REPORT OF AN OUTCOME BASED STATISTICAL ANALYSIS OF THE RESIDENTIAL SUBSTANCE ABUSE TREATMENT (RSAT) PROGRAMS OF THE SOUTH CAROLINA DEPARTMENT OF CORRECTIONS

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EXECUTIVE SUMMARY

On October 1, 2013, System Wide Solutions, Inc. (SWS) of Columbia SC was awarded a contract by the SC Department of Public Safety (SCDPS). The purpose of the contract was to conduct an outcome based statistical analysis of the Residential Substance Abuse Treatment (RSAT) programs of the South Carolina Department of Corrections (SCDC). The analysis is a quasi- experimental design. Individuals who participated in the RSAT program who were released from custody during State FY's 2005, 2006, 2007, 2008, and 2009 are the study population while a matched group of individuals in three other circumstances released at the same time are the comparison groups.

A comprehensive literature review was conducted prior to the analysis taking place. A Data Collection Plan was agreed to by SWS, SCDC and the SCDPS during the early fall of 2013. The dataset was provided by SCDC in November of 2013. Additional questions regarding data and program operations were answered by SCDC in early March of 2014. The analysis was conducted during March and early April of 2014. There are a number of limitations to the study, centering around two issues. These are the use of a database intended for administrative purposes for research purposes and potential selection bias for inmates chosen for the RSAT programs.

There are eleven findings of the study. These findings are:

1. For women, participation in the SCDC RSAT and ATU programs greatly reduces the likelihood of being re-incarcerated at 12, 24 or 36 months after release.
2. For men, there appears to be little difference in re-incarceration rates at 24 or 36 months after release except in comparison to similar inmates from the same institutions at which the treatment programs are located.
3. The RSAT and other ATU programs have similar results.
4. Certain demographic and program variables may have a significant influence on re-incarceration and these influences have a greater effect on the rate of re-incarceration than does program participation.
5. Any participation, successful or not, has a positive influence on re-incarceration for women who participated in the SCDC RSAT or ATU and has a lesser positive influence on re-incarceration for men who participated in the SCDC RSAT or ATU.
6. The use of administrative data systems such as that used for this study limits the reliability of evaluation and analysis for RSAT and other programs.
7. Qualitative data such as interviews with staff and program participants would greatly aid in assuring a more reliable set of data.
8. A quasi-experimental design using a matched comparison group may not be the appropriate methodology to determine the efficacy of addiction treatment programs in correctional institutions.
9. Recidivism studies of the success of addiction treatment programs in correctional institutions should take into account post-release factors as well as pre-release factors.

10. Hazard ratios can be determined using existing SCDC data and these ratios could be helpful in determining individualized planning for inmates.
11. The SCDC potentially can utilize previous studies to improve the performance of the RSAT programs it operates.

There are seven recommendations in the study. These recommendations are:

1. It is recommended that a study be conducted using mixed methods and with an experimental design to determine with greater reliability the effects of RSAT and other addiction treatment programs at SCDC. The design of the study should take into account post-release as well as pre-release factors.
2. It is recommended that the women's RSAT and ATU programs be continued as they are currently operated.
3. It is recommended that the men's RSAT and ATU programs be examined for potential improvements.
4. It is recommended that a study be conducted to more closely examine other variables that lead to improved re-incarceration rates.
5. It is recommended that SCDC consider the development of hazard ratios for its inmates and utilize these ratios to individualize planning.
6. It is recommended that the SCDC utilize previous studies to improve the performance of the RSAT's it operates.

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INTRODUCTION

On October 1, 2013, System Wide Solutions, Inc. of Columbia SC was awarded a contract by the SC Department of Public Safety (SCDPS). The purpose of the contract was to conduct an outcome based statistical analysis of the Residential Substance Abuse Treatment (RSAT) programs of the South Carolina Department of Corrections (SCDC). The analysis is a quasi-experimental design. Individuals who participated in the RSAT program who were released from custody during State FY's 2005, 2006, 2007, 2008, and 2009 are the study population while a matched group of individuals in three other circumstances released at the same time are the comparison groups. During the study period, the RSAT programs were operated by a private provider. The SCDC began directly operating the programs on July1, 2012.

Literature on RSAT Programs in Correctional Facilities

Decades of research in the US and elsewhere support the observation that alcohol and drug abuse is interlinked with crime. Nearly one-third of all arrests in the US are alcohol or drug-related[1]. Eighty percent of offenders in the U.S. criminal justice system report having substance abuse problems, according to a 2003 study by the National Center on Addiction and Substance Abuse at Columbia University. In addition, during the last 20 years, the growth rate of incarceration in the United States has increased by 385 percent. This increase in the prison and jail population can be directly related to the increase in the number of offenders with alcohol and drug problems.[2] These high rates of incarceration have both a monetary and social cost. Nevertheless, substance abusing inmates who completed treatment were less likely to be rearrested after release, especially if residential treatment was followed by aftercare services, according to a study funded by the U.S. Department of Justice's National Institute of Justice.[3] Prison programs that can demonstrate effectiveness are more likely to garner higher levels of public support.

In response to the growing need for substance abuse services, Federal funding for the Residential Substance Abuse Treatment for State Prisoners, known as RSAT, was first established in the Omnibus Crime Control and Safe Streets Act, Pub. L. 90-351, Title I, 82 stat.197 (1968) and subsequently updated in The Violent Crime Control and Law Enforcement Act of 1994 (CFDA # 16.593): This act establishes a program of federal grants administered by the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice to help states, territories and units of local governments develop, implement, and improve residential substance abuse treatment programs in state and local correctional and detention facilities. It also helps them create and sustain community-based aftercare services for probationers and parolees. The 300+ current RSAT programs operate in all 50 states and US territories, varying in the specifics,

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[1] *Weisheit*, R. (*2009*). *Drugs and the Criminal Justice System*. In J. Miller (Ed.), *21st Century criminology: A reference handbook.* (pp. 666-675). Thousand Oaks, CA:

[2] McColl, W. and Sokoni.O. Treatment Instead of Incarceration. *Behavioral Health Management.* March/April 2003 Vol.*T.* Number 2.

[3] Hiller, M, Knight, K and Simpson D.: (1999) Prison Based Substance Abuse Treatment, Aftercare and Recidivism. *Addiction*, 94(6), 833-843.

depending on their settings and populations served.[4] The two programs under consideration for this report in SC at Turbeville and Leath Correctional Institutions are an outgrowth of this initiative. The state has operated at least one RSAT program since 1997.

Assessment of the success of such programs in reducing both re-arrest/re-incarceration and relapse to prior substance abuse patterns has produced mixed results. This review will summarize findings from RSAT program studies and several meta-analyses that are most applicable to the current evaluation.

Since its inception, numerous process evaluations of RSAT programs have been conducted and have been followed by outcome evaluations at many sites. However, results overall have been inconclusive due to barriers to conducting treatment evaluation in prison settings (see Harrison & Marin, 2003; Miller, 2008; Miller, Koons-Witt, & Ventura, 2004), especially the masking of theoretical failure by implementation failure and a general lack of research design rigor.

These constraints inhibit confidence in observed treatment effects (e.g., pre-post test designs without comparison groups). A national evaluation of all the RSAT programs from onset to midpoint was also conducted and found that conclusions regarding success and best practices determination were precluded by faulty data and weak causality designs (Lipton, Pearson, & Wexler, 2000).[5]

Notwithstanding these limitations to conducting sound research in prison settings, there is a considerable body of research from the past 20 years about "what works' in increasing the effect size of prison interventions if certain principles are followed, as first established by Gendreau and Goggin in 1996 and subsequently replicated by more than 45 meta-analyses. The following offers a brief description of each principle[6]:

1. Programs should be *intensive and behavioral* in nature. The most effective programs last between three and nine months and occupy at least 40 percent of the offenders' time with behavioral interventions (Gendreau, 1996).

2. Programs should *target known predictors of crime*. The most effective programs target the dynamic risk factors (i.e. criminogenic needs) of higher risk offenders (Gendreau, 1996).

3. Behavioral programs should use *standardized assessments* to identify the risk level, need level, and responsivity factors of offenders. Research has also found that the most effective programs target higher risk offenders; that is, they match the level of service to the level of risk (Gendreau, 1996)

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[4] Report: Substance Abuse Treatment for State Prisoners (RSAT) (April 2005) Residential Program Bureau of Justice Assistance,

[5] Lipton, D. S., Pearson, F. S., & Wexler, H. K. (2000). *National evaluation of the residential substance abuse treatment for state prisoners program from onset to midpoint-Final report*. New York: National Development and Research Institutes, Inc.

[6] Gendreau, P., Little, T. and Goggin, N, C. (1996), A Meta-analysis of the Predictors of Adult Offender Recidivism: What Works! Criminology, 34: 575–608. doi: 10.1111/j.1745-9125.1996.tb01220.x

4. Programs should *match the characteristics of the offenders, therapists, and programs*.

5. Program contingencies and behavioral strategies should be *enforced in a firm but fair manner and drug testing* should be a routine part of the program.

6. Programs should have *well-qualified and well-trained staff* who can relate to the offenders. It is also important for staff to be educated and to receive adequate training and supervision (Gendreau, 1996).

7. Programs should provide *relapse prevention strategies*. These include access to supportive community services.

These seven principles have had been influential in the programming followed in the RSAT programs at the state and Federal level. However, fidelity to these principles has varied widely, yielding mixed result, as indicated in many state and Federal RSAT evaluations, some of which will be cited here for illustration and their pertinence to the current study.

A study conducted by Prendergast et al (2003)[7] suggests that multiple outcome measures, such as interviews to determine days after release to first use or days to first criminal activity, as well as other behavioral data, may be more valid measures of prison treatment success, not simply a dichotomous measure of re-incarceration or failure of drug testing. Additional findings were that prisoners randomly assigned to treatment performed significantly better than controls on days to first illegal activity, days to first incarceration, days to first use, type of re-incarceration, and mean number of months incarcerated. In this study, no differences were found in type of first arrest or in drug test results. Not surprisingly, those who completed both prison-based and community-based treatment did significantly better on every measure than subjects who received lesser amounts of treatment. Subjects were most vulnerable to recidivism during the 60 days after release, suggesting that more intensive services during this period may be helpful in reducing risk.

The work of Pellisier et al (2005)[8] provides a clear research methodology for conducting a comprehensive study regarding whether there were program differences in post-release outcomes in 20 federal in-prison substance abuse programs that used a cognitive-behavioral treatment approach. One of the study programs had notably poorer outcomes. Their results suggest that, after controlling for individual differences, implementation of a treatment approach which has been shown to be effective - cognitive-behavioral treatment - can result in comparable outcomes across programs, despite differences in program implementation**.** The SC programs under consideration at Turbeville and Leath both have been described as based on such a cognitive-behavioral model. However, the degree of fidelity or adherence to the stated program model was outside the scope of this evaluation and is, therefore, unknown.

