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Cognitive Behavioral Interventions and Misconduct Behind Bars: A Randomized Control Trial of CBI-CC

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Table of Contents

Project Summary	4
Major Goals and Objectives	4
Research Questions	5
Methods	5
Outcomes	5
Expected Applicability	<i>6</i>
Statement of Purpose	7
Cognitive Behavioral Interventions and Misconduct Behind Bars: A Randomized Conference of CBI-CC Thinking Things Through	
Literature Review	11
Cognitive Behavioral Therapy	13
Cognitive Behavioral Interventions – A Comprehensive Curriculum (CBI-CC)	15
Statement of Hypothesis	
Research Design and Methods	
Think Things Through CBI-CC Program	17
Implementing CBI-CC TTT	18
Original Research Design Failure and Re-design	
Eligibility and Intake	20
Random Assignment and Sampling StrategyRoad to Recovery (R2R)ReflectionsControl Group	24 24
Data Collection and Analysis	
Demographics	
Program FidelityFigure 3: Example of Scoring Format	28
TTT Participant Surveys Survey Outcomes	
Analytic Strategy for Misconduct and Recidivism Measures	36
Institutional Misconduct	38

Post Release Outcomes	41
Rearrest	43
Reincarceration	47
Conclusion	51

Cognitive Behavioral Interventions and Misconduct Behind Bars: A

Randomized Control Trial of CBI-CC Thinking Things Through

FINAL REPORT

Project Summary

Major Goals and Objectives

Institutional misconduct, especially violent misconduct, poses a problem for all prisons.

To address the misconduct concern, this project tested whether an evidence-based, cognitive

behavioral treatment (CBT) program will reduce misconduct, including incidents of violent

misconduct, and post-release arrests compared to non or less intensive CBT programming. The

Delaware Department of Correction (DOC) implemented CBT-based programs in their

institutions, which included the Cognitive Behavioral Interventions – Core Curriculum (CBI-CC)

Thinking Things Through program developed at the University of Cincinnati. Three programs

addressed in this report include Thinking Through (TTT), Road to Recovery (R2R), and

Reflections. TTT consisted of the instruments and materials of the CBI-CC, whereas R2R and

Reflections utilized general CBT skills and techniques. The Center for Drug and Health Studies

(CDHS) in collaboration with DOC evaluated the impact of CBC-CC TTT using administrative

records and surveys with program participants. Two major goals were identified:

1. Evaluate the efficacy of the current CBI-CC Thinking Things Through (TTT) treatment

program being administered in all Delaware institutions.

2. Validate the fidelity tool through collaboration with University of Cincinnati.

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Research Questions

Building upon the goals and objectives of this analysis, the CDHS research team sought to address multiple research questions. Specifically, how does CBI-CC TTT impact prison misconduct and recidivism rates compare to different CBT programming? In addition, does CBI-CC TTT have an impact on prison misconduct and recidivism rates compared to a control group? *Methods*

To evaluate the research hypotheses, 1,236 adults incarcerated in Delaware prisons between August 2019 and September 2023 were assessed. Issues related to the COVID-19 pandemic interfered with the planned randomization procedures, so multinomial propensity scoring techniques were utilized to account for group differences. A series of bivariate crosstabs and t-tests are presented in the report, followed by logistic regression and survival models. There was a total of 513 treatment participants and 723 control group participants; among the overall sample, approximately 60% were released to the community and 70% of the treatment group successfully completed programming.

Outcomes

Results indicated that all CBT treatment groups performed better than the control group in terms of rearrest after release at 6 months and 1 year. The group who received the intensive CBT treatment (CBI-CC TTT, and R2r Track 1) performed significantly better than all other groups. Intensive CBT treatment was thus effective in reducing recidivism measured by arrest. In terms of misconduct, CBI-CC TTT participants initially had the highest rates of misconduct but saw a significant decrease after completing programming. In addition, both R2R Track 1 and TTT groups have the lowest rates of rearrest after completing treatment programming compared to all other groups. This can be credited to the length and intensity of programming, as well as

the form of CBT implemented within those programs.

In addition, pre- and post-survey findings suggest that TTT programming was effective at reducing criminal thinking behaviors substantially, but not significantly. Although overall criminal thinking scales were not significantly reduced, certain specific thinking inclinations, such as considering consequences and potential harm to others, were significantly reduced.

Lastly, the research team noted that fidelity was important to program implementation and serves as a place for program growth.

Expected Applicability

These findings are useful to policymakers, correctional treatment providers, as well correctional leaders, such as Departments of Corrections. Findings suggest that CBI-CC TTT is effective at reducing prison misconducts, some criminal thinking behaviors, as well as rearrests at 180 and 365 days post-release. Therefore, institutions should take into account the length, intensity, and techniques of their programming to ensure they are consistent with CBT techniques and skills.

Statement of Purpose

Institutional misconduct, especially violent misconduct, poses a problem for all prisons. To address the misconduct concern, this project tested whether an evidence-based, cognitive behavioral treatment (CBT) program will reduce misconduct, including incidents of violent misconduct, and post-release arrests. The Delaware Department of Correction (DOC) is implementing CBT-based programs in their institutions. These included the Cognitive Behavioral Interventions – Core Curriculum Thinking Things Through program (CBI-CC TTT) developed at the University of Cincinnati. Because there were more people eligible for the program than could be accommodated, the DOC planned to implement a randomization procedure to assign people to the program. The Center for Drug and Health Studies in collaboration with DOC evaluated the impact of the program using administrative records and surveys with program participants.

This study evaluated the effectiveness of the CBI-CC TTT (hereinafter, TTT) program on reducing prison misconduct and violence in prison and arrests after release among a sample of incarcerated individuals in three prisons in Delaware. The TTT program targets high risk individuals and comprises 55 90-minute sessions delivered over 26 weeks making it a high dosage correctional outpatient intervention designed to modify behavior. The Delaware Department of Correction began implementing the program in three of its prisons in 2018 and expanded to another prison in 2019. Delaware also uses the Risk-Needs-Responsivity tool to assess individuals for the most appropriate form of treatment in order to reduce future criminal behavior, which has identified a high need for cognitive behavioral treatment (CBT).

The original design proposed that DOC would randomize approximately 600 adult inmates to receive either the TTT intervention or treatment as usual. Inmates were to be housed in general population in prisons in Delaware and be moderate-high to high-risk based on the This Research was funded by the National Institute of Justice, Award: 2018-75-CX- 0020 Project Title: Cognitive Behavioral Interventions and Misconduct Behind Bars: A Randomized Control Trial of CBI-CC

7

Level of Services Inventory-Revised (LSI-R), serving time for a violent offense, or have committed a violent infraction during the current sentence. CDHS planned to evaluate the program using survey data and administrative records of misconducts and post-release arrest for those who were released.

The study fielded in the late fall of 2019. By March of 2020 the COVID-19 pandemic forced the closure of all programming, while DOC adapted to safeguard the health of those under their care. Beginning in late 2021, the CDHS team and DOC coordinated efforts to redesign the study to adapt to the modified situation.

Cognitive Behavioral Interventions and Misconduct Behind Bars: A Randomized Control Trial of CBI-CC Thinking Things Through

The majority of prison programming effectiveness focuses on the ability to reduce recidivism (Byrne 2020). Items such as the Risk, Needs, and Responsibility (RNR) assessments are used to target areas such as criminal thinking, criminal history, peer relationships, and antisocial personality traits in order to place incarcerated populations into the appropriate programming to reduce recidivism post-release (Ward, Melser, & Yates 2007). Programs that incorporate cognitive behavioral therapy techniques into their methodology are often looking to reduce criminal thinking by changing emotions and thought processes. Most of these programs are geared for post-release results and little is known about the ways that programs change behaviors inside the facility. Currently, only a handful of analyses have tested the impacts of criminal thinking on prison misconduct (Duwe, Clark, & McNeely 2023; Taxman et al. 2011). Results suggest that the Texas Christian University (TCU) criminal thinking scales accurately predict prison misconduct using overall measures and multiple scales. These findings indicate that cognitive behavioral interventions may reduce both prison misconduct, as well as future recidivism.

This report examines the concepts of importation and criminal thinking specifically as it relates to prison misconduct, then we review fidelity observations, and pre-post surveys. The overarching purpose of this project was to rigorously test and evaluate the hypothesis that a program that implements cognitive behavioral methods will reduce prison misconducts and recidivism compared to standard prison programming. This project built upon policies and practices already in place in Delaware's Department of Correction, Bureau of Prisons and took advantage of an effort by the Department to effectively train personnel, as well as implement and complete CBT courses in their facilities. The existing program and plans of the Department

created an ideal environment to evaluate the program components called for in this NIJ initiative with a program with very limited supporting data. The researchers in collaboration with the DOC sought to utilize random assignment procedures to enroll medium to high risk incarcerated populations into a CBI-CC Thinking Things Through (hereinafter, TTT) program and a control group into a standard program. The COVID-19 pandemic interfered with the randomization process because it required mixing people from different housing units and that practice ceased in March of 2020 when the pandemic began impacting operations. The team worked with DOC to redesign the study.

After the redesign, the team utilized a multi-method research design, that had the following objectives:

- Assess the efficacy of the current TTT treatment program being administered in DE institutions.
- Validate the fidelity tool through collaboration with University of Cincinnati in order to ensure successful program implementation.

This project was designed to test, in as close to a real-world setting as possible, the efficacy of providing a high intensity, cognitive restructuring program utilizing skill building activities to assist with cognitive, social, emotional, and coping skill development. This study originally proposed to take advantage of the mismatch between those needing the program and the program's capacity to implement randomization procedures for enrollment in order to test whether those randomized to the program have better outcomes in terms of both institutional behavior and post prison recidivism. However, due to the COVID-19 pandemic and changes in DOC operations, this design was not possible. In order to account for the lack of a control group propensity weighting methods were utilized.

The current research was timely, considering the increased attention generated at improving correctional culture and climate. Adequately changing the emotional and cognitive thought processes associated with prison misconduct has the ability to reduce tensions between staff and peers.

Literature Review

Research on prison violence and misconduct generally started from a dichotomized premise based on either a deprivation or an importation model (Sykes, 1958; Farrington & Nuttal, 1980). Deprivation approaches focus on the character of the prison and the prison experience, while importation approaches work on the assumption that the same thinking and behavior patterns that brought people into the prison continue to manifest in prison resulting in behavioral problems including violence (Harer & Steffensmeier 1996).

Research has found support for both approaches and recent advances have become more refined, examining the combination of inmate characteristics and the prison environment.

Bottoms (1999, 2004) points out that situational components that may reduce prison violence by placing more restrictions on movement and time, while perhaps reducing violence and misconduct in the short term, may reduce the legitimacy of staff and the prison social structure, which can in turn lead to more violence and misconduct. Another area commonly addressed in research relating to the occurrence of prison disorder and violence, is high correctional officer stress and job turnover (Lambert, 2010; Leip & Stinchcomb 2013). Partially in response to research on prison violence and misconduct, modern prisons have increased the use of electronic monitoring, changed architectural designs, and improved management structures and staff training; all of which are associated with decreases in prison misconduct and violence (Homel &

Thompson 2005). Yet violence and misconduct continue, indicating that other avenues toward lowering the rates of these behaviors still need to be explored.

