 1) determine the degree to which the AMHRN programming was implemented as intended, 2) estimate the AMHRN program's impact on institutional misconduct and post-release recidivism outcomes, 3) estimate the AMHRN program's cost relative to the benefits gained from the program, and 4) provide a rating of the program's effectiveness. This report concludes with recommendations of program areas that will benefit from modification of NDCS policy and practice.

Document Roadmap

We first define evidence-based practices and justify program evaluation. We then provide examples of anger management initiatives in other jurisdictions and review the programmatic literature. Next, we provide our methodology and findings from the process evaluation, which describes the implementation of the program. We then provide an examination of program outcomes and costs. Next, we describe our developed rating scale and consolidate study findings, rating the AMHRN program's effectiveness. Finally, we provide discussion and conclusions that review the major findings, discuss limitations, and offer recommendations to maximize the success of AMHRN moving forward.

Establishing Evidence-Based Practices

Many correctional agencies seek programs with proven effectiveness in reducing recidivism in general and aggression in particular. However, few programs have demonstrated consistent success. Evidence-based practices (EBPs) play a crucial role in effective prison programming.[18,19,20] Notably, evidence-based practices (EBPs) involve using thoroughly researched and rigorously evaluated interventions, programs, and practices to achieve desired outcomes.[21,22] For instance, the AMHRN program aims to enhance anger control strategies to reduce violent behaviors among individuals identified as high risk/high needs. Nevertheless, prior to this evaluation, the AMHRN program has not undergone extensive assessment for fidelity or effectiveness within the NDCS population. When formally evaluating a program, a variety of investigative steps should be completed, including a process evaluation

to establish program components, an outcome evaluation to assess negative outcomes (e.g., aggression) reduction, and a cost-benefit analysis (CBA) to determine program efficiencies and returns on state investment.

Why Conduct an Evaluation?

There are multiple reasons for conducting programmatic evaluation and implementing evidence-based programs. First, by conducting correctional evaluations, NDCS will be able to demonstrate whether each clinical and non-clinical program is effective in achieving its goal (e.g., increasing anger control strategies and reducing aggressive behavior). If a program does not demonstrate effectiveness with the population of interest, an alternative program can be implemented in its place and further evaluated for effectiveness. Furthermore, through this process, it can be assured that a program being used is not harmful (i.e., producing an iatrogenic effect) to program participants.

Second, by implementing EBPs, NDCS can ensure that the quality of correctional programs leads to "improved offender lives, reduced recidivism, and increased public safety."[21] Indeed, the goal of EBPs is to create lasting change in behavior, which is essential for promoting individual rehabilitation and creating safe institutional environments and communities upon the release of incarcerated individuals[23]. [22]By ensuring the use of EBPs, NDCS can improve individuals' lives and strengthen investment choices by implementing only those programs that are supported by evidence to work for targeted populations.

Anger Management Initiatives

For decades, agencies have been providing interventions with the intent of reducing violence potential among participants. However, the population, intensity, and effectiveness of said programs can, and do, vary. In this section, we provide an overview of anger management-related programs in line with the goals of AMHRN.

In 2003, several justice agencies sought to develop and use interventions designed to address anger and violence for higher risk populations. One such intervention was the Serious and Violent Offender Reentry Initiative (SVORI), which provided funding to improve a variety of outcomes (e.g., criminal justice, employment, housing, health) among individuals released from incarceration. A wide array of programming types and initiatives were implemented, including anger management, substance use, thinking errors, and life skills programs, which were administered through a combination of social workers and parole officers.[24] Each SVORI participating site used resources differently and administered the program to a variety of populations. For example, Washington provided anger control programming designed specifically to rethink feelings of anger in provoking situations, while Texas provided reentry interventions to those housed in segregation units. Overall, participation in SVORI programming led to fewer arrests compared to non-participants.[25]

Many state agencies offer generalized cognitive-behavioral therapy (CBT) to high-risk correctional populations, often including those with anger management issues. CBT is a form of psychological treatment used to modify an individual's thoughts and behaviors to be more positive.[26] For example, Arkansas, Virginia, and New York, among others, implement some form of anger management programming that involves a CBT curriculum. Overall, CBT has been shown to be effective in helping individuals cope with symptoms of psychological distress such as aggression, depression, and anxiety.[27] Relatedly, Moral Reconation Therapy (MRT) – a cognitive behavioral approach – is a manualized CBT program provided in Kentucky and Nebraska's correctional facilities.[28] Like other CBT programs, MRT seeks to change thought processes that lead to offending; unlike other CBT programs, MRT is specifically geared for use with 'treatment-resistant' individuals (i.e., individuals who are against participating in any type of programming). MRT has been shown to have a small but significant positive effect on reducing recidivism rates, finding greater success with incarcerated adults.[29]

Other types of anger management programs include individual and family therapy. Individual therapy involves one-on-one sessions with a therapist, focusing on assisting the participant in identifying triggering events or situations,

comprehending their automatic thought processes in reaction to anger, and addressing subsequent maladaptive behavioral patterns. The objective is to facilitate the restructuring of these cognitive patterns.[30] Family therapy aims to assist incarcerated individuals and their family members in understanding aggression and cope with the stressors of incarceration.[31] In these cases, a mental health professional meets with the incarcerated individual and their family members to discuss their anger and behavioral triggers. Family therapy can provide a safe space for incarcerated individuals and their families to connect with one another and process issues that will influence their post-release transition .[31]

Finally, relaxation and mindfulness treatments, such as Transcendental Meditation (TM), were introduced to U.S. prisons in the 1960s.[32] The goal of TM is to teach individuals how to manage stress. Indeed, this is a calming and mindfulness program that assists people in understanding their emotions and controlling their reactions. Through meditation-based treatments, individuals can recognize their emotional and physiological responses to stressful situations, stay focused in the present moment, and learn strategies to reduce aggressive behavior. This mindfulness-based intervention has been shown to help people address aggressive behavior, as well as substance use and other issues in their lives.[32]

Overall, programs predominantly employ traditional cognitive-behavioral methods, aiming to address cognitive distortions and behavioral patterns that prompt individuals to resort to violence as a means of conflict resolution. Generally, research indicates that programs such as SVORI and MRT, which incorporate cognitive-behavioral therapy, demonstrate effectiveness for individuals with violent tendencies in correctional settings. However, there is a limited number of evaluations concerning established anger management programs within correctional populations.[29,33,34,35,36] In the next section, we review the state of the evidence for anger management-based programs among correctional populations.

The State of Evidence for Anger Management High Risk/Need Programming

Given the consequences of anger-induced behavior, numerous jurisdictions have sought to find effective treatment programs to reduce person-related crimes, recidivism, and expanding prison populations. Additionally, anger management programming is often a prerequisite for parole and/or release into the community.[9,16]

As indicated, research on anger management programming in correctional settings has been mixed, yet largely positive.[11,37,38] For instance, Henwood et al. (2015) conducted a meta-analysis of 14 studies evaluating the effectiveness of cognitive behavioral therapy-based anger management among males. These studies were conducted in the community, secure rehabilitative centers, and focused largely on individuals convicted of violent offenses. Overall, CBT was effective in reducing both general and violent recidivism rates, with treatment groups having the greatest reduction.[11] Similarly, Lipsey et al. (2007) conducted a meta-analysis on 58 studies investigating the effectiveness of CBT interventions in reducing general recidivism rates among offenders. Findings showed that people who received CBT possessed 50% fewer odds of recidivating when compared to the control group.[38] While no specific CBT program was significantly related to lower rates of recidivism, programs that considered the risk level of participants, implemented the program as intended, and included key intervention components (e.g., anger control and interpersonal problem-solving skills) were most effective.[38]

Several anger management programs have been implemented and evaluated in the U.S. and globally across Canada, New Zealand, the UK, and Australia.[9,11,16,38,39] For example, a UK study evaluating a brief anger management group program [16]found an overall reduction in both observed (i.e., behaviors observed by correctional officers such as shouting, banging on cell doors, etc.[16]) and self-reported measures of anger compared to the comparison group. [16]

While there remain some gaps in research examining anger management programming among incarcerated individuals specifically, findings suggest that anger management is a beneficial treatment option for incarcerated

populations.[11,40,37,41,38] Importantly, research has concluded that when justice-involved individuals report higher rates of readiness to change and motivation to participate in anger management programs, they are more likely to benefit from treatment.[9,39] Anger management can help reduce general and violent recidivism rates and provide incarcerated individuals with coping skills to manage their anger in prison.

The Current Evaluation – The Anger Management High Risk/Need Program

NDCS provides AMHRN for incarcerated people who have demonstrated a high risk/high need related to anger. The AMHRN program is a branded and manualized clinical treatment intervention designed to increase anger control strategies among individuals in custody. The AMHRN curriculum utilizes educational and hands-on 'practice' sessions facilitated by clinicians to help individuals learn basic strategies to manage and control feelings of anger. The program is administered in a group setting over the course of twelve one-hour sessions with roughly 8-10 participants per group. As part of the program, participants are expected to complete readings and assignments to facilitate their learning experience. Overall, the program focuses on anger events and cues, anger control plans, the aggression cycle, cognitive restructuring, thinking errors and creating coping thoughts, problem-solving, and relapse prevention. Participants are assessed on their progress after each session by program facilitators using an evaluation form on their assignments, engagement, communication, implementing new skills in the group, using skills outside of the program, any hindering behaviors, thinking errors, and verbal and physical aggression from that week's session.

The first session introduces the program to participants. During this session, participants meet the facilitators, review the informed consent and their custom treatment plan, and explain the rules and expectations for the program. The treatment plan is designed to increase participants' understanding of the causes of anger, increase their self-awareness of their anger triggers, learn anger management control skills, and learn problem-solving skills. Further, participants are provided with definitions of anger, aggression, and hostility.

Throughout the program, participants are expected to keep a 'behavioral log' which is used to reflect on any triggering events, thoughts, feelings, or behaviors. At the beginning of each group session, participants share their entries from the previous behavioral log. The purpose of this exercise is to encourage participants to engage with the group, share anger triggers experienced throughout the week, discuss how they responded to the event, and explore alternative positive response strategies that could have been implemented. Additionally, if participants received a misconduct report since the last session, they should acknowledge the report to the group and explain how skills learned during group could have led to a different outcome. They also use this exercise to allow the individual the opportunity to express their feelings about the situation and identify alternative emotions experienced.

The final session is a conclusion session where facilitators explain to participants that implementing changes after the program can be stressful and anxiety-inducing, but those feelings are normal and expected. In this session, facilitators also respond to any questions or concerns participants might have before graduating from the program. Additionally, participants take brief quizzes to assess their understanding of the course material provided throughout the 12-week program.

Program completion occurs through one of the four ways. First, a participant can end participation by withdrawing from the group, including being transferred to a different facility, being released to parole, or at the request of the participant. Second, a participant can be terminated from the program due to placement into restrictive housing or possessing several absences. Third, participants can complete the full length of the program but receive an unsatisfactory program completion evaluation. Finally, participants can finish the full length of the program and receive a satisfactory program completion evaluation. Once participants have completed, they are asked to respond to a survey on their experience in the program and to provide feedback. Participants also receive a graduation certificate for program completion.

The Current Evaluation Design

On September 5, 2023, UNO researchers met with NDCS to discuss the goals of the AMHRN evaluation and develop an evaluation plan. This meeting was attended by NDCS leadership, UNO research faculty/staff, and senior members of the clinical staff team. A mixed methods evaluation plan was developed that included a process, and outcome evaluation and cost/benefit analysis. Agreed-upon methods of data collection included interviews with NDCS staff and program participants, and evaluator observations of programming. Administrative data for the outcome evaluation was provided by NDCS, including program participant records, programming materials, and programming/staffing cost estimates. (See Appendix II for methodological details).

Process Evaluation

This section presents the evaluation of AMHRN program processes and fidelity to the program model. We reviewed program materials, interviewed key stakeholders, and observed programming. We begin with a brief description of 'fidelity' in the context of program evaluation and a description of our methodology. We then present the results of the process evaluation, including observational findings, themes from our interviews with participants and staff, and conclude with recommendations to improve program fidelity.

Program Fidelity/Integrity

To fulfill the promise of EBPs, programs must be delivered with 'fidelity' or have 'integrity.'[42,43] That is, the program must be delivered in the fashion in which it was originally designed. Given staffing and resource constraints, a 'light' version of a program is sometimes delivered that has been modified from its original design, which can create concerns for the intended program outcomes. Indeed, decades of implementation science indicates that a lack of program integrity, or fidelity, can reduce an intervention's effectiveness.[44]

Program fidelity comprises both the therapeutic environment of an intervention – reflecting the nature and quality of interactions of program delivery – and the structural components of the intervention, such as class-size, credentials, training of providers, and treatment dosage.[45] NCJR was able to assess each component of program fidelity using a site and programming observation checklist that was informed by the literature.

Process Evaluation Methods

Before examining study outcomes, it is important to first understand the target population, the staff providing the program, and the focus and content of the intervention in greater depth, capturing nuances that numerical data may overlook.[46]. NCJR examines these elements via qualitative methodologies, where the program materials, staff perceptions, and views of the participants are assessed to examine the intent of the program and if those involved believe it is working as directed. Often, the process evaluation information guides subsequent analyses, outlining areas of concern that may be impacting the outcome evaluation's statistical findings.[47]

To understand the multiple components of the process of implementing a program within an institutional facility, the evaluation needed to utilize multiple methodologies. We began by reviewing program materials to familiarize ourselves with the AMHRN program. Equipped with this knowledge, we then completed process evaluation in several stages. First, we observed group sessions of AMHRN programming to provide context for our evaluation activities and to complete a systematic assessment of the therapeutic environment of program delivery. Second, we interviewed clinical staff to expand our understanding of 1) the history of the program at NDCS, 2) perceived implementation challenges, and 3) perceived successes of the program. Finally, we randomly selected and interviewed participants to understand their views of the program's usefulness for addressing how they manage emotional anger that impacts the reentry process.

Since most research and evaluation is dominated by quantitative methods (e.g., statistics and numerical outcomes), it is important to highlight the aims of qualitative methods, which are relatively underrepresented in the field. While quantitative methods often address research questions using large sample sizes and aim to generalize findings to broader populations, qualitative methods focus on understanding phenomena in greater depth and capturing nuances that numerical data may overlook.[48,49] Qualitative findings can be used sequentially with quantitative methods, to corroborate quantitative results, to complement them, or to explore and understand contradictions.[50]

In this evaluation, we analyzed all available program materials and conducted interviews with all relevant clinical staff who agreed to participate. As a result, the findings from these materials and staff interviews are generalizable to all Anger Management program materials and staff. However, this was not feasible when interviewing program participants. Instead, a random selection of participants was interviewed to meet the process evaluation's goals: to understand how the Anger Management program is being implemented as designed at NDCS and how its current implementation is contributing to achieving their intended program goals. A sample of four-to-six participants was considered sufficient to meet the process evaluation goal, as agreed upon by NDCS at the start of the evaluation.

Process Evaluation Results

The following section presents the results of site visits and programming observations, as well as thematic analyses of interviews with NDCS mental health staff and program participants. The major takeaways from this section are summarized on pages 21-22.

Site Visits: Assessing the Therapeutic Environment

Assessing Situational Components. Static situational components have been shown to impact program effectiveness.[51] Such components may be assessed using quality assurance checklists. Since quality assurance checklists are not available for select programs or AMHRN, we created a programming observation checklist to partially assess situational components of programming. Higher scores represent higher levels of fidelity or integrity. Ratings indicate 0 ‘not in place’; 1 ‘partially in place’; and 2 ’fully in place’.

NDCS offers AMHRN groups at two of its facilities: NSP and RTC. However, site observations were limited to observations of AMHRN group facilitation at the NSP facility. Regularly scheduled AMHRN groups were not offered at RTC during the site observation window due to increased demands for other NDCS programming. Therefore, evaluator-provided scoring and feedback were based on singular site observations at NSP, rather than aggregated scoring predicated on observations of multiple facilities. Facilitators at NSP received high scores in the areas of *facilitator preparedness*, *adherence to curriculum*, and *meeting different learning needs*. However, there were two noted areas of improvement: *facilitator rapport* and *group management,* which represented the lowest scores, however both areas still scored at acceptable levels, indicating most elements were in place.

Program Staff Interview Themes

Every interview conducted for the evaluations of NDCS programs used a custom-designed interview protocol structured to facilitate a comprehensive discussion with program staff. The interview guide covered introductions, program overview, interviewee background, collaboration, fidelity to protocols, achievement of outcomes, perceptions of program operations, barriers to implementation, and training elements. The guide ensured interviewers explored program dynamics and challenges, aiming to inform recommendations for program improvement. As such, the themes presented below describe the dynamics and challenges of the AMHRN implemented at NDCS.

Staff Characteristics

Five NDCS clinical staff were interviewed regarding AMHRN implementation during the final months of 2023. The interviewees included members of clinical leadership, the Clinical Violence Offender Review Team (CVORT), and program facilitators. The occupation titles and years of experience at NDCS are provided in Table 2.

Table 2. NDCS Clinical Staff Representation

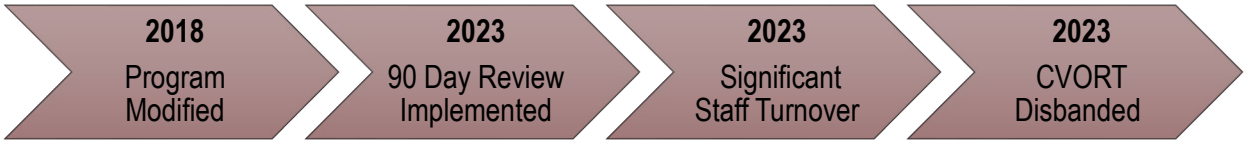
Staff Identifier	Current Position	Years at NDCS
Staff #1	Behavioral Health Practitioner Supervisor	6
Staff #2	Behavioral Health Practitioner	12
Staff #3	LIMHP Behavioral Practitioner	5
Staff #4	LIMHP Behavioral Practitioner/Drug Alcohol Counselor	6
Staff #5	LIMHP Behavioral Health Practitioner Supervisor	25

Significant Event Timeline Context of the Anger Management Program

There were four significant occurrences that have impacted AMHRN in recent years (see Figure 1). First, the program was modified from its initially implemented version during 2018. One staff member described the modification positively, stating that SAMHSA material was incorporated, and metaphors were updated to be timely and more relatable to participants. Another staff described the change as a reduced version of the Violence Reduction Program.

Another significant event that affected the anger management program was the implementation of a policy requiring a review of the eligibility of all individuals within 90 days of admission. Staff indicated that this change, near the beginning of 2023, was prompted by a perceived inadequacy in CVORT's screening criteria. This new requirement was reported to be stressful for the staff and may have contributed to another major issue affecting the program's capacity: significant staff turnover. At the time of the interview, four out of nine anger management staff members had left the mental health department within the preceding four months. Consequently, CVORT was unable to review or refer participants for the anger management program, leading to staff concerns about the future of the program at the time of the process evaluation.

Figure 1. Timeline Context of Anger Management Program



Staffing Shortages and Resource Limitations

All clinicians interviewed for this evaluation reported encountering challenges in serving the population due to staffing shortages or limited resources. Understaffing resulted in difficulties providing adequate services, with one staff member explaining that they were unable to offer programming beyond "crisis management". In one facility, 4 out of 10 (40%) therapist positions were filled, leading to just three AMHRN groups being offered each year. Consequently, staff managing the program have limited experience in the department. This shortage of experienced staff has made offering the program one of the most challenging aspects of implementation.

Some staff elaborated on what they believe to be the source of the staff shortages. They explained that while mental health may have been a priority for NDCS in the 1990s, political pressures and concerns for public safety have resulted in a shift away from mental health care and rehabilitation within NDCS.

Further, those interviewed believed that mental health staff shortages may be, in part. related to salary, where a greater rate of pay for program positions may increase the amount of quality applications.[52] In particular, those interviewed felt that staff positions that required degrees and licensures have prerequisites and a greater level of responsibility that should be reflected in the starting salary offered. While the pay of specialty positions is a common issue within many correctional departments, staff perceived it to be a particular issue for NDCS that may contribute to shortages and staff retention.

Limited resources mentioned by staff include issues with program locations, dilapidated buildings, available program space, adequate training, and relevant research. One staff member compared their clinical experience with AMHRN to that of their experience with the sex offender treatment program, while saying that they do not have the resources. In summary, the staff interviewed described how the shortage of clinicians and available resources affects the quantity and quality of anger management program groups offered, limiting the fidelity of the program and, therefore, the program's effectiveness.