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[7] Prendergast, Michael L.; Hall, Euzabeth A.; Wexler, Harry K. *Journal of Offender Rehabilitation.* 2003, Vol. 37 Issue 3/4, p65-94. 30p.

[8] Pelissier, Bernadette; Motivans, Mark; Rounds-Bryant, Jennifer L. *Journal of Offender Rehabilitation.* 2005, Vol. 41 Issue 2, p57-80. 24p.

Many authors of RSAT studies address the issue of selection bias in affecting outcomes. Some RSAT programs accept volunteers, some give prisoners reduced time or other incentives for volunteering, some use random assignment, and some are described as assigning prisoners to treatment based on staff assessment of their substance abuse severity or degree of risk for reoffending. Each of these methods carries a risk of selection bias. A few studies have used sophisticated statistical methods, notably the Heckman approach[9], to adjust for this factor.

The Pellissier study mentioned above found that individuals who entered and completed in-prison residential treatment were less likely to experience the critical post-release outcomes of new arrests and substance use during the first 6 months following release. The authors noted that although there have been process evaluations of in-prison residential programs throughout the United States, outcome evaluations have been limited to programs in six state prison systems as of the date of their study. They state that evaluations typically reported that treatment lowered recidivism (as measured by arrests, reconvictions and return to prison), decreased post-release drug use, and curtailed self-reported illegal activities. Pellissier and her colleagues noted that there are, however, significant methodological weaknesses in the majority of these studies, the most common and most important being the lack of attention to the problem of selection bias. They cautioned that results might be attenuated if selection bias was not controlled for. Their study did address selection bias in their analysis.

Regarding the method of staff assessment in selecting participants for treatment, a 2013 paper by Miller and Maloney[10] addresses the use of risk/needs assessment tools by front line community corrections staff, as gathered through a national survey. Their analysis showed that tools were mostly filled out when required, but staff decisions were not always based on the tool result. Although about half of the tool-using subgroup were "substantive" compliers who completed tools carefully and tended to use them for decision making, the remaining tool users were "formal" in their compliance. The latter group filled out the tools, but often made decisions that did not correspond with tool results; in some cases they even manipulated the information included in them. Multivariate analysis suggests that practitioners' belief in risk/needs tools, agency monitoring and training, perceptions of agency procedural justice, and agencies' projected confidence in their local risk/need tool may help explain patterns of compliance and noncompliance. These findings have relevance to the current study inasmuch as the SWS evaluators have no information about the degree to which front line staff at Turbeville and Leath used diagnostic guidelines or assessment tools consistently and correctly and to what degree they followed the results in making assignment to the treatment group. Therefore, evaluators did not have sufficient data to determine fidelity to admission guidelines nor selection bias.

The most recent study of the RSAT program in SC, conducted by Miller and Miller (2011) followed a quasi-experimental design with a matched control group. Their analysis showed that the CRA graduates actually reoffended and relapsed at a slightly higher rate than did those subjects in the comparison group identified by matched sampling from the SCDC YOA

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[9] James J. Heckman and Richard Robb. Alternative Methods for Evaluating the Impact of Interventions: An Overview. .*Journal of Econometrics* 30 (1985) 239-267. North-Holland

[10] Miller, Joel and Maloney, Carrie: Practitioner Compliance With Risk/Needs Assessment Tools: A Theoretical and Empirical Assessment. *Criminal Justice and Behavior*. March 11, 2013, doi: 10.1177/0093854812468883. Accessed April 2, 2014.

population. The authors caution that the differences between the two groups were not statistically significant. Their findings nonetheless suggest that the SC program was not effective in terms of achieving its intended objectives.

The Miller and Miller study cites implementation failure as a factor in assessing whether the treatment was effective. They stated that their study could not accurately assess the effectiveness of RSAT in SC because of numerous factors, such as the structure of the program itself, which includes such features as recruitment and training of treatment staff and the rate of staff turnover. In the South Carolina RSAT study, both areas were identified as problematic. Miller and Miller concluded that the CRA program did not have a measurable impact on the subsequent use of drugs by offenders while under community supervision when compared to the control group. They also found, contrary to expectations, that drug testing frequency after release was a significant factor precluding failure, contrary to the conventional view that increased testing identifies greater use. After controlling for all other factors in the model, offenders subjected to a greater number of drug tests during their community supervision were significantly less likely to fail during the follow-up period (b = −.435, p < .000). This finding suggests that offenders tested more often for drugs during community supervision were more likely than controls to be successful during the 12 months following release.

The literature summarized above forms a context in which to interpret the findings of the current evaluation of the RSAT at both the Turbeville and Leath Correctional Institutions. Of particular interest are the degree to which findings are consistent with prior studies and how the limitations of the current evaluation fit with observations of other researchers.

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Lana D. Harrison and Steven S. Martin, Residential Substance Abuse Treatment for State Prisoners: Implementation Lessons Learned, NCJ 195738 (Washington, DC: U.S. Department of Justice, National Institute of Justice, (2003). https://www.ncjrs.gov/pdffiles1/nij/195738.pdf. Web-only document. Accessed March 31, 2014

Paul Gendreau, Tracy Little and Claire Goggin. A Meta-analysis of the Predictors of Adult Offender Recidivism: What Works! Criminology: Volume 34, Issue 4, pages 575–608, November 1996. Article first published online: 7 MAR 2006. Accessed April 1, 2014.

Description of the SC RSAT Programs

The SCDC has two long running RSAT programs, one for males sentenced under the Youthful Offender Act (YOA) at the Turbeville Correctional Institution (CI) and the other for straight time

females at the Leath Correctional Institution (CI). Today and during the time period covered by this study, the unit at the Turbeville CI consists of a structured, residential facility that provides addictions treatment to offenders through a Therapeutic Community (TC). The facility itself consists of a dormitory that houses 272 offenders and a program building that provides office space and meeting rooms for treatment activities. Both buildings are inside the grounds of the Turbeville CI and called the Wyboo Unit.   The TC has a daily schedule of meetings and activities, a clearly defined set of rules and each member of the TC has tasks and duties. Each member of the TC has a responsibility to the other members of the TC. The TC focuses on the community and utilizes a variety of techniques that motivate the offender to examine his thought processes, past decisions, addiction, anger management and life skills. Through the treatment, offenders learn to develop individual responsibility and responsibility to the community. The program is designed to last six months, but offenders must complete all activities and assignments in each phase before they can progress to the next phase. The minimum length of stay in the residential program of six months may be extended up to 12 months.

The estimated length of time for each of the major phases in the Turbeville TC are:

Program Phase	Minimum Time	Maximum Time
Orientation/Assessment Phase	4 weeks	8 weeks
Intensive Treatment Phase	12 weeks	24 weeks
Re-Entry/Transitional Planning Phase	8 weeks	20 weeks
Total	6-12 months residential program	
Continuing Care (Community)	6-12 months of continuing care is recommended	

Clients successfully completing the residential program participate in continuing care at their own expense upon returning to the community. Prior to the offender's release from SCDC, a copy of the client's treatment record is forwarded to the Continuing Care provider. The providers are the addictions treatment program of the County Alcohol and Drug Abuse Authority in the client's county of residence. The services provided include, but are not be limited to an assessment, crisis management, individual counseling, group counseling, case management, and intensive outpatient treatment. Upon discharge, in addition to an aftercare appointment, the Continuum client will also be given a pocket sized resource/referral card relevant to their needs. Five members of the treatment team, two Senior Counselors, the Intake Coordinator and the two Clinical Records Specialists function as the Transition/Aftercare Monitoring Team. This team assists the offender to create a personalized aftercare plan, identify aftercare providers in the offender's home community, work with the offender's family and coordinate with SC Department of Probation, Pardon and Parole (SCDPPS) as necessary. Inmates released from this program into the community are placed under the supervision of SCDPPPS, where they are subject to periodic drug testing to determine if they are remaining AOD free. Results of the SCDPPPS administered drug tests are tracked for evaluation. In addition for continued support to the recovering offender, a phone line identified as (1-800-ATU-HELP/1-800-4357), is available to provide continued support and resources/referrals.

The criteria for entering the program are as follows:

- Program services are for those male inmates who have been sentenced under the Youthful Offender Act.
- Must be classified as dependent by the SASSI or DDS, or assessed as dependent by a qualified substance abuse or mental health professional;
- Must have successfully completed an SCDC Addiction Treatment Unit during current period of incarceration and/or be eligible for labor crew/work release program;
- Must have a minimum of 6-12 months remaining on sentence;
- Must have no victim/witness opposition;
- Must have no detainers remaining that are category 4 or 5;
- Must have no documented acts of violence 18 months prior to admission.
- Received a score of three (3) or above on the Texas Christian University Drug Dependency Screen (TCUDDS). Those who received a score of three (3) or above on the TCUDDS were randomly selected for program admission as bed space became available. Generally, anyone who answered "YES" to 3 or more of the questions on the TCUDDS received a "YES" to the question "Does this offender need substance abuse treatment"; otherwise, the offender received a "NO". There was no attempt to triage based on the number of "YES" responses on the TCUDDS. The maximum score on the TCUDDS is 11.

The women's RSAT was located at the Leath Correctional Institution in the past and now is located at the Camille Griffin Graham Correctional Institution. The RSAT consists of a structured, residential facility that provides addictions treatment to offenders through a modified Therapeutic Community (TC) with a heavy emphasis on cognitive re-structuring and eliminating criminal thinking. Each member of the TC has a responsibility to the other members of the TC. The unit was designed to house 96 inmates, but the new unit has 48 inmates. The RSAT program is housed in a separate housing unit from the general population.

The program is designed to last six months, but offenders must complete all activities and assignments in each phase before they can progress to the next phase. The minimum length of stay in the residential program is six months and may be extended up to 9 months. Inmates participate in classes, groups and other highly structured activities that enable them to reach the following goals:

1. Develop pro-social values and positive attitudes.
2. Develop anger management and violence reduction techniques.
3. Develop relapse prevention skills.
4. Identify and learn to cope with urges and cravings for criminal behaviors and drug use.
5. Effectively utilize peer support.
6. Discover new kinds of personal satisfaction, novel and healthy sources of recreation, relaxation and productive outlets for creative energy.
7. Learn problem solving skills
8. Develop a continuing recovery plan to assist in maintaining a crime- and drug-free life.

The estimated length for each of the major phases in the Leath TC are:

PROGRAM PHASE (Leath)	Length of Program Component
Orientation/Assessment	8 weeks
Intensive Treatment Phase	10 weeks
Re-Entry/Transitional Planning Phase	8 weeks
Total	6-9 month residential program
Continuing Care (Community)	1 year or more

Clients successfully completing the residential program participate in continuing care at their own expense upon returning to the community. Prior to the offender's release from SCDC, a copy of the client's treatment record is forwarded to the Continuing Care provider. The providers are the addictions treatment program of the County Alcohol and Drug Abuse Authority in the client's county of residence. The services provided include, but are not be limited to an assessment, crisis management, individual counseling, group counseling, case management, and intensive outpatient treatment. Upon discharge, in addition to an aftercare appointment, the Continuum client will also be given a pocket sized resource/referral card relevant to their needs. Five members of the treatment team, two Senior Counselors, the Intake Coordinator and the two Clinical Records Specialists function as the Transition/Aftercare Monitoring Team. This team assists the offender to create a personalized aftercare plan, identify aftercare providers in the offender's home community, work with the offender's family and coordinate with SC Department of Probation, Pardon and Parole (SCDPPS) as necessary. Inmates released from this program into the community are placed under the supervision of SCDPPPS, where they are subject to periodic drug testing to determine if they are remaining AOD free. Results of the SCDPPPS administered drug tests are tracked for evaluation. In addition for continued support to the recovering offender, a phone line identified as (1-800-ATU-HELP/1-800-4357), is available to provide continued support and resources/referrals.