In tandem with research on the prison environment, a large body of literature exists on the effectiveness of correctional based treatment on post prison outcomes (Aos et al. 2006; Cullen & Gilbert 2013; Sacks et al. 2011). Prisons have responded by increasing the availability of a wide variety of treatment programs. While the program content and research on effectiveness has focused on the post-release period, programs may be an effective tool for managing incarcerated populations behavior inside the prison as well. In 2003, O'Connell (Principal Investigator for this study) studied the impact of therapeutic community (TC) programs on prison misconduct and concluded that the separate treatment environment created by TCs led to lower levels of misconduct on TC units in Delaware prisons (Deitz, O'Connell & Scarpitti 2003). However, that study did not investigate the impact of programs that are delivered to the general incarcerated population, and little is known about the effects of programming on overall institutional behavior.

More recent trends in correctional treatment have focused on cognitive behavioral (CBT) approaches. While CBT programs have focused on changing criminal thinking patterns and have demonstrated impacts on post release recidivism, the programs have not addressed potential impacts on in-prison behavior. The purpose of the current study is to investigate whether a CBT program delivered in prison, and utilizing prison life examples in its teaching model, has a direct impact on institutional violence and misconduct. If utilizing CBT and focusing on current prison life examples creates a safer and more easily managed prison environment, prison administrators would have an additional tool for prison management by tailoring programs many are already implementing.

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CBI-CC

The conclusions from a recent study of the effectiveness of in-prison programming in Ohio correctional institutions support the objectives of the proposed project. The University of Cincinnati Corrections Institute (UCCI) conducted an evaluation of the Ohio Department of Rehabilitation and Correction (ODRC) "Reentry Approved" programs offered in all correctional institutions. The study was designed to explore the effectiveness of programming on institutional misconduct and recidivism (see Latessa et al. 2015). However, at the time of this study, evidence-based cognitive behavioral programs were not being offered in Ohio institutions. At the conclusion of the study, the evaluators offered the following recommendation:

"Research continues to affirm that effective programming not only targets criminogenic needs, but also aims to change offender behavior through cognitive and social learning approaches.

Current approved program criteria are inadequate in the use of *cognitive behavioral interventions* (emphasis added). These criteria should be strengthened to include cognitive behavioral strategies such as practice and the demonstration of pro-social skills (Latessa et al. 2015: 11).

In direct response to the observation from the University of Cincinnati evaluators that cognitive behavioral interventions administered in correctional institutions may be useful in reducing inmate misconduct and recidivism, the current study evaluated the impact of an evidence-based, cognitive behavioral curriculum in a correctional setting on violent and other misconduct in prison, as well as its impact on reducing post-release arrests.

Cognitive Behavioral Therapy

The foundation for effective programming to reduce antisocial behavior, including misconduct in prison, is well established in large bodies of literature (Aos et al. 2006; Steiner, Butler, & Ellison 2014). The necessary components for obtaining positive outcomes for justice-involved individuals, whether engaged in programming in the community or in prison, evolve

from three key principles: risk, need, and responsivity (RNR). The clear focus on the risk-need-responsivity aspect of programming for individuals involved in the criminal legal system underlies the effectiveness of any program model in regard to outcomes. By targeting interventions to those at medium to high risk and addressing the most important criminogenic needs through the proper responsivity, significant reductions in recidivism have been found (Andrews 2006; Andrews, Bonta & Wormith 2006). Andrews (2006) notes that focusing on dynamic needs is the most effective means of producing change. History of antisocial behavior, antisocial personality patterns, attitudes, cognition and antisocial peers are the top four criminogenic needs. These can be addressed through multiple program models, with cognitive behavioral therapy having strong support (Andrews 2006).

Cognitive behavioral therapy is not a new model or concept for prison programming. In fact, multiple analyses since the 1990s have studied the implementation and impact of CBT in multiple correctional settings (see Allen et al. 2001; Hansen 2008; Henning & Frueh 1996; Zlotnick et al. 2003). CBT assumes that most people can become conscious of their own thoughts and behaviors and then make positive changes to those thoughts. A person's thoughts are often the result of experience, and behavior is often influenced and prompted by these thoughts. In addition, thoughts may sometimes become distorted which can lead to antisocial and unproductive behavior. Support for CBT effectiveness is present within justice-involved juveniles and adults, substance-involved and violent incarcerated populations, as well as individuals under community-supervision (Barnes, Hyatt, & Sherman 2017; Lambert et al. 2007; Landenberger & Lipsey 2005). CBT is also effective in various criminal justice settings, both in institutions and in the community, and addresses a host of problems associated with criminal behavior. For instance, in most cognitive behavioral therapy programs, individuals improve their

social skills, problem solving, critical reasoning, moral reasoning, self-control, impulse management and self-efficacy. It also has been shown to reduce recidivism (Landenberger & Lipsey 2005).

A systematic review of evidence-based programs for justice-involved adults, looking at almost 300 evaluations, included a review of cognitive behavioral treatment programs (see Aos et al. 2006). The researchers found "25 rigorous evaluations of the program for the general offender population that employed CBT." Overall, they found these programs significantly reduced recidivism by 8.2 percent. Two other systematic reviews came to a similar conclusion (Lipsey et al. 2001; Wilson et al. 2005). Finally, a new analysis from the Office of Justice Programs and CrimeSolutions.gov (2016) finds strong support for cognitive behavioral therapy in the context of corrections and reentry programming: in 15 of 21 studies, the findings were "effective" or "promising" (Feucht & Holt 2016). However, to our knowledge, only a handful of studies have tested the effectiveness of CBT programming using randomized control trials (Umbach, Raine, & Leonard 2018). This research sought to expand that knowledge.

Cognitive Behavioral Interventions – A Comprehensive Curriculum (CBI-CC)

Cincinnati embeds basic concepts and skills that are necessary for programming, particularly a

The CBI-CC Thinking Things Through (TTT) program developed by the University of

foundation in cognitive behavioral programming and social learning theory. A "Consumer's

Guide to Selecting Cognitive Curricula" was developed by the International Community

Corrections Association (ICCA, 2001). It is noteworthy to mention that TTT was developed in

collaboration with the Council of State Governments in order to offer a very comprehensive

curriculum targeting the major criminogenic needs of all justice-involved individuals, including

those with mental health problems.

Based on accumulating evidence, the curriculum incorporates the essential components that research cites as necessary for obtaining good outcomes, such as adherence to the risk principle. The TTT program specifically targets moderate to high-risk individuals. It also addresses the need principle by targeting multiple criminogenic needs, especially the primary needs of criminal thinking patterns, attitudes and beliefs, and addresses basic personality traits by incorporating emotion regulation, problem solving, and skills development. Additionally, TTT has some built-in responsivity targets, such as modifications for those with mental health needs and a module specifically targeting motivation. This approach is unique to any existing program developed for justice-involved individuals and is in alignment with the research.

Statement of Hypothesis

The CBI-CC *Think Things Through* (TTT) intervention will produce significantly better outcomes than the standard practice condition with respect to:

- Lower rates of misconduct especially violent incidents.
- Recidivism rates (arrest, reincarceration) after release from prison.
- Self-reported criminal thinking, association with delinquent peers, and psychosocial functioning, as assessed 6 months after enrollment in the program.

Research Design and Methods

Delaware Department of Correction (DE DOC) is a unified system consisting of four Bureaus and the Office of the Commissioner. The Bureau of Prison oversees the operation of all four adult correctional facilities in Delaware. To move towards an Evidence Based Correctional System, the DE DOC Implemented the Risk-Needs-Responsivity (RNR) tool developed by George Mason University in their prisons in 2015 (Taxman, 2014; Taxman and Caudy, 2015). The RNR tool contains three modules; 1) Assess a Program, 2) Assess an Individual, and 3)

Assess a Jurisdiction. The RNR tool thus contains data on individual needs and program capacity and targeted behavior (e.g. substance abuse, criminal thinking, life skills, etc.). These two data elements enable a jurisdiction to use the Assess a Jurisdiction module to assess the fit between the needs of their population (risk/needs) and the programs being delivered by the jurisdiction (part of responsivity), known as a Gap Analysis.

DE DOC conducted a gap analysis in 2017 of its programming for incarcerated individuals, which indicated a substantial need for additional programming to address criminal cognitions among the inmate population. After conducting a thorough review of existing CBT programs, the University of Cincinnati's CBI-CC TTT program was chosen to be implemented in the DE prisons. In collaboration with the Department of Correction, Connections Inc. (a Delaware based treatment provider) agreed to expand its group programming to deliver the program. Fifteen Connections clinicians were trained by the University of Cincinnati to administer the TTT curriculum (as of April 2018). The TTT groups are categorized in the Risk Needs Responsivity (RNR) Tool as a Group B type program. Group B programs are those that address criminal thinking patterns, which have been found to be a major contributor to recidivism. This cognitive restructuring program utilizes skill building activities to assist with cognitive, social, emotional, and coping skill development.

Think Things Through CBI-CC Program

The CBI-CC TTT program was implemented at all four of Delaware's prisons (male and female) in the fall of 2018. The program was intensive, comprising 55 sessions totaling 150 hours of curriculum time. At most facilities, each group met 2 times per week. With 55 modules in the curriculum, it takes approximately 6 months for one cohort to complete the program. The average group size was ten participants. The maximum group size was twelve participants. The

program was structured as a modified closed group, which allows multiple entry points to allow for flexibility of participation (versus a completely closed group format which has the same

cohort beginning and ending a full cycle together).

The treatment modules are as follows:

• Pre-treatment and Module 1: Motivational Engagement

• Module 2: Introduction to Cognitive Behavioral Interventions

• Module 3: Cognitive Restructuring

• Module 4: Emotional Regulation

• Module 5: Understanding Behavior Patterns

• Module 6: Choosing Behavior Responses

• Module 7: Problem Solving

• Module 8: Planning your Future

• Module 9: Success Planning

The modules include role playing and situational activities designed to focus on how

participants think and react to situations. In conjunction with the University of Cincinnati

consultants, the treatment provider established that these activities were lessons suited for the

prison environment and designed to focus on behavior both inside and outside the prison. These

modifications did not change the content or structure of the program and provide an opportunity

to potentially gain increased effects of the program that are focused on prison safety.

Implementing CBI-CC TTT

DE DOC and the treatment provider started training facilitators to run CBI-CC TTT

programming in each facility. The first groups began shortly after the training with some

institutions conducting two groups simultaneously. Facilitators were provided scripts, created by

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Project Title: Cognitive Behavioral Interventions and Misconduct Behind Bars: A Randomized Control Trial of

CBI-CC

the University of Cincinnati's TTT core curriculum, with detailed instructions on how to conduct each treatment module and session. The treatment cohorts created group rules to follow in the initial sessions with expectations for how the program would advance. The program focused on changing criminal thinking patterns and behaviors utilizing the needs principle, which was described above.

Original Research Design Failure and Re-design

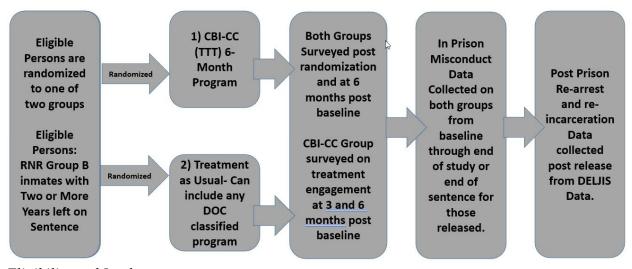
The study fielded in the fall of 2019. One randomized cohort completed the study in early 2020. Five new cohorts were randomized in early 2020. On March 11, 2020, the research team was informed that programming had temporarily ceased due to the outbreak of the COVID-19 pandemic. The 144 persons randomized in early 2020 were thus lost to the study. The team waited for what would eventually be 16 months before being able to recruit new participants. For clarity, we briefly describe the original design as well as the re-designed study below, before turning to results.