These thematic findings suggest that the AMHRN program may benefit from prioritizing and allocating more staff and resources to mental and behavioral treatment at NDCS. This would involve the State of Nebraska providing increases in funding dedicated to raising the wages of new (and existing) mental health staff to attract new hires and ensure retention. Efforts could focus on increasing wages for those specializing in violent offenders and providing relevant training for mental health staff. Additionally, offering more competitive compensation could assist in retention efforts. Renovations to restore available programming spaces where AMHRN is conducted should be undertaken to ensure said spaces are conducive to therapy with proper lighting, heating, and humidity control, and free from distractions. These updates would likely result in improvements to participant learning and retention. Together, these efforts are likely to improve the AMHRN program and violence reduction programs more broadly by creating a therapy-friendly environment with adequate staffing levels.

Program Fidelity and Design

All NDCS clinician staff interviewed for this evaluation (100%) affirmed their adherence to the facilitator guides and fidelity to the program model, yet voiced reservations regarding the program's design. Participants engaged in discussions regarding the AMHRN program curriculum and clinical methodologies for emotion regulation. The curriculum underscores the concept that anger is a secondary emotion necessitating management, rather than being the core issue itself.

Clinicians reported utilization of the facilitator guides and generally expressed satisfaction with the service delivery. However, despite a 2018 program redesign aimed at integrating more pertinent teaching metaphors, the current design faced significant critique from the interviewed clinical staff. The primary concern raised was the perceived insufficiency of time allocated for thorough teaching of the program material. Clinicians articulated a sense that the

current program model lacks adequate time for integrating participant experiences to foster learning and reflection on their behavior. Approximately half of the participants were perceived to struggle with the program by one staff member, indicating that additional time could ameliorate these challenges. While facilitators delve into trauma to aid emotional regulation, there is insufficient time for participants to effectively process both their trauma and the program material simultaneously.

As one staff member succinctly summarized, although the program covers a broad spectrum of skills, it lacks depth. Essentially, staff believe that participants sometimes encounter difficulties with the material due to its complexity and the pace of delivery. Moreover, facilitators noted that the program's pace poses a challenge, as participants' progress must align with their respective Stages of Change.[53] Grouping participants without Stage of Change consideration can also impede the collective progress of the group.

There exists inconsistency among staff regarding the criteria used for assigning participants to the AMHRN program, resulting in confusion and frustration. While signs of emotional dysregulation and past records are taken into account, an overemphasis on past behaviors rather than present concerns may introduce bias into the assignment procedures.

Collectively, these observations highlight substantial challenges associated with the design, pacing, and assignment protocols of the program. Effectively addressing these issues will require a comprehensive reassessment of the program's framework, content, and assignment procedures to uphold fairness and enhance the effectiveness of service delivery.

Limited Collaboration and Support

Another prevalent theme that emerged from the interview data suggests that all interviewed staff believe the program could be more successful with expanded collaboration within NDCS and increased support for the mental health department. While separate departments may have distinct short-term goals, they presumably share a similar long-term objective: rehabilitating the population for eventual community reintegration. For instance, staff have articulated a need for a 'feedback loop' wherein mental health professionals of all levels can exchange programming experiences and propose enhancements collaboratively. This cooperative strategy mirrors recommendations from the evaluation team's VRP evaluation report, which underscores the significance of

feedback mechanisms in augmenting program efficacy. One suggestion put forward by staff was to offer feedback on participants who may not align well within treatment groups, a detail that could also be invaluable when provided by correctional staff.

Furthermore, there is a perceived disconnect between administration and frontline staff, resulting in confusion and a sense of undervaluation among experienced facilitators. One staff member expressed feeling unsupported and undervalued, particularly considering their years of experience and expertise in violent offender services. This sentiment underscores the importance of fostering a supportive and inclusive environment within the department to retain experienced staff and optimize program outcomes.

Additionally, some lower-ranking mental health staff felt uninformed about participant selection or prioritization for the anger management program and suggested that increasing transparency around the participant selection processes may help improve participant engagement and motivation.

In conclusion, bolstering collaboration and support within NDCS, particularly within the mental health department, is imperative for maximizing the efficacy of the anger management program and attaining long-term rehabilitation objectives. Through the implementation of feedback mechanisms, enhanced transparency, and the cultivation of a supportive atmosphere for staff, NDCS can more effectively synchronize its endeavors towards the shared goal of facilitating successful community reintegration for program participants.

Participant Engagement and Feedback

As previously mentioned, staff unanimously voiced concerns regarding participant engagement and the feedback received from program participants. Several staff believed that many subjects' primary motivation for completing the program was to improve their odds of securing employment upon release. For example, one staff member noted that participants are primarily focused on obtaining their completion paperwork and leaving, which is cited as a central reason for their lack of engagement in the program. Additionally, challenges related to participants' reading abilities and comprehension levels were reported, further impacting their engagement and success in the program. Another obstacle to program engagement highlighted by staff was test anxiety, which complicates assessment and potentially skews measurements of participants' comprehension of program content.

In conclusion, results from the process evaluation suggest that the psychoeducational approach of the program may require additional resources and a longer program duration to effectively address the needs of this population. Additionally, staff may want to recruit the assistance of successful program completers to alter the reputation of the AMHRN program. Program completers could help with recruitment by sharing what they appreciated about the program, serve as co-facilitators by updating the material with examples from their own lives making the material relatable, and/or serve as peer mentors to assist participants who need more processing assistance. Lastly, mental health staff could consider alternative assessments or explore ways to reduce test anxiety to increase the rate of success among participants.

Program Goals and Outcomes

All staff interviewed agree that the primary goal of the program is to equip participants with the skills and knowledge to manage anger, aiming to reduce misconduct reports and/or recidivism. One staff participant added that success would include participants' self-awareness to apply program concepts, potentially moving from pre-contemplative to more developed Stages of Change. However, other staff members suggested that the Stages of Change should be considered before participation in the program. Thus, while staff agree on the program's goals, they seem uncertain about the target Stages of Change within NDCS that would benefit most from program participation.

Another issue emerged regarding participants who receive misconduct reports at NDCS for the same issues the program aims to address. For instance, multiple outbursts toward staff could prevent participants from attending group sessions, limiting their access to the program. Meanwhile, some mental health staff expressed reluctance to terminate participants, preferring to offer support rather than terminate participants with qualifying misconduct reports (i.e., multiple misconduct reports or misconduct incidents involving violence). However, it is unclear to what extent all mental health staff follow this protocol, posing a challenge to program consistency.

In summary, while the program aims to promote prosocial behavioral changes, institutional constraints, and disciplinary measures within the correctional facilities create significant barriers. This raises questions about the coherence and effectiveness of misconduct report terminations in addressing the underlying issues. Addressing these challenges will require a comprehensive approach involving clarifying program objectives, adapting interventions to meet participant needs, and addressing systemic barriers to program participation. Revising policies and procedures to align with program goals and support positive behavioral changes will be crucial in these efforts.

Participant Interview Themes

Table 3 (below) presents basic demographic characteristics for program participants who were randomly sampled from program completers and agreed to speak to NCJR evaluators. The average age of these five participants was 34.2 years old.

Table 3. Program Participant Characteristics

Staff Identifier	Age	Sex	Race/Ethnicity
Participant #1	33	Male	White
Participant #2	29	Female	Hispanic
Participant #3	33	Male	White
Participant #4	33	Male	White
Participant #5	43	Male	White

Program Effectiveness and Frustration

The interviews revealed a consistent theme of frustration and disillusionment among participants regarding the effectiveness of programs offered within NDCS facilities (80%). Participants interviewed expressed dissatisfaction with various aspects of the programs, including content, staff support, and overall impact on personal growth. Regarding content, program participants interviewed described AMHRN as overly simplistic, elementary, and lacking applicability to their real-world experiences. One participant regarded program material 'talked down' to participants and voiced frustrations with correctional programs in general:

> *"A lot of these programs are extremely elementary, and they don't really get to the heart of any kind of matter. It's just kind of, you know, some jack*** that went to college and then wrote a book about it. Then, you know, I had some study to back that up and then okay. Well, this is a game plan we're going through the Midwest now for the prison systems, and they'll do trial and error."*

Participants interviewed perceived a disparity between themselves and the program facilitators, noting that the content creators lacked firsthand experiences like their own. This disconnect was evident as facilitators guided participants through the material. While participants valued hearing reflections and perspectives from their peers during program sessions, they did not feel that the program offered substantial insights or tools for effectively managing their anger issues. Consequently, participants interviewed expressed disappointment and skepticism when sharing their overall thoughts about the program.

These findings suggest that implementing cognitive-based interventions that involve justice-involved individuals in program creation and facilitation could be advantageous. Moreover, the themes from participants interviews suggest ongoing updates to the content are necessary to maintain relevance and effectiveness. Lastly, providing additional training for program staff to gain a deeper understanding of participant experiences within facilities and communities could enhance their capacity to engage with participants and facilitate meaningful change.

Desire for Personal Growth and Change

Most participants expressed a desire for personal growth, change, and rehabilitation. Many acknowledged past mistakes and aspired to build a better future. Despite challenges, several participants displayed a willingness to engage in self-improvement efforts, and a desire to make positive life changes.

These findings highlight the importance of tailoring programs to support participants' aspirations for personal growth and change. As Participant #1 explained, "aim people towards the more specific things that might apply to them."

Additionally, providing resources and support systems that foster self-reflection, skill-building, and goal setting can empower participants to take ownership of their rehabilitation journey.

Integration of Staff and Participant Thematic Findings

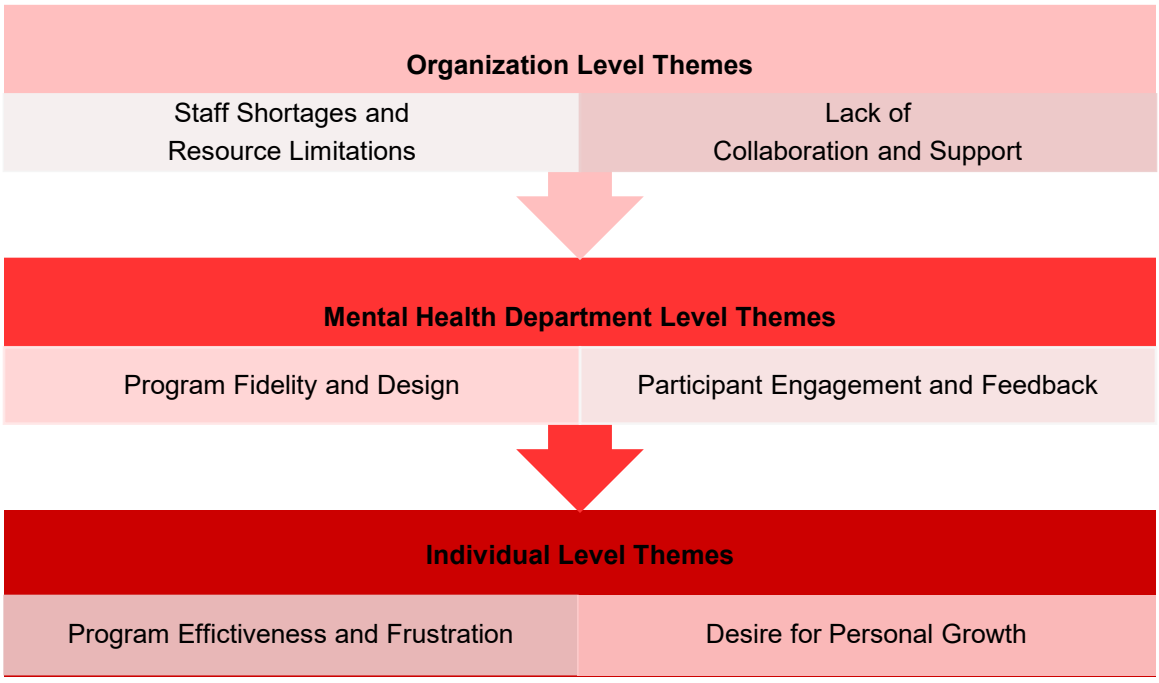
In the thematic results presented above, there is some overlap in the themes discussed by staff and participants, along with notable differences in their perspectives and priorities. Staff tend to focus on systemic issues within the correctional facility, program design, and fidelity, while participants primarily express frustrations with program content, impact, and their broader experiences within the correctional facility. Addressing these differences will require a holistic approach that considers the perspectives and needs of both staff and participants to enhance the effectiveness and relevance of correctional programs. The themes and their respective levels of impact are presented in Figure 2.

Process Evaluation Conclusion

This process evaluation involved program observations, as well as interviews with staff and program participants to obtain a holistic understanding of the AMHRN program. Our goal was to assess satisfaction with the program, fidelity and delivery, perceived effectiveness, and to understand staff and participants' experiences with its implementation.

The program, for the most part, followed the curriculum guidelines. However, all staff interviewed reported challenges resulting from staffing shortages and limited resources, making it harder to meet participants' needs. Staff also expressed concerns about the program's duration being too short and lacking adequate time to delve into the underlying issues related to the participants aggressive behavior. Despite some reservations about the program, all staff members stated that they followed the facilitator guide. Similarly, participants felt the program was ineffective, but they expressed remorse for their actions and a desire for personal growth and self-improvement. While the program was delivered as per the manual, both staff and participants agreed that improvements were needed to better address participants' needs.

Figure 2. Themes Across Levels of Impact



Outcome Evaluation

Following the process evaluation, quantitative analyses were used to assess program outcomes. The relevant question for the outcome evaluation is whether the AMHRN participants fared better than non-participants regarding institutional and community outcomes. The following sections describe our quantitative methodology and conclude with our findings.

Methodology

Outcome data was collected for all individuals screened by the clinical team for potential offering of AMHRN. Study measures used administrative data sources for both institutional outcomes and community outcomes (i.e., recidivism). The data included program metrics and dates of participation, offerings, and screenings. Data also included demographics and item-level data from the risk/needs assessment used by NDCS and spanned from AMHRN's initiation in 2008 until the data-pull date in October 2023.[i]

While a randomized controlled trial would be ideal for identifying program effects, this method was not feasible due to the retrospective nature of the evaluation. Instead, we utilized a statistical balancing procedure to simulate random assignment and equate AMHRN participants with selected control group subjects. The procedure used 31 different measures, allowing analyses to fairly compare AMHRN and control group subjects (see Appendix II). The balancing procedure was conducted independently for each sample.

Findings

The following section presents the quantitative findings of NCJR's AMHRN outcome evaluation. We begin with a description of the participant and comparison group characteristics. Next, we examine institutional outcomes (i.e., violent, serious, & non-serious misconducts) and conclude with an examination of community outcomes (i.e., returns to prison, new felony convictions, & new violent felony convictions).

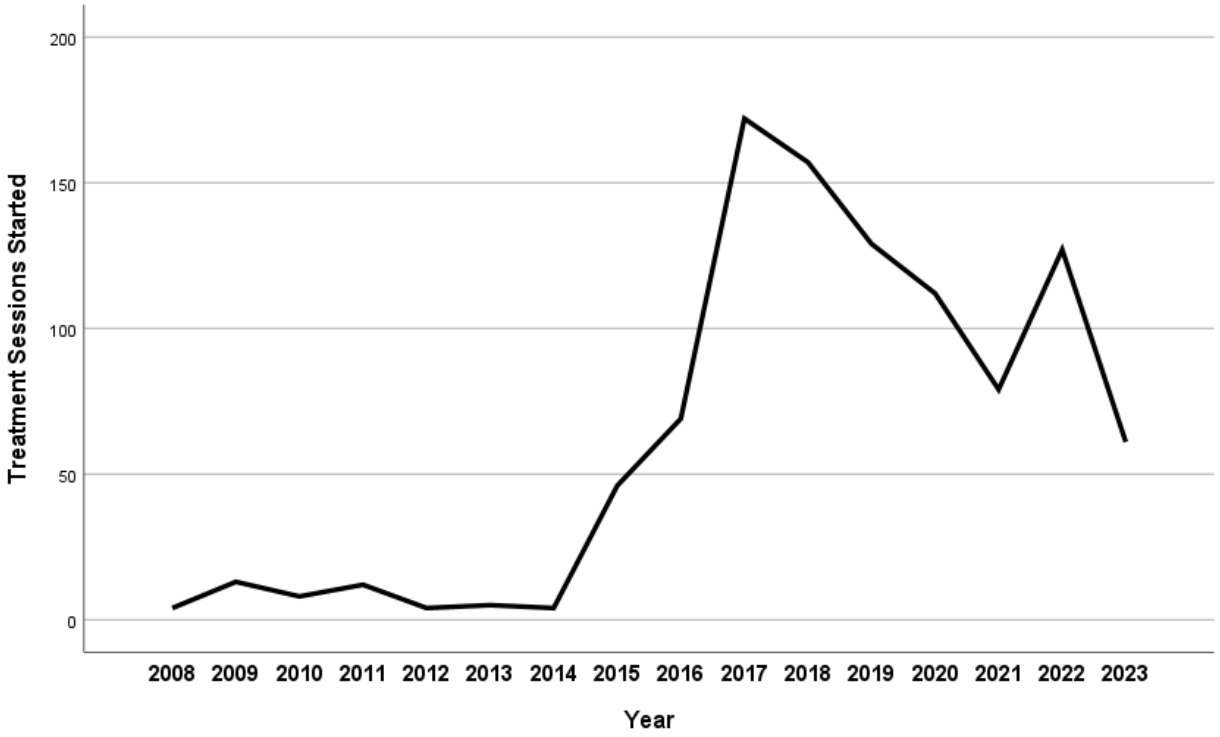
AMHRN Characteristics

The implementation of AMHRN began in 2008. Between 2008 and September 2023, CVORT, the specialized mental health team responsible for screening individuals, conducted 1,798 screenings on 1,390 individuals. CVORT offered AMHRN to over 85% of eligible individuals. When programming was offered, 89% of individuals accepted enrollment. Of those offered, almost 29% of individuals were offered AMHRN programming more than once. Treatment sessions began in 2008, resulting in 1,017 official 'starts' of programming for 831 individuals. Figure 3 describes the frequency of individuals starting AMHRN programming across years of implementation.

Participation in AMHRN was very low for the first seven years of implementation. Participation increased substantially in 2015 to a peak of 172 participants in 2017. By 2021, participation reduced to 79, increased to 127 in 2022, and then reduced again to 61 participants in 2023. We note that some of the 2021 decline in participation was due to the impact of the COVID-19 pandemic.

[i] The Static Risk and Offender Needs Guide Revised – Nebraska version (STRONG-R Neb) contains 92 items assessing static and dynamic variables for risk and needs classification. This assessment is conducted by trained staff through a semi-structured interview within seven days of intake to the NDCS. It is scored in a computer program that provides summary risk/needs scores for each of 9 domains (Criminal History, Residential, Education, Employment, Family, Friends/Peers, Alcohol/Drug Use, Mental Health, & Aggression). The overall risk models are gender-specific and can assess the risk for violent, property, drug, or general felonies. See Hamilton and colleagues (2016) for more details on the original STRONG-R, developed for the Washington State Department of Corrections.

Figure 3. Frequency of Individuals Starting AMHRN Programming by Year



Sample Characteristics

Participants in the treatment group began their programming between June 17, 2008, and August 18, 2023 (n_t= 788). Several categories of participation and completion types were examined. As previously mentioned, determination of the type of completion is made by CVORT based on programming performance measures. For these measures, all subjects were determined to be satisfactory, adequate, unsatisfactory, terminated, or withdrawn from the program. Types and proportions of participation and completion are presented in Table 4.

To be deemed 'satisfactory', participants must be assessed by staff to have successfully fulfilled program requirements. This entails achieving an average progress assessment score of 85% or higher and exhibiting no aggressive, violent, or disruptive behaviors during group sessions, as well as abstaining from substance abuse. Additionally, participants must consistently adhere to staff directives and have no unexcused absences from the group.

To be considered ’adequate’, participants must be assessed by staff to have successfully fulfilled program requirements (i.e. an average progress assessment score of 70% or more) and demonstrate appropriate attendance. ‘Unsatisfactory’ is also a possible completion status and is assigned if the enrolled participant is not assessed by staff to have made sufficient progress (i.e. an assessment score of less than 70%). Two individuals were assigned “Other” status, which was undefined by clinicians.[ii]

A participant is terminated from the program if they receive multiple misconduct reports or are involved in a violent incident during treatment. Withdrawn is typically assigned when an individual is transferred to a new facility for any

[ii] Records indicate that ‘other’ status was used more frequently in the first four years of implementation (2008-2011), and the associated clinical notes typically mention removal for disciplinary reasons.

reason or is released to the community. Table 4 presents frequencies and percentages of types of completions by AMHRN participants.

Table 4. Types of Participation & Completion (n = 788)

	%	n
Satisfactory Progression	42.1%	332
Adequate Progression	38.5%	303
Unsatisfactory Progression	3.2%	25
Terminated from Program	10.9%	86
Withdrawn from Program	2.7%	21
Other	1.1%	9
Missing Outcome	1.5%	12

Participants and non-Participants

To understand how AMHRN changed an individual's behavior due to programming, we needed a frame of reference in the form of a comparison group. We grouped non-completers who were screened and offered AMHRN by CVORT, but did not participate in the program or participated for fewer than seven days and examined their outcomes relative to the treatment group. First, we created a study eligibility date, which was the most recent start date for those in treatment for at least seven days.[iii] For all others who were offered the program but did not participate, the study eligibility date was the most recent date the program was offered.