The criteria for entry into the women's programs are as follows:

- Must meet custody/security level for the assigned institution;
- Must be classified as dependent by the SASSI or DDS, or assessed as dependent by a qualified substance abuse or mental health professional;
- Must be within 6-12 months from max out release date or be granted conditional parole relating to substance abuse treatment needs;
- Must not be convicted of a current and/or prior sex crime;
- Must not have a Category 4 or 5 detainer;
- Must be medically compliant and stabilized if the inmate is diagnosed as mentally ill;
- Must have no documented acts of violence six (6) monthly prior to admission.
- Must be at a minimum of 1 year from parole date
- Received a score of three (3) or above on the Texas Christian University Drug Dependency Screen (TCUDDS). Those who received a score of three (3) or above were randomly selected for program admission as bed space became available. Generally, anyone who answered "YES" to 3 or more of the questions on the TCUDDS received a "YES" to the question "Does this offender need substance abuse

treatment"; otherwise, the offender received a "NO". There was no attempt to triage based on the number of "YES" responses on the TCUDDS. The maximum score on the TCUDDS is 11.

Current SCDC Policy requires that RSAT inmates undergo both random drug testing by the agency as well as additional testing by the RSAT staff. A percentage of the inmates enrolled are randomly selected for testing by staff at least three times during their participation in the program. Inmates may also be tested when they move from one phase of treatment to the next.

Successful completion from both RSAT programs is determined by the inmate's positive participation, progress in completing program treatment phases, positive community behavioral changes, progression of individual treatment plan goals/objectives and program attendance.

Other Treatment Programs

SCDC operated two additional Addiction Treatment Units (ATUs) during the time period covered by his study. These were at Lee CI (for adult/straight time men) and Goodman CI (for women).   Both of these programs were funded by state dollars.

METHODOLOGY

Purpose of the Study

The purpose of this study is to compare the re-incarceration rates of inmates who took part in the RSAT programs at the SCDC to the re-incarceration rates of similar inmates who did not take part in the RSAT programs. The comparisons take place at six, twelve, 24 and 36 month intervals after release from SCDC facilities.

Evaluation Design

This study was conducted using a quasi-experimental design utilizing a matched comparison group. The match was made based on TCUDD score, dates of incarceration, and eligibility for the RSAT program.

Development of a Data Collection Plan

The SWS team met on October 10, 2013 with representatives of the SC Department of Public Safety (SCDPS) and SC Department of Corrections (SCDC) to discuss the goals of the analysis and the availability of data. Following the meeting, a series of draft Data Collection Plans were developed and circulated among all parties. A final plan was completed on October 21 and a formal request for data made.

Collection of Data

The datafile from SCDC was ready on November 6, 2013 and picked up on CD by SWS on November 8, 2013. Questions asked in the data request document were answered.

Preparation of Data

Creation of a Main Record

The purpose of the main record is to create a starting point by which all other data is analyzed. Each individual in the study has one and only one Main Record.

Release records were pulled for all inmates released from custody during State FY's 2005, 2006, 2007, 2008, and 2009. The total number of records was 67,090. If the individual was released more than once in a particular fiscal year, the most recent release was selected. Records where the commitment resulted in death, or the inmate was remanded or resentenced were excluded. The result was 64,701 releases from custody between FY2005-2009 (note that an individual may have been released from custody more than one time during this period).

Second, the appropriate admissions record for this release was identified. Duplicate admission records in the datafile were identified and removed according to criteria provided by the SCDC. The most recent record where the admissions date was earlier than the release date and the Most Serious Offense was matched was connected to the release record, resulting in 57,404 matching admissions records.

The final step in creation of the Main Record was to join the release and admissions record to the appropriate TCUDD record. This was done by pulling the most recent TCUDD record administered prior to the release date. Duplicate TCUDD records were updated or removed form the datafile according to criteria provided by the SCDC. The same TCUDD record may be used for multiple admissions. This resulted in 44,382 records with an admission, release, and TCUDD record. These three datasets records were combined to create one Main Record per incarceration. Of these, 13,712 were male inmates ages 25 or younger at the time of sentencing and therefore eligible for RSAT at Turbeville, and 5,029 were female inmates eligible for RSAT at Leath.

Identification of Study Groups

Services provided to inmates were classified into program categories according to service description, location, and service dates, as prescribed by information provided by the SCDC. The codes are as follows:

> 1 - RSAT program
> 2 - Other ATU
> 3 - Other Alcohol/Drug Treatment Program
> 4 - Substance Abuse Services Other
> 5 - Other Non-Substance Abuse Services

Services that were included in classification 5 above were further categorized into the following types of services:

> 6 – Therapy/Counseling (not ATOD specific)
> 7 – Education/Employment Skills
> 8 – Social/Coping Skills
> 88– Other (not able to be coded into one of the above categories)
> 99 – Process Code

The programs/services received by each inmate were matched to the Main Record identified above where the program services were delivered between the admissions date and the release date. Of the 18,741 main records, program data that matched according to these criteria was available for 14,012 inmates. A primary program category was assigned to each incarceration by calculating the minimum program category in which the individual participated. Of the 2,363 individuals who were in the RSAT program during State FY's 2005 to 2009, 1,894 were successfully matched to a Main Record. The 416 who were not included in the study were admitted prior to State FY 2005, released after State FY 2009, or were not male under 25 or female.

The dataset was filtered so that the individuals included in the dataset met the eligibility criteria set forth by the program. Those individuals who met all criteria and for whom all data was available to determine eligibility and to stratify the dataset were included in the study. Although not specifically stated as being an eligibility criterion, it was identified that all of the treatment participants were either citizens or naturalized citizens. Therefore, individuals who were considered aliens or foreign nationals were excluded from the dataset. After excluding records based on these criteria, 5,582 releases remained in the dataset.

1. **TCUDDS Score:** Only those records where the associated TCUDD score was greater than or equal to 3 were selected for analysis. 371 records of individuals who participated in the RSAT program were excluded because their TCUDD score was less than three. 88 of these individuals had a Most Serious Offense Category of "Dangerous Drugs"; however, the remaining had other types of offenses, the most common of which were burglary, assault, and robbery. It is assumed, based on the criteria provided, that these individuals were assessed and deemed to be substance abuse dependent by a qualified professional which resulted in the referral to ATU; however, it could not be established whether individuals in the comparison group had also been so classified by a professional. Because this eligibility criterion could not be accounted for in the comparison group, these program participants were excluded from the study.
2. **Previous Convictions:** For women, individuals who had been convicted of a sex crime or who had been convicted of a violent crime six months prior were excluded. For men, individuals who had been convicted of a violent crime within 18 months prior were excluded.
3. **Length of Commitment:** Individuals whose commitment sentence was for less than six months were excluded.

Therefore, the study group includes 5,582 individuals identified as being substance abuse dependent, who met the criteria to participate in the program, who were admitted and released during State FY's 2005, 2006, 2007, 2008, and 2009, and for whom all data elements necessary for analysis were available. Of those, 1,451 were RSAT participants, 321 participated in an ATU at a different location, 406 participated in other alcohol or drug treatment programs, 1,262 received other substance abuse services, and 142 did not receive any substance abuse services. This resulted in a non-program comparison group of 443 women who have similar characteristics to those who participated in the RSAT program at Leath Correctional Institution and 1,008 men who have similar characteristics to those who participated in the RSAT program at Turbeville Correctional Institution.

Treatment Group

Multiple incarcerations for individuals were eliminated to establish a single incarceration "baseline" record for each individual. If an inmate participated in the RSAT program at any point during the study period, that record was selected as the main record. For all other individuals, the first incarceration during the study period was selected as the main study record. All later incarcerations are used in the calculation of recidivism. Therefore, the treatment group includes 443 women who participated in the RSAT program at Leath Correctional Institution and 1,008 men who participated in the RSAT program at Turbeville Correctional Institution.

Comparison Groups

Three types of comparison groups were available and utilized in the analysis. The first is an "institutional comparison" for both the Leath RSAT and Turbeville RSAT groups. The institutional comparison includes 49 women who were at Leath during the same time as the program group but who did not participate in the program, and 310 men who were at Turbeville during the same time as the program group but who did not participate in the program. This group is utilized in the comparison to determine what, if any, impact would have resulted from the correctional institution, independent of the RSAT program.

The second comparison group is a "similar program comparison" for both the Leath and Turbeville RSAT groups. The similar program comparison includes 166 women who participated in the ATU at Goodman Correctional Institution and 155 men who participated in the ATU at Lee Correctional Institution during state FY's 2005-2009. This group is utilized in the comparison to determine how the impact of the RSAT program may be different from the impact of a different intensive treatment unit.

The third and final "non-program comparison" is a stratified random sample of individuals from different institutions (other than Leath, Turbeville, Goodman, and Lee), who did not participate in an ATU, but were also identified as being substance dependent based on the TCUDD. These comparison groups were stratified to each program group to be similar in gender, race, marital status, community region (Upstate, Midlands, PeeDee, and Lowcountry), and severity of the most serious offense. When an exact match could not be found, the closest match was identified by varying the severity of the most serious offense.

Variables Included in the Analysis

The following demographic variables were included in the analysis.

1. Race
2. Gender
3. Age (at first offense, commitment, release)
4. Marital
5. GED/HS Diploma/Education Level
6. Citizenship
7. County/locale of residence (rural/urban/suburban)
8. Prior convictions (number of offenses, number of instances of offenses, age at first offense, type and severity of most serious offense prior to program participation)
9. Most Serious Offense for current commitment (category, county of offense, severity)
10. Score on the TCUDD.
11. Security level classification
12. Medical Classification (calculated as the most severe during commitment event)
13. Mental Health Classification (calculated as needing substance abuse services, other mental health services, or no mental health service needs identified)
14. Participation in therapy or counseling (not ATOD specific), education or employment services, and social skills training
15. Time served

16. Type of release (maxed out, probation, parole, community supervision)
17. Reason for treatment termination (successful or unsuccessful)
18. FY of reentry to the community

Recidivism measurements follow the guidelines set forth by the Association of State Correctional Administrators (ASCA) for the counting of recidivism. These measurements are indicative of convictions occurring after the release date for which the individual is re-commitment to a correctional facility. The variables included are:

1. Whether or not the individual recidivated at 6 months, 12 months, 24 months and 36 months
2. Number of months to first re-offense (for those who were re-incarcerated)
3. Most Serious Offense for first instance of re-offense (category, severity, technical violation)
4. Most Serious Offense of all re-offenses (category, severity, technical violation)

Age at first re-offense was evaluated as a potential outcome variable; however, this data was highly dependent upon the age of the individual at admission. It was determined that the number of months to first re-offense was a better measure of time passed to re-offense.