Figure One below shows the original research design prior to the onset of COVID-19. As the figure shows, the design was relatively straightforward. Inclusion Criteria: Eligible subjects were (1) incarcerated persons with a minimum of two years left on their sentence, (2) screened moderate-high or high-risk on the LSI-R at classification intake; OR (3) serving a sentence for a violent offense; OR (4) have received a prison misconduct for a violent incident in the prison during the current sentence; (5) be age 18 years or older; (6) speak English. Exclusion criteria were: (1) diagnosed current and known DSM-V psychotic disorder; (2) inability to speak the English language, and (3) life expectancy of less than 6 months. The research team continued to meet with DOC throughout 2020 and well into 2021. A modified TTT program resumed in late summer 2021. The revised approach delivered the program to persons from one housing unit to

avoid mixing people from different units. This change made randomization of participants impossible.

For the purposes of the study, DE DOC was to randomize eligible persons to either CBI:CC TTT or standard care. The standard care treatment was defined as whatever programming regimen DOC classifies the person to and can range from no programming at all to an intensive substance abuse treatment. All programming was tracked by the research team for analysis. The randomization component administered by DOC proposed to enable this study to determine whether participation in CBI:CC TTT is effective at reducing prison misconduct, especially violent misconduct, and whether CBI:CC TTT impacts recidivism post-release.

Figure One: Original Research Design



Eligibility and Intake

The CBI-CC TTT program was categorized as a Group B type program in the DOC's RNR Tool. Only moderate to high-risk individuals (as determined by LSI-R risk category) who resided in the general population (e.g., not restrictive housing or residing in a T.C.) were eligible for the program.

For purposes of the study, LSI-R identified moderate—high- and high-risk persons as well as those with violent misconducts or with violent current offenses were to be randomized to either the TTT groups or standard care, defined as whatever programming regimen the person is classified to and can range from no programming at all to intensive substance abuse treatment. The randomization study would enable the team to determine whether participation in TTT is effective at reducing prison misconduct- especially violent misconduct, and whether TTT impacts recidivism post release.

No research incentives were to be provided to participants who were classified into the TTT programs. However, the DE DOC does offer good time credits for participants who successfully complete the course¹. Participants who were eligible to join the program would be allowed to miss two treatment sessions over the duration of the course. Participants would be removed for missing more than three sessions, continuous group disruptions, or refusal to participate in group. The treatment provider had discretion over who was removed from the group and the researchers would be notified via email or at the following data collection. *Random Assignment and Sampling Strategy*

The CBI-CC TTT program evaluation was originally intended to involve three facilities: Sussex Correctional Institution (SCI), Howard R. Young Correctional Institution (HRYCI), and Baylor Women's Correctional Institution (BWCI). Only one all-female cohort was conducted at BWCI due to limited population size. The COVID-19 pandemic froze all data collection from March 13, 2020 until June 25, 2021. The 92 individuals that were actively enrolled in the study during the pandemic did not complete treatment. Although some individuals were as far as 5.5 months into treatment, they were unable to complete due to shutting down of treatment services.

1

¹ Good time credits refer to the award of reduced time off an incarcerated individual's sentence for good behavior or successful completion of a program that is used to improve reentry processes.

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Due to COVID-19, the Delaware Department of Correction indicated they were no longer able to conduct randomization for the approved study. As seen in prisons across the country, the pandemic significantly impacted the functioning of Delaware prisons. Delaware DOC restructured the way they house inmates to minimize the amount of interaction across housing units; essentially, units are not mixed.

Despite the original study design, the research team pivoted and are unsure of the overall impact the pandemic had on the study outside of redesigning and strategizing data collection.

DOC followed emerging protocols to ensure the safety of both staff and the persons serving sentences in the institutions. Part of these protocols was to minimize the movement of people from one housing unit to another. Because the TTT program was designed as outpatient treatment, in that participants from all over the prison came to a central location three times a week for the 90-minute treatment sessions, program implementation was not possible. Nor was it possible for people from the research team to visit the facilities, due to protocols limiting exposure to only required personnel. The original study design was thus not possible and was essentially scrapped.

The original study was essentially made unworkable by the delay in programming and the revised way in which DOC implemented programming while accounting for COVID-19 program operation protocols. After the beginning of the pandemic, housing units were populated with people receiving the same treatment; all those who receive CBI:CC must live on the same housing unit (although not necessarily everyone on that unit is receiving CBI:CC). This was implemented during the pandemic to prevent cross-contamination between housing units. Due to the continued threat of COVID outbreaks and need to control spread of the virus, the DOC treatment groups were to retain this manner of selection for the foreseeable future. As such, they

could not randomly choose inmates from across the entire institution to the control or treatment group, nor were there enough eligible persons on a unit to randomize within units. During several meetings with DOC, the research team discussed with DOC and the treatment provider different options that would allow randomization, but any would require moving people across units and were thus sternly denied due to DOC COVID-19 protocols. Delaware DOC made it clear they would no longer conduct randomization in an attempt to reduce the spread of the COVID virus and prioritize the safety of the entire prison population.

CBI-CC (TTT) 6-Groups Surveyed Month Outpatient Pre and Post Program In Prison Misconduct Road to Recovery Data Track 1 Post Prison Collected Persons are Re-arrest on All classified to Road to Recovery and regroups programs Track 2 incarceration from based on the Data baseline Risk-Needsthrough collected Road to Recovery Responsivity post release end of Track 3 Tool and LSI from DELJIS study or Scores. Data. end of Reflections DUI sentence Program for those released. **Matched Control**

Figure Two: Revised Research Design

As demonstrated in Figure Two, the revised design dropped the randomization process.

Group

The treatment programming began again in the summer of 2021 after a sixteen-month halt, and the research team began collecting data under the new revised design. In order to account for the data lost during the pandemic shutdown, other programs utilizing CBT techniques were included in the data collection and analysis. They are described below:

Road to Recovery (R2R)

The DOC redesigned its live-in substance use programming and launched the Road to Recovery program in late 2020. Road to Recovery (R2R) retains elements of a Therapeutic Community model, but incorporated a CBT based curriculum within it. The basic structure of the R2R programs was as follows:

Eligibility was determined through DOC's classification process and included a comprehensive assessment, drug screen, and multi-disciplinary clinical review.

Participants were placed in one of three levels of care:

o Track 1 Level V: 30-35 structured treatment hours weekly for 9-12 months

o Track 1 Level IV: 25-30 structured treatment hours weekly for 6-9 months

o Track 2 Level V/IV: 9-15 structured treatment hours weekly for 4-6 months

o Track 3 Level V/IV: 9 structured treatment hours weekly for 3-6 months

Length of treatment in R2R may vary depending on the level of care required. In addition, behavior and sanctions may impact the length of treatment. R2R was offered at Level V facilities HRYCI, SCI and BWCI beginning in early 2021. The program was able to function during the pandemic since individuals lived together on the same housing units.

Reflections

The Reflections Program was a 90-day residential program for individuals convicted of multiple DUI charges. Reflections utilizes a CBT-based approach in teaching participants better thinking skills related to substance use, particularly changing thoughts and behaviors related to alcohol consumption and driving. Because it is also a residential program, Reflections maintained functionality during the pandemic. The program functioned from late 2020 through the end of data collection (2022) at the Sussex Correctional Institution on a standalone unit.

Control Group

A control group of like situated individuals was created by DOC based on demographics, LSI-R scores, RNR assessment, and sentence length.

Data Collection and Analysis

Data collection procedures were three-pronged. First, the research team conducted fidelity observations of the TTT groups to ensure the program was being properly delivered. Incarcerated individuals in the TTT program were surveyed at intake, mid-point (three months into the program) and program completion on criminal thinking, penchant for risk taking, criminal peers, and social support. Second, recorded prison misconducts were examined, to test whether program participation lessened the likelihood of violations while incarcerated. Lastly, post-prison outcomes for those in the sample who were released are examined for arrest and reincarceration at 6 months and 1 year. Rather than structure the outcome report in terms of data, followed be measures and outcomes, the sections below report on the data, process, and outcomes for the three in-prison measures -- fidelity, surveys, and misconducts -- followed by post release outcomes.

Demographics

Table 1.1 illustrates the demographics of samples in both the control and treatment groups. The final sample size for the control group was 723 incarcerated individuals, whereas the final treatment sample size totaled 513 incarcerated individuals. Both groups consisted of majority male participants in their mid 30s, which was representative of the prison population. In addition, the treatment sample consisted of 260 (51%) individuals who identified as white and 253 (49%) individuals who identified as Black. Comparatively, the control group sample had a majority Black (68%) identifying sample.

The treatment group consisted of three types of CBT programs: Road 2 Recovery (R2R), Reflections, and Thinking Things Through (CBI-CC TTT). As noted earlier, R2R has three separate tracks; this treatment sample had 106 individuals in Track 1 (9%), 135 individuals in Track 2 (11%), and 59 individuals in Track 3 (5%). Also, the treatment program Reflections included 81 individuals (7%) and the TTT program was made up of 132 individuals (11%)..

Overall, 60 percent of the total sample was released from incarceration with 82 percent of the treatment cohorts released. In addition, 70 percent of the treatment sample successfully completed the program they were enrolled in and approximately 7 percent were terminated from the program.

Table 1.1 Demographic and Program Data

	Control	(N=723)	Treatmen	it (N=513)
Demographic Variables	N	%	N	%
Black	490	68%	253	49%
White	233	32%	260	51%
Hispanic	39	5%	24	5%
Male	706	98%	495	97%
Released	321	44%	418	82%
Program Variables				
R2R Track 1	-	-	106	9%
R2R Track 2	-	-	135	11%
R2R Track 3	-	-	59	5%
Reflections	-	-	81	7%
TTT	-	-	132	11%
Program Successfully Completed	-	-	362	70%
Program Terminated	-	-	113	7%
Program Unsuccessfully Completed	-	-	38	3%

Table 1.2 Median Age at Admission			
Control (N=723)	Treatment	(N=513)
Range	Median	Range	Median
16 – 71 yrs.	31	17 – 73 yrs.	35

Program Fidelity

Miller and Miller (2014) called for more comprehensive analyses for criminal justice programming and integration of fidelity measurements in program evaluation. However, the current study was not designed to evaluate program fidelity due to the small number of program groups which lack sufficient power for analyses. TTT treatment staff received training and follow-up from the University of Cincinnati team to ensure the program was delivered as intended. The research team was also trained and observed groups to monitor conformity to the intended implementation. While the post-COVID redesign made it difficult to observe groups the study sought to diversify our measurements by conducting 28 fidelity observations of the TTT classes. (Fidelity measures were not conducted of the R2R and Reflections groups.) Two of the 28 fidelity observations were not able to be used for data analysis due to insufficient class time. This stemmed from lockdowns in the facility that delayed the start times of classes and thus, did not allow an entire class period to be observed. Fidelity observations were conducted in eight different TTT classes offered in three different facilities in Delaware.

Despite limited analyses examining the effectiveness of maintaining fidelity in a CBT program, other criminal justice scholars argue that the duration of exposure to treatment, as well as delivery of treatment, are essential to treatment success (Miller and Miller 2014). Fidelity was scored utilizing the University of Cincinnati scoring guide; the guide is composed of six sections: Section A: Group Structure Format, Section B: Facilitating Models and Knowledge, Section C: Teaching Skills, Section D: Behavior Management, and Section E: Communication. Within each section are areas that represent the overall section (i.e. the area of building rapport is within Section E: Communications). These areas are scored using favorable and unfavorable indicators; in order to score satisfactory a facilitator must meet all of the favorable indicators without

scoring any unfavorable indicators. Next, a facilitator must score more favorable than unfavorable indicators to score a needing improvement, and finally a facilitator must score more unfavorable or no favorable indicators to score a missed opportunity². Figure 3 provides an example of a scoring area within a scoring section.