We created three samples to analyze. The first is the full sample, utilizing all available data from 2008 to 2023. The second is the historical sample, utilizing data from 2008 to 2018. The third is the contemporary sample, utilizing data from 2018 to 2023. Analysis of the contemporary sample is bolstered by utilizing information provided by the STRONG-R risk assessment. The STRONG-R risk assessment increases the accuracy of findings by improving the ability of the balancing procedure to make accurate statistical adjustments. The historical and full sample were limited to traditional demographic and criminal history information to control for spurious relationships. Finally, we excluded the seven participants that were still enrolled in programming at the time data was retrieved to allow for a sufficient follow-up period to assess study outcomes.[iv]

Table 5 provides demographic and other descriptives for the treatment and comparison groups using the Full Sample (i.e., 2008 to 2023).

[iii] In addition to being screened by CVORT and offered participation in AMHRN, a minimum of seven days in treatment was employed to distinguish the treatment group from the comparison group. We implemented this seven-day criterion based on an analysis of data indicating that certain participants declined the program after initially accepting it and participating once, or not at all. Additionally, qualitative interviews revealed that individuals may be withdrawn from programming for various reasons, such as transfers or misconducts. We added this as the "adjusted" component of an intent-to-treat design.

[iv] The characteristics of participants of AMHRN and their accompanying comparison group are presented in the "pre" columns located in Appendix II.

Table 5. Demographics of AMHRN Full Sample – 2008 to 2023 (unweighted)

	AMHRN Tx Group n_t= 313		Comparison Group n_c= 296	
	x/%	SD	x/%	SD
Eligibility Date	05/16/2016	(873 days)	06/21/2014	(1,069 days)
Prior AMHRN Offers	0.06	(0.28)	0.08	(0.29)
Prior AMHRN Refusals	0.03	(0.20)	0.04	(0.19)
Age	33.62	(9.11)	32.65	(9.75)
Male	91.22		97.12	
White	45.95		45.05	
Hispanic	14.53		12.78	
Black	32.09		36.1	
Other	7.43		6.07	
Prior Felonies	2.04	(1.39)	1.75	(1.59)
Prior Violent Felonies	1.30	(1.04)	1.06	(1.12)
Misconducts – Non-Serious	71.55	(101.94)	46.35	(93.62)
Misconducts – Serious	3.42	(5.12)	2.06	(3.91)
Misconducts – Violent	13.23	(29.07)	14.12	(21.49)
Days Incarcerated prior to Tx	1,304.79	(1,760.14)	619.10	(921.01)

Table 6 provides demographic and other descriptive statistics for the treatment and comparison groups using the Contemporary Sample (2018 to 2023). The remaining analyses in this report utilize the ***weighted*** samples that effectively equate our AMHRN and comparison groups. Details on the weighting procedures are outlined in Appendix I.

Institutional Outcomes

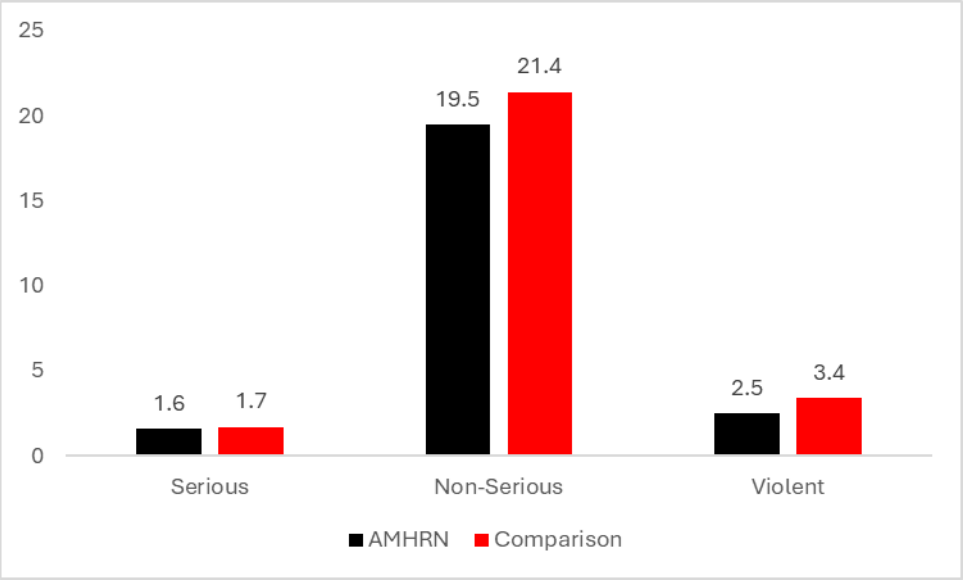
The first analysis following the balancing procedures examines institutional outcomes to understand how AMHRN influenced individual behavior due to programming. This included assessing 12-month rates of violent or serious prison misconduct after the program. For comparing institutional outcomes, the contemporary sample was used, as it offers a comparison within the same timeline of incarceration, where NDCS policies and procedures were similar or identical. Additionally, the balancing procedure utilized relevant STRONG-R dynamic items, increasing the similarities between the groups and thereby enhancing the accuracy of the comparison. Misconducts were categorized by NDCS as either serious or non-serious and violent or non-violent. Seven individuals who escaped and were later returned to prison were excluded from the institutional outcome analyses.

Table 6. Demographics of AMHRN Contemporary Sample – 2018 to 2023 (unweighted)

	AMHRN Tx Group n_{t1}= 340		Comparison Group n_{c1}= 224	
	x/%	SD	x/%	SD
Eligibility Date	02/23/2021	(530 days)	11/14/2020	(540 days)
Prior AMHRN Offers	0.60	(1.24)	0.80	(1.11)
Prior AMHRN Refusals	0.34	(0.64)	0.33	(0.59)
Age	34.26	(10.11)	33.64	(9.72)
Male	92.86		94.12	
White	48.66		49.41	
Hispanic	7.14		11.18	
Black	31.70		29.71	
Other	12.50		9.71	
Prior Felonies	1.91	(1.35)	1.98	(1.20)
Prior Violent Felonies	1.21	(0.99)	1.14	(1.00)
Misconducts – Non-Serious	142.10	(226.38)	131.20	(164.05)
Misconducts – Serious	8.98	(14.07)	9.30	(11.28)
Days Incarcerated prior to Tx	1,100.10	(1,849.61)	1,000.1	(1,112.55)

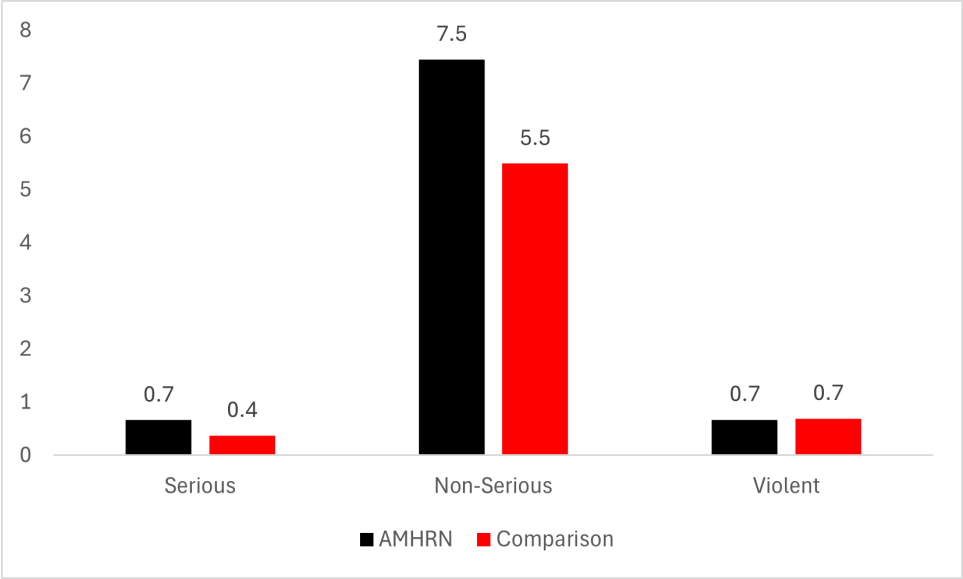
In Figure 4 we present one-year rates of institutional misconducts comparing the AMHRN group to the contemporary sample, following program completion. We note that these analyses adjusted for the number of days 1) between program eligibility date and release or 2) between program eligibility date and date of data retrieval for those that are still incarcerated.

Figure 4. AMHRN and Contemporary Sample One-Year Rate of Misconducts



In Figure 5 we present one-year rates of institutional misconduct, comparing the AMHRN group to the comparison group, following program completion. Again, these analyses adjusted for the number of days 1) between program eligibility date and release or 2) between program eligibility date and date of data retrieval for those that are still incarcerated.

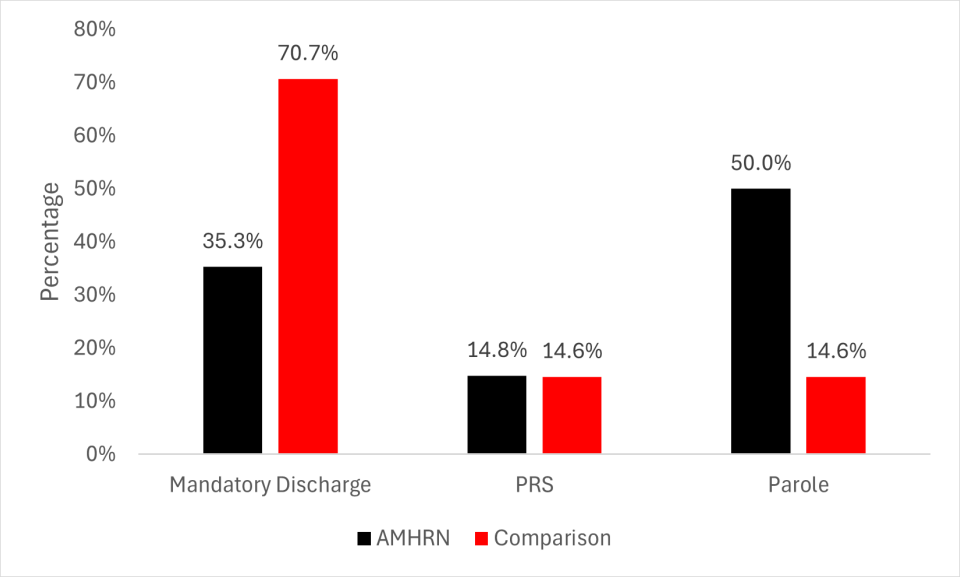
Figure 5. Historical Sample One-Year Rate for Misconducts



Community Outcomes

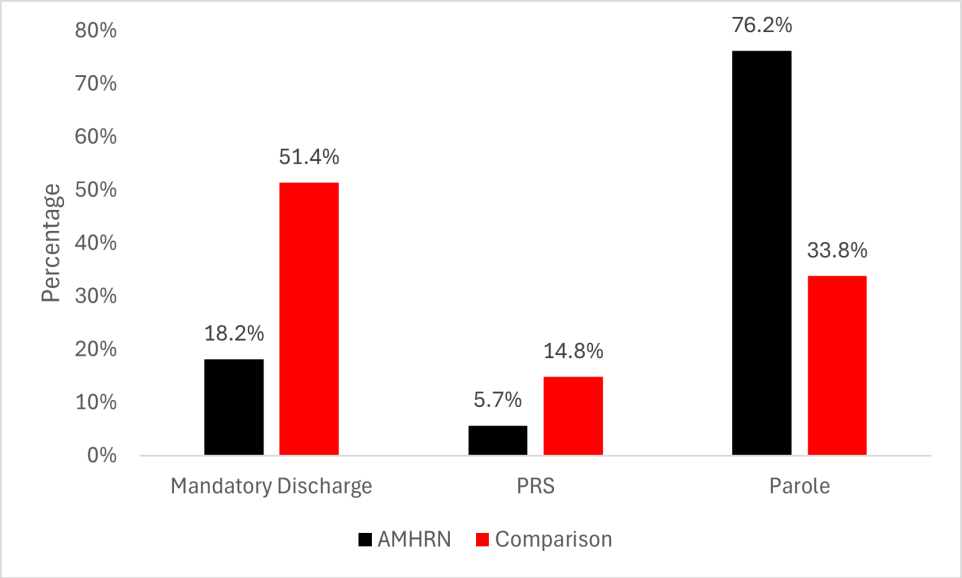
Next, we examine community outcomes following treatment completion. In Figure 6 we present release types for the contemporary sample, comparing the AMHRN group and the comparison group. Notably, 50% of AMHRN participants were released via parole compared to 14.6% of comparison group participants. This has implications for AMHRN participants, as parole is granted to comparison subjects less frequently. Further, subjects in the comparison group were far more likely to be released via mandatory discharge (70.7%), or 'jam out', compared to AMHRN subjects (35.3%). However, there was no variation between groups for PRS releases.

Figure 6. Contemporary Sample Release Types



We also examined releases for the historical sample (Figure 7), again, AMHRN participants were far more likely to be released via parole than individuals in the control group (76.2% v. 33.8%). Again, subjects in the historical comparison group were far more likely to be released via mandatory discharge (51.4%), or 'jam out', compared to historical AMHRN subjects (18.2%). However, unlike the contemporary sample, the proportion of releases via PRS

Figure 7. Historical Sample Release Types



were greatly reduced for AMHRN participants compared to the historical sample (14.8%). This is due, in most part, to PRS only being an option from 2016 forward.

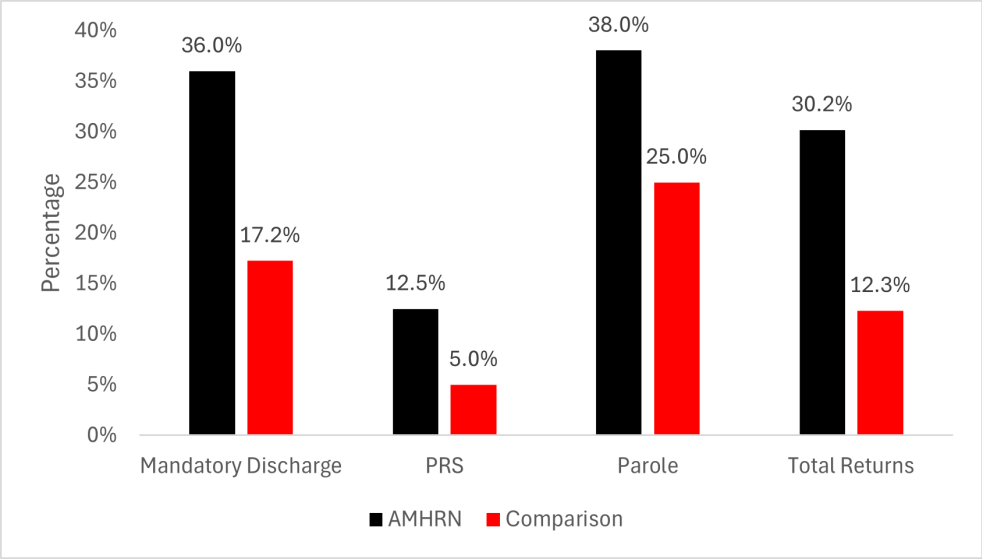
Returns.

Next, we compared AMHRN and comparison group subjects' reincarcerations in the contemporary sample.[v] Of those released to the community in the contemporary sample, approximately 11% returned to prison. Notably, of those who returned to prison (n=68), approximately 27% of mandatory releases were returned, compared to 31% of those released on parole, and 10% of PRS releases. Overall, the contemporary AMHRN group had a return rate of 30.2%, while the comparison group fared better with a 12.3% return rate, which was found to be a statistically significant difference, despite a small effect size (p<.001; OR=1.26). The caveat, once again, is that most of the sample was released on parole and thus, possessed a greater return rate than non-parolees.

Given the high return rate for those released on parole, we then examined new convictions by discharge type (see Figure 9). Overall, 2.3% of AMHRN participants received a new conviction compared to 4.1% of those in the comparison group, but these differences were not found to be statistically significant (p=0.59; OR=.986). Notably, very few mandatory discharged AMHRN subjects returned for a new conviction however, higher rates of new convictions were observed for AMHRN subjects that were released via PRS, while fewer AMHRN subjects possessed a new conviction compared to the contemporary subjects that were paroled.

[v] We omit the full sample for this returns analysis given the vast differences in parole policies experienced over the entire sample.

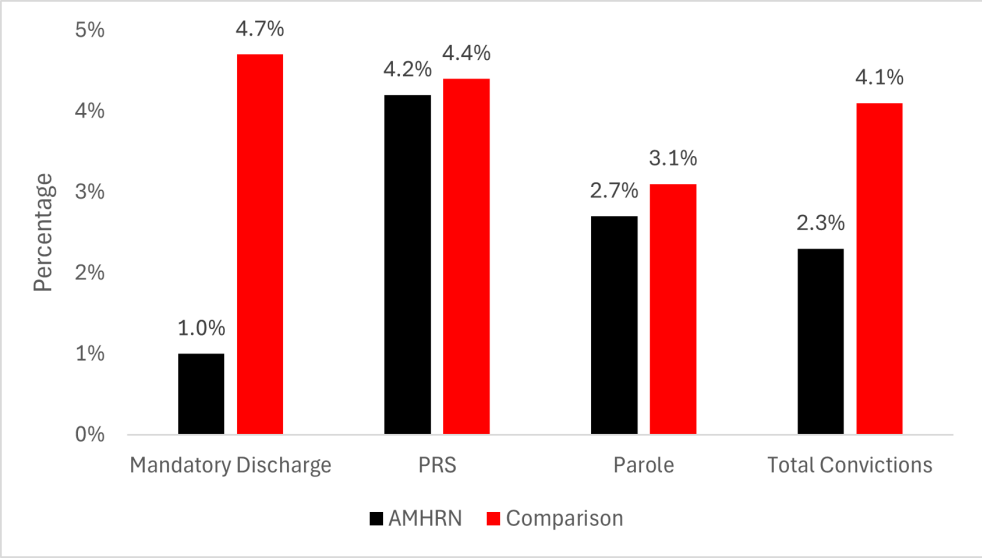
Figure 8. Any Returns – Contemporary Sample



Convictions.

This section compares the treatment and comparison groups for the full sample. While most criminal justice analyses have traditionally focused on crimes committed in the community, individuals can legally be convicted of a crime while incarcerated. Further, criminal statutes are subject to lesser deviation in judgement compared to

Figure 9. New Convictions by Discharge Type – Contemporary Sample



proceedings revoking one's community supervision. Therefore, we felt more confident presenting analyses on convictions for the full sample compared to institutional outcomes and other community outcomes. Here we examined the extent to which convictions within three years varied across study groups.

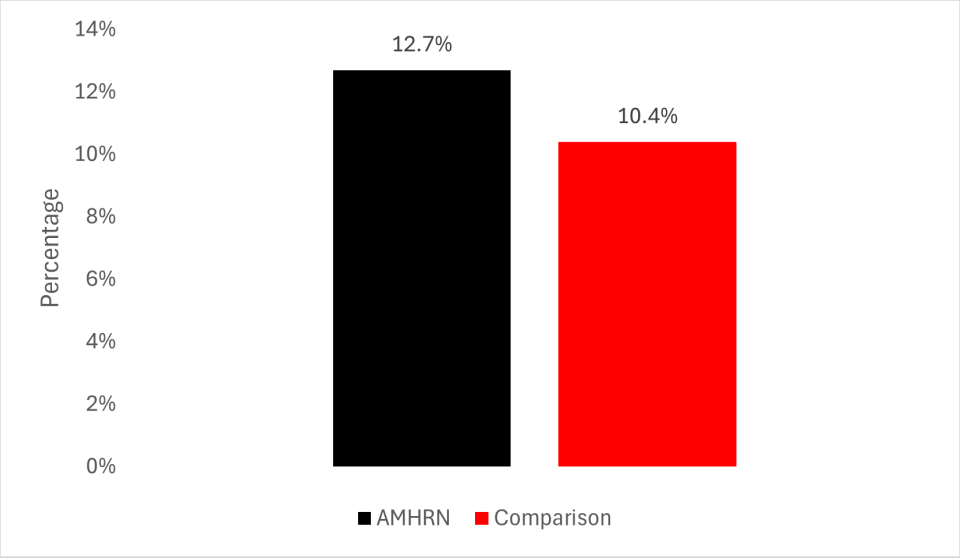
We examine 'all types of crimes' (i.e., excludes traffic offenses), as well as 'felony-only crimes' specifically. Unlike our examination of 'returns,' this distinction allows the analysis to determine if differences are similar across conviction severity. We also separately examine 'violent + non-violent crimes' and 'violent crimes,' which allows us to determine if differences are similar across types of convictions. Finally, we separately examine those 'released' and the full samples. This separation allows for further clarification on location of new convictions, providing context for the 'returns' findings, specifically regarding the effects of parole.