Technical violations were not clearly indicated as such in the dataset provided. Technical violations were identified as such when the offense date occurred prior to the release date and the sentence and commitment dates were after the release date.

Baseline Equivalence between the Treatment and Comparison Groups

The baseline equivalence of groups was analyzed by determining if significant differences between the groups existed on any of the demographic variables. The groups were divided by gender, so that the RSAT participants at Leath were compared with other females in correctional facilities that met the eligibility criteria for the program but did not participate.

The analysis compared the 444 women who participated in RSAT at Leath to 658 women at Leath and other correctional institutions who did not participate in RSAT. By the very nature of the stratification process, the RSAT group was not significantly different from the non-program comparison on race, marital status, severity of most serious offense, and community region. The institutional comparison and the similar program comparison were not significantly different in race, marital status, community region, or severity of most serious offense. The lack of significance may be due in part to smaller numbers of participants in these groups. There were also no significant differences between the groups in education level and severity of any prior offenses.

The most common categories of most serious offense for individuals in the treatment group are burglary (13.8%), dangerous drugs (31.4%), larceny (9.9%), forgery/counterfeiting (14.9%), assault (5.4%), family offense (4.7%), and fraudulent activity (6.8%). The proportions in the subgroups are similar enough to be comparable.

The similar program comparison group is significantly different from the treatment group in the age at admission and age at first offense. Between the groups, the similar program comparison group is comprised of individuals who were approximately five years younger at admission than any of the other three groups (*F=16.18, df=3, p<0.001*). In addition, these individuals were also between three and six years younger, on average, at the age of their first offense than the other three groups (*F=7.24, df=3, p<0.001*).

The non-program comparison group is significantly different from the treatment group in the average TCUDD score (*F=21.5, df=3, p=0.030*). On average, the treatment group scored 0.5 points higher on the TCUDD than their non-program counterparts. It is possible that this difference represents an unobserved difference between the groups (selection effect).

Table 1: Baseline Characteristics of Women Treatment and Comparison Groups

	Treatment Group	Institutional Comparison	Similar Program Comparison	Non-Program Comparison
Total in Group	443	49	166	443
Race				
Black	35.9%	32.7%	33.1%	35.9%
White	63.7%	63.3%	66.3%	63.7%
Other	0.4%	4.0%	0.6%	0.4%
Marital Status				
Common Law	15.6%	14.3%	8.4%	16.3%
Divorced	14.2%	14.3%	11.4%	15.6%
Married	20.5%	18.4%	16.3%	19.9%
Separated	12.9%	14.3%	12.7%	12.9%
Single	33.0%	34.7%	48.8%	32.7%
Widowed	3.8%	4.1%	2.4%	2.7%
Community Region				
Lowcountry	7.7%	4.1%	11.4%	7.7%
Midlands	25.1%	28.6%	31.9%	25.1%
PeeDee	16.3%	10.2%	15.1%	16.3%
Upstate	51.0%	57.1%	41.6%	51.0%
MSO Severity	2.43	2.31	2.37	2.39
SE	*0.04*	*0.10*	*0.05*	*0.03*
TCUDD Score	7.43	7.02	7.37	6.92
SE	*0.12*	*0.33*	*0.21*	*0.13*
Education Level at Admission	10.70	10.24	10.64	10.69
SE	*0.09*	*0.30*	*0.14*	*0.09*
Age at Admission	35.51	35.88	30.78	35.61
SE	*0.38*	*1.12*	*0.66*	*0.40*
Age at First Conviction in Inmate History	28.22	31.20	24.84	28.17

N, SE	*257, 0.46*	*25, 1.61*	*88, 0.70*	*265, 0.45*
Most Serious Conviction in Inmate History	2.42	2.32	2.28	2.42
N, SE	*257, 0.05*	*25, 0.13*	*88, 0.08*	*265, 0.05*

"N" = number of members of the category   "SE" = Standard Error

The analysis compared the 1,008 men who participated in RSAT at Turbeville to 1,473 men at Turbeville and other correctional institutions who did not participate in RSAT. By the very nature of the stratification process, the RSAT group was not significantly different from the non-program comparison on race, marital status, severity of most serious offense, and community region. The treatment and non-program comparison groups were significantly different in years of education, age at admission, age of first offense and TCUDD score. The non-program comparison group had on average about 0.15 more years of education ($F=6.06$, $df=3$, $p<0.001$), was on average 1.4 years older at admission ($F=76.4$, $df=3$, $p<0.001$), was about 10 months older on average at the age of first prior offense ($F=18.6$, $df=3$, $p<0.001$), and had a slightly lower average TCUDD score ($F=9.33$, $df=3$, $p<0.001$). On average, the treatment group scored 0.6 points higher on the TCUDD than their non-program counterparts. It is possible that this difference represents an unobserved difference between the groups (selection effect).

The most common categories of most serious offense for individuals in the treatment group are burglary (31.3%), dangerous drugs (18.3%), larceny (4.8%), robbery (12.1%), assault (13.3%), stolen vehicle (4.3%), and weapon offense (6.5%). The proportions in the subgroups are similar enough to be comparable. There are slightly higher proportions of individuals convicted of dangerous drug offenses (25%) and weapon offenses (10%) in the non-program comparison.

The similar program comparison is significantly more likely to be white ($\chi^2=14.98$, $df=6$, $p=0.020$), be from the Midlands or Upstate ($\chi^2=27.94$, $df=9$, $p=0.001$), and be convicted of more serious offenses (*mean difference=0.27, p<0.001*) than the treatment group.

The institutional comparison group is significantly different from the treatment group in the severity of offense, age at admission and age at first offense. The institutional comparison group is comprised of individuals who were convicted of offenses an average of 0.23 points higher than the treatment and non-program comparison groups ($p<0.001$) and were about 1.98 years younger at admission ($p<0.001$).

Table 2: Baseline Characteristics of Men Treatment and Comparison Groups

	Treatment Group	Institutional Comparison	Similar Program Comparison	Non-Program Comparison
Total in Group	1008	310	155	1008
Race				
Black	65.0%	65.8%	51.6%	65.0%
White	34.3%	32.6%	47.7%	34.3%
Other	0.7%	1.6%	0.6%	0.7%
Marital Status				
Common Law	13.9%	12.9%	16.1%	12.0%

Divorced	0.9%	1.0%	0.6%	0.8%
Married	3.7%	5.2%	3.2%	5.6%
Separated	0.5%	1.0%	1.9%	0.7%
Single	81.0%	80.0%	78.0%	81.0%
Widowed	0.1%	0.0%	0.0%	0.0%
Community Region				
Lowcountry	30.9%	32.6%	14.2%	30.9%
Midlands	21.5%	21.6%	32.3%	21.5%
PeeDee	24.2%	19.0%	23.9%	24.2%
Upstate	23.4%	26.8%	29.7%	23.4%
MSO Severity	2.70	2.98	2.93	2.70
SE	*0.02*	*0.04*	*0.06*	*0.02*
TCUDD Score	6.37	6.14	5.96	5.77
SE	*0.09*	*0.14*	*0.20*	*0.08*
Education Level at Admission	9.98	9.81	10.15	10.13
SE	*0.04*	*0.07*	*0.11*	*0.04*
Age at Admission	20.99	21.09	22.97	22.38
SE	*0.08*	*0.14*	*0.18*	*0.08*
Age at First Conviction in Inmate History	18.36	18.09	19.49	19.14
N, SE	*561, 0.11*	*210, 0.13*	*92, 0.24*	*538, 0.10*
Most Serious Conviction in Inmate History	2.72	3.00	2.75	2.65
N, SE	*561, 0.03*	*210, 0.05*	*92, 0.08*	*538, 0.03*

"N" = number of members of the category   "SE" = Standard Error

Analytic Strategy

The analytic strategy followed in the SWS study was:

1. A descriptive summary of the variables.
2. Exploration of relationships between the variables using t-tests, chi-square, and ANOVA.
3. Independent samples t-tests to compare final outcomes between the groups.
4. Logistic regression analysis to examine the likelihood of re-offense while accounting for differences in groups and to identify any variables that may be predictive of success/failure.

Findings of the Analysis

The analysis determined whether those who participated are less likely to have been re-incarcerated at the 6, 12, 24, and 36 month marks, accounting for differences in the aforementioned variables, using the following outcome variables:

1. Time to re-incarceration
2. Re-offense charges, type and severity (including parole revocation)
3. Region of county/locale at re-offense

This study focused on outcomes during the follow-up period after inmates are re-introduced into the community. The control group selection identified those who have been re-introduced to the community after approximately the same period of time.

Limitations of Study

The study assumes, based on information from SCDC, that program participants were selected for the program at random if they had a certain TCUDD score.   Potential effects of other variables that may influence recidivism were controlled for in the analysis to the extent possible. The analysis therefore assumes participants were not selected into the program using any other individual characteristics, that is, there was no selection bias. However, the data is secondary and the evaluators had no knowledge of or control over the randomization or selection processes and therefore cannot guarantee the integrity of the processes.

The data source is the SCDC administrative data. Since this data is not gathered for purposes of recidivism analysis, there is no assurance of accuracy for that purpose. The process of preparing the data for analysis may have skewed the data where certain items were missing or were excluded in the records.   (Reference to this limitation may be found at http://www.nij.gov/topics/corrections/recidivism/Pages/measuring.aspx#howrates.)

The criteria for men entering the RSAT include sentencing under the Youthful Offender Act. Not all individuals in the men's program were marked on the data provided by SCDC as having been sentenced under the Youthful Offender Act. The evaluators therefore assumed that not all non-RSAT offenders who were sentenced under the Youthful Offender Act were marked as such in the records. Furthermore, an insufficient number of those who were marked as sentenced under the Youthful Offender Act were available to use for comparison. The members of the treatment group and comparison groups are not therefore all identified in the records as being sentenced under the Youthful Offender Act but as far as is possible using other available data are assumed to have been eligible to be so sentenced in the study.

The "at-risk environment" must be considered when measuring recidivism. The level of risk for someone released from prison may depend on the level of post-release supervision. For example, it may depend on whether drug testing is conducted. The studies covered in the above literature review indicate that the higher the at-risk environment, the more likely someone will recidivate. That was not taken into consideration in this study.

The limitations of this study are reflective of the limitations remarked on in the five similar studies SWS was able to locate.

FINDINGS

Description of the Treatment Variables

Treatment variables describe what happened during the individual's incarceration event. These are separate from baseline characteristics in that they may be influenced by the individual's participation, or lack of participation, in the program.