Figure 3: Example of Scoring Format

The Group Structure/Format section examines the o	tructure/Format overall group organization, preparation, and setting that rall group processes. s of the setting of the group session.
Favorable ☐ Group setting allows for confidentiality ☐ Facilitator to participant ratio is appropriate (maximum of 1:10 or 2:16) ☐ The seating arrangement is set up in a way that is inclusive (e.g., in a "U" shape, participants can make eye contact with facilitators and other participants) ☐ Participants have limited or no view of activities outside of the group ☐ There was enough seating for all participants ☐ Participants can write without difficulty (e.g., participants have a hard surface to write on) ☐ There is adequate room for structured activities (e.g., role plays)	Unfavorable ☐ Group setting has distracting background noise (e.g., loud HVAC system, repeated intercom calls, loud radios) ☐ There are outside individuals coming in and out of the room ☐ There are distracting or inappropriate visuals in the room (e.g., posters, participant artwork)
Total Favorable: Total Unfavorable:	Item A.1 Score: 0 1 2

Among the 28 observations, nearly all facilitators scored satisfactory in the areas of building rapport (86%), practicing active listening skills (96%), endorsing treatment (89%) and

² The University of Cincinnati describes their scoring guidelines as, "For each item to be scored, a series of favorable and unfavorable indicators have been outlined. Observers should check the appropriate boxes using the indicator scoring criteria below to determine if the item score should be 2, 1, 0, or Not Applicable. Favorable indicators are defined as components of the group that are an expectation. Unfavorable indicators are defined as an unexpected occurrence that would compromise the group or learning in some capacity. Do not mark an indicator if scoring remains in question" (UCCI Scoring Guide 2019:10)

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communicating respectfully with participants (86%). The facilitators' most favorable skill sets fall in the communication area, which represents strong respect, rapport, listening, and clarity skills. Although all the facilitators followed the manual for TTT, some groups had more favorable skills than others. For example, only 54% of facilitators scored *satisfactory* on involvement of all participants, whereas 46% scored *needs improvement*. Comparably, 38% of facilitators scored *needs improvement* for modeling techniques appropriately and efficiently, as well as 42% of facilitators scored *needs improvement* for ensuring all participants are effectively able to practice techniques. Use of authority was another area where most facilitators (74%) scored as *needing improvement*. Lastly, 50% of facilitators *needed improvement* in the clarity category, which indicated that the facilitator did not always provide instructions that were easy to follow. Despite the overall score reflecting the need for improvement in the previously discussed areas, it is important to note that all facilitators scored more favorable indicators than unfavorable but did not meet all of the favorable criteria.

Finally, only a handful of sections had more unfavorable indicators than favorable (see Tables 2.1 and 2.2). For example, one facilitator scored more unfavorable indicators in the responsivity section, which indicated this facilitator missed an opportunity to tailor their teaching style and deliver content in a manner that considers the learning needs of participants. Also, nearly all of the facilitators scored as needing improvement in two sections, appropriate setting and preparedness. This indicated that the group structure and formatting to adequately lead groups was rarely satisfactory. However, this was not the fault of the facilitator, rather this was a limitation of the prison environment. For example, not all rooms were equipped to lead groups based on the criteria set forth in cognitive behavioral intervention approaches. The three most impactful factors that made the groups not score *satisfactory* were 1) delayed start times of the

group due to uncontrollable prison movements, 2) inclusive seating arrangement due to layout of room, and 3) distracting noises, visuals, and outside interruptions during groups due to announcements and windows in rooms.

Table 2.1: Section A- Group Structure Format		
Variables	<u>N</u>	Percent
A.1 Appropriate Setting		
Missed Opportunity	0	0.0
Needs Improvement	27	96.0
Satisfactory	1	4.0
A.2 Prepared		
Missed Opportunity	0	0.0
Needs Improvement	26	93.0
Satisfactory	2	7.0
A.3 Manual		
Missed Opportunity	0	0.0
Needs Improvement	10	36.0
Satisfactory	18	64.0
A.4 Homework		
Missed Opportunity	0	0.0
Needs Improvement	7	27.0
Satisfactory	7	27.0
Not Applicable	12	46.0
A.5 Involves all Participants		
Missed Opportunity	0	0.0
Needs Improvement	13	46.0
Satisfactory	15	54.0
A.6 Time Management		
Missed Opportunity	1	4.0
Needs Improvement	9	32.0
Satisfactory	18	64.0
A.7 Visual Aids		
Missed Opportunity	0	0.0
Needs Improvement	4	15.0
Satisfactory	23	85.0
A.8 Endorses Treatment		
Missed Opportunity	0	0.0
Needs Improvement	3	11.0
Satisfactory	25	89.0

Table 2.2: Section B- Facilitating Knowledge/Modeling			
Variables	<u>N</u>	Percent	
B.1 CBT Skills			
Missed Opportunity	1	4.0	
Needs Improvement	4	15.0	
Satisfactory	10	39.0	
Not applicable	11	42.0	
B.2 Cognitive Restructuring			
Missed Opportunity	2	8.0	
Needs Improvement	4	15.0	
Satisfactory	9	35.0	
Not applicable	11	42.0	
B.3 Pro-Social Modeling			
Missed Opportunity	1	4.0	
Needs Improvement	5	19.0	
Satisfactory	20	77.0	
B.4 Responsivity			
Missed Opportunity	1	4.0	
Needs Improvement	11	39.0	
Satisfactory	9	32.0	
Not Applicable	7	25.0	
B.5 Problem Solving			
Missed Opportunity	0	0.0	
Needs Improvement	8	30.0	
Satisfactory	4	15.0	
Not applicable	15	55.0	

Despite the limitations of offering TTT in a correctional environment, the facilitators scored more favorably on fidelity observations, compared to unfavorably. Additionally, they portray strong communication and facilitation skills with areas for improvement in teaching skills, as well as doing their best with the space and materials provided to them by the institution. Overall, the facilitators of the TTT intervention groups showed room for improvement but demonstrated satisfactory skills.

TTT Participant Surveys

Baseline, midpoint, and follow-up surveys were collected from all TTT study participants. Surveys were based on the Texas Christian University Criminal Thinking Scales (CTS), which include 36 items from 6 scales representing Entitlement, Justification, Power Orientation, Cold Heartedness, Criminal Rationalization, and Personal Irresponsibility (Knight et al. 2006). All CTS scales were administered and items from the TCU Treatment Needs and Motivation Survey (MOTS) were included as well. The MOTS includes 36 items from 5 scales representing Problem Recognition, Desire for Help, Treatment Readiness, Treatment Needs Index, and Pressures for Treatment Index. Some of the MOTS scales were substance use specific and were modified or dropped for use with this population. The survey was administered at program enrollment, at three months through the program, and at program completion for the TTT group.

Surveys were voluntarily administered in group settings at the beginning of each TTT cohort. The research team had experience conducting surveys in Delaware DOC with high participation rates, so similar rates were expected for this survey. If a person joined the group late as a result of group attrition the new participant was surveyed within two weeks of program enrollment. Follow-up surveys were also administered in group settings at program completion. All surveys included SBI numbers which were verified with correctional staff to ensure accuracy.

Originally, randomization was proposed to compare standard programming to TTT programming using the survey measures. Unfortunately, the COVID-19 pandemic halted the ability to randomize control groups for survey data. However, prison misconduct and post-release recidivism data were assessed for the control group.

Survey Outcomes

Originally, surveys were administered to TTT participants at the beginning of the program and after completion of the program. However, due to the COVID-19 pandemic, participants in the first cohorts were not able to complete surveys at the end of programming. The DE DOC stopped all group programming, as well as mixing housing units in an attempt to reduce the spread of COVID-19. Thus, as previously discussed, the pandemic stopped all data collection, which limited our ability to administer completion surveys for the original group and baseline surveys for the cohorts that began later. In response to these challenges, the research team added an intermediate survey to measure participants' attitudes and perspectives halfway through the completion of the program. In total there were 276 respondents who completed a pre- or post-test. The post-test had a smaller sample size (N=102) compared to the pre-test (N=175). This is due to multiple factors including the researchers not allowed to enter the facilities due to COVID-19 pandemic to collect post surveys of three groups and TTT class participant's being terminated from the program. Since, the pandemic shut programming in the women's institution, only institutions with male incarcerate populations were utilized. The following analyses utilize a sample of participants only in Institution 1(N=140), the northern institution, and Institution (N=98), the southern institution.

Survey data utilized the TCU Criminal Thinking Scales. This measure consists of six scales: entitlement, justification, power orientation, cold heartedness, criminal rationalization and personal irresponsibility. For the purpose of this evaluation, a one-sample t-test was used to analyze the difference in criminal thinking from the beginning to the end of the TTT program. First, a one sample t-test analysis was utilized to determine the mean difference between the preand post- survey findings (N= 98 pre- and post-test respondents). Results indicated that there was

no significant difference between pre- and post-survey scores on any of the criminal thinking scales (see Table 3.1).

Table 3.1 One Sample T-Test Results Full Sample (N=98)			
Criminal Thinking Scales	Mean Difference	t-value	Effect Size
Entitlement	- 0.29	-0.95	3.02
Justification	- 0.13	-0.45	2.98
Cold Heartedness	- 0.03	-0.13	2.46
Power Orientation	- 0.51	-1.39	3.62
Criminal Rationalization	- 0.31	-0.85	3.65
Personal Irresponsibility	- 0.43	-1.38	3.13

Next, the average scores on the post-tests between two institutions that offered the class consistently, were compared and are shown in Table 3.2 (N=95 total post-test respondents). The northern institution scored significantly lower on the Criminal Rationalization and Personal Irresponsibility scales compared to the southern institution. This indicates that after finishing the TTT program participants at the northern institution reported less criminal thinking tendencies in areas of criminal rationalization and personal irresponsibility compared to the southern institution. This is surprising based on fidelity observations at the sites. However, the limited sample sizes and facilitator turnover could have contributed to these results. Surprisingly, the mean score of cold heartednesses increased at the northern institution compared to the southern institution, although the mean difference is not significant.

Table 3.2.

Comparison of Northern and Southern Institution Survey Results at Program Completion (N=95)

Criminal Thinking Scales	Mean Difference	t-value
Entitlement	- 0.27	-0.39
Justification	- 0.58	-0.855
Cold Heartedness	0.55	0.98
Power Orientation	- 0.92	-1.09
Criminal Rationalization	- 2.19**	-2.71
Personal Irresponsibility	- 1.39*	-2.02

Analytic Strategy for Misconduct and Recidivism Measures

As noted above, the COVID-19 pandemic made the original RCT research design unworkable. Thus, in collaboration with the DOC, the research team determined that the best way to salvage a study that would be beneficial to both the Delaware DOC and the field would be to examine the impact of all DOC programs utilizing CBT methodologies. Since randomization would no longer be used in the analysis, the research team utilized a weighting technique to account for group differences.

As a robustness check for our empirical analyses of outcomes for treatment and control groups, the team added a special set of weights to further isolate treatment effects. Weighting is a strategy that helps to diminish the influence of observable pretreatment differences across groups that can confound estimates of program impacts (Stuart 2010). That is, differences in outcomes among groups could be misattributed to treatment rather than to the distinctions in the underlying characteristics of groups (e.g., age or gender composition). Because the team examines the outcomes of six groups, we introduced multinominal propensity score weights developed by

researchers at RAND (McCaffrey et al. 2014; Ridgeway et al. 2016). Propensity score weighting effectively 1) gives more or less weight to individuals within groups, 2) yields balance in the observable characteristics of groups, and 3) better distinguishes programmatic effects in a non-randomized experimental setting.

