An Evaluation of Minnesota’s Second Chance Act Adult Demonstration Grant: The High-Risk Revocation Reduction Reentry Program

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RESEARCH SUMMARY

This research assessed whether a reentry program targeted towards high-risk short-term prison inmates significantly reduced recidivism. Adult male release violators serving incarceration periods of two to six months in two Minnesota state prisons were randomly assigned to either the control group (n = 77) or the High-Risk Revocation Reduction (HRRR) program (n = 162). The latter group was provided with enhanced case planning, housing assistance, employment assistance, mentoring services, cognitive-behavioral programming, and transportation assistance, while the former group was given standard case management services. After one to two years of post-release follow-up time, event history analysis was used to predict the following four measures of recidivism: supervised release revocation, rearrest, reconviction, and new offense reincarceration. The Cox regression analyses revealed that participation in the HRRR program significantly lowered the risk of supervised release revocations and reconvictions by 28 and 43 percent, respectively. Regardless of treatment or control group membership, receiving more reentry assistance significantly reduced supervision revocations as well as rearrests. Analyses also revealed that employment assistance, including subsidized employment, was especially effective at reducing recidivism. Targeting resources towards this previously under-served population may be useful for lowering recidivism as well as promoting public safety.
INTRODUCTION

Although U.S. prisoners have been transitioning from prisons to communities for over a century, the intense scholarly and legislative focus on the topic of “prisoner reentry” is relatively new (Visher 2007). Nationally, 95 percent of prisoners admitted to correctional institutions will eventually be released (Hughes and Wilson 2003). Out of the 4,157 admissions to Minnesota state prisons for new felony offenses in calendar year 2012, almost 69 percent will have been released within two years, and over 90 percent will be released within five years.¹ Despite an increase in resources and programs dedicated to prisoner reentry in the state of Minnesota (Duwe 2013; Minnesota Department of Corrections 2013a), statewide recidivism rates have remained stable. For offenders released between 2002 and 2009, three-year felony reconviction rates have fluctuated between 35 and 37 percent, while three-year reincarceration rates have remained between 25 and 26 percent (Minnesota Department of Corrections 2013a).

The Second Chance Act (SCA) is one part of a national bipartisan reentry effort intended to reduce stubbornly high recidivism rates (O’Hear 2007). The SCA unofficially began during the 2004 State of the Union address when President George W. Bush called for 300 million dollars to be dedicated to prisoner reentry initiatives. The SCA, which was signed into law four years later, funds reentry programs that target high-risk offenders released from state and local correctional facilities. These programs provide mentoring, chemical dependency treatment, career training, and housing, among many other services. All programs funded by the SCA must incorporate elements of evidence-based practices, including the use of actuarial-based risk and need assessment instruments and sustained case planning that follows offenders from incarceration into the community (U.S. Department of Justice 2010).

¹ Based on admissions data made available from the Minnesota Department of Corrections.
The Minnesota Department of Corrections (DOC) was awarded a SCA Adult Demonstration Grant during the fall of 2010. This SCA-funded program, titled High-Risk Revocation Reduction (HRRR), started a reentry initiative that targets a specific subset of offenders: adult male release violators (RVs). RVs are defined as offenders who were previously released from a Minnesota state prison, but were returned to prison for violating the conditions of supervised release.²

The RVs targeted for treatment by this program were provided with sustained case planning, housing assistance, employment assistance, group mentoring, life skills programming, and transportation assistance. These offenders also have access to a community hub funded by the grant, which is staffed by a full-time coordinator and serves as a “one-stop shop” for all of the grant-funded resources, as well as services provided by local nonprofit organizations. The grant-funded reentry coordinators—the individuals primarily responsible for sustained case planning—are also licensed to conduct chemical dependency assessments, which qualify participants for community-based chemical dependency treatment upon release from prison.

This study used a randomized experimental research design with both intent-to-treat and as-treated design elements to evaluate whether HRRR participants have lower recidivism rates than control group participants after one to two years of post-release follow-up time. That is, the researchers estimated the effect of selection into the HRRR program on four types of recidivism, and also measured the effect of the total number of reentry services received as well as the effect of individual reentry services on recidivism. In the following sections, this paper presents a detailed background of this program, along with a summary of the supporting research on similar

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² Minnesota state prisoners are required by law to serve at least two-thirds of their prison sentences in a correctional facility, and the remaining third can be served in the community under supervision. Offenders who violate their conditions of release may be sent back to prison for a duration of time up to the expiration of their sentences.
reentry initiatives. The data and methods used for the analyses are then presented, followed by the results and a discussion of the findings.