The examinations are ordered in terms of breadth, beginning broadly (i.e., all crimes) and proceeding towards more acute examinations (i.e., violent felonies for those released). While all examinations are presented in bar charts, Appendix III provides these findings in tables that also include *p*-values, odds ratios, and 95% bootstrapped confidence intervals. Also included in Appendix III are tables examining the historical sample and the contemporary sample.

Again, using the full sample, our first examination (see Figure 10) includes the broadest measure (i.e., felonies and misdemeanors/violent and non-violent) and largest population (i.e., those released and those not released).

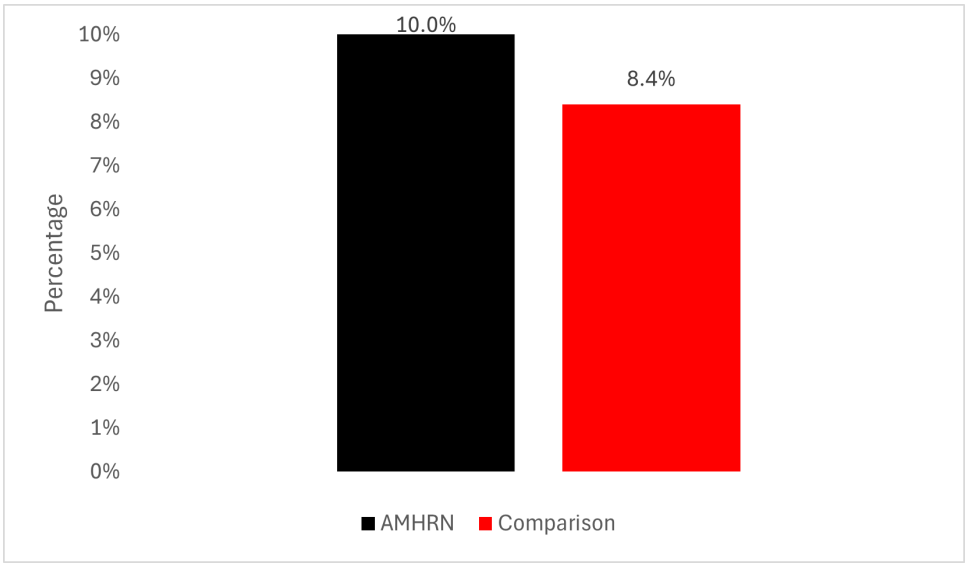
In Figure 10, we present percentages of new felony convictions for three years following treatment completion. While differences in new convictions were observed between groups, the differences did not reach statistical significance. Thus, there is not sufficient evidence to claim AMHRN reduced convictions for all new crimes.

Figure 10. Any New Convictions



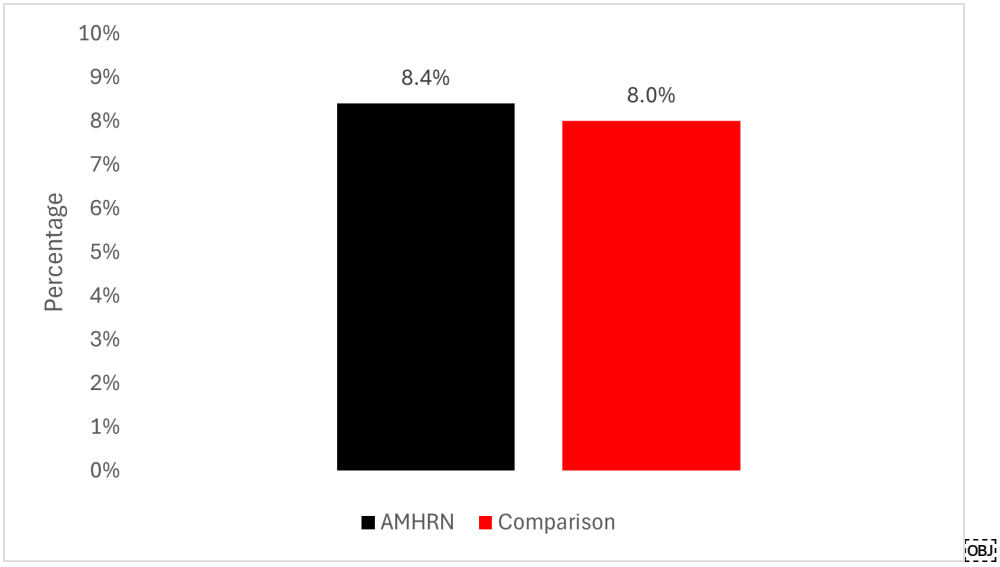
In Figure 11 we present percentages of new felony convictions for three years following treatment completion. AMHRN participants recorded slightly more instances of having one or more felony convictions than the comparison group, yet the difference was not statistically significant.

Figure 11. New Felony Convictions



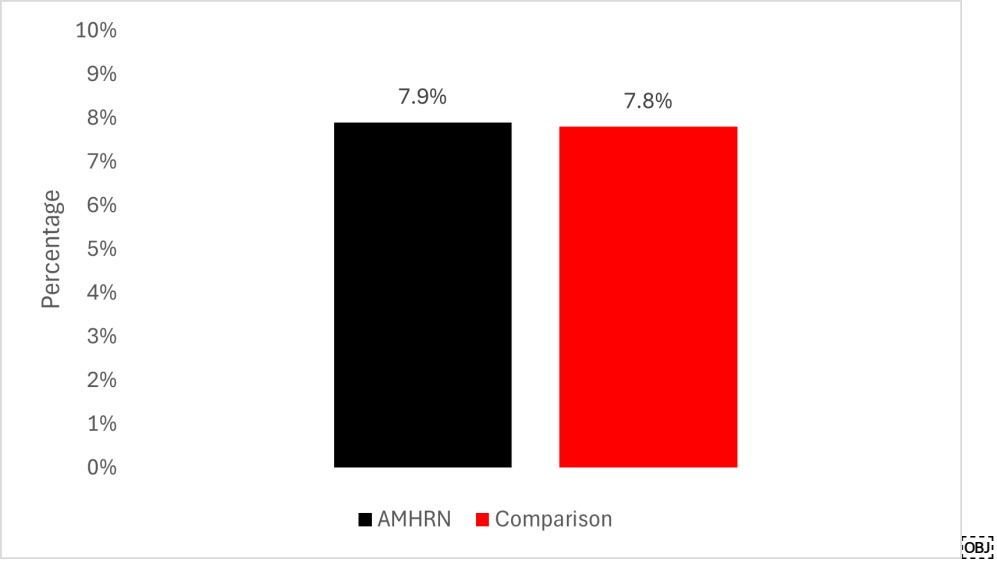
In Figure 12 we present percentages of those with at least one violent conviction three years following treatment completion. AMHRN participants had slightly more instances of having one or more violent convictions than their counterparts, but, again, the difference was not statistically significant.

Figure 12. New Violent Convictions



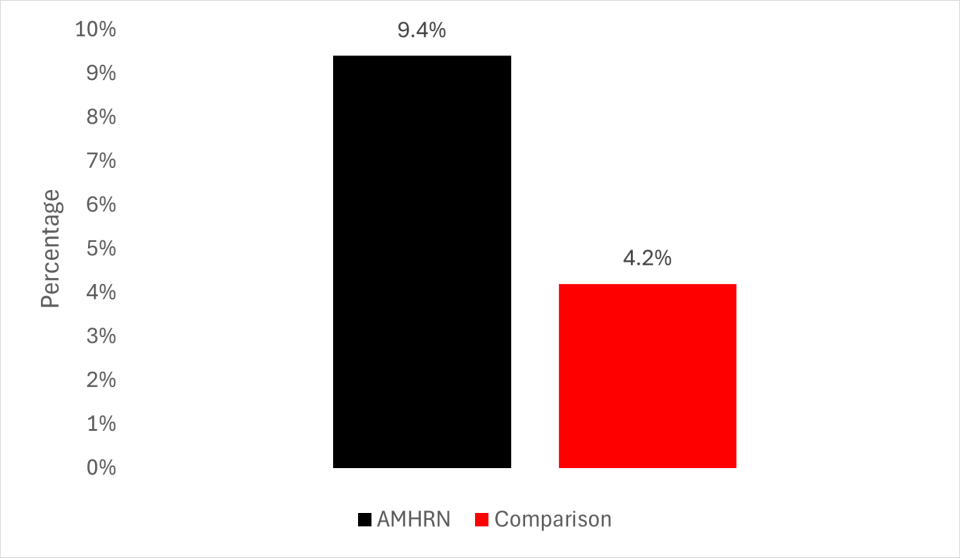
In Figure 13 we examine violent felony convictions for three years following treatment completion. AMHRN participants were observed to have roughly equivalent instances of one or more convictions to their counterparts, again, a non-statistically significant difference.

Figure 13. New Violent Felony Convictions



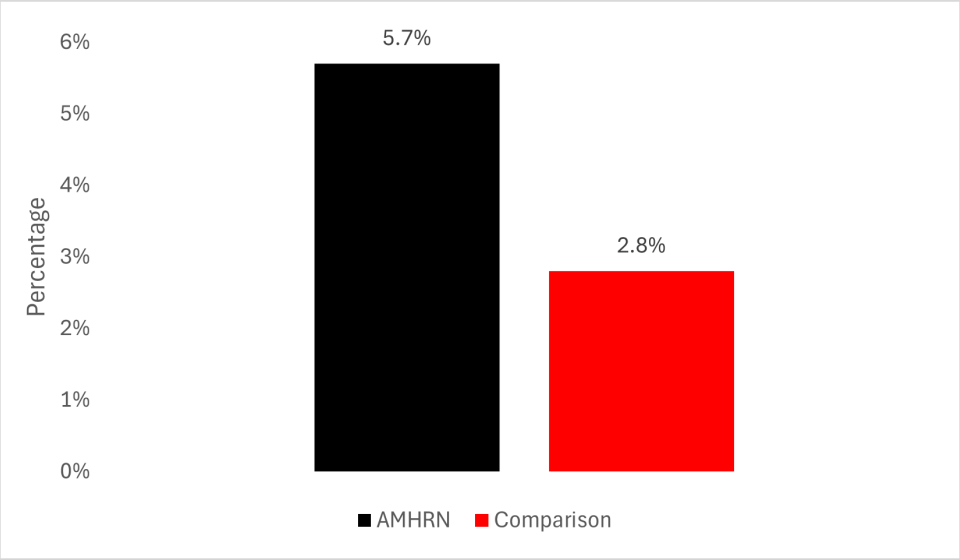
In Figure 14 we examine new convictions for the full sample for only those released to the community during the study period. While more AMHRN participants (9.4%) were convicted of one or more crimes compared to the comparison group (4.2%), the difference did not reach statistical significance.

Figure 14. New Convictions of Releasees Only



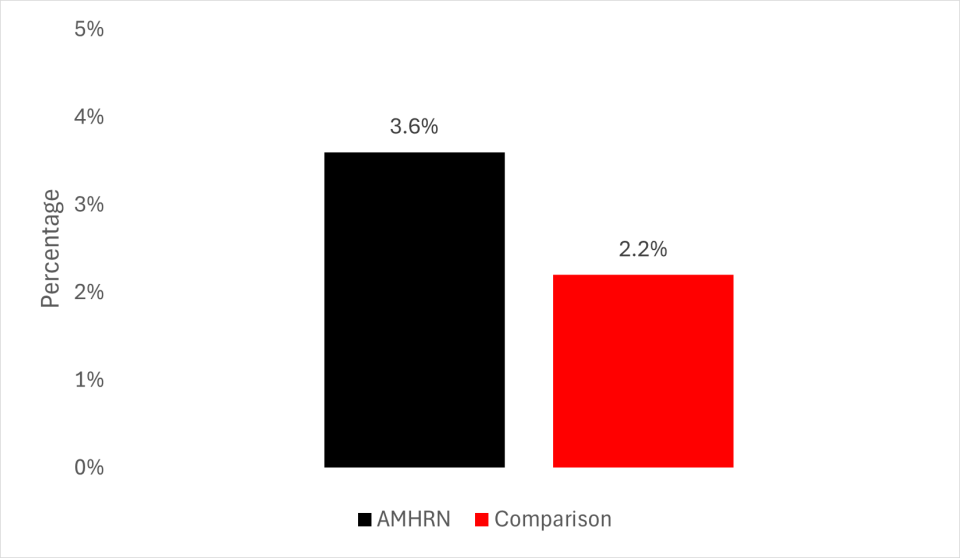
In Figure 15 we examine new felony convictions for the full sample for only those released to the community during the study period. As with the 'all convictions' comparison, while more participants were convicted than the comparison group, the difference did not reach statistical significance.

Figure 15. New Felony Convictions of Releasees Only



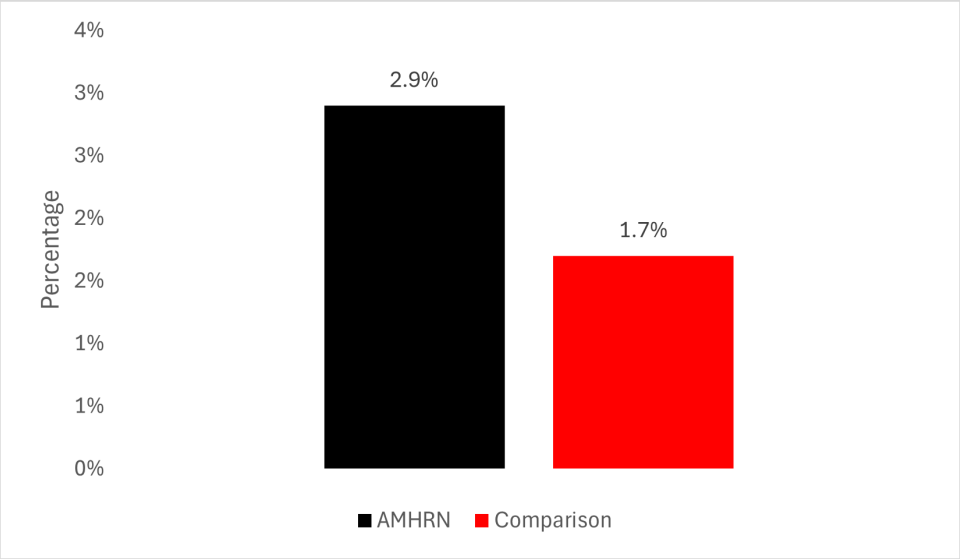
In Figure 16 we examine new violent felony convictions for the full sample for only those released to the community during the study period. While more program participants were convicted compared to the control group, the difference did not reach statistical significance.

Figure 16. New Violent Convictions of Releasees Only



Finally, in Figure 17 we examine new felony convictions for the full sample for only those released to the community during the study period. As with the 'all convictions' comparison, while more participants were convicted than the comparison group, the difference did not reach statistical significance.

Figure 17. New Violent Felony Convictions for Releasees Only



Outcome Evaluation Conclusion

The outcome evaluation analyzed program participation totals across all years of data, participant demographics for the total and two subsamples, and institutional outcomes. Community return outcomes were examined using the contemporary sample (2018 to 2023) to minimize policy fluctuations over the years, particularly regarding parole. The community outcome of convictions was assessed using the full sample. Additionally, the evaluation examined a third subsample of the full sample, including only individuals released to the community during the study period. Findings were based on population parameters, indicating the observed differences were actual differences in rates or counts.

The analyses included several types of institutional and community outcomes, measuring instances of offenses (one or more vs. zero). Using NDCS's classification scheme, dichotomous institutional outcomes were categorized as non-serious, serious, and violent misconducts. No significant differences were found between the treatment and control groups in these categories.

Community outcomes were divided into releases, returns, and new criminal convictions. A significant difference was found in release rates, with AMHRN participants being released on parole more frequently. However, AMHRN participants also had higher return rates. Further analysis revealed that parole significantly contributed to the return rates. No differences were found in criminal conviction rates between the treatment and control groups, indicating that higher return rates for paroled individuals were due to technical violations rather than new convictions. Significance testing on conviction severities ('all crimes,' 'new felonies,' and 'new violent felonies') showed no significant differences.

Finally, significance testing on convictions for those released to the community found no significant differences between the groups for any offense type or severity. However, due to the small sample size, strong conclusions about AMHRN's effect on violent convictions for released individuals cannot be drawn.

Overall, our findings do not demonstrate strong evidence that AMHRN provides a substantial recidivism reduction effect. However, these findings also suggest that parole is driving returns to prison. Notably, the AMHRN program has been used sparingly, providing the evaluation with limited samples. Further, AMHRN participants differentially receive more supervised (i.e., parole) releases than comparison subjects. Without investigating the procedures and

intentions of the parole board, this finding suggests that the parole board perceives AMHRN as a protective factor for recidivism. Subsequently, and similar to our previous report on the Violence Reduction Program (VRP) (Campagna et al., 2024), we find that those released to parole supervision have a greater likelihood of returning to NDCS custody compared to those that have a mandatory release or even those released to PRS. This finding is important, as it indicates that supervision may be producing a spurious effect, which makes it difficult to disentangle AMHRN's true effects.

While our breakdown of findings by release type provides a consistent indication of the program's effects, it is important to note that AMHRN is designed to reduce violent recidivism, or new convictions for violent offenses. An evaluation of AMHRN's violent recidivism reduction impact is cut short, or drastically limited, when an individual is returned to custody via revocation for a non-violent conviction or technical violation of parole conditions. Although outside the scope of this evaluation, we feel it is important for NDCS to assess the impact and use of parole revocations, as their frequency of use obscures the evaluation of AMHRN's effects.

Cost-Benefit Analysis

A cost-benefit analysis (CBA) was conducted to examine the financial effects of the AMHRN program. CBA is an economic tool that allows policymakers to make informed decisions about the effectiveness of programs, framing investment in program cost through dollars saved via participants' reduced outcomes. This form of analysis allows policymakers to compare the monetary benefits to costs of a program where, if identified, outcome benefits outweigh the program costs, the investment is deemed 'cost-effective'.

CBA findings are presented in Table 7.[vi] A description of the methods adopted for the current evaluation are described in Appendix IV.

Table 7. Cost-Benefit Analysis

	AMHRN	Comparison
Implement AMHRN cost per participant	$170.78	$0.00
Recidivism cost per participant[vii]	$944.16	$1,276.04
Recidivism rate	58/636=9.12%	78.88/636=12.4%
C/B ratio	1:1.943	

Utilizing these metrics, we find that for every dollar spent on AMHRN, the state saved $1.94. This is a net savings of $0.94 for every dollar spent, making the program valuable as a cost savings program administered by NDCS. Notably, these savings stem from the higher frequency of crimes committed by the comparison group relative to the AMHRN group.

[vi] While the Outcome Evaluation identified 24 new occurrences of felony convictions for the AMHRN group, the CBA accounted for 58 felonies for this same group. This discrepancy arises because the Outcome Evaluation employed a binary measure for 'new felonies' and restricted the sample to individuals with a complete three-year follow-up period. In contrast, the CBA utilized a count of 'new felonies' without imposing a three-year follow-up restriction. The count of felonies provides a more comprehensive assessment of the costs to the justice system and tangible losses to victims. In contrast, the Outcome Evaluation focused solely on whether individuals incurred new felony charges. Additionally, for the CBA, our aim was to depict an overall effect rather than strictly adhere to the state's definition of a three-year return to prison. We maintained the three-year follow-up for convictions to ensure consistency with the returns measure and other evaluations of state recidivism.

[vii] The cost-benefit structure of this report is an adaptation of the 2014 Washington State Institute for Public Policy Benefit-Cost Model (WSIPP) in their evaluation of public policy related examinations.

Rating Program Effectiveness

The process evaluation, outcome evaluation, and the cost-benefit analysis described were conducted to provide a rating of AMHRN program effectiveness as implemented by NDCS. NCJR developed a rating classification schema (adapted from Crime Solutions and the National Institute of Justice) to assist in decision-making. To this end, we provide a classification of the AMHRN program implemented at NDCS.

We categorize programs and/or practices into three possible levels that include: 'Effective,' 'Promising,' and 'No Effects,' based on the program's strength of evidence and ability to achieve its intended goals.[54] 'Effective' programs have demonstrated strong evidence that they will achieve intended goals; 'Promising' programs demonstrate some supportive evidence in achieving intended goals; while programs with 'No Effects' have not indicated sufficient evidence that they will achieve intended goals and/or may result in harmful consequences.