Propensity score weighting is a machine-learning method to adjust for covariate imbalance across more than two groups (i.e., one or more treatment and/or control groups). The approach relies on a Generalized Boosted Model (GBM) to predict group membership as an iterative function of pretreatment group characteristics. This method allows for non-linear and interactive relationships among variables measuring an individual's characteristics. Predicted probabilities from this model identify the "propensity" for an observation with certain characteristics to fall into one group versus another. At the same time, the model generates the best set of probability weights that make treatment and control groups as similar as possible to one another, as represented by balance in average pretreatment characteristics.

We specified our GBM to balance groups according to the observable demographic characteristics in our data: race (i.e., Black or not Black), ethnicity (i.e., Hispanic/Latino or not Hispanic/Latino, age at admission, and gender (i.e., Male or not Male). We ran the algorithm through the Toolkit for Weighting and Analysis of Non-Equivalent Groups (TWANG) using the statistical analysis program R. We specified that the best parameters achieving covariate balance across groups should be identified after 3,000 iterations. After weights are applied to the treatment and control groups, the effective sample size is approximately 498 individuals. Because the weighted sample size fluctuates when reporting sample numbers, below we use unweighted numbers; however, means, rates and other estimates have been computed using weighted data unless otherwise specified.

Institutional Misconduct

Participation in a CBT program, such as TTT, should theoretically decrease institutional misconduct among participants. Misconduct data for this analysis were collected from the Delaware Automated Correction System (DACS), the Department's management information system for incarcerated individuals. All misconducts are tracked in DACS and the system can be queried. However, assessing the impact of program participation on misconduct can be difficult. For example, individuals can be recommended to a program based on institutional behavior, so people entering the program can be higher risk than what is captured by screening tools such as the LSI-R. Additionally some programs, especially residential programs, often utilize misconduct worthy behaviors as teachable moments within the program. This process can lessen the likelihood of receiving a misconduct for behavior or reporting of such behavior, compared to a general institutional housing unit. The study tracked misconducts for the entire sample (all treatment groups and the control group) from the point of admission to the point of release. The analytic approach examined the likelihood of misconduct prior to program admission, as well as the likelihood of misconduct after program admission. Results are presented below.

Table 4.1 depicts the number of misconducts by group. As shown in Table 4.1, the number of misconducts ranges from a minimum of zero to a maximum of 78 misconducts received by one individual during the period of incarceration examined by the study. There were differences across groups in the percent of persons receiving misconducts, whether assessed by total misconducts, preprogram misconducts, or misconducts received after program entry. The TTT group had the *highest* number of misconducts across all three measures. This is not surprising given that the program targets individuals who have exhibited behavioral issues and who are at earlier stages of their sentence for the most part. That being said, the number of

misconducts declined after the TTT program admission compared to before program entry (6.7 vs. 4.27).

Table 4.1 Number of Misconducts Total, Pre and Post Program Admission							
Program Group	insconducts Total, TTC 2	N N	Min	Мах	Mean	Std. Dev	% with Misconduct
	Total Misconducts	723	0	64	4.42	6.20	77%
Control	Pre-Program Admit Misconducts	NA	NA	NA	NA	NA	NA
	Post Program Admit Misconducts	NA	NA	NA	NA	NA	NA
	Total Misconducts	106	0	44	4.32	7.54	69%
R2R Track 1	Pre-Program Admit Misconducts	106	0	44	2.72	6.91	48%
	Post Program Admit Misconducts	106	0	16	1.59	2.77	48%
	Total Misconducts	135	0	43	4.25	6.94	68%
R2R Track 2	Pre-Program Admit Misconducts	135	0	38	3.10	6.26	51%
	Post Program Admit Misconducts	135	0	14	1.15	1.77	55%
	Total Misconducts	59	0	36	4.02	7.96	56%
R2R Track 3	Pre-Program Admit Misconducts	59	0	36	3.33	7.90	39%
	Post Program Admit Misconducts	59	0	6	0.68	1.22	36%
	Total Misconducts	81	0	10	0.44	1.45	16%
Reflections	Pre-Program Admit Misconducts	81	0	5	0.24	0.76	12%
	Post Program Admit Misconducts	81	0	5	0.2	0.781	9%
	Total Misconducts	132	0	78	10.97	14.87	92%
TTT	Pre-Program Admit Misconducts	132	0	77	6.70	10.85	80%
	Post Program Admit Misconducts	132	0	42	4.27	6.651	72%

Table 4.1 does not account for length of time and thus is confounded with time incarcerated. The misconduct numbers are shown to demonstrate the relatively high level of misconducts received by all persons examined in the study. In order to properly examine the effects of programming on misconducts it was necessary to control for time incarcerated. The rate of misconducts was calculated as the number of misconducts per month both prior to program admission and post program admission. The difference and misconduct rate were then calculated. Table 4.2 illustrates the mean differences in misconducts after program admission.

Table 4.2 Monthly Rate of Misconducts Pre and Post Program Admission						
Program	-	Min	Мах	Mean	Std. Dev	
Control	Monthly Rate	0	1.36	.1089	14.62	
R2R Track 1	Pre-Program Admit Rate	0	1.00	.1459	21.84	
	Post-Program Admit Rate	0	0.5	.0508	9.16	
R2R Track 2	Pre-Program Admit Rate	0	3.5	.1950	40.89	
	Post-Program Admit Rate	0	1.08	.0591	12.22	
R2R Track 3	Pre-Program Admit Rate	0	3.00	.2039	46.77	
	Post-Program Admit Rate	0	0.25	.0329	5.88	
Defications	Pre-Program Admit Rate	0	2.00	.0693	27.20	
Reflections	Post-Program Admit Rate	0	0.29	.0113	4.92	
	Pre-Program Admit Rate	0	1.22	.1902	22.42	
TTT	Post-Program Admit Rate	0	0.55	.0727	11.79	

Note: All pre-post differences are significant at p<.05.

Because the control group had no realistic change point such as program admission, the TTT group was used as a comparison group against the R2R programs and the Reflection DUI program. Mean differences between programs were calculated and Cohens D statistics utilized for effect sizes. As shown in Table 4.3, all groups demonstrated a decline in the monthly rate of misconducts after being admitted to the CBT programs, including TTT.

Table 4.3 Change in Monthly Rate of Misconduct after Program Admission						
	Mean Difference (All Reductions)	Std. Dev	Std. Error	Cohen's D		
TTT	0.08	0.161	0.006			
R2R Track 1	0.10*	0.216	0.007	0.12		
R2R Track 2	0.17*	0.401	0.013	0.26		
R2R Track 3	0.16*	0.272	0.009	0.33		
Reflections	0.02*	0.151	0.006	0.37		

Post Release Outcomes

Therefore, the study tested whether participation in the various CBT-based programs impacted post-prison arrest and reincarceration. Not all participants returned to the community during the study period, but for those released to the community, post-release arrest and reincarceration were tracked and analyzed. All arrests and incarcerations are tracked in the Delaware Justice Information System (DELJIS). Because the original design was jettisoned due to COVID-19, the revised design included receipt of post release data through October 18, 2023. Criminal history data were used to control for prior history in analyses. In addition, post-release arrest and

Recidivism is still an important primary outcome for prison-based interventions.

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reincarceration were analyzed to test whether participants were less likely to be arrested or return

to prison after release than the comparison groups. Differences in recidivism between the programs were also tested.

Table 5.1									
	Program Participants Released and Time at Risk								
Group	Not Released	Released	Total	% Released	Mean Days	180 Days	365 Days		
Control	402	321	723	44.4%	879	86%	66%		
R2R Track	10	96	106	90.6%	793	90%	66%		
R2R Track 2	12	123	135	91.1%	820	92%	70%		
R2R Track	7	52	59	88.1%	780	98%	69%		
Reflections	8	73	81	90.1%	310	99%	68%		
TTT	58	74	132	56.1%	1560	84%	73%		
Total	497	739	1236	59.8%	863	89%	68%		

As shown in table 5.1 the TTT group and the control group, were released at a lower rate than the R2R or Reflections groups. R2R is designed to take place at the end of a person's sentence; therefore, the vast majority of those individuals were released. The same is true with the Reflections group as program participation is designed as part of the sentence for persons convicted of multiple DUI's. The TTT group on the other hand, was specifically set up to occur earlier in a person's sentence precisely because part of the underlying goal is to change behavior in prison not only after release. The control group, because they are not tied to a program-based sentence, was less likely to be released. All groups served a significant amount of time incarcerated. The Reflections group served the least amount with the mean of 310 days, which was expected based on the nature of the program and DUI charges. All of the other groups served an average of well over two years. The TTT group was incarcerated for significantly

longer, based largely on the fact that the persons with the most serious criminal history are targeted for the program.

Rearrest

Table 5.2 shows the results of a series of cross tabulations using the weighted data to predict post release arrest for the total time at risk, those arrested within 180 days of release, 365 days of release, and 730 days of release. When examining the total time at risk those participating in the Reflections DUI program were arrested at the lowest rate (53.5%) followed by the TTT group at 59.5%. Persons charged with multiple DUI's and placed in a program like Reflections are arguably different than those classified to other programs in terms of criminality. When comparing the TTT group to the control group (64.7%) and R2R groups, the TTT group performed significantly better in terms of arrest (59.5% rearrested) when examining the total time at risk.

Table 5.2
Mean Percent of Persons Rearrested 180- and 365-days Post-Release
(Weighted data)
-

Programs	Total Time at Risk	180 Days	365 Days
Control	64.70%	37.4%	61.9%
R2R Track 1	70.30%*	19.8%*	41.7%*
R2R Track 2	67.30%*	27.0%*	55.2%*
R2R Track 3	69.00%*	27.6%*	57.0%*
Reflections	53.50%*	19.3%*	21.1%*
TTT	59.50%*	19.8%*	37.1%*
Total	64.90%	24.7%	46.4%

While arrest across total time at risk is useful, not all participants had the full time at risk. Therefore, a series of variables were created to analyze a specified person's risk for the entire time in each time category. Represented in Table 5.2, arrest categories of 180 days and 365 days were constructed. For each time category, a person would need to be at risk for the specified period of time and have been arrested within that period of time to be included in the percentage shown. When examining the 180-day category, the Reflections DUI program was again the lowest with 19.3% of that eligible group being arrested in the 180-day time. The TTT group and the R2R track one group were rearrested at the same rate of 19.8% within 180 days of release. This compares to approximately 27% for the R2R track two and track three groups, as well as 37.4% for the control group. Importantly, the R2R track one is a intensive, residential program consisting of 30 to 35 structured treatment hours a week, for 9 to 12 months, whereas tracks two and three range from 9 to 15 hours per week and three to six months. The treatment literature clearly demonstrates that dosage is an important factor in treatment, therefore these results are consistent with extant findings.

As time at risk increases, the arrest rate for all groups increases as expected. At 365 days, the Reflections group maintained the lowest arrest rate at 21.1%. The control group continued to demonstrate the highest rearrest rate at 61.9%, followed by R2R tracks two (55%) and three (57%). Interestingly, at 365 days the R2R track one group begins to diverge from the TTT group. R2R track one participants were rearrested at a rate of 41.7%, while TTT participants were rearrested at a rate of 37.1%. Therefore, the R2R track one and TTT have similar rearrest rates at 180 days, but the effect declines over time for the R2R track one group. Based on findings from this bivariate analysis, all programming is having an impact on post-release arrest. However, the more intensive programs, such as R2R track one and TTT, are having the most robust impact.