Mental Health Service Classification

The primary mental health service classification was calculated by determining, for each incarceration, first whether substance abuse treatment was recommended. If substance abuse treatment was not recommended, the individual was then classified as needing other mental health services if the case record included a recommendation for hospitalization, intermediate care, or outpatient services. If none of these were in the record for the incarceration event, the individual was classified as having no services recommended.

Mental health status was evaluated for use as a stratification variable due to the wide variations in classifications as noted below. Upon evaluation of this variable, it was determined that there were large inconsistencies as to when the recommendation for services was made. For females in the RSAT program, the recommendation was made between three years prior to one year after the start of their program participation (standard deviation = 156.05). For males in the RSAT program, the recommendation was made between one and a half years prior to one month after the start of their program participation (standard deviation = 42.08). As a result, this variable is considered to be descriptive of treatment services and not a baseline characteristic.

The majority of females who participated in the RSAT program were identified as needing substance abuse treatment (73.1%). About the same proportion of individuals in the similar program comparison were also identified as needing substance abuse treatment (71.7%). The institutional and non-program comparisons are significantly less likely to have been identified as needing substance abuse services and are more likely to have been identified as needing other mental health services ($\chi^2=86.4$, $df=6$, $p<0.001$). (See Table 3a.)

Table 3a: Primary Mental Health Service Recommendation for Females in the Study

Status	Treatment Group (n=443)	Institutional Comparison (n=49)	Similar Program Comparison (n=166)	Non-Program Comparison (n=443)
Substance Abuse Treatment	73.1%	34.7%	71.7%	50.6%
Other Mental Health Services	16.9%	57.1%	14.5%	34.8%
No Services Recommended	9.9%	8.2%	13.9%	14.7%

No mental health services were recommended for the majority of males who participated in the RSAT program (72.9%), and only 18.7% were identified as needing substance abuse treatment. The similar program comparison and non-program comparison groups were significantly more likely to have received a recommendation for substance abuse treatment (26.5% and 22.4%, respectively), and the institutional comparison group was significantly more likely to have received a recommendation for other mental health services ($\chi^2=57.7$, $df=6$, $p<0.001$). (See Table 3b.)

Table 3b: Primary Mental Health Service Recommendation for Males in the Study

Status	Treatment Group (n=1008)	Institutional Comparison (n=310)	Similar Program Comparison (n=155)	Non-Program Comparison (n=1008)
Substance Abuse Treatment	18.7%	19.4%	26.5%	22.4%
Other Mental Health Services	8.4%	21.6%	7.1%	9.2%
No Services Recommended	72.9%	59.0%	66.5%	68.4%

Approved Security Level Classification

The first approved security level is the security level classification with the earliest date for a particular incarceration event. The majority of females who participated in the RSAT program were classified as minimum security – level 1B facility (78.6%). About the same proportion of individuals in the comparison groups were also identified as needing substance abuse ($\chi^2=10.2$, $df=6$, $p=0.117$). (See Table 4a.)

Table 4a: First Approved Security Level for Females in the Study

Status	Treatment Group (n=443)	Institutional Comparison (n=49)	Similar Program Comparison (n=166)	Non-Program Comparison (n=443)
Minimum Security	78.6%	89.8%	78.3%	82.5%
Medium Security	19.4%	10.2%	21.7%	16.5%
Maximum Security	2.0%	0.0%	0.0%	1.0%

Almost all of the males who participated in the RSAT program were initially classified as medium security (92.8%). About the same proportion of individuals in the institutional comparison were also classified as medium security (89.7%). In contrast, the similar program

comparison and non-program comparison groups were about equally split between minimum and maximum security (52.9% and 53.9%, respectively were classified as minimum security compared to 45.8% and 44.6%, respectively who were classified as medium security. The differences between the groups are statistically significant ($\chi^2=656.3$, $df=6$, $p<0.001$). (See Table 4b.)

Table 4b: First Approved Security Level for Males in the Study

Status	Treatment Group (n=1008)	Institutional Comparison (n=310)	Similar Program Comparison (n=155)	Non-Program Comparison (n=1008)
Minimum Security	7.2%	9.0%	52.9%	53.9%
Medium Security	92.8%	89.7%	45.8%	44.6%
Maximum Security	0.0%	1.3%	1.3%	1.5%

Medical Classification

The majority of females who participated in the RSAT program had either a medical problem and no work restriction (54.4%) or a medical problem and a work restriction (40.9%). These proportions are about the same for the institutional comparison (55.1% and 42.9%, respectively), and almost the same for the non-program comparison (49.3% and 47%, respectively). On the other hand, the similar program comparison group is significantly more likely ($\chi^2=29.1$, $df=6$, $p<0.001$) to have a medical problem and no work restriction than a medical problem with a work restriction (68.5% and 23.6%, respectively). (See Table 5a.)

Table 5a: Medical Status for Females in the Study

Status	Treatment Group (n=443)	Institutional Comparison (n=49)	Similar Program Comparison (n=166)	Non-Program Comparison (n=443)
No Med Problem/ No Work Restriction	4.7%	2.0%	7.9%	3.7%
Med Problem/ No Work Restriction	54.4%	55.1%	68.5%	49.3%
Med Problem/ Work Restriction	40.9%	42.9%	23.6%	47.0%

The majority of males who participated in the RSAT program had either no medical problem and no work restriction (46%) or a medical problem and no work restriction (40.8%). These proportions are about the same for the non-program comparison (45.9% and 42.5%, respectively). On the other hand, the similar program comparison group is significantly more

likely than the other groups to have a medical problem and no work restriction (47.7%) and the institutional comparison is significantly more likely than the other groups to have a medical problem and work restriction (23.6%) ($\chi^2=40.1$, df=6, p<0.001). (See Table 5b.)

Table 5b: Medical Status for Males in the Study

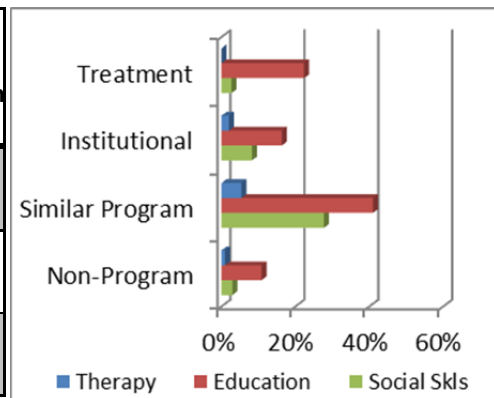| Status	Treatment Group (n=1008)	Institutional Comparison (n=310)	Similar Program Comparison (n=155)	Non-Program Comparison (n=1008)
No Med Problem/ No Work Restriction	46.0%	33.0%	36.1%	45.9%
Med Problem/ No Work Restriction	40.8%	43.4%	47.7%	42.5%
Med Problem/ Work Restriction	13.2%	23.6%	16.1%	11.5%
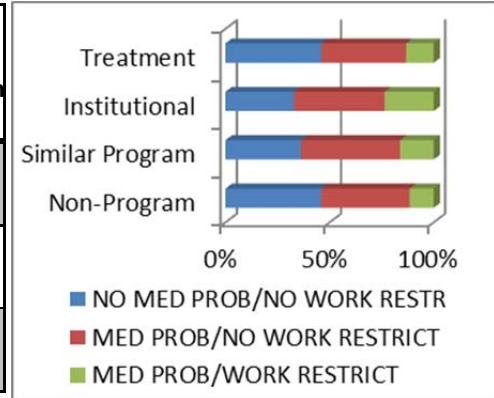
Other Services Provided

Females who participated in the RSAT program and those in the similar program comparison group were significantly more likely to receive education and/or employment training than the non-program comparison ($\chi^2=70.1$, df=3, p<0.001). None of the females in the treatment group and very few in the comparison groups received therapeutic services that were not specifically designed to treat substance abuse. A significantly smaller proportion of the female treatment group (2.7%) received social skills training, compared to 27.7% of the similar program comparison group ($\chi^2=136.6$, df=3, p<0.001). (See Table 6a.)

Table 6a: Other Services Provided to Females in the Study

Status	Treatment Group (n=443)	Institutional Comparison (n=49)	Similar Program Comparison (n=166)	Non-Program Comparison (n=443)
Therapy (not ATOD-specific)	0.0%	2.0%	5.4%	0.9%
Education/ Employment	22.3%	16.3%	41.0%	10.8%
Social Skills	2.7%	8.2%	27.7%	2.9%

Males who participated in the RSAT program and those in the institutional program comparison group were significantly more likely than the similar program and non-program comparisons to receive therapeutic services not specifically designed to treat substance abuse ($\chi^2=1284.2$, df=3, p<0.001), education and/or employment training ($\chi^2=647.6$, df=3, p<0.001), and social skills training ($\chi^2=1155.8$, df=3, p<0.001). (See Table 6b.)

Table 6b: Other Services Provided to Males in the Study

Status	Treatment Group (n=1008)	Institutional Comparison (n=310)	Similar Program Comparison (n=155)	Non-Program Comparison (n=1008)
Therapy (not ATOD-specific)	84.9%	87.4%	0.6%	15.9%
Education/ Employment	81.6%	66.1%	25.8%	28.3%
Social Skills	82.1%	91.6%	1.3%	19.2%

Program Termination

Of the 443 females who participated in the RSAT program at Leath, 327 (73.8%) completed the RSAT program, 36 (8.1%) were paroled or released, 69 (15.6%) terminated their participation early, and 11 (2.5%) ended their participation for other or unknown reasons. Of those who completed the program, 31 (9.5%) completed with excellent participation, 274 (83.8%) completed with good participation, and 11 (3.4%) completed with average participation. The quality of participation for 11 (3.4%) is unknown.
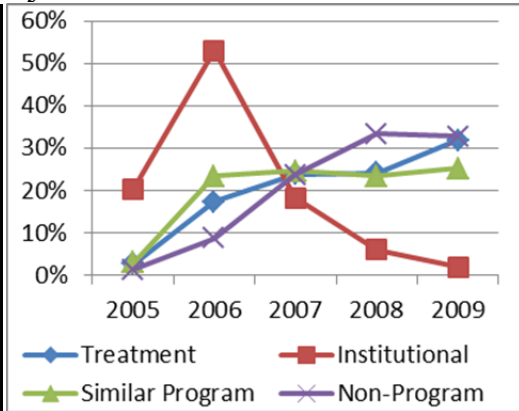
Of the 1,008 males who participated in the RSAT program at Turbeville, 839 (83.2%) completed the RSAT program, 19 (1.9%) were paroled or released, 92 (9.1%) terminated their participation early, and 58 (5.8%) ended their participation for other or unknown reasons. Of those who completed the program, six (0.7%) completed with excellent participation, 89 (10.6%) completed with good participation, 453 (54%) completed with average participation, one (0.1%) met the basic requirements, and 22 (2.6%) completed with poor participation. The quality of participation for 267 (31.8%) is unknown.