**High-Risk Revocation Reduction Program**

The DOC’s HRRR program provides RVs with supplemental case planning that begins in the facility at least 60 days prior to release and lasts for six months to a year after release into the community. Upon selection into the program, a grant-funded reentry coordinator makes contact with the RV, as well as the RV’s institutional case manager. The reentry coordinators employed by this grant have offices located in the facility as well as in the community hub. In addition to the reentry coordinators, the hub is staffed by a full-time coordinator, who also facilitates RV access to reentry services.

The case planning provided by the HRRR program is more comprehensive than what existing institutional case managers provide, and case plans are based on the framework developed by the National Institute of Corrections’ Transition from Prison to the Community (TPC) model (Burke 2008). Once the RV is introduced to the services offered through the grant, the reentry coordinator develops a Transition Accountability Plan (TAP; Burke 2008), which includes Small, Measurable, Attainable, Realistic, and Timely (SMART) goals based on case file information, discussions with the RV, as well as the results of a risk and needs assessment (the Level of Service Inventory-Revised).4

Prior to the RV’s release from prison, the reentry coordinator works with the RV, the RV’s institutional case manager and community supervision agent, as well as the community hub coordinator to determine which reentry services the RV would need for a successful transition.

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3 Case managers are facility-based DOC employees who facilitate offender activities, such as enrollment in prison programming and post-release housing.

4 Towards the end of this grant period, the DOC transitioned to the Level of Service/Case Management Inventory (Andrews, Bonta, and Wormith 2004).
from prison to the community. In addition to enhanced case planning, the HRRR program directly provides the following services:

**Community Hub:** Participants have up to one year of post-release access to a facility located in Minneapolis where they can meet with grant-funded reentry coordinators, the hub coordinator, community supervision agents, as well as representatives from grant-funded services (e.g., employment, housing). Local nonprofit organizations also offer programming at this facility (e.g., Alcoholics Anonymous meetings, life skills programming).

**Housing:** Participants are eligible for up to 75 days of transitional housing at dedicated grant-funded facilities. A small number of participants are also eligible for cash assistance for housing.

**Employment:** Participants are offered up to 16 weeks of subsidized employment at scattered work sites in the Minneapolis-St. Paul metropolitan area. Participants are also offered work readiness assistance, as well as referrals to non-subsidized employment opportunities and career training programs for up to one year after release.

**Domestic Violence Prevention:** Continuous weekly life skills programming is available by a grant-funded contractor for up to one year after release at the community hub. The main purpose of the class is family violence prevention. However, the class also focuses on strengthening interpersonal relationships and pro-social skills. The class is open to all HRRR participants, including RVs without a history of family violence.

**Mentoring:** Group mentoring sessions are offered at the community hub once a week.5

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5 During the first wave of program enrollment, one-on-one mentor matches were attempted. However, very few mentor matches were made, and most of the participants in the first wave of enrollment did not receive any mentoring services.
Transportation Assistance: Participants can receive up to three free passes for the Minneapolis-St. Paul public transportation system (Metro Transit) within the first year of release.\footnote{One of the available Metro Transit passes provides the RV with ten trips on Metro Transit busses and light rail transit, while the other two passes provide the RV with two months of unlimited rides.}

Prior to release from prison, RVs in the program are given the opportunity to meet with representatives from each of the grant-funded services during orientations held within the facilities. Within three days after release from prison, RVs are expected to meet at the community hub with their assigned reentry coordinators and community supervision agents, as well as the community hub coordinator. At the Reentry Team Meetings, grant staff and community supervision agents review the RV’s TAP and SMART goals, and go over the schedule of program offerings at the community hub. RVs also have an opportunity to meet with representatives from the grant-funded employment services. Grant-funded staff, community corrections agents, and representatives from contracted reentry services meet regularly in anticipation of upcoming releases of program participants. A project steering committee comprised of the DOC’s Reentry Services unit, representatives from each of the participating correctional facilities, and representatives from community corrections departments in each of the four participating counties meet at regular intervals to discuss the status of the program.