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CBI-CC

Below we report the results of categorical logistic regressions to investigate whether adding demographic variables and time in prison impacts the results. One approach to account for group differences when randomization is not possible, is through the propensity weighting techniques utilized above. Another approach is to simply control for the impact of measures associated with group differences. While the latter approach does not account for unmeasured differences in the error terms in the same way that propensity weighting does, controlling for the group differences is a useful and accepted mechanism for analyzing group-based data net of randomization. Both can be utilized by running regressions with the weighted data to doubly account for the group differences. We present the results of both methods below.

Table 5.3 shows the results of categorical regression models predicting post-release arrest at 180 and 365 days. Categorical regression methods were utilized comparing each program to the control group. The odds ratios presented in Table 5.3 for the program measures are thus comparing that particular group to the control group. Models were first run with the unweighted data and then rerun with the data weighted.

Table 5.3
Logistic Regression Predicting Arrest (Unweighted and Weighted Data)
Odds Ratios

	Unweighted		Weig	hted
Variables	180 Days	365 Days	180 Days	365 Days
Days Incarcerated	1*	1*	1*	1*
Male	0.81	0.87	0.87	0.92
White	0.74	0.74	0.93	0.83
Age at Admission	0.96*	0.97*	0.98*	0.98*
Control Group				
R2R Track 1	0.50*	0.49*	0.43*	0.47*
R2R Track 2	0.65	0.64	0.62*	0.73*
R2R Track 3	0.67	0.78	0.65*	0.74*
Reflections	0.33*	0.21*	0.41*	0.14*
TTT	0.49*	0.42*	0.45*	0.48*
Constant	4.10	10.09	1.69	5.15

Note: Control group is comparison

Regarding the demographic variables, neither race nor gender were significant in any of the models. The number of days incarcerated was significant and increased the likelihood of rearrest, while age at admission to prison was significant and decreased the likelihood of arrest in all models. The results of the unweighted data in the 1st and 2nd columns were comparable to the bivariate models. The Reflections program had the lowest rate of rearrest, followed by TTT, and

lastly by R2R track one. The odds of a participant in the Reflections program being rearrested at 180 days, was approximately one-third as likely as those in the control group (OR=.33). Next, participants in R2R track one and TTT were approximately half as likely to be arrested at 180 days than those in the control group (OR=.50 and .49, respectively). In addition, results were similar for the 365-day model. R2R tracks two and three were not significantly different from the control group in the 180- or 365- day arrest models.

In order to use the most robust and conservative analysis available with the data, Table 5.3 also reports the regression models utilizing the propensity score weights. This methodology doubly accounts for the demographic variables and length of time in prison because they are utilized in the weights and then also entered into the regression models. As shown in the table results, there is slight change although the overall trend is relatively stable. The Reflections program again shows the strongest negative effect on recidivism compared to the control group, followed by R2R track one and the TTT program. R2R track one and TTT returned very similar results when controlling for the amount of time in prison. When the weights are applied to the logistic regression model R2R track two and three show a significant impact on recidivism compared to the control group.

Reincarceration

In addition to post release arrest the study also sought to determine whether program participation had an impact on reincarceration. The reincarceration measure was generated from DELJIS data. Reincarceration is defined as any return to custody and includes return to prison for violations of supervision. While this measure is not ideal for determining the severity of any post-release criminal activity it does provide an additional gauge as to whether an individual was apprehended for engaging in behavior warranting being reincarcerated. As with the arrest data

the reincarceration analysis accounted for time at risk. As discussed above there were differences across groups for the percent of individuals released from custody during the study. As noted, this was due to the R2R program and Reflections DUI program being designed for implementation just prior to release, whereas the TTT program targeted individuals with more time left on their sentences in order to impact behavior within the institution. As noted in Table 5.1 above however, once released there was little difference between groups in the time at risk for post release outcomes.

A caveat needs to be made concerning the reincarceration data. Only 50 individuals were reincarcerated at the 180-day point and only 68 persons were reincarcerated at 365 days. This creates small sample issues for the analysis below, especially the regression analysis presented in Table 6.2. Results, while somewhat encouraging, should be interpreted cautiously.

Table 6.1 shows the results of cross tabulation analysis for reincarceration for the total time at risk as well as for 180 and 365 days at risk. As with the arrest analysis only those who had been in the community for 180 or 365 days are included in the analysis.

Table 6.1 Percent Reincarcerated by Group (Weighted Data)						
	Total	180 Days	365 Days			
Control	13.10%	5.70%	10.80%			
R2R Track 1	12.50%	9.70%	16.60%			
R2R Track 2	12.20%	12.20%	15.20%			
R2R Track 3	15.40%	11.60%	14.00%			
Reflections	6.80%	1.70%	9.90%			
TTT	4.10%	3.10%	3.50%			
Total	11.50%	8.10%	12.40%			

As shown in Table 6.1, the TTT group was reincarcerated at a significantly lower rate at 180 days than any other group with the exception of the reflections DUI group. At 180 days, 5.7 percent of the control group was reincarcerated while 3.1% of the TTT group was reincarcerated. A different pattern emerges with the R2R program compared to what was found in the arrest data. R2R participants in all three tracks were reincarcerated at higher rates than the control group at 180 days.

When examining the 365-day data the same basic pattern emerges except the Reflection DUI program participants were reincarcerated at a higher rate than the TTT group. All three R2R tracks exhibited higher reincarceration rates than did the control group or the TTT and Reflections DUI groups. Again, caution is called for when interpreting these results due to the small number of persons reincarcerated by the study end date.

In the interest of completeness logistic regressions were conducted in the same manner as in the arrest data presented above. Results are presented in Table 6.2. Caution is again urged due to the small number of people reincarcerated. Odds ratios are presented in Table 6.2 for both the unweighted and weighted regression models. As shown in the table below the unweighted models demonstrate very little of significance. The only items that rose to a significant level were R2R tracks 2 and three. Focusing on the program variables, utilizing the control group as the comparison group, all R2R programs again show higher reincarceration rates than the control group, controlling for gender, race, age at admission, and number of days incarcerated. The odds of R2R track 2 participants being rearrested were 2.65 times that of the control group while the odds of track 3 participants being reincarcerated was 3.3 times that of the control group at 180 days. When controlling for background factors the TTT program and R2R track one performed similarly, with the odds of being arrested for TTT and R2R track one participants being

approximately half that of the control group. This was true in both the unweighted and weighted models.

Tables 6.2 Logistic Regression Predicting Reincarceration						
	Unweighted Weighted					
	OR- 180 days	OR- 365 days	OR- 180 days	OR- 365 days		
Demographics						
Days Incarcerated	1.00	1.00	1.00	1.00		
Male	.288	1.002	0.31*	1.225		
White	.731	.724	0.636*	0.713*		
Age at Admission	.974	.980	0.99	0.98*		
Programs						
Control						
R2R Track 1	2.130	1.753	1.872*	1.64*		
R2R Track 2	2.625*	1.438	2.419*	1.476		
R2R Track 3	3.330*	1.750	2.225*	1.263		
Reflections	.786	1.018	0.339*	1.112		
TTT	.458	.317	0.489*	0.282*		
Constant	.541	.300	0.297	0.22		

Note: Models were significant utilizing Linear Association statistics.

Note: Control group is comparison

Using the propensity weights to doubly balance the data strengthen the impact of a number of variables. Focusing on the programmatic variables, the TTT group was significantly less likely than the control group or any of the R2R tracks to be reincarcerated at either 180 or 365 days. The odds of the TTT group being rearrested were approximately half as likely as control group. Only the Reflections DUI program group demonstrated lower odds of reincarceration. All R2R groups were reincarcerated at significantly higher rates than the control group at 180 days controlling for the background factors.

At 365 days the contrast between the TTT and other groups is more pronounced with the odds of the TTT group being reincarcerated being approximately 2.8 tenths that of the control group. We again reiterate that these results should be interpreted with caution due to the small number of persons being rearrested at 180 and 365 days. The bivariate crosstab tables presented above are likely a better indicator of reincarceration due to the simplified methodology utilized. Still, taking the bivariate and multivariate models together, the analyses do indicate that the TTT group performs better than the control group or other CBT groups when predicting reincarceration at 180 or 365 days.

Conclusion

Programming based on cognitive behavioral therapy is emerging as an evidence-based practice in corrections. Having already demonstrated effectiveness in other arenas the application of CBT programming among incarcerated adults may be a promising method to both improve the lives of the persons incarcerated and receiving the programs as well as improving public safety. This study attempted a rigorous evaluation of an intensive outpatient CBT program implemented among incarcerated adults.

The onset of the COVID-19 pandemic proved a serious detriment to implementing the study as planned. Having had the research shut down for a full 16 months created serious issues for the research team. Still through collaboration with our DOC partners a redesigned methodology and approach was employed. While it was not possible to conduct the originally planned randomized study of just the CBI-CC TTT program, instead, the project studied the impact of multiple DOC programs being implemented during the study period that employed CBT within their treatment regimen. The project thus examined the impact of the University of Cincinnati's Cognitive Behavioral Intervention Core Curriculum (CBI-CC), the residential Road

to Recovery (R2R) program, and the Reflections residential DUI program, compared to a comparison group not receiving CBT treatment, as well as comparisons between CBT programs.

While unable to complete the randomized design, a novel approach utilizing propensity weighting procedures to account for differences between groups was employed successfully in order to conduct the most robust set of analyses possible. While randomized designs are considered the gold standard for determining differences between groups in an intervention, propensity weighting can have some advantages. Specifically, the project was able to look across multiple programs and examine the impact on persons who were placed in them through the classification and referral process as it is conducted day-to-day in the DOC providing a much wider view of overall CBT programming than would have been possible under the original design. Findings indicate participation in programming had a significant impact on arrest and appears to have an impact on reincarceration. The research team is collaborating with DOC to obtain additional data later in 2024 when a longer time at risk can be examined. Thus, while the funded portion of the research project has ended, the team will continue to examine the study sample in order to determine program impact in the most robust way possible.

Discussion of Findings

While the findings indicate the positive impact of CBT-based programming on the behavior of persons involved, some of the findings are difficult to interpret. This is especially the case with institutional misconduct. Institutional behavior is confounded with program entry because the persons with the highest rates of misconduct are targeted for inclusion in the most intense programs. The mean number of misconducts for the TTT group was significantly higher than all other groups prior to program entry indicating a higher level of institutional problems prior to program entry. While there was a significant decline in the rate of misconducts from before TTT

program entry to after program entry this decline did not differ significantly from the decline observed in the other groups. It is difficult to untangle the reasons for this, but as discussed above, behavioral issues are dealt with differently in residential programs than they are on regular housing units where the TTT participants return to after their treatment sessions.

Misconducts are the result of a person acting in a manner against the rules as well as prison officials responding to that behavior by creating a report of a misconduct. The extent to which the behavior is dealt with in a different way on different units could impact the study's findings but the data collected for the current analysis is unable to tease that out.

The findings presented above demonstrate that there is a significant impact of long term intensive CBT programming on post release arrest and reincarceration. Utilizing weighted data to control for group differences at the bivariate level demonstrate that all of the program groups performed better in terms of rearrest than the control group. The Reflections DUI program members were rearrested at a lower rate than any of the other groups. As discussed above, that is likely the result of persons receiving multiple DUI's having different characteristics from those in the long-term CBT programs in ways that were not captured in the data, even through the weighting process. Reflections is often mandated for those with multiple DUI's even if they do not score high enough on the LSI-R to be included in the R2R or TTT programs. Among the other programs, TTT performed better than the control group or R2R groups at 365 days and better than control and R2R tracks two and three at 180 days. R2R track one and the TTT program participants were rearrested at the same rate of 19.8% at 180 days. The results indicate that while TTT showed signs of effectiveness, both long-term, high dosage programs (TTT, R2R track 1) demonstrated a significant impact on post release arrest.