Using this rating schema, we outline each classification criterion in Table 8. NCJR assessed AMHRN at NDCS on program fidelity, evaluation data findings, and previous research associated with similar programs. The gray boxes represent the selected rating for AMHRN across each of these three categories.

Table 8. NCJR Evaluation Rating Classification Schema

	No Effects *	**Promising** **	**Effective** ***
Program Fidelity	This program is not being implemented with fidelity, is not provided to intended population, or does not have fidelity guidelines.	This program is mostly being implemented with fidelity (70% of components), has definition of the intended population, is mostly being provided to the intended population, and is expected to have favorable outcomes.	This program is being implemented with fidelity, has clear definition of the intended population, is provided to the intended population, and is expected to have favorable outcomes.
Evaluation Data	The evaluation team has not observed evaluation data results that would suggest favorable outcomes.	The evaluation team has observed some evaluation data results that would suggest favorable outcomes.	The evaluation team has observed evaluation data results that should produce favorable outcomes.
Additional Research	Little to no research suggests this program would have favorable outcomes.	Some peer reviewed research suggests this program would have favorable outcomes if implemented with fidelity.	A majority of studies suggest this program would have favorable outcomes if implemented with fidelity.

The evaluators assessed AMHRN implementation fidelity using four core components commonly applied in the field: adherence, exposure, participant responsiveness, and quality. Adherence refers to the program's capacity to follow the intervention protocol, exposure pertains to the provision of an adequate dosage, responsiveness involves addressing participant needs, and quality concerns the condition of program delivery. Based on the process

evaluation results, the evaluators concluded that AMHRN's implementation largely conformed to the program model and was delivered to the intended population.

In terms of adherence, it was observed that NDCS utilized program materials intended to deliver the program to participants. AMHRN aims to enhance anger control strategies among incarcerated individuals and is designed for group implementation. However, despite adherence to the program design, none of the outcome evaluation results were significant, suggesting that AMHRN had minimal to no effects on the desired outcomes among participants. Nevertheless, the process evaluation findings indicate that the program is being delivered with considerable quality by staff. As the AMHRN program meets 70% of components, it is classified as 'Promising' within the fidelity category.

Regarding evaluation data, the AMHRN program was categorized as having ‘No Effects.’ Process evaluation data suggests that program facilitators adhere to the program model but have concerns about its effectiveness and duration for participants to achieve program goals. Additionally, outcome evaluation data did not reveal significant associations indicating goal achievement.

Finally, under the category of 'additional research,' the AMHRN program was rated as ‘Promising.’ Several cited studies support the adoption of an AMHRN program (or a similar anger-control or CBT-based program) to better manage and reduce future crimes stemming from anger issues. In conclusion, considering all evaluation components and established classification criteria, the ratings led NCJR to classify AMHRN as 'Promising' in achieving its intended outcomes.

Discussion

To complete the objectives of LB 896, NCJR evaluated the AMHRN implemented at NDCS. The goal was to evaluate services provided by NDCS to determine the quality of implementation, program effectiveness in preventing misconduct and recidivism outcomes, and the program’s cost-effectiveness. To fulfill this mandate, NCJR conducted a process evaluation, outcome evaluation, and cost-benefit analysis of the AMHRN program. AMHRN uses educational practices to help participants learn strategies to manage and control their anger. This program is targeted to reduce violence needs during one’s incarceration.

Summary of Process Evaluation Findings

When implementing evidence-based programs (EBPs) like AMHRN, maintaining fidelity to the program model is crucial for achieving its intended effects, such as reducing anger and violence. Deviating from the program model can lead to diminished effectiveness in reaching program goals. To assess the implementation of AMHRN, NCJR conducted a comprehensive evaluation process.

First, NCJR reviewed program materials to gain a thorough understanding of the program. Then, researchers observed AMHRN sessions to gain firsthand insight into program delivery and its therapeutic environment. Lastly, NCJR conducted interviews with NDCS staff to explore both challenges and successes encountered during program delivery. Additionally, participant interviews were conducted to gather insights into the perceived effectiveness of the program in addressing issues and fostering anger management skills for the future.

Site observations were limited to one facility, NSP, as no groups were offered an RTC during the observation period. Overall, facilitators at NSP demonstrated high adherence to the program and curriculum but showed limited rapport with participants and struggled to manage group discussion.

Interviews with NDCS program staff revealed widespread difficulties in serving participants due to staff shortages and limited resources. Some staff attributed these shortages to a perceived lack of prioritization of mental health and rehabilitation compared to other NDCS departments, as well as below-market compensation for clinical staff.

While AMHRN program staff reported adhering to facilitator guides and the program model, concerns were raised about the program's design. Staff described the AMHRN program's reduced content as compared to the originally implemented model and expressed concerns about its duration and potential for causing harm to participants due to insufficient time for processing traumatic experiences.

Increased collaboration within NDCS was highlighted as essential for future program success, with concerns about staff feeling undervalued and participants' engagement in the program. Despite areas of dissatisfaction, participants expressed a desire for personal growth and rehabilitation, along with remorse for past behaviors and hopefulness for the future.

Summary of Outcome Evaluation Findings

The outcome evaluation analyzed program participation data, participant demographics, institutional and community outcomes. Statistical tests ensured equivalence between comparison and treatment groups. Results showed no significant differences in institutional outcomes. However, significant differences were found in one of the community outcomes, with AMHRN participants being released on parole at higher rates and returning at higher rates compared to the control group. Parole significantly contributed to returns in this sample.[viii] Examining new criminal convictions revealed no differences between groups, suggesting higher return rates for paroled individuals were due to technical violations. No significant differences were found in conviction severities. Overall, while parole drove returns to prison, the AMHRN program did not decrease institutional or community outcomes.

Summary of the Cost-Benefit Analysis

Next, a CBA was completed to assess the potential saving generated through AMHRN. The CBA found that, for every dollar spent on AMHRN, the state saved $1.94. This is a net savings of $0.94 for every dollar spent, making the program valuable as an inclusive cost savings program administered by NDCS. These savings stem from the higher frequency of convictions among the comparison group, compared to the treatment group, which consequently increases criminal justice administration expenses for the state. Readers should note that our cost estimates exclude expenses incurred by NDCS related to recidivism events. Instead, they are limited to estimated and time/location-adjusted costs associated with state courts, local and state police, and tangible victim costs.

Summary of Program Effectiveness

LB 896 also required the evaluation to rate the program on effectiveness. Regarding program fidelity or integrity, as described above, AMHRN was rated, as 1) meeting the fidelity criteria regarding dosage/duration and implementing the program in a group setting as intended, and 2) the prior research on anger management interventions indicates that indicate positive effects of these practices. However, the outcome evaluation data did not reveal significant associations that would suggest the program is achieving its intended goals. Thus, using the established rating scale, NCJR identified the AMHRN program as being *'Promising'*.

Recommendations for the Implementation of Anger Management Programming at NDCS Facilities

NCJR recommends the following:

1. **Staffing and Resources:**
    - Given the reported challenges due to staffing shortages and limited resources, we recommend seeking additional State funding to increase wages for new and existing mental health staff. This

[viii] We conducted a significance test on an interaction term between release type and intervention group (not shown in Outcome Evaluation section) and found parole to be significantly contributing to increased return rates for our treatment group.

action aims to attract new employees and ensure staff retention. Specifically, efforts should concentrate on raising wages for those specializing in violent offenders and providing necessary training for mental health staff.

- Furthermore, NDCS should be allocated funding to renovate or expand the available programming spaces where anger management programs are conducted. These spaces should be designed to facilitate therapy, ensuring proper lighting, heating, humidity control, and free from distractions. Such improvements are expected to enhance the provision of the anger management program and contribute to the broader effectiveness of violence reduction programs.

2. **Program Length:**
    - Our review of qualitative and quantitative findings indicates that AHRN programming duration should be extended. Prior research highlights the importance of treatment intensity, with moderate-to high-risk individuals benefiting from 200–300 hours of structured, evidence-based programming. Given that program effects were not identified here, NCJR recommends extending the length of the AMHRN program to ensure sufficient treatment dosage and teaching time. Further, we suggest piloting a two-month program extension and/or adding an additional weekly session to align with research-based dosage recommendations. NCJR believes these extensions will contribute to increased program effectiveness.
3. **Program Rotation:**
    - Participants progress at different rates, and those that are not progressing through the stages of changes should be held back so as not to impact the growth of others in the program cohort. To enhance responsivity, NCJR proposes implementing a two-month rotation model. This approach establishes a continuous programming loop, enabling struggling or ambivalent participants to temporarily step out of groups and receive one-on-one sessions with a program provider. These 'loops' provide overlapping cohorts, where latter cohorts trail behind by several sessions. For those that require one-on-one sessions; after addressing their needs, these participants can seamlessly rejoin the next cohort, ensuring both individual support and group cohesion.
4. **Participant Readiness:**
    - Facilitators of the program expressed challenges in managing the pace of the program due to inadequate consideration of participants' Stages of Change. As a result, participants may be placed in groups when they are not ready for behavioral changes, potentially impeding progress for the entire group. To address this issue, we recommend paying greater attention to potential participants' Stages of Change before assigning them to the program. This would ensure that participants are appropriately matched to the program stage, optimizing their engagement and progress.
5. **Priority Determination:**
    - It is recommended that NDCS continue the practice of prioritizing individuals nearest to their parole eligibility date (PED). Additionally, consideration should be given to clinical determinations for priority decision-making, with a focus on creating therapeutic cohorts. Specifically, clinical determinations should identify an individual's likely Stages of Change, giving priority to contemplative individuals. Moreover, the STRONG-R Violent scale should be utilized to screen individuals for AMHRN needs, in conjunction with the Stages of Change and PED.

6. **Staff Training and Evaluation:**

    - The effectiveness of programs wanes, or drifts over time. These negative impacts are often a result of training and evaluation standards. In accordance with national standards for cognitive behavioral programming, it is recommended that all new staff delivering the program receive a minimum of 40 hours of initial training focused on the program curriculum, principles of the Risk-Need-Responsivity (RNR) model, and effective facilitation strategies. To maintain fidelity and adapt to evolving needs, bi-annual booster training sessions (8–10 hours each) are advised, covering updates in evidence-based practices and addressing challenges observed in program delivery. Evaluation efforts should also include assessments of Behavioral Health Professionals (BHPs) through direct observation and performance reviews, as well as participant surveys to gather feedback on program content, delivery, and perceived outcomes. Combining these evaluation methods ensures a comprehensive approach to maintaining program quality and effectiveness.[55,56,57]

7. **Interdepartmental Collaboration:**

    - Greater collaboration and communication between the mental health department and other NDCS departments are recommended. While separate departments may have distinct short-term goals, they presumably share similar long-term objectives, such as rehabilitation and community reintegration. Staff expressed a desire for a 'feedback loop,' where mental health professionals of all ranks could share their program experiences and offer suggestions for improvement.

8. **Misconduct Protocol Review:**

    - NCJR recommends revising misconduct protocols to ensure security measures do not unnecessarily hinder program completion for participants with high rehabilitation needs. Current protocols were perceived to prematurely terminate participants for repeated minor infractions or moderate behavioral issues, disrupting rehabilitation and limiting program effectiveness. Evaluators observed that termination decisions often disproportionately exclude high-need individuals who might benefit most from continued participation.
    - To address this issue, NDCS could implement graduated sanction protocols for non-violent misconduct, such as temporary suspensions, mandatory counseling, or addressing misconduct episodes directly within the program. However, it is essential NDCS must balance this flexibility with clear communication to supervision staff and accountability for participants that result in clear and swiftly applied consequences. Minor misconduct events are often the result of challenging behaviors that are the focus of cognitive behavioral interventions, where incidents should be reframed as teaching opportunities that allow participants to practice conflict resolution, accountability, and other key skills in a controlled environment.
    - To mitigate resentment, NDCS could involve supervision staff in designing misconduct response protocols, ensuring their concerns about authority and institutional safety are acknowledged. Additionally, framing responses as collaborative interventions rather than leniency may help build trust and reinforce the rehabilitative goals of the program. For participants, it must be emphasized that program engagement does not equate to immunity from consequences; instead, it reflects a structured opportunity for corrective growth.

      We note that program refinements often come with observable benefits, including:

        1. *Improved Retention*: Reduces unnecessary exclusions, enhancing program completion rates.

2. *Balanced Goals*: Ensures safety while prioritizing rehabilitation and skill development.
3. *Skill Reinforcement*: Leverages misconduct as a teaching moment, fostering real-time learning.
4. *Collaborative Responses*: Engages supervision staff in protocol design, addressing concerns about authority and program leniency.

By aligning misconduct protocols with rehabilitative objectives, involving supervision staff in the process, and reframing behavioral misconduct as opportunities for growth, NDCS can better support participant success while maintaining institutional integrity and staff engagement.

9. **Fidelity Checklist Adoption:**
    - NDCS should adopt a standard fidelity checklist for AMHRN as part of its quality assurance procedures. This checklist could be collaboratively developed by mental health team members. Initially, templates such as the MRT fidelity checklist and the University of Cincinnati Correctional Institute's fidelity checklist could be used, customized to align with the specific materials of the AMHRN program. The fidelity checklist should be completed at least twice for each group by mental health staff members from different facilities, promoting a collaborative and unified approach focused on maintaining quality assurance.
10. **Screening Process Enhancement:**
    - The practice of using PSI and misconduct reports for screening should be abandoned, as it is counter to the RNR model. Instead, specialized scores from the STRONG-R assessment should be utilized for screening and tracking changes in individual needs over time. Individuals scoring high need in domains such as Aggression and Attitudes & Behaviors should be screened by a clinical review team for AMHRN and/or other violence/anger-related programming.

Future Directions: Combined, our process and outcome evaluations suggest that AMHRN is a promising program, but not particularly effective at achieving its primary outcomes as currently implemented. Thus, we outline three future options for consideration:

- **Option 1- Refresh AMHRN with Enhanced Fidelity:** NDCS updates the AMHRN based on the recommendations provided, focusing on delivery with a higher degree of fidelity to the intended program model. Emphasis should be placed on monitoring and evaluation, utilizing tools such as fidelity checklists. [7,8]This would include adherence to program curricula, regular training for facilitators, and structured feedback loops to address implementation challenges. Strengthening fidelity could help realize the potential of AMHRN and improve its effectiveness in reducing violence and recidivism.
- **Option 2 – Replace AMHRN with a Violence-Focused CBI or Comprehensive Program:** NDCS replaces AMHRN with a more evidence-based program that specifically targets violent behavior while also adhering to high fidelity standards. Two promising approaches include:
    - **Violence-Focused CBIs:** Programs like Moral Reconation Therapy (MRT) or Thinking for a Change (T4C), which use cognitive-behavioral techniques to address criminogenic thinking patterns, have a strong track record in reducing recidivism. These programs can be tailored to focus on violent behavior while addressing general criminogenic needs.
    - **Comprehensive Programs:** NDCS could also consider adopting a broader initiative like the Resolve to Stop the Violence Project (RSVP), which integrates therapy, education, and restorative justice

practices to target violent behavior holistically. RSVP has demonstrated success in reducing violence both during incarceration and after release.[58]

This option allows NDCS to prioritize violence reduction with either a targeted or holistic approach, ensuring that the selected program is delivered with high fidelity to maximize its impact.

- **Option 3: Replace AMHRN with a Generalized CBI Addressing Criminogenic Thinking:** Finally, NDCS can consider replacing AMHRN with a generalized cognitive-based intervention designed to address criminogenic thinking more broadly, which would still include violent behavior but might also tackle other risk factors such as impulsivity or antisocial attitudes. Programs like the six brief cognitive behavioral interventions or Texas Christian University's brief interventions,[62] which are used in conjunction with NDCS's 5-keys program is strong candidate, but the focus here would be on the versatility of the intervention rather than its specificity to violence. This broader focus may align better with NDCS's overall goals if violence is only one of several key concerns. Further, NDCS is currently providing the Achieving Change Through Values-Based Behavior program (ACTV), which is an evidence-based program focusing on domestic violence but can be applied more broadly for anger management and violence prevention [61].

Limitations and Suggestions for Future Evaluation

In the current evaluation, several limitations warrant consideration. First, the assessment could not validate the enrollment procedure (i.e., CVORT screening) beyond the implementation-focused analyses conducted in the process evaluation interviews. Although multiple NDCS staff affirmed screening for violence occurred in some capacity, this finding does not guarantee screening occurred comprehensively for the true high-risk, high-need population at NDCS. Future evaluations should examine program screening procedures by analyzing data from the entire pool of potential participants. These findings may prompt a reassessment of the screening process to ensure appropriate targeting of individuals in need of anger management programming.

Regarding program observations, our scope was restricted to monitoring programming solely at one NDCS facility, NSP. Despite the availability of the AMHRN program at RTC as well, no groups were scheduled for observation during the evaluation period. Consequently, it was impossible to assess any implementation variations or patterns across different facilities.

The outcome evaluation adopted a retrospective quasi-experimental descriptive design. Although an advanced balancing procedure was employed to equalize the treatment and comparison groups, the quality of balancing is contingent upon the validity and quantity of available variables. This limitation necessitated restricting the examination of some outcomes to the sample years (and individuals) where dynamic needs factors, as measured by NDCS's risk/need assessment (i.e., STRONG-R), were accessible. To supplement this, a balancing procedure was conducted for the full population (i.e., 2008 – 2023) and a historical group (i.e., 2008 – 2018) using static factors only (see Appendix II), with findings presented in Appendix III.

Furthermore, statistical difference tests were conducted to ascertain the extent to which the results reflect true population parameters. However, sample size limitations constrained statistical power. To mitigate this constraint, odds ratios (i.e., effect sizes) and 95% bootstrapped confidence intervals (derived from 1,000 samples) were calculated and are provided in Appendix III. Future analyses stand to benefit from additional years and the inclusion of dynamic variables capable of measuring participants' progress beyond recidivism and misconduct.

The cost-benefit analysis (CBA) offers a basic assessment of program costs; however, several elements remain unmeasured. Notably, expected increases in tax revenue attributable to individuals released to the community were excluded. Calculating these and similarly typed values is complex and necessitates significant investment to enhance CBA accuracy. Further, to keep the estimates conservative, we excluded correctional incarceration costs

from analyses and focused on costs to NDCS clinical programmatic staffing, police administration, court administration, and tangible victim costs. While beyond the current CBA's scope, future evaluations could collaborate with entities such as the Nebraska Crime Commission, the Nebraska State Auditor's office, or the Nebraska Department of Labor to explore how tax revenue and additional cost-benefit metrics could yield more robust estimates.

As with many criminal justice evaluations, the absence of a centralized database in the US collecting data on all criminal charges, convictions, and recidivism a person might encounter is a study limitation. This evaluation, confined to the state of Nebraska, does not encompass charges from other states, federal, or county jail agencies. Consequently, future endeavors would benefit from examining a broader range of data from various agencies to obtain a more comprehensive portrayal of recidivism and desistance rates among program participants.

Conclusion

The current report examined the Anger Management High-Risk High-Needs Program (AMHRN), encompassing analyses of program design, implementation, institutional outcomes, cost-benefit considerations, and a program rating. The collective findings led to the classification of AMHRN as a '*Promising Practice'* in its pursuit of intended outcomes. However, in its present state, AMHRN falls short in various aspects that impede its effectiveness potential. While the program and its staff show promise, enhanced fidelity to the program design and increased investment in both staff and resource allocation are necessary for AMHRN to evolve into an '*Effective*' program. These updates will likely improve 'evaluability', or the ability to evaluate the program in the future, where process evaluation findings demonstrated AMHRN's limited and inconsistent provision. These enhancements hold the potential to help AMHRN become a more beneficial intervention for its participants.

Appendices

Appendix I – Evaluation Methodology

We conducted a process and outcome evaluation, cost-benefit analysis, and rating of effectiveness on AMHRN. The following is a description of data collected, human subjects' protection procedures, the sampling procedures, analytic strategies, and the balancing procedure.

Data

Data for the process evaluation was provided by NDCS throughout the end of 2023. These included program materials, eligibility criteria, and program policy changes. We also observed programming and interviewed staff and participants of the AMHRN.

Data for the outcome evaluation was provided by NDCS in October of 2023. Data included all clinical data collected by the Violent Offense Services team, lifetime criminal admissions and convictions, and lifetime prison misconduct records. Risk and needs data were provided for participants by an NDCS-contracted third-party vendor. NDCS transferred the data to UNO via a secure file transfer site. Data tables were matched, deidentified, and stored securely at the university.

Data for the cost-benefit analysis was provided by NDCS in December of 2023. The team needed to adjust the data to conform with accepted measures for crime and justice cost-benefit analyses. This included adjusting for inflation from known crime costs and adjusting for cost of living from the state of Washington (where the known crimes costs derive) to the state of Nebraska, as NDCS costs were provided in 2022 Nebraska metrics.