While treatment group members receive HRRR services, the control group members receive standard release planning by institutional case managers. Generally, release planning consists of setting the conditions of supervised release and finding appropriate housing in the community. This process usually involves some collaboration with the RV’s community supervision agent. Case managers may also make recommendations or referrals to community-based treatment providers. Given the large caseloads faced by both case managers and
community supervision agents, this planning process is less comprehensive than what is offered through the HRRR program. Case managers at DOC male facilities have an average caseload size of 80 offenders at any given time. The HRRR program reentry coordinators each provided case planning to a similar amount of offenders stretched out over the course of two years. Moreover, the services provided by HRRR reentry coordinators were in addition to standard services provided by DOC case managers and services provided by the community hub coordinator.

The DOC used this SCA funding to target male RVs for four main reasons. First, males account for a much larger proportion of the Minnesota state prison population than females (93 percent compared to 7 percent, respectively; Minnesota Department of Corrections 2013b). Moreover, male offenders have a higher rate of return to prison for release violations. Among offenders released from Minnesota state prisons in calendar year 2009, 38 percent of released male offenders returned to prison for a supervised release violation in the subsequent three years, compared to only 28 percent of the female releases.

The second reason the HRRR program targets male RVs is because these offenders have been returned to prison for a release violation. Thus, they have a demonstrated inability to successfully reintegrate back into the community. Third, by reducing the number of release violators readmitted to prison, this program could have a substantial impact on reducing Minnesota’s overall prison population. In calendar year 2012, there were approximately 7,412 admissions to Minnesota state prisons, and RVs accounted for about 36 percent of those admissions (Minnesota Department of Corrections 2013b). Given that RVs are held for an average of six months, they can have a meaningful impact on the overall prison population.7

7 The average length of time that RVs are held in prison was calculated based on RVs released from prison in calendar year 2013.
The final reason the HRRR program targets this population is because RVs typically do not receive many services once they are readmitted to prison. RVs are held for relatively short periods of time (an average of six months compared to an average of one year and six months for offenders committed with new sentences), which does not leave sufficient time for many prison programs. Further, because most prison programs have limited enrollment capacities, prison administrators may be reluctant to use precious resources on offenders who have squandered previous opportunities.

Previous Reentry Initiatives

State and federal prison populations have been shrinking in recent years after decades of unprecedented growth (Carson and Sabol 2012). The number of releases from state and federal prisons outpaced the number of admissions between 2009 and 2011 (the three most recent years of available national data). In Minnesota, the number of annual releases from prison more than doubled from 3,736 in 1998 to 7,876 in 2012 (Minnesota Department of Corrections 1999, 2013b). That means Minnesota communities are now absorbing more newly released prisoners than ever before. About 40 percent of all offenders released from Minnesota state prisons in 2012 were returned to Anoka, Dakota, Hennepin and Ramsey Counties. Together, these counties make up the center of the Minneapolis-St. Paul metropolitan area and they are the four participating counties in this study.

Many offenders leave prison facing even more hardships than they did before prison (Pettit and Western, 2004; Western, Kling, and Weiman 2001). That is, offenders enter prison with educational and job-skill deficits (Arum and LaFree 2008; Harlow 2003; Hirschfield 2008; Visher, La Vigne, and Travis 2004), as well as chemical dependency and mental health issues (Lynch and Sabol 2001; Mumola and Karberg 2006). In Minnesota, about 30 percent of
prisoners do not have at least a high school or GED diploma (Minnesota Department of Corrections 2013b). Ninety percent of Minnesota state prisoners are diagnosed as chemically dependent or abusive, and there are only 860 treatment slots available at a time (Minnesota Department of Corrections 2014a). Offenders leave prison with all of the above issues along with the stigma of incarceration and a felony record (Travis and Visher 2005; Wakefield and Uggen 2010).