Fiscal Year of Release

Females who participated in the RSAT program at Leath were much more likely to be released during FY's 2007, 2008, and 2009. There is a similar pattern in FY releases in the similar program comparison and the non-program comparison. This difference is logical given the requirement that the admission and the release occurred during FY's 2005-2009, as those with longer sentences have a greater likelihood of being included in the study in later years. The institutional comparison, however, is more likely to have been admitted and released during FY's 2005 and 2006, and the proportion of releases in each fiscal year drops as the proportion of treatment group releases in each fiscal year increases. (See Table 7a.)

*Table 7a: Fiscal Year of Release for Females in the Study*

FY	Treatment Group (n=443)	Institutional Comparison (n=49)	Similar Program Comparison (n=166)	Non-Program Comparison (n=443)
2005	2.7%	20.4%	3.0%	1.4%
2006	17.4%	53.1%	23.5%	8.8%
2007	23.9%	18.4%	24.7%	23.7%
2008	24.2%	6.1%	23.5%	33.4%
2009	31.8%	2.0%	25.3%	32.7%

Males who participated in the RSAT program at Turbeville had a much sharper increase in releases during FY 2006 than did the similar program and non-program comparison groups; however, this increase is similar to the increase in the institutional comparison group. The similar program comparison had the largest proportion of releases for FY 2009. (See Table 7b.)

Table 7b: Fiscal Year of Release for Males in the Study

FY	Treatment Group (n=1008)	Institutional Comparison (n=310)	Similar Program Comparison (n=155)	Non-Program Comparison (n=1008)
2005	1.4%	4.5%	0.6%	1.6%
2006	21.9%	26.8%	5.8%	6.9%
2007	25.8%	25.5%	27.1%	26.8%
2008	25.5%	23.2%	23.9%	36.9%
2009	25.6%	20.3%	42.6%	27.8%
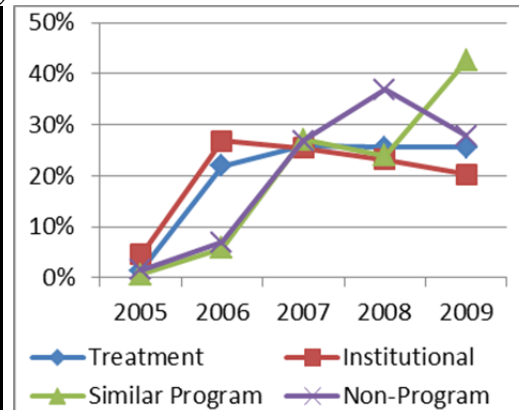
Time Served

The 443 females who participated in the RSAT program at Leath served an average of 526.3 days, or about one and a half years (*SE=11.2*). The 166 females in the similar program comparison also served about one and a half years (*mean=506.8, SE=16.*0). The females in the institutional comparison group served significantly fewer days at an average of 314.2 (*SE=27.9*), and the individuals in the non-program group served the shortest sentences on average (*mean=271.9, SE=9.1*) (*F=120.5, df=3, p<0.001*).

The 1,008 males who participated in the RSAT program at Turbeville served an average of 430.3 days, or one and a quarter years (*SE=5.9*). The 310 males in the institutional comparison group also served about one and a quarter years (*mean=431.1, SE=15.8*). The individuals in the non-program comparison served a shorter sentence of just under one year on average (*mean=334.8, SE=7.9*). Individuals in the similar program comparison group served the longest sentence (*mean=701.2, SE=29.1*). The differences are statistically significant (*F=111.3, df=3, p<0.001*).

Post-Release Supervision

The majority of females who participated in the RSAT program at Leath were released because they maxed out their sentence (48.5%), or were paroled (29.6%). The proportion of individuals who maxed out is slightly higher in the institutional comparison (57.1%) and the non-program comparison (59.4%). On the other hand, individuals in the institutional and non-program comparison groups are more likely to have been released on probation ($\chi^2=312.98$, $df=12$, $p<0.001$). (See Table 8a.)

Table 8a: Post-Release Supervision for Females in the Study

	Treatment Group (n=443)	Institutional Comparison (n=49)	Similar Program Comparison (n=166)	Non-Program Comparison (n=443)
Community Supervision	2.7%	2.0%	1.2%	2.0%
Maxout	48.5%	57.1%	33.7%	59.4%
Parole	29.6%	4.1%	19.9%	3.8%
Parole - YOA	0.0%	0.0%	27.1%	2.9%
Probation	19.2%	36.7%	18.1%	31.8%

Almost all of the males who participated in the RSAT program at Turbeville were offenders sentenced under the Youthful Offenders Act who were released on parole (95%). The proportion of the institutional comparison group released on YOA parole is only slightly less (81%). In contrast, the similar program and non-program comparison groups were significantly more likely to max out (55.5% and 43.1%, respectively) or be released on probation (18.1% and 19.7%, respectively) ($\chi^2=1393.3$, $df=15$, $p<0.001$). Very few individuals in the study group were released with community supervision. (See Table 8b.)

Table 8b: Post-Release Supervision for Males in the Study

	Treatment Group (n=1008)	Institutional Comparison (n=310)	Similar Program Comparison (n=155)	Non-Program Comparison (n=1008)
Community Supervision	0.1%	0.3%	3.2%	1.6%
Maxout	4.0%	15.5%	55.5%	43.1%
Parole	1.0%	6.0%	20.6%	5.2%
Parole - YOA	95.0%	81.0%	2.6%	30.5%
Probation	0.8%	2.6%	18.1%	19.7%

Recidivism of the Treatment and Comparison Groups

Recidivism is calculated as the cumulative percentage of individuals who were recommitted to a correctional facility within six months, 12 months, 24 months and 36 months after release.

The Leath CI RSAT

Of the 443 females who participated in the RSAT at Leath, 3.6% were re-incarcerated within the first six months of their release, 9.3% were re-incarcerated within 12 months, 16.3% were re-incarcerated within 24 months, and 20.1% were re-incarcerated within 36 months. Individuals in the similar program comparison group followed a similar pattern, and ended with 20.5% who were re-incarcerated within 36 months. On the other hand, individuals in the institutional comparison and individuals in the non-program comparison had a slightly higher rate of recidivism at all data points. At the end of 36 months, 26.5% of the institutional comparison and 30.7% of the non-program comparison had been re-incarcerated. (See Table 9a.)

The difference between groups at six months is not statistically significant ($\chi^2=7.5$, $df=3$, $p=0.057$). The differences between groups at 12, 24, and 36 months is statistically significant ($\chi^2_{12m}=14.2$, $df=3$, $p=0.003$; $\chi^2_{24m}=14.7$, $df=3$, $p=0.002$; $\chi^2_{36m}=15.3$, $df=3$, $p=0.002$), indicating that at 12, 24, and 36 months RSAT participants and similar program participants were significantly less likely than the non-program comparison to be re-incarcerated.

Table 9a: Time to First Re-Incarceration for Females in the Study

|	TotInGrp	%6mo	%12mo	%24mo	%36mo
RSAT - Leath	443	3.6%	9.3%	16.3%	20.1%
Institutional Comparison	49	8.2%	14.3%	24.5%	26.5%
Similar Program Comparison	166	4.2%	6.6%	15.1%	20.5%
Non-Program Comparison	443	7.4%	15.8%	25.3%	30.7%
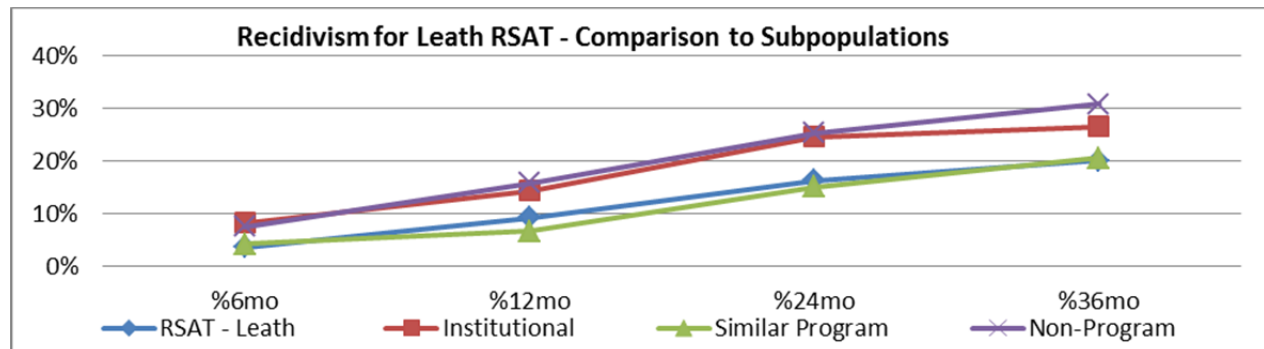
The recidivism rate for females who participated in and successfully completed the RSAT program is significantly lower at 24 months than the recidivism rate for females who terminated participation early ($\chi^2_{24m}=5.0$, $df=1$, $p=0.025$). If only those females who successfully completed the RSAT program are included, the difference in recidivism rates for RSAT

participants and the comparison groups becomes greater. However, the significance levels and interpretation of likelihood to be re-incarcerated remain the same.

Table 10a: Time to First Re-Incarceration for Females by Completion of RSAT

	TotInGrp	%6mo	%12mo	%24mo	%36mo
RSAT - Leath Successful	327	3.4%	8.9%	15.0%	19.3%
RSAT - Leath Early Termination	69	4.3%	14.5%	26.1%	29.0%
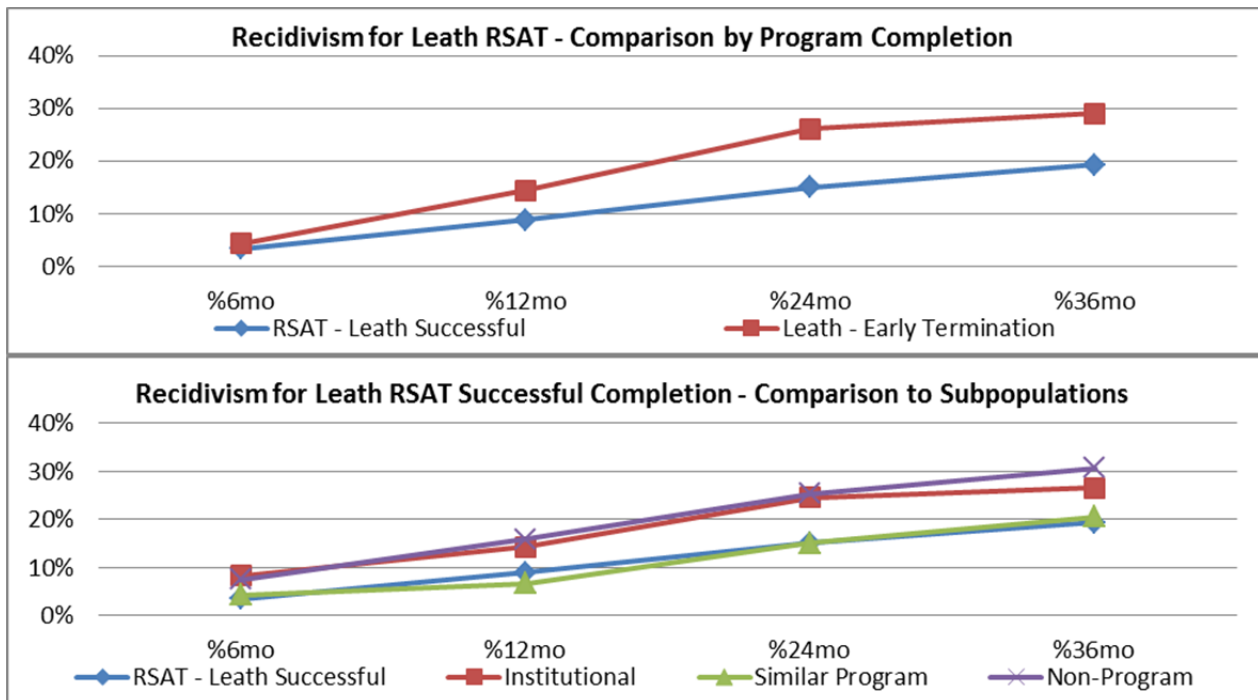
The average difference in the number of months from release to re-offense (for only those who were re-incarcerated) is not significantly different (*F=1.56, df=3, p=0.200*) for females who successfully completed the RSAT program (*mean=15.98, SE=1.3*) compared to the institutional comparison (*mean=11.6, SE=2.4*), similar program comparison (*mean=17.3, SE=1.7*), and non-program comparison (*mean=14.3, SE=0.8*).