Human Subjects Protection

This project was deemed "not research" by the University of Nebraska Omaha's contracted Institutional Review Board (IRB), housed at the University of Nebraska Medical Center. Therefore, there was no IRB protocol reviewed by a certified human protections board. However, considering the evaluation includes analysis of protected personal identifying information, along with interviews with a protected population (i.e., prisoners), we included additional protections. All interviewees signed a consent to participate form that explained the risks and benefits of participation. All terms were reviewed carefully with each participant (i.e., staff or prisoner) prior to their signing. All participants were provided with a copy of the consent form. Zero staff and zero prisoners declined to participate following a review of the consent form. Finally, all empirical data were transferred securely via a secure file transfer site and saved to a firewall and password protected encrypted drive following deidentification of all personal identifiers.

Sample

We utilized the entire sample of data provided, encompassing those with a study eligibility date between 2008 and 2023. Study eligibility was calculated by using the most recent screening date by CVORT. The resulting sample had individuals who had refused the program, some who had accepted the program and not started, some who had accepted the program and received some of the program, and some who had accepted the program and completed the curriculum. The former two types of participants were deemed the comparison group, and the latter two types of participants were considered the treatment group.

Analytic Strategies

For the process evaluation, we interviewed key NDCS administrators assigned to the Violent Offense Services Team (CVORT), along with NDCS facilitators of the program. We also interviewed five randomly selected incarcerated completers of AMHRN. Data was collected via audio recording, interviewer/observer notes, and procurement of program materials from NDCS staff. For the interviews, a semi-structured interview protocol was developed with insight from the evaluation plan developed during the kickoff meeting. We reviewed participant flow through the AMHRN with interviewees and asked about how they would make the program and procedures better. All interviews were conducted at an NDCS facility or via conference call and ranged from 20-90 minutes. A programming observation form was developed by NCJR prior to the evaluation but after a review of best practices in correctional programming. Data was compiled and compared to original program materials from AMHRN.

For the outcome evaluation, we adopted an *adjusted intent-to-treat design*, examining all individuals who were screened by CVORT. We considered someone part of the treatment group if they 1) had a program start date, 2) participated for seven days, and 3) were assigned any treatment outcome. If those screened by CVORT did not meet all three of these conditions, they were assigned to the comparison group. Further, we conducted a missing data analysis to determine if data was missing 'completely at random' and conducted a multiple imputations procedure with random forests to impute missing data. We also created a pseudo treatment completion date for the comparison group by adding the treatment group's average time from eligibility date to program completion to the comparison group's eligibility date.

Further, analyses were conducted to estimate the degree to which the program affected participants' lives.[ix,x] The first set of analyses estimates the treatment effects of AMHRN on institutional misconducts, and as such, the main dependent variable is frequency of misconducts. Misconducts were classified as serious, non-serious, and violent. "Serious" was defined by NDCS and "Violent" was defined by the misconduct category description. To account for the different amounts of time individuals spent incarcerated following program completion, we examined a 12-month rate of misconduct. The effects that AMHRN had on institutional outcomes were examined using a Fishers exact test. We utilized bootstrapping for all significance tests to counter the small sample size and increase statistical power. We also present an effect size for all tests in Appendix II.

The second analysis examined the occurrence of reincarceration and conviction for new felonies. For reincarceration, the treatment group fared worse than the comparison group, though not significantly. Interestingly, no one in the comparison group was released to parole over the 4.5 years studied. Further, tests were conducted to determine if the occurrence of a new or violent felony differed between the treatment and comparison groups.

Balancing Procedure

Considering random assignment was not possible and the study is retrospective, we needed to apply a strategy to minimize the differences between the treatment and comparison groups. To provide a fair comparison between the

[ix] Prior to analysis, we conducted an entropy balancing procedure to simulate random assignment and reduce the differences between the comparison group and treatment group. Entropy balancing is an increasingly popular method for matching control and comparison groups in quasi-experimental research (McMullin & Schonberger, 2022). This method reweights covariates that are theoretically related to treatment enrollment so key parameters (e.g., mean, variance, skewness) of these variables are equivalent between the treatment and control groups (Hainmueller & Xu, 2013). This results in a comparison group that is roughly identical to the treatment group on relevant variables, allowing for robust examinations of treatment effects. Another advantage of this method over other matching procedures is that it does not require a large data set and has been shown to be an effective approach in eliciting treatment effects in social science research (MacDonald & Donnelly, 2017; Perry & Schleifer, 2018).

two groups, we employed a two-step process. To begin, we used an adjusted intent-to-treat design to define both the treatment and comparison groups. The treatment group consisted of individuals who began AMHRN programming between 2008 and 2023. In contrast, the comparison group was composed of individuals who were screened by CVORT and offered programming (intention to treat) but never actually started the program for various reasons (e.g., transfer to a facility that does not offer AMHRN). Regarding the "adjusted" component of the design, the comparison group included individuals who were offered programming, began it, but had an end date within seven days of the program start date. These individuals were included in the comparison group because, although CVORT intended to treat them, they received no treatment beyond the initial orientation sessions. This inclusion was necessary as these cases could potentially skew the results for the treatment group. It is important to note that individuals who were screened but not offered programming were excluded from both the treatment and comparison groups.

Second, we compared the two groups on demographics, items measured by the STRONG-R as risks to reincarceration, and various dates relevant to admission and screening.

To simulate random assignments and reduce the differences between the comparison group and treatment group, we conducted an entropy balancing procedure. Entropy balancing is an increasingly popular method for matching control and comparison groups in quasi-experimental research.[59,60] This method creates a weight based on covariates that are theoretically related to treatment enrollment so key parameters (e.g., mean, variance, skewness) of these variables are equivalent between the treatment and control groups.[61] This results in a comparison group that is roughly identical to the treatment group on relevant variables, allowing for robust examinations of treatment effects. Another advantage of this method over other matching procedures is that it does not require a large data set and has been shown to be an effective approach in eliciting treatment effects in social science research.[62,63]

We therefore utilize basic details and demographics to weight the contemporary sample. All individuals were given a specific weight that empirically minimizes the differences between the two groups. The weight is then applied when conducting all analyses. Table IA presents the pre balance and post balance descriptive statistics for both the treatment and comparison groups in the full sample.[xi] Table IB presents the pre balance descriptive statistics for a subsample of historical participants (2008 to 2018). Finally, Table IC presents the pre-balanced descriptive statistics for a subsample of contemporary participants (2018 to 2023). This contemporary sample utilized more covariates, including dynamic items, to improve the accuracy of the balancing procedure (i.e., includes STRONG-R items that were not available for the historical participants).

[xi] The number of subjects in the comparison group changes as a result of the balance, but this is only a statistical artifact of the procedures. Individuals were not 'created'.

Table IA. Descriptive Statistics Pre and Post Entropy Balance – Full Sample

Prior	Pre Balance				Post Balance			
Measure	Comp %/M (SD)	Tx %/M (SD)	STD Diff	p-value	Comp %/M (SD)	Tx%/M (SD)	STD Diff	p-value
Eligibility Date	1/22/2017 (1,384.70)	12/4/2018 (1,123.45)	54.03*	0.000	12/4/2018 (1,154.37)	12/4/2018 (1,123.45)	0	1.000
Age	33.32 (9.92)	33.63 (9.43)	3.19	0.205	33.63 (10.24)	33.63 (9.43)	0	1.000
Male	95.34	92.77	10.91	0.002	92.77	92.77	0	1.000
White	46.55	47.8	2.49	0.824	47.80	47.80	0	1.000
Hispanic	10.43	12.74	7.21	0.530	12.74	12.74	0	1.000
Black	34.26	30.82	7.36	0.297	30.82	30.82	0	1.000
Other	8.75	8.65	0.37	0.503	8.65	8.65	0	1.000
Prior Felonies	1.82 (1.5)	2 (1.29)	13.51	0.017	2 (1.68)	2 (1.29)	0	1.000
Prior Violent Felonies	1.12 (1.07)	1.21 (1.02)	8.57	0.007	1.21 (1.12)	1.21 (1.02)	0	1.000
Misconducts – Non-Serious	86.30 (169.29)	103.44 (141.71)	10.98	0.002	103.44 (171.2)	103.44 (141.71)	0	1.000
Misconducts – Serious	4.95 (10.14)	6.56 (9.42)	16.52	0.000	6.56 (11.64)	6.56 (9.42)	0	1.000
Misconducts – Violent	13.23 (29.07)	14.12 (21.49)	3.49		14.12 (23.51)	14.12 (21.49)		
Days Incarcerated prior to Tx	819.74 (1,404.79)	1,141.91 (1,457.12)	22.51*	0.042	1,141.91 (2,214.53)	1,141.91 (1,457.12)	0	1.000
Summary:	n=537	n=636	2/13 (15.38%)	4/13 (30.77%)	n=636	n=636	0/13 (0%)	0/13 (0%)

Table IB. Descriptive Statistics Pre and Post Entropy Balance – Historical Sample

Prior	Pre Balance				Post Balance			
Measure	Comp %/M (SD)	Tx %/M (SD)	STD Diff	p-value	Comp %/M (SD)	Tx%/M (SD)	STD Diff	p-value
Eligibility Date	7/13/2014 (1,030.43)	5/16/2016 (873.02)	70.47*	0.205	8/3/2015 (926.18)	5/16/2016 (873.02)	0	1.000
Age	32.65 (9.75)	33.62 (9.11)	10.29	0.002	33.62 (9.77)	33.62 (9.11)	0	1.000
Male	97.12	91.22	25.38*	0.824	91.22	91.22	0	1.000
White	45.05	45.95	1.80	0.530	45.95	45.95	0	1.000
Hispanic	12.78	14.53	5.08	0.297	14.53	14.53	0	1.000
Black	36.1	32.09	8.45	0.503	32.09	32.09	0	1.000
Other	6.07	7.43	5.42	0.017	7.43	7.43	0	1.000
Prior Felonies	1.75 (1.59)	2.04 (1.39)	19.36	0.007	2.04 (2.12)	2.04 (1.39)	0	1.000
Prior Violent Felonies	1.06 (1.12)	1.3 (1.04)	21.81*	0.002	1.3 (1.45)	1.3 (1.04)	0	1.000
Misconducts – Non-Serious	46.35 (93.62)	71.55 (101.94)	25.75*	0.000	71.55 (121.31)	71.55 (101.94)	0	1.000
Misconducts – Serious	2.06 (3.91)	3.42 (5.12)	29.89*	0.042	3.42 (5.19)	3.42 (5.12)	0	1.000
Misconducts – Violent	6.78 (14.01)	9.17 (14.79)	16.56	0.000	9.17 (14.06)	9.17 (14.79)		
Days Incarcerated prior to Tx	619.1 (921.01)	1,304.79 (1,760.14)	48.81*	0.205	1,304.79 (1,788.97)	1,304.79 (1,760.14)	0	1.000
Summary:	n=313	n=296	6/13 (46.15%)	8/13 (61.54%)	n=296	n=296	0/13 (0%)	0/13 (0%)

Table IC. Descriptive Statistics Pre and Post Entropy Balance – Contemporary Sample

Prior	Pre Balance				Post Balance			
Measure	Comp %/M (SD)	Tx %/M (SD)	STD Diff	p-value	Comp %/M (SD)	Tx%/M (SD)	STD Diff	p-value
Eligibility Date	8/5/2020 (500.34)	2/23/2021 (530.41)	39.14*	0.000	18,681.28 (512.25)	18,681.28 (530.41)	0	1.000
Age	34.26 (10.11)	33.64 (9.72)	6.25	0.470	33.64 (9.55)	33.64 (9.72)	0	1.000
Male	92.86	94.12	5.1	0.549	94.12	94.12	0	1.000
White	48.66	49.41	1.5	0.861	49.41	49.41	0	1.000
Hispanic	7.14	11.18	13.99	0.111	11.18	11.18	0	1.000
Black	31.7	29.71	4.31	0.615	29.71	29.71	0	1.000
Other	12.5	9.71	8.89	0.296	9.71	9.71	0	1.000
Prior Felonies	1.91 (1.35)	1.98 (1.2)	5.14	0.555	1.98 (1.41)	1.98 (1.2)	0	1.000
Prior Violent Felonies	1.21 (0.99)	1.14 (1)	7.06	0.412	1.14 (0.92)	1.14 (1)	0	1.000
Misconducts – Non-Serious	142.13 (226.38)	131.2 (164.05)	5.53	0.534	131.2 (188.11)	131.2 (164.05)	0	1.000
Misconducts – Serious	8.98 (14.07)	9.3 (11.28)	2.5	0.776	9.3 (13.84)	9.3 (11.28)	0	1.000
Days Incarcerated prior to Tx	22.24 (40.2)	18.44 (25.19)	11.34	0.208	18.44 (24.88)	18.44 (25.19)	0	1.000
Juvenile Commitments	1,100.1 (1,849.61)	1,000.1 (1,112.55)	6.55	0.468	1,000.1 (1,355.15)	1,000.1 (1,112.55)	0	1.000
Days Since Last Conviction	0.22 (0.53)	0.3 (0.59)	13.13	0.123	0.3 (0.6)	0.3 (0.59)	0	1.000
Prison Misconducts	3.01 (1.2)	2.86 (1.27)	12.29	0.151	2.86 (1.25)	2.86 (1.27)	0	1.000
Serious Interpersonal Misconducts	1.59 (1.35)	1.58 (1.41)	1.04	0.903	1.58 (1.36)	1.58 (1.41)	0	1.000
Prison Visitations	1.04 (0.92)	1.02 (0.95)	1.3	0.879	1.02 (0.93)	1.02 (0.95)	0	1.000
Domestic Violence Perpetrator	-0.13 (0.91)	-0.29 (0.96)	17	0.048	-0.29 (0.91)	-0.29 (0.96)	0	1.000
Pro-Social Family	7.59	5.88	6.8	0.423	5.88	5.88	0	1.000
Alcohol/Drug Treatment	50.89	62.65	23.85*	0.006	62.65	62.65	0	1.000
Homicide Conviction	23.66	22.06	3.81	0.657	22.06	22.06	0	1.000
Anger/Frustration Tolerance	3.12	1.47	11.04	0.183	1.47	1.47	0	1.000
Consequential Thinking	0.22 (0.89)	0.03 (0.84)	22.33*	0.010	0.03 (0.78)	0.03 (0.84)	0	1.000
Impulse Control	0.09 (0.76)	-0.04 (0.69)	17.11	0.050	-0.04 (0.69)	-0.04 (0.69)	0	1.000
Interpersonal Skillsets	-0.48 (1.77)	-0.69 (1.79)	11.91	0.167	-0.69 (1.71)	-0.69 (1.79)	0	1.000
Applies Appropriate Solutions	-0.08 (1.53)	-0.46 (1.41)	25.67*	0.003	-0.46 (1.31)	-0.46 (1.41)	0	1.000
Accepts Responsibility for Anti-social Behavior	-0.13 (0.34)	-0.11 (0.32)	4.5	0.598	-0.11 (0.32)	-0.11 (0.32)	0	1.000
Realistic Goals	52.23	45.59	13.3	0.122	45.59	45.59	0	1.000
Readiness to Change	-0.08 (0.27)	-0.11 (0.31)	9.72	0.265	-0.11 (0.31)	-0.11 (0.31)	0	1.000
Belief in Success	0.03 (0.81)	-0.16 (0.76)	24.13*	0.006	-0.16 (0.73)	-0.16 (0.76)	0	1.000
Summary:	n=224	n=340	5/31 (16.13%)	7/31 (22.58%)	n=340	n=340	0/31 (0%)	0/31 (0%)

Appendix II – Outcome Evaluation Supplementary

The following presents comparisons of convictions for a historical sample along with the contemporary sample that was presented in the Outcome Evaluation section of this report. The historical sample balancing procedure was created using only static factors, which were the only variables available for the years 2008 to 2016. Between mid-2016 and 2018, considerable concern regarding the validity of the STRONG-R was expressed throughout the evaluation and therefore allotted to the historical sample. Table IIA presents the demographic characteristics of the historical sample.

Table IIA. Demographics of AMHRN Historical Sample – 2008 to 2018 (unweighted)

	AMHRN Tx Group n_{t2}= 313		Comparison Group n_{c2}= 296	
	x/%	SD	x/%	SD
Eligibility Date	05/16/2016	(873 days)	06/21/2014	(1,069 days)
Prior AMHRN Offers	0.06	(0.28)	0.08	(0.29)
Prior AMHRN Refusals	0.03	(0.20)	0.04	(0.19)
Age	33.62	(9.11)	32.65	(9.75)
Male	91.22		97.12	
White	45.95		45.05	
Hispanic	14.53		12.78	
Black	32.09		36.1	
Other	7.43		6.07	
Prior Felonies	2.04	(1.39)	1.75	(1.59)
Prior Violent Felonies	1.30	(1.04)	1.06	(1.12)
Misconducts – Non-Serious	71.55	(101.94)	46.35	(93.62)
Misconducts – Serious	3.42	(5.12)	2.06	(3.91)
Days Incarcerated prior to Tx	1,304.79	(1,760.14)	619.10	(921.01)

Along with this additional sample for context, we present confidence intervals and odds ratios for all convictions analyses below, beginning with Table IIB (below). We provide confidence intervals that were bootstrapped with 1,000 samples. We additionally present analyses of all the levels/types of convictions for only those released, beginning in Table A9 (below).

While differences in new convictions were observed between groups in all three samples, the differences did not reach statistical significance (Table IIB). We can therefore conclude that there is not sufficient evidence to claim AMHRN affected convictions for crimes.

Table IIB. New Convictions

	Contemporary Sample		**Historical Sample**		**Full Sample**	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	295 (87.8%)	190 (84.8%)	254 (86.7%)	290 (93.0%)	549 (85.4%)	480 (88.3%)
One+	41 (12.2%)	34 (15.2%)	39 (13.3%)	22 (7.0%)	80 (14.6%)	56 (11.7%)
Odds Ratio (p-value) =	*0.77(0.667)*		*2.02(0.210)*		1.25 (0.59)	
95% Bootstrapped	*-3.64 – 5.70*		*-3.67 – 16.73*		-3.79 – 6.69	

Confidence Intervals		

AMHRN participants in the contemporary sample recorded slightly more felony convictions than the comparison group, yet the difference did not reach statistical significance (Table IIC). For the historical sample, AMHRN participants also recorded slightly greater convictions than the comparison group and also did not reach statistical significance.

Table IIC. New Felony Convictions

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	301 (89.6%)	192 (85.7%)	265 (90.4%)	296 (94.9%)	566 (90.0%)	488 (91.7%)
One+	35 (10.4%)	32 (14.3%)	28 (9.6%)	16 (5.1%)	63 (10.0%)	44 (8.3%)
Odds Ratio (p-value) =	*0.697(0.551)*		*1.95 (0.326)*		0.82 (0.83)	
95% Bootstrapped Confidence Intervals	*-4.36 – 8.18*		*-4.38 – 13.17*		-3.27 – 4.06	

AMHRN participants in the contemporary sample had slightly more violent convictions than their counterparts, and those in the historical sample recorded fewer convictions (Table IID). However, neither of the differences reached statistical significance.

Table IID. New Violent Convictions

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	305 (90.8%)	196 (87.5%)	271 (92.5%)	297 (95.2%)	576 (91.6%)	493 (92.0%)
One+	31 (9.2%)	28 (12.5%)	22 (7.5%)	15 (4.8%)	53 (8.4%)	43 (8.0%)
Odds Ratio (p-value) =	*0.71 (0.611)*		*1.61 (0.544)*		1.05 (0.96)	
95% Bootstrapped Confidence Intervals	*-4.35 – 7.41*		*-4.28 – 8.112*		-2.56 – 2.68	

AMHRN participants in the contemporary sample had more violent felony convictions than their counterparts, and those in the historical sample recorded fewer felony convictions (Table IIE). Regardless, neither of the differences reached statistical significance.

Table IIE. New Violent Felony Convictions

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	309 (92.0%)	198 (88.4%)	270 (92.1%)	288 (92.4%)	579 (92.1%)	486 (92.2%)
One+	27 (8.0%)	26 (11.6%)	23 (7.9%)	15 (7.6%)	50 (7.9%)	41 (7.8%)
Odds Ratio (p-value) =	*0.665 (0.545)*		*1.73 (0.155)*		1.03 (0.98)	
95% Bootstrapped Confidence Intervals	*-4.47 – 8.48*		*-4.36 – 8.69*		-2.63 – 2.67	

Further, when comparing across groups (Table IIF), we found no evidence that AMHRN affected new convictions for those released during the study period.

Table IIF. New Convictions (Releasees Only)

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	164 (97.0%)	129 (97.0%)	220 (87.7%)	278 (95.5%)	384 (90.6%)	407 (96.0%)
One+	5 (3.0%)	4 (3.0%)	31(12.3%)	13 (4.5%)	36 (9.4%)	17 (4.0%)
Odds Ratio (p-value) =	*0.98 (0.988)*		*3.01 (0.073)*		2.24 (0.17)	
95% Bootstrapped Confidence Intervals	*-2.77 – 2.67*		*-1.06 – 23.51*		-3.20 – 18.13	

Differences between groups did not reach statistical significance, suggesting that there is no evidence that AMHRN affected felony convictions for those released to the community (Table IIG).