The alarming monetary and social costs of mass incarceration along with the growing numbers of released offenders and high recidivism rates have together created a national focus on prisoner reentry (O'Hear 2007). This focus has led to major reentry initiatives, including the SCA and its predecessor, the Serious and Violent Offender Reentry Initiative (SVORI). Much like the SCA, the SVORI provided money to state and local justice systems to enhance the reentry process, and it emphasized the need for strong collaborations between institutional and community-based agencies (Lattimore et al. 2004).

SVORI-funded reentry projects varied across sites, but all participating agencies were encouraged to target offenders who posed the greatest risk to public safety in the community, develop comprehensive reentry plans, utilize risk and needs assessment tools, and increase offender access to vital community resources (Lattimore et al. 2004). A multi-site evaluation revealed that more SVORI participants were receiving community services than non-participants (Lattimore and Visher 2009). However, the number of SVORI participants receiving services fell short of the number assessed as needing the services. Among adult male participants, SVORI participation did not have a significant effect on obtaining stable housing or desistance from substance use, but SVORI participants were significantly more likely to be supporting themselves through employment than non-participants during the follow-up period (Lattimore
and Visher 2009). SVORI participants were significantly less likely than non-participants to be rearrested within a 15-month follow-up period, but they were also significantly more likely to be reincarcerated during that time.

As one of the 69 SVORI grant recipients, the DOC used the grant funds to create the Serious Offender Accountability Restoration project (Minnesota Department of Corrections 2006). Much like the HRRR program, Minnesota’s SVORI program provided comprehensive case planning in an effort to connect offenders with stable employment and housing, treatment for any substance abuse or mental health issues, and social support networks in the community. Unlike the HRRR program, Minnesota’s SVORI project targeted a broader subsection of high-risk offenders, including juveniles and females. This reentry initiative provided services to 240 offenders who were released to Hennepin County over a three-year period. A process evaluation found that certain program components, such as faith-based services and Circles of Support (group mentoring), were not implemented as planned. Also, chemical dependency and mental health services were not offered until the very late stages of the program. Multivariate analyses found that Minnesota’s SVORI project participants did not have significantly different rates of recidivism than a randomly selected control group, which may have been the result of the lack of full implementation (Minnesota Department of Corrections 2006).

Another predecessor to the HRRR program at the DOC was the Prisoner Reentry Initiative (PRI). This reentry program targeted adult male offenders released from one Minnesota state prison to standard supervision in Hennepin and Ramsey counties (Minnesota Department of Corrections 2011). Similar to the HRRR program, the PRI emphasized inter-agency collaborations and employed a reentry coordinator who worked with institutional case managers and community supervision agents to provide comprehensive case planning. Because one of the
main objectives of the PRI was to connect released offenders with sustainable employment, the
DOC contracted with a local nonprofit to provide offenders with work skills training,
employment search and placement assistance, and transitional employment. Using a group of
similar offenders released from the same facility to Hennepin County prior to the start of the PRI
as a comparison group, multivariate analyses revealed that the PRI did not have a statistically
significant effect on recidivism. Moreover, offenders from the comparison group were more
likely than the PRI participants to find employment in the first year after release, and control
group members worked more hours. An evaluation of the program concluded that employing a
supplemental reentry coordinator may not be the key to better recidivism outcomes for reentry
programs (Minnesota Department of Corrections 2011). That is, rather than providing
supplemental case planning and facilitating inter-agency collaborations, these reentry
coordinators may be used to diffuse heavy caseloads among institutional case workers and
community corrections staff.

Around the same time that the PRI was launched, the DOC also implemented the
Minnesota Comprehensive Offender Reentry Plan (MCORP). Similar to all of the programs
listed above, the main premise of the MCORP was that reentry planning should begin long
before release, and requires multiagency collaborations (Duwe 2012a). To this end, the MCORP
used designated institutional case managers and community supervision agents intended to have
smaller caseloads than normal. The reduced caseload sizes meant case managers could develop
dynamic case plans that addressed each offender’s criminogenic needs, and community
supervision agents could begin working with offenders while they were still in prison. An early
evaluation that used a randomized experimental design found the MCORP significantly reduced
three out of four types of recidivism by increasing offender access to many critical community
services. A later follow-up study, after offenders had been out of prison for an average of three years, found that in addition to reducing multiple types of recidivism and increasing offender access to community services, the MCORP was cost-effective (Duwe 2014). Although the effect sizes of the MCORP on recidivism were modest in size, for every one dollar spent on the MCORP, the DOC received a benefit of $1.80 (Duwe 2014).