While propensity weighting is useful for minimizing differences across groups, traditional mechanisms such as multivariate regression attempt to account for group differences as well. The current study utilized categorical logistic regression methods as well as conducting regressions with propensity weighting employed to doubly account for group differences. As demonstrated above results did not significantly change for the arrest outcomes between the unweighted to the weighted models. The CBT-based programs performed better in terms of arrests at 180 and 365 days when accounting for gender, race, age at admission, and number of days incarcerated. Neither race nor gender were significant in either model, whereas number of days incarcerated was significant and positive and age at admission was significant and negative in all models. R2R tracks 2 and 3 did not achieve significance in the unweighted data but did once the data were weighted. When controlling for background factors the TTT program and R2R track one performed similarly, with the odds of being arrested among TTT and R2R track one participants being approximately half that of the control group. This was true in both the unweighted and weighted models.

While the total number of persons who were reincarcerated was small across all groups, analyses were performed utilizing the same methods as in the arrest models presented above. Using weighted data in the bivariate models the TTT group was reincarcerated at a lower rate than all other groups except for the Reflections DUI program group at 180 days. Only 3.1% of the TTT group were reincarcerated at 180 days and 3.5% at 365 days. This compares to 5.7% of the control group at 180 days and 10.8% at 365 days. While the magnitudes of these differences may not appear overly large, the control group was reincarcerated at a rate three times that of the TTT group.

Power for the logistic regression models was not optimal, but 180-day and 365-day reincarceration logistic regression models were estimated again using unweighted and weighted data. We urge caution in interpreting the results of the logistic regressions due to the small number of persons reincarcerated, however results are encouraging in that the odds of the TTT group being reincarcerated were significantly less than the control group when the data weights were applied. As encouraging as those results are, the positive odds ratios for the R2R and Reflections program leave us suspicious of the accuracy of these models and hence we encourage caution in interpreting these results. We hope to revisit these models in the future when more data are available.

Overall, the findings presented above indicate that CBT-based programming has a significant impact in reducing recidivism, measured by arrest. This was true for all CBT programs examined, with the more intensive TTT and R2R track one programs showing the most robust effects. We find these outcomes even more impressive given that much of the study took place under COVID protocols which placed DOC under extreme pressure to maintain programming at any level. That the programs implemented and examined in this study returned positive results under these circumstances is extremely encouraging.

Implications for Policy and Practice

The current study adds to the growing body of research demonstrating the effectiveness of CBT-based programming in adult correctional populations. Part of what the research team learned in the course of the study was that intensive outpatient programming is difficult to administer in correctional environments. Conducting the TTT groups involved regular movement of incarcerated persons in the institution several times a week as well as occupying scarce space to conduct the groups. Especially in light of the COVID pandemic, hiring and maintaining

qualified program staff was challenging throughout the study. While the team was impressed with the interventionists we witnessed while conducting fidelity assessments there was a fair amount of turnover during the study, which clearly impacted fidelity as any change in program practitioners interrupts the flow of a treatment group. Staffing was also an issue for DOC security throughout the pandemic adding to the difficulty in implementing the outpatient program.

Considering the positive impact of the R2R track one and TTT, a possible direction is the expansion of long-term residential based CBT programming that specifically employs a curriculum such as CBI-CC TTT. Cognitive communities are growing in popularity and utilization in a number of states (Visher et al., 2020). It may be that implementing a program structured around a regimen similar to CBI-CC TTT could add to the effectiveness of such programs.

An interesting implication of study findings is that more than one option may be available for implementing correctional programming based on CBT principles. In addition to the outpatient TTT program, the R2R track 1 long-term residential program that implemented elements of CBT within its structure had a significant impact on post release outcomes. Because both demonstrated effectiveness, correctional practitioners may be able to choose programming based on their space and staffing structure and still achieve significant behavioral change. The current study thus adds to the literature on the effectiveness of CBT-based prison programming and does so in a way that shows the impact of numerous implementation methodologies thus providing correctional program administers more options.

Limitations

As stated above it is not possible to gauge the full impact of the COVID-19 pandemic on the current study. While the research team collaborated with the Delaware DOC to the best of our ability, the study that was implemented was clearly not the study that was originally intended. The results indicating a positive impact of the programs delivered in this environment is a credit to the Delaware DOC for their perseverance. The research team remained flexible in order to carry out a useful study under difficult circumstances.

Within that framework there are several limitations. As noted above we are unable to tease out the misconduct findings in terms of the interaction of behavior and response across different units. Another limitation was the small number of persons reincarcerated during the study. We thus noted above that reincarceration findings, especially the multivariate findings, be approached with caution.

Future Research

Future research should continue to test the impact of different CBT-based interventions on both in prison and post release behavior. The current study has shown a certain level of effectiveness, but more research is needed. Future directions in addition to replication should investigate different modalities across residential and outpatient models and different levels of dosage. Fidelity as measured by the University of Cincinnati observation tool was clearly not optimal and yet the programs as delivered demonstrated significant effects. This raises the question of what fidelity means in terms of manualized CBT-based program delivery. Lastly, qualitative research and research that involves program participants at both the staff and the recipient level needs to be conducted to gain a better level of understanding of how change occurs, how it is internalized, and how it affects those individuals involved. CBT-based

programming for incarcerated persons continues to show promising effects and provides another tool for correctional practitioners for improving the lives of the people in their care and for improving public safety in the community.

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Appendix: Participant Surveys

University of Delaware Department of Correction Program Evaluation Survey.

The University of Delaware is asking you to fill out this survey. The survey seeks to learn about your thoughts and opinions. Your participation in this survey is voluntary. Only the University will know who you are by information provided on the consent form and the numeric ID on the survey. DO NOT PUT YOUR NAME ON THIS BOOKLET. No identifying information should be on the survey other than the ID number. This will retain your privacy. No identifying information will be made available to DOC or anyone else. You don't have to answer any questions you don't want to. There is no penalty if you choose not to fill out the survey or any part of it. Only mark one answer for each question and completely fill in each answer bubble. REMEMBER, this isn't a test, so there are no right or wrong answers. We need HONEST ANSWERS. If you don't find an answer that fits exactly, choose the one that comes closest. If it's something you just dont understand, raise your hand for help.

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	Disagree	l		Agree	46
Please Fill in the Bubble that Best Tells Us How You Feel	Strongly	Disagree	Agree	Strongly	45
1) V C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					44
1) You feel people are important to you.	0	0	0	O	43
2) You think of several different ways to solve a problem.	0	0	0	0	41
3) You make good decisions.	0	0	0	0	39
4) Laws are just a way to keep poor people down.	0	0	0	0	38
5) It is okay to commit crime in order to pay for the things you need.	0	0	0	0	36
6) You have paid your dues in life and are justified in taking what you want.	0	0	0	0	34 33 32
7) It is okay to commit crime in order to live the life you deserve.	0	0	0	0	31
8) You are locked-up because you had a run of bad luck.	0	0	0	0	29
9) This country's justice system was designed to treat everyone equally.	0	0	0	0	27
10) Bankers, lawyers, and politicians get away with breaking the law every day.	0	0	0	0	25 24
11) You may be a criminal, but your environment made you that way.	0	0	0	0	23
12) You find yourself blaming the victims of some of your crimes.	0	0	0	0	21
13) You feel you are above the law.	0	0	0	0	19
14) You are not to blame for everything you have done.	0	0	0	0	18
15) Society owes you a better life.	0	0	0	0	16 15
16) Nothing you do here is going to make a difference in the way you are treated.	0	0	0	0	14 13 12
17) The real reason you are locked-up is because of your race.	0	0	0	0	11
18) Your good behavior should allow you to be irresponsible sometimes.	0	0	0	0	9
19) Prosecutors often tell witnesses to lie in court.	0	0	0	0	7 6
20) You worry when a friend is having problems.	0	0	0	0	5
21) You rationalize your actions with statements like "Everyone else is doing it, so why shouldn't I?"	0	0	0	0	3 2

53 52	Please Fill in the Bubble that Best Tells Us How You Feel	Disagree Strongly	Disagree	Agree	Agree Strongly
50	22) Police do worse things than do the "criminals" they lock up.	0	0	0	0
49	23) Breaking the law is no big deal as long as you do not physically harm someone.	0	0	0	0
47	24) When people tell you what to do, you become aggressive.	0	0	0	0
45	25) You justify the crimes you commit by telling yourself that if you had not done it, someone else would have.	0	0	0	0
43	26) Seeing someone cry makes you sad.	0	0	0	0
41	27) You find yourself blaming society and external circumstances for the problems in your life.	0	0	0	0
39 38 37	28) When not in control of a situation, you feel the need to exert power over others.	0	0	0	0
36	29) Anything can be fixed in court if you have the right connections.	0	0	0	0
35	30) It is unfair that you are locked-up when bankers, lawyers, and politicians get away with their crimes.	0	0	0	0
33	31) You argue with others over relatively trivial matters.	0	0	0	0
31	32) You are sometimes so moved by an experience that you feel emotions you cannot describe.	0	0	0	0
29	33) Please fill in the "Uncertain" bubble as your response here.	0	0	0	0
27 26	34) When being asked about the motives for engaging in crime, you point out how hard your life has been.	0	0	0	0
25	35) You have family members who want you to be in treatment.	0	0	0	0
22	36) You think you have to pay back people who mess with you.	0	0	0	0
21	37) The only way to protect yourself is to be ready to fight.	0	0	0	0
19 18 17	38) You get upset when you hear about someone who has lost everything in a natural disaster.	0	0	0	0
16	39) You need help in dealing with your problems.	0	0	0	0
15	40) If someone disrespects you then you have to straighten them out, even if you have to get physical.	0	0	0	0
13	41) It is urgent that you find help immediately for your problems.	0	0	0	0
11 10 9	42) You have too many outside responsibilities now to be in a treatment program.	0	0	0	0
8 7	43) You feel you are unimportant to others.	0	0	0	0
6 5	44) This treatment may be your last chance to solve your problems.	0	0	0	0
4	45) You are tired of your problems.	0	0	0	0

Please Fill in the Bubble that Best Tells Us How You Feel	Disagree Strongly	Disagree	Agree	Agree Strongly	53 52
46) You have legal problems that require you to be in treatment.	0	0	0	0	51
47) You will give up your friends and hangouts to solve your problems.	0	0	0	0	49
48) You can solve your problems without any help.	0	0	0	0	47
49) You feel a lot of pressure to be in treatment.	0	0	0	0	45
50) You could be sent to jail or prison if you are not in treatment.	0	0	0	0	43
51) You want to be in a treatment program.	0	0	0	0	41
52) You like to be in control.	0	0	0	0	39 38 37
53) You have much to be proud of.	0	0	0	0	36 35
54) This treatment program can really help you.	0	0	0	0	34
55) You are in this treatment program because someone else made you come.	0	0	0	0	32
56) You want to get your life straightened out.	0	0	0	0	30
57) You plan to stay in this treatment program for a while.	0	0	0	0	28
58) This kind of treatment program will not be very helpful	0	0	0	0	26
59) You are concerned about legal problems.	0	0	0	0	25
60) This treatment program seems too demanding for you.	0	0	0	0	22
61) Your life has gone out of control.	0	0	0	0	21
62) You wish you had more respect for yourself.	0	0	0	0	19
63) In general, you are satisfied with yourself.	0	0	0	0	17
64) You make decisions without thinking about consequences.	0	0	0	0	15
65) You feel you are unimportant to others.	0	0	0	0	13
66) You plan ahead.	0	0	0	0	10
67) You feel like a failure.	0	0	0	0	8
68) You think about what causes your current problems.	0	0	0	0	6
69) You have trouble making decisions.	0	0	0	0	5 4 3