Table IIG. New Felony Convictions (Releasees Only)

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	165 (97.6%)	129 (97.0%)	231 (92.0%)	283 (97.3%)	396 (91.4%)	412 (97.2%)
One+	4 (2.4%)	4 (3.0%)	20 (8.0%)	8 (2.7%)	24 (5.7%)	12 (2.8%)
Odds Ratio (p-value) =	*0.78 (0.940)*		*3.06 (0.153)*		*2.24 (0.17)*	
95% Bootstrapped Confidence Intervals	*-2.98 – 3.21*		*-2.79 – 17.77*		*-3.20 – 18.13*	

Table IIH (below) results suggest that AMHRN did not affect conviction rates for violent crimes for those released from prison during the study period.

Table IIH. New Violent Convictions (Releasees Only)

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	167 (98.8%)	131 (98.5%)	238 (94.8%)	284 (97.6%)	405 (96.3%)	415 (97.8%)
One+	2 (1.2%)	2 (1.5%)	13 (5.2%)	7 (2.4%)	15 (3.6%)	9 (2.2%)
Odds Ratio (p-value) =	*0.784 (0.964)*		*2.22 (0.411)*		*1.71 (0.06)*	
95% Bootstrapped Confidence Intervals	*-2.51 – 2.63*		*-4.04 – 9.87*		*-3.87 – 7.08*	

Finally, Table III findings suggest that there is no evidence that AMHRN affected violent felony convictions for the sample of those released during the study period.

Table III. New Violent Felony Convictions (Releasees Only)

	Contemporary Sample		Historical Sample		Full Sample	
	AMHRN	**Comparison**	**AMHRN**	**Comparison**	**AMHRN**	**Comparison**
None	167 (98.8%)	131 (98.5%)	241 (96.0%)	286 (98.3%)	408 (97.1%)	417 (98.3%)
One+	2 (1.8%)	2 (1.5%)	10 (4.0%)	5 (1.7%)	12 (2.9%)	7 (1.7%)
Odds Ratio (p-value) =	*0.78 (0.965)*		*2.37 (0.427)*		*1.75 (0.59)*	
95% Bootstrapped Confidence Intervals	*-2.53 – 2.64*		*-3.78 – 8.92*		*-3.62 – 6.41*	

Appendix III - Cost Benefit Analysis Details

We conducted a cost-benefit analysis (CBA) to determine the return on investment (ROI) gained by implementing AMHRN. We found that AMHRN saves the state an additional $0.94 for every dollar spent on implementation. The current appendix presents background of the CBA methods, followed by our description of calculating costs to implement AMHRN, a description of how we calculated crime costs from original costs contained in WSIPP's 2014 report, and a description of our final calculations.

Background

Nebraska's LB 896 required NDCS programs to be evaluated with a CBA to determine their ROI. As a template, NCJS drew from a Washington State Institute for Public Policy (WSIPP) report conducted in 2014 that detailed procedures for a government program evaluation. A leading local government research center, WSIPP has conducted extensive evaluations of criminal justice and other related government institutions for the purpose of informing agencies and government leaders as to the effectiveness of their programming efforts. We adopted their methodology for conducting the following CBA.

Calculating Cost to Implement AMHRN

For our cost-benefit analysis, the Nebraska Department of Correctional Services (NDCS) provided estimates pertaining to staff costs in terms of time investiture. NDCS calculated hours worked by AMHRN staff to be 750 hours annually over a four-year span. The average hourly wage was calculated by NCJR confirming salaries for eight verified AMHRN staff using a public record search.[64] Salaries were totaled and then averaged to represent a standard hourly rate of $28.33. The average annual number of staff hours worked by AMHRN staff over the four-year period was estimated to be 750. This equated to a projected average annual staff operating cost of $21,247.50 over the four-year study period.[1]

Calculating Crime Costs

Next, we calculated the cost of crimes in 2022 Nebraska dollars. Following WSIPP's calculations, we averaged six categories: Murder, Felony sex crimes, Robbery, Aggravated assault, Felony property, and Felony drug.

The WSIPP Report – 2014

The original WSIPP report contained projected costs using both operating and capital costs for seven criminal offense types across eleven sectors in the criminal justice system.**Error! Bookmark not defined.** For the purposes of this cost-benefit-analysis, three of the eleven sectors were not selected as they all pertained to juvenile justice-related costs and are outside the scope of this evaluation. The remaining eight sectors were *courts and prosecutors*, *police*, *adult jail*, *adult local supervision*, *adult state prison*, *adult post-prison supervision*, *victim costs (tangible)*, and *victim costs (intangible)*. The seven criminal offense types included for our analysis were homicide, felony sex crimes, aggravated assault, robbery, felony drug, felony property, and misdemeanors. Furthermore, the marginal operating costs per type of crime contained in the WSIPP report were used as the basis of the calculations in the cost-benefit analysis (see Table A13 below).

Data

All cost expenditure data contained in the 2014 WSIPP report were obtained by WSIPP researchers through the Washington State Auditor (WSA). The WSA collected expenditure either directly from all local jurisdictions or data

[1] No adjustments were made to salaries (i.e., inflation, COLA).

accessed through national/federal repositories. Data from all 39 counties within Washington state was collected for each criminal justice sector. The majority of the cost expenditure data collected for the WSIPP report concluded in 2008 and subsequently, all annual dollar amounts collected were adjusted by WSIPP in their report to reflect 2009 values utilizing the United States Implicit Price Deflator for Personal Consumption Expenditures from the U.S. Department of Commerce (Washington Economic and Revenue Forecast Council).

This is the rationale behind converting monetary values to 2009 dollars. Additionally, time-series analyses were conducted for all sectors. Time series analyses are a widely accepted method of analyzing cross-sectional data and uniquely suited to identify changes and trends over time.**Error! Bookmark not defined.**

Cost Sources

WSIPP obtained costs on Washington police, courts and prosecutors, county/regional jails, pre-prison community supervision, state prisons, post-prison community supervision, victim costs (tangible), and victim costs (intangible). For the current report, we only estimate the costs to police, courts and prosecutors, and tangible victim costs.

WSIPP's police operating costs were obtained from all local city and county police expenditure data collected from 1994 to 2008, with crime prevention being the only category that was excluded from their analysis. Arrest data from 1994 to 2007 was also obtained through the National Archive of Criminal Justice Data maintained by the University of Michigan (1993 was unavailable at the time of the study), which was used to calculate an average arrest cost.

WSIPP obtained courts and prosecutor data from the United States Bureau of Justice Statistics annual survey: *Justice Expenditure and Employment Extracts* (2006). Data related to local county court and prosecutor expenditure data were collected for the years 1994 to 2008. Court data includes the costs of court administration, superior courts, and county clerks. Regarding expenditure data, the following expenses were excluded: district courts, law library-related expenditures, and indigent defense. Prosecutor data includes costs for administration legal and legal services. Excluded expenditures for prosecutors include facilities-legal services, consumer affairs-legal services, crime victim and witness program-legal services, and child support enforcement-legal services.

The 2014 WSIPP reports further projected tangible victim costs. The tangible victim costs consisted of medical and mental health care expenses, property damage and losses (if applicable), and loss of future earnings incurred by crime victims.[65]

Table IIIA is used as foundational costs and derives from WSIPP's report (2014).

Further, some felonies in the examined NDCS data were classified as 'other' categories, which does not directly correspond to one of the crime types identified by WSIPP. As a solution, we averaged the base costs of all crimes.

Table IIIA. Marginal Operating Costs in Washington Dollars (WSIPP, 2014)							
	Murder	**Felony sex crimes**	**Robbery**	**Aggravated assault**	**Felony property**	**Felony drug**	**Year of estimate**
Police	$670.00	$670.00	$670.00	$670.00	$670.00	$670.00	2009
Courts and prosecutors	$152,378.00	$18,770.00	$9,865.00	$4,877.00	$201.00	$201.00	2009
Juvenile local detention	$20,293.00	$20,293.00	$20,293.00	$20,293.00	$20,293.00	$20,293.00	2009
Juvenile local supervision	$5,200.00	$5,200.00	$5,200.00	$5,200.00	$5,200.00	$5,200.00	2009
Juvenile state institution	$36,743.00	$36,743.00	$36,743.00	$36,743.00	$36,743.00	$36,743.00	2009
Juvenile state supervision	$3,927.00	$3,927.00	$3,927.00	$3,927.00	$3,927.00	$3,927.00	2009
Adult jail	$21,469.00	$21,469.00	$21,469.00	$21,469.00	$21,469.00	$21,469.00	2009
Adult local supervision	$1,861.00	$1,861.00	$1,861.00	$1,861.00	$1,861.00	$1,861.00	2009
Adult state prison	$12,722.00	$12,722.00	$12,722.00	$12,722.00	$12,722.00	$12,722.00	2009
Adult post prison supervision	$1,861.00	$1,861.00	$1,861.00	$1,861.00	$1,861.00	$1,861.00	2009
Victim costs (tangible)	$737,517.00	$5,556.00	$3,299.00	$8,700.00	$1,922.00	$0.00	2009
Victim costs (intangible)	$8,422,000.00	$198,212.00	$4,976.00	$13,435.00	$0.00	$0.00	2009

Adjusting for Inflation

To account for inflation costs, costs of crime, according to WSIPP's extensive report (see Table A13, above), were adjusted using the Bureau of Labor Cost (BLC) Inflation Calculator, which is easily accessible and free to use online.

Offense type and criminal justice sector costs from the 2014 WSIPP report were inputted into the BLC Inflation Calculator individually and then averaged. Inflation adjustment from June 2009 to June 2022, calculations reflected an inflation rate of approximately 37.38% for all cost of crime values. An example of the inflation cost calculations are presented below in Figure IIIA.

Figure IIIA. Inflation Rate Calculation Example

Inflation Rate Calculation Example – Victim Costs (Tangible)

$756,994.00	X	1.3738	=	$1,039,958.36
Washington Initial 2009 cost		**Rate of Inflation (06/09 – 06/22)**		**2022 Adjusted Cost**

Table IIIB presents the result of these inflation calculations. Note that costs associated with jails, prisons, community supervision (pre or post), and juvenile-related sectors are NOT included in our CBA. Intangible victim costs are also NOT included due to wide variation in the WSIPP estimates and our hesitancy to account for those variabilities across state lines across time – cultural differences between states are suggested as the potential source of error for intangible costs.

Table IIIB. Marginal Operating Costs Adjusted for Inflation (2009 dollars to 2022 dollars)

	Murder	Felony sex crimes	Robbery	Aggravated assault	Felony property	Felony drug	Adjusted
Police	**$913.97**	**$913.97**	**$913.97**	**$913.97**	**$913.97**	**$913.97**	**2022**
Courts and prosecutors	**$207,863.03**	**$25,604.67**	**$13,457.12**	**$6,652.85**	**$274.19**	**$274.19**	**2022**
Juvenile local detention	$27,682.24	$27,682.24	$27,682.24	$27,682.24	$27,682.24	$27,682.24	2022
Juvenile local supervision	$7,093.46	$7,093.46	$7,093.46	$7,093.46	$7,093.46	$7,093.46	2022
Juvenile state institution	$50,122.14	$50,122.14	$50,122.14	$50,122.14	$50,122.14	$50,122.14	2022
Juvenile state supervision	$5,356.93	$5,356.93	$5,356.93	$5,356.93	$5,356.93	$5,356.93	2022
Adult jail	$29,286.45	$29,286.45	$29,286.45	$29,286.45	$29,286.45	$29,286.45	2022

Adult local supervision	$2,538.64	$2,538.64	$2,538.64	$2,538.64	$2,538.64	$2,538.64	2022
Adult state prison	$17,354.43	$17,354.43	$17,354.43	$17,354.43	$17,354.43	$17,354.43	2022
Adult post prison supervision	$2,538.64	$2,538.64	$2,538.64	$2,538.64	$2,538.64	$2,538.64	2022
Victim costs (tangible)	**$1,006,067.26**	**$7,579.09**	**$4,500.26**	**$11,867.91**	**$2,621.85**	**$0.00**	**2022**
Victim costs (intangible)	$11,488,682.27	$270,386.45	$6,787.90	$18,327.05	$0.00	$0.00	2022
Total	$12,845,499.47	$446,457.12	$167,632.18	$179,734.72	$145,782.95	$143,161.09	2022
Relevant total	**$1,214,844.26**	**$34,097.73**	**$18,871.34**	**$19,434.73**	**$3,810.01**	**$1,188.16**	**2022**

Shaded rows represent the cost sectors included in our Nebraska CBA and are summed in the "relevant total" row.[2,3]

Geographical Cost-of-Living Adjustment.

After adjusting crime costs for inflation, a separate adjustment was necessary to account for the difference in cost-of-living between Washington and Nebraska. In 2022, the state of Washington had a cost-of-living 14.2% higher than the national average (114.2%) whereas Nebraska's cost of living for 2022 was 8.1% lower than the national average (91.9%) which equates to a 22.3% gap between Washington and Nebraska. Cost-of-living rates were provided by Statista.com. Statista's estimates are based on six cost metrics including housing, utilities, groceries, transportation, healthcare goods and services across 273 participating national markets. An example of the cost-of-living calculations are depicted in Figure IIIB below.[4]

Figure IIIB. Washington to Nebraska Cost of Living Adjustment

Washington to Nebraska Cost of Living Adjustment (2022)
Victim Costs (Tangible)

$1,039,958.36	X	.919	=	$955,721.73
Washington Initial Cost		**Nebraska Cost of Living**		**2022 Cost w/Adjustments for Inflation & Cost of Living**

[2] The remaining rows are provided for the reader to calculate any combination of costs they desire.
[3] Inflation adjustments for 2022 were not necessary, as they already represent a 4-year average of salaries (i.e., 2018-2022). The 4-year average was desirable to stabilize the differential amounts of time NDCS staff spent on the program per year.
[4] Cost of living adjustments for Nebraska salaries were not necessary, as they already represent Nebraska-based costs.

Table IIIC depicts the adjusted costs for cost-of-living difference between Washington and Nebraska.

Table IIIC. Marginal Operating Costs Adjusted for Cost-of-Living (Washington to Nebraska)

	Murder	Felony sex crimes	Robbery	Aggravated assault	Felony property	Felony drug	Adjusted
Police	**$735.49**	**$735.49**	**$735.49**	**$735.49**	**$735.49**	**$735.49**	**2022**
Courts and prosecutors	**$167,273.31**	**$20,604.81**	**$10,829.33**	**$5,353.74**	**$220.65**	**$220.65**	**2022**
Juvenile local detention	$22,276.69	$22,276.69	$22,276.69	$22,276.69	$22,276.69	$22,276.69	2022
Juvenile local supervision	$5,708.31	$5,708.31	$5,708.31	$5,708.31	$5,708.31	$5,708.31	2022
Juvenile state institution	$40,334.72	$40,334.72	$40,334.72	$40,334.72	$40,334.72	$40,334.72	2022
Juvenile state supervision	$4,310.87	$4,310.87	$4,310.87	$4,310.87	$4,310.87	$4,310.87	2022
Adult jail	$23,567.65	$23,567.65	$23,567.65	$23,567.65	$23,567.65	$23,567.65	2022
Adult local supervision	$2,042.92	$2,042.92	$2,042.92	$2,042.92	$2,042.92	$2,042.92	2022
Adult state prison	$13,965.61	$13,965.61	$13,965.61	$13,965.61	$13,965.61	$13,965.61	2022
Adult post prison supervision	$2,042.92	$2,042.92	$2,042.92	$2,042.92	$2,042.92	$2,042.92	2022
Victim costs (tangible)	**$809,611.05**	**$6,099.11**	**$3,621.49**	**$9,550.45**	**$2,109.88**	**$0.00**	**2022**
Victim costs (intangible)	$9,245,270.58	$217,587.70	$5,462.42	$14,748.30	$0.00	$0.00	2022
Total	$10,337,140.11	$359,276.79	$134,898.40	$144,637.66	$117,315.70	$115,205.82	2022
Relevant total	**$977,619.85**	**$27,439.42**	**$15,186.31**	**$15,639.68**	**$3,066.02**	**$956.14**	**2022**

As seen in the 'Relevant totals' row of Table IIIC that only includes police, courts and prosecutors, and tangible victim costs, the costs are presented in Table IIID.

Table IIID. Crime Costs in 2022 Nebraska Dollars

Crime Type	Cost
Robbery	$15,186.31
Drug	$956.14
Assault	$15,639.68
Other	$2,011.08
Property	$3,066.02

Following these adjustments, costs were averaged and applied to each crime committed by both the treatment and comparison groups and presented in Table IIIE (below). Only those who were released are assessed for costs. The costs of treatment (calculated above) were $1,424.91.

Table IIIE. Calculating Costs and Benefits

	Treat	Comparison
Raw Total Recidivism Cost	$600,487.36	$811,562.204128197
Raw Total Treatment Cost	$108,616.08	$0
Effective N	636	636.000000563923
Constrained N	636	636
Constrained Total Recidivism Cost	$600,485.76	$811,561.44
Constrained Total Treat Cost	$108,616.08	$0

Table IIIF presents the relevant numbers to calculate the cost-benefit ratio (CBR).

Table IIIF. Calculating Cost-Benefit Ratio

	Treat	Comparison
Recidivism Cost	944.16	1276.04
Treatment Cost	170.78	0
Recidivism Rate	58/636=9.12%	78.88/636=12.4%
Cost-Benefit Ratio	1:1.943	

The CBR was calculated as:

(Treatment ($944.16) – Comparison ($1,276.04)) ÷ Program Cost ($170.78) = 1.943

This CBR calculation results in a **$0.94** net gain for every dollar invested in AMHRN. These losses only apply to police, courts, and tangible victim costs, which is a conservative measure of losses to the state and ignores intangibles lost to victims. Ultimately, the cost of re-jailing, community supervision, prison, and the more subjective intangible losses to victims are not included. If including these costs to Nebraska and victims, the loss would be higher for this CBA. We sought this conservative estimate as the sectors included are the most applicable prior to discretion-laden state decision-making that would assign a punishment for one's crime.

Appendix IV – Clinical Review of Evaluation

Review of the Evaluation Report for the Anger Management Program Operating at Nebraska Department of Correctional Services

The evaluation report authored by Campagna and colleagues (2024) offers several recommendations for improvement to the current anger management programming provided within the facilities managed by the Nebraska Department of Correctional Services (NDCS). The analysis was based on both qualitative (e.g.., observations of the environments and semi-structured interviews with staff and participants) as well as quantitative (e.g., rates of institutional misconduct, rates of reincarceration following anger management). These recommendations range from environmental factors for the space where services are provided, such as design and comfort of the therapeutic space where sessions are conducted, improved screening of participants for appropriateness of referral to anger management, improvements to the programming to make it more applicable to the population, and concerns related to staffing shortages, and ongoing monitoring of adherence to treatment protocols.

Examples of recommendations for improvements to the therapeutic environment included attention to the lighting of the room, adequate temperature control, and appropriate accommodations to ensure those with disabilities or limitations can adequately participate in the programming (e.g., having guidelines for appropriate behavior in group clearly posted, ensuring those with learning difficulties, hearing impairment, or low/no vision can participate). These environmental recommendations are certainly in line with practice guidelines offered by the American Psychological Association (APA, 2022).

Several recommendations were also made to improve screening of participants for anger management, such as use of objective assessments of a potential participants' risk of violence and re-offense, pre-assessments of their current stage of change before being enrolled in a group, and prioritizing participants for anger management programming based on their scheduled release date. Research studies of cognitive bias in various settings have demonstrated that mental health practitioners are not immune to implicit biases in their decision-making, underestimate the role that cognitive biases may play in their judgment, and incorrectly believe that introspection and willpower are sufficient to overcome these biases (Zapf and Dror, 2017; Zapf, Kukucka, Kassin, and Dror, 2018). Interestingly, there is often an inverse relationship between years of experience and acknowledgement of the possible role of cognitive biases in judgment. In other words, the greater the years of experience a person has in their career the *less likely* the person will be to express awareness of risk of cognitive bias in the field overall as well as in their own personal judgments (Zapf et al., 2018). Therefore, including objective assessments of risk of violence and recidivism can be a valuable tool to reduce the influence of cognitive biases in determining whether a person can benefit from anger management.