The average difference in the age at first instance of recidivism is significantly different between program groups (*F=3.2, df=3, p=0.025*). Females who successfully completed the RSAT program were re-incarcerated for the first time, on average, at age 38.2 (*SE=0.9*), compared to the institutional comparison (*mean=38.8, SE=2.1*), similar program comparison (*mean=33.5, SE=1.4*), and non-program comparison (*mean=36.6, SE=0.6*).

For females in the RSAT program at Leath, the most common types of most serious offense for the first recidivism event are: assault (5.8%), burglary (8.7%), dangerous drugs (15.5%), forgery/counterfeiting (10.7%), fraudulent activity (9.7%), larceny (20.4%), obstructing police (4.9%), and felony traffic offenses (6.8%). These proportions are similar for the comparison groups, and there are no significant differences in the severity of the offense (*F=0.042, df=3,*

p=0.988). Of those who were re-incarcerated, 19 (18.4%) of the RSAT participants were re-incarcerated on a technical violation or parole revocation, compared to 6.7% of the institutional comparison, 21.6% of the similar program group, and 24.8% of the non-program group. These differences are not statistically significant ($\chi^2=3.5$, df=3, p=0.315).

The Turbeville CI RSAT

Of the 1,008 males who participated in the RSAT at Turbeville, 13.6% were re-incarcerated within the first six months of their release, 21.8% were re-incarcerated within 12 months, 33% were re-incarcerated within 24 months, and 39.3% were re-incarcerated within 36 months. Individuals in the similar program comparison group and non-program group followed a similar pattern, and ended with slightly lower total recidivism at 35.5% of the similar program comparison and 37.8% of the non-program comparison who were re-incarcerated within 36 months. On the other hand, individuals in the institutional comparison had a higher rate of recidivism at all data points. At the end of 36 months, 51.3% of the institutional comparison had been re-incarcerated. (See Table 9b.)

The difference between groups at six months is not statistically significant ($\chi^2=7.5$, df=3, p=0.057). The difference between groups at 12 months is not statistically significant ($\chi^2=5.9$, df=3, p=0.116). The difference between groups at 24 and 36 months is statistically significant ($\chi^2_{24m}=8.04$, df=3, p=0.045; $\chi^2_{36m}=20.0$, df=3, p<0.001), indicating that at 24 and 36 months individuals in the treatment, non-program, and similar program groups were significantly less likely to be re-incarcerated than the institutional comparison.

Table 9b: Time to First Re-Incarceration for Males in the Study

|	TotInGrp	%6mo	%12mo	%24mo	%36mo
RSAT - Turbeville	1008	13.6%	21.8%	33.0%	39.3%
Institutional Comparison	310	19.0%	28.4%	41.0%	51.3%
Similar Program Comparison	155	11.0%	21.9%	32.3%	35.5%
Non-Program Comparison	1008	14.1%	23.6%	32.7%	37.8%
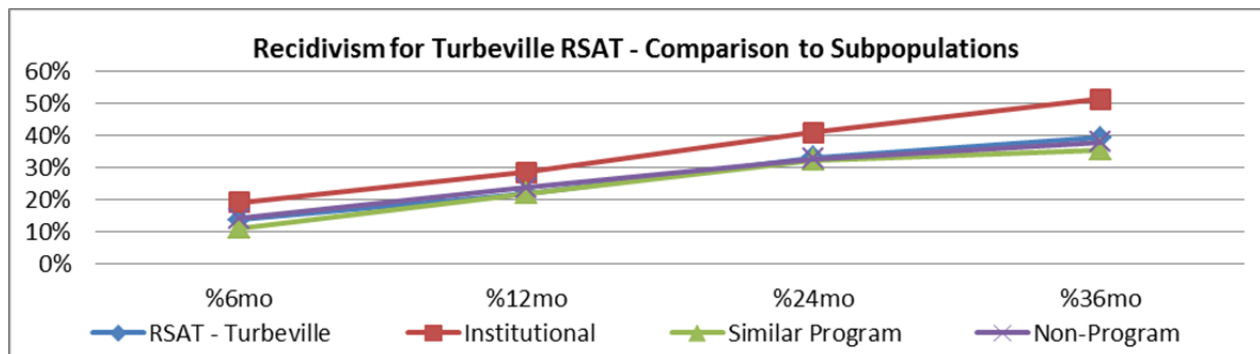
The recidivism rate for males who participated in and successfully completed the RSAT program is significantly lower at 24 and 36 months than the recidivism rate for males who terminated participation early ($\chi^2_{24m}=4.98$, df=1, p=0.026; $\chi^2_{36m}=4.04$, df=1, p=0.045). If only those males

who successfully completed the RSAT program are included, the difference in recidivism rates for RSAT participants and the comparison groups becomes greater. However, the significance levels and interpretation of likelihood to be re-incarcerated remain the same.

Table 10a: Time to First Re-Incarceration for Males by Completion of RSAT

	TotInGrp	%6mo	%12mo	%24mo	%36mo
RSAT - Turbeville Successful	839	13.3%	21.2%	31.9%	38.1%
RSAT - Turbeville Early Termination	92	16.3%	27.2%	43.5%	48.9%
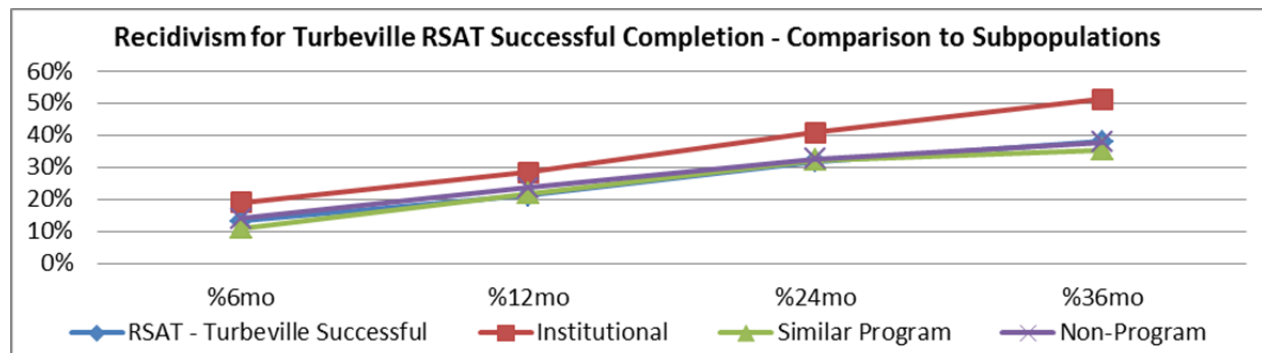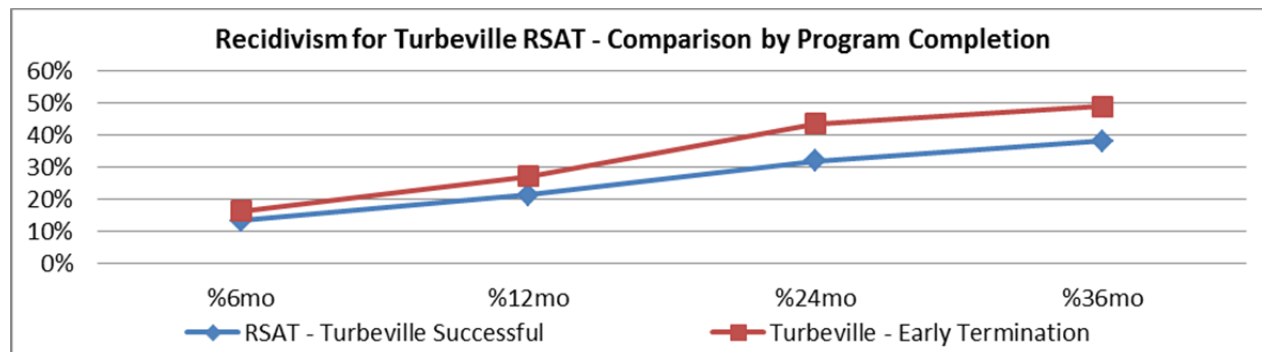
The average difference in the number of months from release to re-offense (for only those who were re-incarcerated) is significantly greater (*F=2.7, df=3, p=0.*047) for males who successfully completed the RSAT program (*mean=19.3, SE=0.9*) compared to the institutional comparison (*mean=16.8, SE=1.1*), similar program comparison (*mean=14.4, SE=1.5*), and non-program comparison (*mean=16.9, SE=0.7*). Therefore, it is likely that RSAT participants recidivate much later than what would otherwise be expected.

The average difference in the age at first instance of recidivism is significantly different between program groups (*F=7.9, df=3, p<0.001*). Males who successfully completed the RSAT program were re-incarcerated for the first time, on average, at age 24.5 (*SE=0.2*), compared to the institutional comparison (*mean=24.5, SE=0.3*), similar program comparison (*mean=26.7, SE=0.4*), and non-program comparison (*mean=25.0, SE=0.2*).

For males in the RSAT at Turbeville, the most common types of most serious offense for the first recidivism event are: assault (5.3%), burglary (15%), dangerous drugs (23.1%), larceny (6.6%),

obstructing police (6.4%), robbery (7.5%), stolen vehicle (5.6%), felony traffic offenses (8.8%), and weapon offense (7.1%). These proportions are similar for the comparison groups, with the exception of the similar program group which did not have any weapon offenses. There are no significant differences between the groups in the average severity of the offense ($F=1.3$, $df=3$, $p=0.280$). Of those who were re-incarcerated, 25 (5.3%) of the RSAT participants were re-incarcerated on a technical violation or parole revocation, compared to 10.3% of the institutional comparison, 8.2% of the similar program group, and 12.8% of the non-program group. These differences are statistically significant ($\chi^2=15.5$, $df=3$, $p=0.001$), indicating that RSAT participants are significantly less likely to return to incarceration on a technical violation.