53 52	Please Fill in the Bubble that Best Tells Us How You Feel	Disagree	Strongly	Disagı	ee	Agre	e Agre	e Strongly		
51	70) You consider how your actions will affect others.	0		0		0 0		0		
50 49 48	71) You think about probable results of your actions.	0		0		0		0		
47	72) You feel you are basically no good.		0	0		0	0 0			
46	73) You analyze problems by looking at all the choices.		0	0		0 (0		
44	74) You think you are a criminal.	0		0	0		0			0
42 41 40	In the Past Two Months, How Often Have You Been Visited By:	Never	1 to 3 Times	4 to 6		to 9	10 + Times	Does Not		
39	•							,		
38	75) A Spouse or Boyfriend/Girlfriend	0	0	0		0	0	0		
36 35	76) A Parent (e.g. mother, father, other guardian)	0	0	0		0	0	0		
34	77) A Child	0	0	0		0	0	0		
32	78) Other Family Member (e.g.sibling, aunt, uncle, grandparent)	0	0	0		0	0	0		
30	79) Close Friends	0	0	0	0		0	0		
28	80) Other. If So, Please Specify	0	0	0		0	0	0		
26 25	81) You receive mail and/or phone calls from friends or family.	y. Yes 🔾			O No			lo 🔿		
24 23 22	Please Answer the Following Based on the Person Who Visits MOST OFTEN			agree	Dis	agree	Agree	Agree Strongly		
21	82) Your relationship with this person is very important to you.		0		0		0	0		
19	83) You have a great deal of respect for this individual.		0				0	0		
17	84) You typically get warmth and affection from this person du	ring vis	its.		0		0	0		
16 15	85) You feel stress or pressure during these visits.		0		0		0	0		
13	86) This person would not be upset if you started committing or	rime aga	in. O		0		0	0		
12	87) You receive support and encouragement during these visits	s.	0		0		0	0		
9	88) You often argue or fight with this person during visits.		0		0		0	0		
7	89) You plan on spending time with this person once you are re	eleased.	0		0		0	O		
7 6 5	90) This person is unlikely to provide financial support (e.g. he		0		0		0	0		
7 6		lp with						0		

University of Delaware Department of Correction Program Evaluation Survey.

The University of Delaware is asking you to fill out this survey. The survey seeks to learn about your thoughts and opinions. Your participation in this survey is voluntary. Only the University will know who you are by information provided on the consent form and the numeric ID on the survey. **DO NOT PUT YOUR NAME ON THIS BOOKLET.** No identifying information should be on the survey other than the ID number. This will retain your privacy. No identifying information will be made available to DOC or anyone else. **You don't have to answer any questions you don't want to.** There is no penalty if you choose not to fill out the survey or any part of it. **Only mark one answer for each question and completely fill in each answer bubble.**REMEMBER, this isn't a test, so there are no right or wrong answers. We need <u>HONEST ANSWERS</u>. If you don't find an answer that fits exactly, choose the one that comes closest. If it's something you just dont understand, raise your hand for help.

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	Disagree			Agree	46
Please Fill in the Bubble that Best Tells Us How You Feel	Strongly	Disagree	Agree	Strongly	45
		_	_		44
1) You feel people are important to you.	0	0	0	0	43
2) X/ 41: 1 C 11:00 4 4 1 11					42
2) You think of several different ways to solve a problem.	0	0	0		41
2) Van mala and decisions					40
3) You make good decisions.	0	0	0		39
4) Laws are just a way to keep poor people down.					38
Laws are just a way to keep poor people down.	0	0	0	0	37
5) It is okay to commit crime in order to pay for the things you need.	0	0			35
					34
6) You have paid your dues in life and are justified in taking what you			0		33
want.					32
7) It is okay to commit crime in order to live the life you deserve.	0		0		31
					30
8) You are locked-up because you had a run of bad luck.	0		0		29
					28
9) This country's justice system was designed to treat everyone equally.	0	0	0		27
					26
10) Bankers, lawyers, and politicians get away with breaking the law	0		0	0	25
every day.					24
11) You may be a criminal, but your environment made you that way.	0	0	0	0	23
					22
12) You find yourself blaming the victims of some of your crimes.	0	0	0	0	21
					20
13) You feel you are above the law.	0	0	0	0	19
					18
14) You are not to blame for everything you have done.	0	0	0	0	17
15) 0 1-4 1:6-					16
15) Society owes you a better life.	0	0	0	0	15
16) Nothing you do here is going to make a difference in the way you are					14
treated.	0	0	0	0	13
17) TI 1 1 1 1 C	_	_	_		12
17) The real reason you are locked-up is because of your race.	0	0	0		11
18) Your good behavior should allow you to be irresponsible sometimes.	_		_		10
10) Total good behavior should allow you to be irresponsible sometimes.	0	0	0	0	9
10) Dungan antong a front of 1 miles against a line in a count					8
19) Prosecutors often tell witnesses to lie in court.	0	0	0		7
20) You worry when a friend is having problems.					6
	0	0	0		5
21) You rationalize your actions with statements like "Everyone else is					4
doing it, so why shouldn't I?"	0	0	0		3 2
This Descend was finded by the National Institute of Institute Assessed	0040 75 01/	0000		60	1 2

53 52	Please Fill in the Bubble that Best Tells Us How You Feel	Disagree Strongly	Disagree	Agree	Agree Strongly
50	22) Police do worse things than do the "criminals" they lock up.	0	0	0	0
49 48	23) Breaking the law is no big deal as long as you do not physically harm someone.	0	0	0	0
47	24) When people tell you what to do, you become aggressive.	0	0	0	0
45	25) You justify the crimes you commit by telling yourself that if you had not done it, someone else would have.	0	0	0	0
43	26) Seeing someone cry makes you sad.	0	0	0	0
41	27) You find yourself blaming society and external circumstances for the problems in your life.	0	0	0	0
39 38 37	28) When not in control of a situation, you feel the need to exert power over others.	0	0	0	0
36	29) Anything can be fixed in court if you have the right connections.	0	0	0	0
35 34 33	30) It is unfair that you are locked-up when bankers, lawyers, and politicians get away with their crimes.	0	0	0	0
32	31) You argue with others over relatively trivial matters.	0	0	0	0
31	32) You are sometimes so moved by an experience that you feel emotions you cannot describe.	0	0	0	0
29	33) Please fill in the "Agree" bubble as your response here.	0	0	0	0
27 26	34) When being asked about the motives for engaging in crime, you point out how hard your life has been.	0	0	0	0
25	35) You have family members who want you to be in treatment.	0	0	0	0
22	36) You think you have to pay back people who mess with you.	0	0	0	0
21	37) The only way to protect yourself is to be ready to fight.	0	0	0	0
19	38) You get upset when you hear about someone who has lost everything in a natural disaster.	0	0	0	0
17 16	39) You need help in dealing with your problems.	0	0	0	0
15	40) If someone disrespects you then you have to straighten them out, even if you have to get physical.	0	0	0	0
13	41) It is urgent that you find help immediately for your problems.	0	0	0	0
10	42) You have too many outside responsibilities now to be in a treatment program.	0	0	0	0
9 8 7	43) You feel you are unimportant to others.	0	0	0	0
6 5	44) This treatment may be your last chance to solve your problems.	0	0	0	0
4	45) You are tired of your problems.	0	0	0	0

Please Fill in the Bubble that Best Tells Us How You Feel	Disagree	Disagree	Agree	Agree	53
Trease I iii iii the Bubble that Best Tells 03 How Tou I eel	Strongly		7.9.00	Strongly	51
46) You have legal problems that require you to be in treatment.	0	0	0	0	50
47) You will give up your friends and hangouts to solve your problems.	0	0	0	0	48
48) You can solve your problems without any help.	0	0	0	0	46
49) You feel a lot of pressure to be in treatment.	0	0	0	0	43
50) You could be sent to jail or prison if you are not in treatment.	0	0	0	0	42
51) You want to be in a treatment program.	0	0	0	0	40
52) You like to be in control.	0	0	0	0	38
53) You have much to be proud of.	0	0	0	0	36
54) This treatment program can really help you.	0	0	0	0	34
55) You are in this treatment program because someone else made you come.	0	0	0	0	32
56) You want to get your life straightened out.	0	0	0	0	30
57) You plan to stay in this treatment program for a while.	0	0	0	0	28
58) This kind of treatment program will not be very helpful	0	0	0	0	26 25
59) You are concerned about legal problems.	0	0	0	0	24
60) This treatment program seems too demanding for you.	0	0	0	0	22
61) Your life has gone out of control.	0	0	0	0	20
62) You wish you had more respect for yourself.	0	0	0	0	18
63) In general, you are satisfied with yourself.	0	0	0	0	16
64) You make decisions without thinking about consequences.	0	0	0	0	14
65) You feel you are unimportant to others.	0	0	0	0	13
66) You plan ahead.	0	0	0	0	10
67) You feel like a failure.	0	0	0	0	8
68) You think about what causes your current problems.	0	0	0	0	6
69) You have trouble making decisions.	0	0	0	0	5 4
	•			•	3

53 52	Please Fill in the Bubble that Best Tells Us How You Feel	Disagree	Strongly	Disagr	ee	Agre	e Agre	e Strongly		
51	70) You consider how your actions will affect others.	0		0				0		
50 49 48	71) You think about probable results of your actions.	0		0				0		
47	72) You feel you are basically no good.		0	0		0		0		
46	73) You analyze problems by looking at all the choices.		0	0		0		0 0		0
43	74) You think you are a criminal.		0	0	0			0		
41 40	In the Past Two Months, How Often Have You Been Visited By:	Never	1 to 3 Times	4 to 6 Times		to 9	10 + Times	Does Not		
	now Oiten have rou been visited by.				-					
39 38 37	75) A Spouse or Boyfriend/Girlfriend	0	0	0		0	0	0		
36 35	76) A Parent (e.g. mother, father, other guardian)	0	0	0		0	0	0		
34	77) A Child	0	0	0		0	0	0		
32	78) Other Family Member (e.g.sibling, aunt, uncle, grandparent)	0	0	0		0	0	0		
30	79) Close Friends	0	0	0		0	0	0		
28	80) Other. If So, Please Specify	0	0	0		0	0	0		
26 25	81) You receive mail and/or phone calls from friends or family	y. Yes 🔿			No			o ()		
24 23 22	Please Answer the Following Based on the Person Who Visits MOST OFTEN			agree	Dis	agree	Agree	Agree Strongly		
21	82) Your relationship with this person is very important to you.	•	0		0		0	0		
19	83) You have a great deal of respect for this individual.		0		0		0	0		
17	84) You typically get warmth and affection from this person du	ring vis	its.		0		0	0		
15 14	85) You feel stress or pressure during these visits.		0		0		0	0		
13	86) This person would not be upset if you started committing c	rime aga	ain.		0		0	0		
11	87) You receive support and encouragement during these visits	•	0		0		0	0		
9	88) You often argue or fight with this person during visits.		0		0		0	0		
7	89) You plan on spending time with this person once you are re	eleased.	0		0		0	0		
5 4	90) This person is unlikely to provide financial support (e.g. he paying bills) if you need it when you are released.	lp with	0		0		0	0		
3	91) This person will provide emotional support after you are re	leased.	0		0		0	0		