Regarding the recommendation to assess for readiness for change prior to enrolling a participant in an anger management group, the research findings on the relationship between stage of change and outcomes appears to be more complex than would be intuitively hypothesized (e.g., participants in the contemplation or action Stages of Change at the time of starting an intervention would have better results compared to those that were in the precontemplation stage; Ronan, Gerhart, Bannister, and Udell, 2010). Rather, readiness to change appears to be a dynamic factor and shifts in Stages of Change should be monitored throughout the course of treatment such that participants who regress in their Stages of Change can be identified and possibly receive additional services around increasing readiness to change (Ronan et. al., 2010). Additionally, given the shortage of mental health providers in corrections settings (Morris and Edwards, 2022), enrolling participants in anger management programming based on their scheduled release date will maximize the number of participants that can benefit from the programming.

Finally, quality assessment is the gold standard for provision of mental health care services, and the elements assessed in any organization include both the macro (i.e., structural elements), and micro (i.e., process measures to evaluate treatment protocols or procedures, and performance measures to assess patient outcomes and identify areas that require additional improvements; APA, 2009). As practitioners often do not accurately assess their own effectiveness (Constantino et al., 2023), there is a need to objectively measure a clinician's abilities. Commonly made recommendations in treatment outcome research include blind raters using a direct-observational method to ensure fidelity of treatment protocol implementation in cognitive behavior therapy research (Waltman, Sokol, and Beck, 2017) and practice (Schoenwald et al., 2011). Without a structured and objective method to evaluate mental health provider adherence to the treatment protocol and provider competence, it is impossible to accurately evaluate the efficacy of an intervention or the providers implementing the protocol (Waltz, Addis, Koerner, and Jacobson, 1993). Further, although the concept of fidelity monitoring can result in concerns that this will reduce morale and increase staff turnover, research in this area suggests that implementing evidence-based practices with fidelity monitoring actually resulted in greater staff retention compared to organizations that did not implement these policies (e.g., Aarons, Sommerfeld, Hecht, Silovsky, and Chaffin, 2009; Bahtsevani, Udén,and Willman, 2004).

In conclusion, the recommendations offered by Campagna and colleagues (2024) to improve the facilities where mental health treatment is provided, adequately staff and compensate the clinician teams providing anger management services, utilize objective measurements of recidivism and violence risk, and implement evidence-based practices with on-going monitoring of fidelity to a treatment manual/protocol are consistent with the recommendations made by the larger community of researchers and practitioners in the mental health field. Further, the recommendations in the report are consistent with high reliability organizations that lead to increased trust in the organization, higher morale among teams, and better outcomes for participants/patients (Hopkins, 2021).

Author's Bio

Dr. Debra O'Connell completed her Ph.D. in clinical psychology at Washington State University in 2019. She completed a two-year post-doctoral fellowship in clinical neuropsychology at the University of Nebraska Medical Center in 2021. She has co-authored several peer-reviewed journal articles on topics related to psychopathic personality traits and psychotherapy treatment comparisons. She has worked both as a consultant to assist with program development in corrections settings and clinically with formerly incarcerated individuals providing court-mandated psychotherapy services. Dr. O'Connell currently works as a clinical neuropsychologist conducting comprehensive cognitive evaluations at the VA Eastern Kansas Healthcare System.

Clinical Review References

Aarons, G. A., Sommerfeld, D. H., Hecht, D. B., Silovsky, J. F., & Chaffin, M. J. (2009). The impact of evidence-based practice implementation and fidelity monitoring on staff turnover: evidence for a protective effect. *Journal of Consulting and Clinical Psychology*, *77*(2), 270.

American Psychological Association, APA Task Force on Guidelines for Assessment and Intervention with Persons with Disabilities. (2022). Guidelines for Assessment and Intervention with Persons with Disabilities. Retrieved from https://www.apa.org/about/policy/guidelines-assessment-intervention-disabilities.pdf.

American Psychological Association. (2009). Criteria for the evaluation of quality improvement programs and the use of quality improvement data. *The American Psychologist*, *64*(6), 551-557.

Bahtsevani, C., Udén, G., & Willman, A. (2004). Outcomes of evidence-based clinical practice guidelines: a systematic review. *International Journal of Technology Assessment in Health Care*, *20*(4), 427-433.

Campagna, M., Towne, K., Spohn, R., Hamilton, Z., Tostlebe, J., Al Falatah, S., Gildea, B., & Ursino, J. (2024). *Evaluation Report: Anger Management at the Nebraska Department of Correctional Services*. Nebraska Center for Justice Research, School of Criminology and Criminal Justice, University of Nebraska Omaha.

Constantino, M. J., Boswell, J. F., Coyne, A. E., Muir, H. J., Gaines, A. N., & Kraus, D. R. (2023). Therapist perceptions of their own measurement-based, problem-specific effectiveness. *Journal of Consulting and Clinical Psychology*.

Hopkins, A. (2021). A Practical Guide to Becoming a "High Reliability Organisation". *High Reliability Organizations (HRO). Australian Institute of Health & Safety (AIHS)*.

Morris, N. P., & Edwards, M. L. (2022). Addressing shortages of mental health professionals in U.S. jails and prisons. *Journal of Correctional Health Care, 28*(4), 209–214. https://doi.org/10.1089/jchc.21.08.0072

Ronan, G., Gerhart, J., Bannister, D., & Udell, C. (2010). Relevance of a stage of change analysis for violence reduction training. *The Journal of Forensic Psychiatry & Psychology*, *21*(5), 761-772.

Schoenwald, S. K., Garland, A. F., Chapman, J. E., Frazier, S. L., Sheidow, A. J., & Southam-Gerow, M. A. (2011). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*, 32-43.

Waltman, S. H., Sokol, L., & Beck, A. T. (2017). Cognitive behavior therapy treatment fidelity in clinical trials: review of recommendations. *Current Psychiatry Reviews*, *13*(4), 311-315.

Waltz, J., Addis, M. E., Koerner, K., & Jacobson, N. E. (1993). Testing the integrity of a psychotherapy protocol: Assessment of adherence and competence. *Journal of Consulting and Clinical Psychology, 61*, 620–630.

Zapf, P. A., & Dror, I. E. (2017). Understanding and mitigating bias in forensic evaluation: Lessons from forensic science. *International Journal of Forensic Mental Health, 16(3)*, 227–238. https://doi.org/10.1080/14999013.2017.1317302

Zapf, P. A., Kukucka, J., Kassin, S. M., & Dror, I. E. (2018). Cognitive bias in forensic mental health assessment: Evaluator beliefs about its nature and scope. *Psychology, Public Policy, and Law*, *24*(1), 1-10.

Appendix V – Report Statistical Term Table Guide

The authors recognize that statistical terms and references are not commonly used language among our target audience. Thus, we have included a reference guide of statistical terms used throughout this report, along with range indicators to make since of the quantitative results in this report. The terms are presented in table VA.

Table VA. Statistical Term Reference Guide

Statistical Term	Interpretation	Range Indicators
Odds Ratio	This number indicates the odds of an event occurring in one group compared to another or as a unit increases.	> 1 higher odds 1 = no difference < 1 lower odds
p-value	How likely an observed difference is due to chance.	p < 0.05**:** Statistically significant p >= 0.05: Not statistically significant
Effect Size	Describes the magnitude of the difference between two variables.	Depends on the test employed
Confidence Interval (CI)	Range within which the true effect size lies, with a certain degree of confidence (usually 95%).	Narrow CI**:** More precise estimate Wide CI**:** Less precise estimate
Mean/Average (x)	Sum of all values divided by the number of values.	Higher mean indicates greater average Lower mean indicates lesser average
Standard Deviation (SD)	Measures the amount of variation or dispersion from the mean.	Low SD**:** Values are close to the mean High SD**:** Values are spread out over a wider range
Median	The middle value that is in the middle of a list of values.	Half of the values are above the median Half of the values are below the median
Proportion (%)	A part of the whole expressed as a percentage.	Indicates the percentage of the total for a given category.

Evaluation Report References

[1] Bourgon, G., & Hanson, R. K. (2009). A meta-analysis of the effectiveness of the risk-need-responsivity model of offender rehabilitation. *Public Safety Canada*.

[2] Makarios, M., Sperber, K. G., & Latessa, E. J. (2014). Treatment dosage and the risk principle: A refinement and extension. *Journal of Offender Rehabilitation, 53*(5), 334–350. https://doi.org/10.1080/10509674.2014.922157

[3] Sperber, K. G., Latessa, E. J., & Makarios, M. D. (2013). Examining the interaction between level of risk and dosage of treatment. *Criminal Justice and Behavior, 40*(3), 338–348. https://doi.org/10.1177/0093854812467942

[4] Latessa, E. J., Cullen, F. T., & Gendreau, P. (2002). Beyond correctional quackery: Professionalism and the possibility of effective treatment. *Federal Probation, 66*(2), 43–49.

[5] Taxman, F. S., Shepardson, E. S., & Byrne, J. M. (2004). *Tools of the trade: A guide to incorporating science into practice.* National Institute of Corrections.

[6] Hill, G. (2016). Training manuals and lesson plans for correctional staff, including practical application of the UN standards and norms. *United Nations Asia and Far East Institute for the Prevention of Crime and Treatment of Offenders Resource Material Series, 98*, 37–49.

[7] Breitenstein, S. M., Gross, D., Garvey, C. A., Hill, C., Fogg, L., & Resnick, B. (2010). Implementation fidelity in community-based interventions. *Research in Nursing & Health*, 33(2), 164–173. https://doi.org/10.1002/nur.20373

[8] Martin, M., Shenderovich, Y., Caron, E. B., & Breitenstein, S. (2023). The Case for Assessing and Reporting on Facilitator Fidelity: Introducing the Fidelity of Implementation in Parenting Programs Guideline. *Global Implementation Research and Applications*, 3(3), 183–195.

[9]Howells, K, Day, A., Bubner, S., Jauncey, S., Williamson, P., Parker, A., & Heseltine, K. (2002). Anger management and violence prevention: Improving effectiveness. *Trends & Issues in Crime and Criminal Justice* no. 227. Canberra: Australian Institute of Criminology. https://www.aic.gov.au/publications/tandi/tandi227

[10] Carson, A. E., & Kluckow, R. (2023). *Correctional populations in the United States, 2021 – statistical tables*. *Bureau of Justice Statistics*. https://bjs.ojp.gov/library/publications/correctional-populations-united-states-2021-statistical-tables

[11] Henwood, K. S., Chou, S., & Browne, K. D. (2015). A systematic review and meta-analysis on the effectiveness of CBT informed anger management. *Aggression and Violent Behavior*, *25*, 280-292.

[12] Holbrook, M. I. (1997). Anger Management training in prison inmates. *Psychological Reports*, *81*(2), 623-626. https://doi.org/10.2466/pr0.1997.81.2.623

[13] Breiner, M. J., Tuomisto, L., Bouyea, E., Gussak, D. E., & Aufderheide, D. (2012). Creating an art therapy anger management protocol for male inmates through a collaborative relationship. *International Journal of Offender Therapy and Comparative Criminology*, *56*(7), 1124-1143.

[14] Lee, A. H., & DiGiuseppe, R. (2018). Anger and aggression treatments: A review of meta-analyses. *Current Opinion in Psychology*, *19*, 65-74.

[15] Holbrook, M. I. (1997). Anger management training in prison inmates. *Psychological Reports*, *81*(2), 623-626.

[16] Ireland, J. L. (2004). Anger management therapy with young male offenders: An evaluation of treatment outcome. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, *30*(2), 174-185.

[17] Walters, G. D. (2009). Anger management training in incarcerated male offenders: Differential impact on proactive and reactive criminal thinking. *International Journal of Forensic Mental Health*, *8*(3), 214-217.

[18] Latessa, E. (2003). The challenge of change: Correctional programs and evidence-based practices. *Criminology & Public Policy*, *3*(4), 547-560.

[19] Mackenzie, D. (2000). Evidence-based corrections: Identifying what works. *Crime & Delinquency*, *46*(4), 443-568.

[20] Taxman, F., & Belenko, S. (2011). *Implementing evidence-based practices in community corrections and addiction treatment*. Springer Series on Evidence-Based Crime Policy.

[21] Duriez, S.A., Sullivan, C., Latessa, E.J., & Lovins, L.B. (2018) The evolution of correctional program assessment in the age of evidence-based practices, *Corrections*, *3*(2), 119-136, DOI: 10.1080/23774657.2017.1343104

[22] Elliott, D., Buckley, P., Gottfredson, D., Hawkins, J., & Tolan, P. (2020). Evidence-based juvenile justice programs and practices: A critical review. *Criminology & Public Policy*, *19*(4), 1305-1328.

[23] Serin, R. (2005). *Evidence-based practice: Principles for enhancing correctional results in prisons.* National Institute of Corrections.

[24] Lattimore, P., Steffey, D., & Visher, C. (2010). Prisoner reentry in the first decade of the twenty-first century. *Victims & Offenders*, *5*(3), 253-267.

[25] Lattimore, P. K., Barrick, K., Cowell, A., Dawes, D., Steffey, D., Tueller, S., & Visher, C. A. (2012). Prisoner reentry services: What worked for SVORI evaluation participants. *Washington, DC: National Institute of Justice.*

[26] American Psychological Association. (2017). *What is cognitive behavioral therapy?*. American Psychological Association, Division 12. *Society of Clinical Psychology*. https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral

[27] Amoke, C. V., Ede, M. O., Nwokeoma, B. N., Onah, S. O., Ikechukwu-Ilomuanya, A. B., Albi-Oparaocha, F. C., Nweke, M. L., Amoke, C. V., Amadi, K. C., Aloh, H. E., Anyaegbunam, E. N., Nwajiuba, C. A., Onwuama, O. P., Ede, K. R., Ononaiwu, A. I., & Nweze, T. (2020). Effects of group cognitive-behavioral therapy on psychological distress of awaiting-trial prison inmates. *Medicine*, *99* (17), e18034. https://doi.org/10.1097/MD.0000000000018034

[28] Wright, E., Spohn, R., Chenane, J., & Toto, S. (2018). *Evaluation of the Moral Reconation Therapy (MRT) at the Nebraska Department of Correctional Services*.

[29] Ferguson, L.M., & Wormith, J.S. (2013): A meta-analysis of moral reconation therapy. *International Journal of Offender Therapy and Comparative Criminology* 57.9 1076-1106.

[30] Walker, J. S., & Bright, J. A. (2009). False inflated self-esteem and violence: A systematic review and cognitive model. *The Journal of Forensic Psychiatry & Psychology*, *20*(1), 1-32.

[31] Tadros, E., Fye, J. M., McCrone, C. L., & Finney, N. (2019). Incorporating Multicultural Couple and Family Therapy Into Incarcerated Settings. *International Journal of Offender Therapy and Comparative Criminology*, *63*(4), 641–658.

[32] Spina, F. (2023). The Importance of Mindfulness Meditation in Correctional Settings. *Journal of Correctional Education*, *74*(2), 56–71. https://www.jstor.org/stable/48730994

[33] Papalia, N., Spivak, B., Daffern, M., & Ogloff, J. (2019). A meta-analytic review of the efficacy of psychological treatments for violent offenders in correctional and forensic mental health settings. *Clinical Psychology Science and Practice*. 26. 10.1111/cpsp.12282.

[34] Sloane, S. (2002). A study of the effectiveness of Alternatives to Violence workshops in a prison system. *AVP.* California.

[35] Miller, M. L., & Shuford, J. A. (2005). The Alternatives to Violence project in Delaware: A three-year cumulative recidivism study. Delaware: *AVP Inc*.

[36] National Institute of Justice. (2013). Evaluation of the Serious and Violent Offender Reentry Initiative. Nij.ojp.gov. https://nij.ojp.gov/topics/articles/evaluation-serious-and-violent-offenderreentry-initiative

[37] Dowden, C., & Andrews, D. A. (2000). Effective correctional treatment and violent reoffending: A meta-analysis. *Canadian Journal of Criminology*, *42*(4), 449-467.

[38] Lipsey, M. W., Landenberger, N. A., & Wilson, S. J. (2007). Effects of cognitive-behavioral programs for criminal offenders.

[39] Heseltine, K., Howells, K., & Day, A. (2010). Brief anger interventions with offenders may be ineffective: A replication and extension. *Behaviour Research and Therapy*, *48*(3), 246-250.

[40] Bahrami, E., Mazaheri, M. A., & Hasanzadeh, A. (2016). Effect of anger management education on mental health and aggression of prisoner women. *Journal of Education and Health Promotion*, 5.

[41] Jolliffe, D., & Farrington, D. P. (2007). A systematic review of the national and international evidence on the effectiveness of interventions with violent offenders.

[42] Taxman, F., & Thurman, T. (2019). Implementation science toolkit: Equipping justice agencies with the tools to facilitate the change process. Center for Advancing Correctional Excellence. https://csgjusticecenter.org/wp-content/uploads/2021/02/ImplementationScience_Toolkit_Taxman.pdf

[43] Duwe, G. (2017). *The use and impact of correctional programming for inmates on pre-and postrelease outcomes* (Vol. 48). US Department of Justice, Office of Justice Programs, National Institute of Justice.

[44] Duwe, G. & Clark. V. (2015). The importance of program integrity. *Criminology & Public Policy*, *14*(2), 301-328. https://doi.org/10.1111/1745-9133.12123

[45] Miller, J. M., & Miller, H. V. (2015). Rethinking program fidelity for criminal justice. *Criminology & Public Policy, 14*(2), 339-349. https://doi.org/10.1111/1745-9133.12138

[46] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

[47] Hammarberg, K., Kirkman, M., & De Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human reproduction*, *31*(3), 498-501.

[48] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

[49] Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications.

[50] Hammarberg, K., Kirkman, M., & De Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human reproduction*, *31*(3), 498-501.

[51] Miller, J. M., & Miller, H. V. (2015). Rethinking program fidelity for criminal justice. *Criminology & Public Policy, 14*(2), 339-349. https://doi.org/10.1111/1745-9133.12138

[52] Campagna, M., Towne, K., Spohn, R., Hamilton, Z., Tostlebe, J., Krushas, A., Gildea, B., Ursino, J., Al Falatah, & S., Hayes, A. (2024). *Evaluation report: Violence Reduction Program at the Nebraska Department of Correctional Services*. Nebraska Center for Justice Research, School of Criminology and Criminal Justice, University of Nebraska Omaha.

[53] Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*(3), 390–395. https://doi.org/10.1037/0022-006X.51.3.390

[54] National Institute of Justice. (2019, November 29). *Evidence continuum*. https://crimesolutions.ojp.gov/about/crimesolutionsgov-evidence-continuum

[55] Latessa, E. J., Cullen, F. T., & Gendreau, P. (2002). Beyond correctional quackery: Professionalism and the possibility of effective treatment. *Federal Probation, 66*(2), 43–49.

[56] Taxman, F. S., Shepardson, E. S., & Byrne, J. M. (2004). *Tools of the trade: A guide to incorporating science into practice.* National Institute of Corrections.

[57] Hill, G. (2016). Training manuals and lesson plans for correctional staff, including practical application of the UN standards and norms. *United Nations Asia and Far East Institute for the Prevention of Crime and Treatment of Offenders Resource Material Series, 98*, 37–49.

[58] Gilligan, J., & Lee, B. (2005). The Resolve to Stop the Violence Project: reducing violence in the community through a jail-based initiative. *Journal of public health (Oxford, England)*, *27*(2), 143–148.

[59] McMullin, J., & Schonberger, B. (2022). When good balance goes bad: A discussion of common pitfalls when using entropy balancing. *Journal of Financial Reporting, 7*(1), 167-196.

[60] Zhao, Q., & Percival, D. (2017). Entropy balancing is doubly robust. *Journal of Causal Inference, 5*(1), 1-19.

[61] Hainmueller, L., & Xu, Y. (2013). Ebalance: A stata package for entropy balancing. *Journal of Statistical Software, 54*(7), 1-18.

[62] MacDonald, J., & Donnelly, E. (2017). Evaluating the role of race in sentencing: An entropy weighting analysis. *Justice Quarterly, 36*(4), 656-681.

[63] Perry, S. L., & Schleifer, C. (2018). Till porn do us part? A longitudinal examination of pornography use and divorce. *The Journal of Sex Research*, *55*(3), 284-296.

[64] American Transparency. (2024). *Nebraska State employees: Open the books: every dime.* Online In Real Time. https://www.openthebooks.com/nebraska-state-employees/

[65] Miller, T.R., Cohen, M.A., & Wiersema, B. (1996). *Victim costs and consequences: A new look* (Document No. NCJ 155282). Washington, DC: National Institute of Justice.

[61] Zarling, A., & Russell, D. (2022). A randomized clinical trial of acceptance and commitment therapy and the Duluth Model classes for men court-mandated to a domestic violence program. Journal of consulting and clinical psychology, 90(4), 326.

[62] Joe, G. W., Knight, K., Simpson, D. D., Flynn, P. M., Morey, J. T., Bartholomew, N. G., ... & O'Connell, D. J. (2012). An evaluation of six brief interventions that target drug-related problems in correctional populations. Journal of Offender Rehabilitation, 51(1-2), 9-33.