Variables Impacting Recidivism within 36 Months

Females who received social skills training are significantly less likely to be re-incarcerated within 36 months (14.7% of those who received such services were re-incarcerated compared to 25.4% of those who did not) ($\chi^2=4.4$, $df=1$, $p=0.037$). Females who were released on probation were significantly more likely to be re-incarcerated (42.3% of females released on probation were re-incarcerated compared to 18% of those paroled, 13.8% of those paroled through YOA, and 19% of those who maxed out) ($\chi^2=64.5$, $df=4$, $p<0.001$). Females who were not re-incarcerated had served a significantly longer sentence (*mean difference=49.1 days, SE=17.1, t=2.9, df=1099, p=0.004*), had fewer prior commitments (*mean difference=-1.6, SE=0.2, t=-6.3, df=343.97, p<0.001*), and were older at the time of their first prior offense (*mean difference=1.7 years, SE=0.6, t=2.7, df=385.7, p=0.007*).

Black males are significantly more likely to return to incarceration within 36 months of release than white males (41.7% of black males were re-incarcerated compared to 36.9% of white males) ($\chi^2=5.3$, $df=1$, $p=0.022$). Single men are significantly less likely to recidivate within 36 months (37.9% of single men were re-incarcerated, compared to 48.2% of men who are married/common law and 52.5% of men who are divorced/separated) ($\chi^2=18.6$, $df=2$, $p<0.001$). Men in the Upstate region are the most likely to be re-incarcerated (46.8% of men from the Upstate were re-incarcerated compared to 38.2% of men in the PeeDee, 37.7% of men in the Midlands, and 37.4% of men in the Lowcountry) ($\chi^2=15.4$, $df=3$, $p=0.001$). Men with an approved security level of medium or maximum security are significantly more likely to have been re-incarcerated within 36 months (66.7% of those with a maximum security level and 41.7% of those with a medium security level were re-incarcerated, compared to 34.3% of those with a minimum security level ($\chi^2=17.99$, $df=2$, $p<0.001$). Males who were released on probation and YOA males who maxed out were significantly more likely to be re-incarcerated (56.8% of males released on probation and 49.5% of YOA males who maxed out were re-incarcerated compared to 39.2% of YOA males who were paroled, 33.3% of males paroled, and 33.9% of those who maxed out) ($\chi^2=42.9$, $df=5$, $p<0.001$). Males who were not re-incarcerated had a significantly higher level of education at admission (*mean difference=0.23 years, SE=0.5, t=4.5, df=2240.6, p<0.001*), had fewer prior commitments (*mean difference=-0.34 instances, SE=0.06, t=-5.3, df=1793.1, p<0.001*), and were older at the time of admission (*mean difference=0.3 years, SE=0.1, t=2.9, df=2031.04, p=0.003*).

Severity of the original offense (for which the study release occurred), medical classification, mental health services recommendations, whether or not the individual received therapy services,

whether or not the individual received education services, is not significantly related to whether or not the individual were re-incarcerated within 36 months for either males or females.

Attempts were made to model the likelihood of recidivism, controlling for the effects of demographic and treatment variables shown to have significant differences in outcomes using binary logistical regression. These attempts were unsuccessful in identifying a statistically valid model. For example, a model of re-incarceration for males in the study was identified which included all of the variables identified as having an impact on recidivism. This model was statistically significant ($\chi^2=167.1$, $df=17$, $p<0.001$), meaning that the variance as explained by the model is greater than 0. However, further analysis of the model indicates that it does not thoroughly explain the variance in a reliable manner. The r^2 coefficient=0.066, meaning that the model explains only 6.6% of the differences in why a male in the study would become re-incarcerated. Furthermore, the probability of re-incarceration being predicted correctly for those who were incarcerated is 0.302, meaning that when the values for an individual on each included variable are included in the model equation, the predicted value that is returned is correct only 30.2% of the time. For this reason, the models were not included in this study.

DISCUSSION AND CONCLUSIONS

There are a number of similarities between this study and the other studies of correctional institution based RSAT programs SWS was able to find in the literature. Among these similarities are:

- There are major difficulties in using databases designed for administrative purposes to conduct evaluative research.
- There appears to be selection bias in regards to who actually enters the RSAT programs.
- The evaluators are unable to determine the fidelity of the implementation of the programs.
- There are different outcomes with different programs in the same correctional system.

Among women, there are no statically significant differences in recidivism among the four groups examined six months after release. However at 12, 24 and 36 months after release, the RSAT and similar program (ATU) participants were significantly less likely to be re-incarcerated than other women incarcerated at the same CI as the one the programs are situated in or at other CI's.

Among men, there are no statistically significant differences in recidivism at six or 12 months after release. However, at 24 and 36 months after release, the RSAT and similar program (ATU) participants and the comparison group who were not incarcerated at correctional institutions other than those with an RSAT or ATU were significantly less likely to be re-incarcerated than the comparison group incarcerated at Turbeville or Lee CI's.

This leads to the conclusions that:

1. For women, participation in the SCDC RSAT and ATU programs greatly reduces the likelihood of being re-incarcerated at 12, 24 or 36 months after release.
2. For men, there appears to be little difference in re-incarceration rates at 24 or 36 months after release except in comparison to similar inmates from the same institutions at which the treatment programs are located.
3. The RSAT and other ATU programs have similar results.

There are a number of other factors that were found to influence re-incarceration within 36 months. These factors confound the above findings.

Women were significantly less likely to be re-incarcerated if they received social skills training; were paroled or maxed out their sentences rather than being placed on probation; served a significantly longer sentence than others; had fewer prior commitments; and who were older at the time of their first prior offense.

Men were significantly less likely to be re-incarcerated if they are a race other than Black; single; from the PeeDee, Midlands, or Lowcountry as opposed to the Upstate; have an approved security level less than medium; and were paroled or maxed out their sentences.

Severity of the original offense (for which the study release occurred); medical classification, mental health services recommendations; whether or not the individual received therapy services; and whether or not the individual received education services are not significantly related to whether or not the individual was re-incarcerated within 36 months for either males or females.

This leads to the conclusion that:

4. Certain demographic and program variables may have a significant influence on re-incarceration and these influences have a greater effect on the rate of re-incarceration than does program participation.

The recidivism rate for females who participated in and successfully completed the RSAT program is lower than for females who terminated participation early, significantly so at 24 months. The recidivism rate for males who participated in and successfully completed the RSAT program is lower than the recidivism rate for males who terminated participation early, significantly so at 24 and 36 months. Any participation, successful or not, decreases the likelihood of re-incarceration for women who receive RSAT or ATU services in comparison to women who did not receive such services and who are incarnated in the same CI's or in other CI's. Any participation, successful or not, decreases the likelihood of re-incarceration for men who receive RSAT or ATU services in comparison to men who did not receive such services and who are incarcerated in the same CI's.

This leads to the conclusion that:

5. Any participation, successful or not, has a positive influence on re-incarceration for women who participated in the SCDC RSAT or ATU and has a lesser positive influence on re-incarceration for men who participated in the SCDC RSAT or ATU.

The data used in the study were derived from a database designed for administrative purposes. Such systems are not designed or implemented with the rigor necessary for research purposes. The system does not have definitions of data elements with as great a specificity as is necessary for research and evaluation work and does not appear to have the type of quality assurance methods that eliminates mistakes in input, missing data and redundancy. This leads to the conclusion that:

6. The use of administrative data systems such as that used for this study limits the reliability of evaluation and analysis for RSAT and other programs.
7. Qualitative data such as interviews with staff and program participants would greatly aid in assuring a more reliable set of data.
8. A quasi-experimental design using a matched comparison group may not be the appropriate methodology to determine the efficacy of addiction treatment programs in correctional institutions.

One of the many difficulties with measuring recidivism is that analysts tend to assume that the risk environment of re-arrest is the same for everyone who is being studied. This factor is

important for practitioners and criminologists to be able to study programmatic differences in an intervention. If someone released from one program is put in a "riskier" environment than someone from a different intervention or a control group, any observed differences in re-arrest or recidivism rates may be due to the risk environment rather than the intervention. For example, one can think of a program that releases offenders to higher levels of supervision than a contrasting program. Observed differences in recidivism may be due to the different levels of supervision rather than the effect of the program. Moreover, other studies have noted that consistent treatment aftercare, particularly in the first six months of release, lowers recidivism rates; the consistency and frequency of aftercare services for this study population is unknown.. This leads to the conclusion that:

9. Recidivism studies of the success of addiction treatment programs in correctional institutions should take into account post-release factors as well as pre-release factors.

It is possible using the data available in the dataset used for this study to determine the likelihood of recidivism when inmates have certain specific attributes. These likelihoods are called hazard ratios. Hazard ratios are interpreted as the multiple of the likelihood of failure. For example, inmates who are gang members may have a hazard ratio of 1.56. Since it is greater than one, it means that a male inmate is (1.56-1=0.56) 56% more likely to fail than an inmate who was not a gang member with all other factors held constant (meaning they are identical on all factors in the model except for gang membership).

On the other hand, if the hazard ratio is less than one, the interpretation is a percent reduction in likelihood to fail. For example, a Hispanic inmate is (1-0.775=.225) 22.5% less likely to recidivate than a non-Hispanic inmate with all other factors held constant.

For those measures that are expressed as numeric counts instead of dichotomous (Yes/No), the hazard ratios show the increase or decrease PER UNIT INCREASE in the factor. For example, for each additional disciplinary report an inmate receives while incarcerated, his or her likelihood of recidivating may increase by (1.012-1=.012) 1.2%. For each additional grade level tested, his or her likelihood of recidivating may decrease by (1-0.971=0.029) 2.9%.

While many of the attributes of inmates cannot be influenced (for example race and age), others (such as gang membership and education, can be. This leads to the conclusion that:

10. Hazard ratios can be determined using existing SCDC data and these ratios could be helpful in determining individualized planning for inmates.

There is great deal of literature pertaining to RSAT's within correctional institutions. A summary of the findings pertinent to the successful operation of such RSAT's may be found on pages 4 and 5 of this report. This leads to the conclusion that:

11. The SCDC potentially can utilize previous studies to improve the performance of the RSAT programs it operates.

RECOMMENDATIONS

1. It is recommended that a study be conducted using mixed methods and with an experimental design to determine with greater reliability the effects of RSAT and other addiction treatment programs at SCDC. The design of the study should take into account post-release as well as pre-release factors.
2. It is recommended that the women's RSAT and ATU programs be continued as they are currently operated.
3. It is recommended that the men's RSAT and ATU programs be examined for potential improvements.
4. It is recommended that a study be conducted to more closely examine other variables that lead to improved re-incarceration rates.
5. It is recommended that SCDC consider the development of hazard ratios for its inmates and utilize these ratios to individualize planning.
6. It is recommended that the SCDC utilize previous studies to improve the performance of the RSAT's it operates.