Outside of Minnesota, similar reentry programs in California (Wexler, De Leon, et al. 1999; Wexler, Melnick, et al. 1999; Prendergast et al. 2003), Delaware (Inciardi, Martin, and Butzin 2004; Martin et al. 1999), Massachusetts (Braga, Piehl, and Hureau 2009), New York (Jacobs and Western 2007), and Ohio (Miller and Miller 2010) have shown modest yet promising recidivism results. Taken together, this body of research demonstrates that properly implemented reentry programs that foster multiagency collaborations and develop individualized release plans can reduce recidivism rates.

Although the HRRR program has many features in common with the effective programs listed above, particularly the MCORP, it has two differences that may alter its potential effect on recidivism. First, the HRRR program has an added layer of reentry staff (reentry coordinators and the hub coordinator) similar to the PRI. Because the PRI reentry coordinators were inadvertently used to diffuse heavy caseloads rather than enhance the case planning process, they may have contributed to the PRI’s ineffectiveness. However, the HRRR staff were aware of this possibility when planning and implementing the program, and were proactive in ensuring that the HRRR grant staff were used as intended.

The second main difference between the HRRR program and its successful predecessor in Minnesota is that the HRRR program has fewer limitations in the types of offenders it enrolls. Unlike the MCORP, the PRI, and Minnesota’s SVORI project, the HRRR program enrolls sexual
offenders and offenders released to Intensive Supervised Release (ISR), the most restrictive form of community supervision in Minnesota. In Minnesota, these groups of offenders have higher rates of supervised release violations, but they do not necessarily commit more new offenses (Minnesota Department of Corrections 2013a; 2014b; 2014c). Directing intensive programs, such as the HRRR program, at the highest risk offenders is one of the basic principles of effective correctional treatment (e.g., Andrews et al. 1990; Lowenkamp, Latessa, and Holsinger 2006). Thus, the HRRR program could have a more substantial impact on at least one form of recidivism (supervised release violations) than its predecessors.

**DATA AND METHODS**

This study employed a randomized experimental design to evaluate whether HRRR participants had significantly lower rates of recidivism than control group members. While RVs account for about a third of prison admissions in Minnesota in recent years, an examination of DOC data prior to the start of the HRRR program revealed that there would not be enough eligible RVs to randomly assign equal numbers to both the treatment and control groups. Given the finite amount of funds and time for this trial program (which guided the eligibility criteria), grant administrators determined that they would not be able to meet their enrollment objectives with a 1:1 treatment-to-control group random assignment model. To ensure that a sufficient number of RVs would be enrolled in the program, two-thirds of offenders who met all of the eligibility requirements were randomly assigned to the treatment group, while the remaining third were assigned to the control group. The RVs included in this study were identified by DOC research staff once a week between April 2011 and April 2012. Participation in the grant

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8 A 1:1 allocation ratio for treatment and control groups is optimal and usually preferred by most researchers, but prior research has shown that 2:1 allocation model does not bias the results or lead to a significant reduction in power so long as the imbalance is random (Dumville et al. 2006; Schulz and Grimes 2002). In the present study, this imbalance was random.
was compulsory for the randomly selected treatment group members. If treatment group members refused all services, they were still considered part of the treatment group and grant staff would continue to offer them grant services for up to one year post-release.

In addition to being a male RV, eligible participants had to meet the following criteria: (1) be located at participating facilities for the entirety of their confinement,\(^9\) (2) have no less than 60 days of confinement time remaining at the time of selection, but have no more than 180 days total confinement time, (3) plan on returning to one of the four participating counties,\(^10\) (4) have at least 150 days of community supervision remaining after release, and (5) not have a new pending sentence or a serious pending charge.\(^11\)

Offenders who met all of the eligibility requirements but were not at one of the participating facilities at the time of selection were automatically assigned to the control group.\(^12\) Treatment group participants who were transferred to non-participating facilities after selection were eliminated from the project, and were not added to the control group. RVs in both the treatment and control groups who ultimately returned to non-participating counties were eliminated from the grant. During the enrollment period covered in this study, 218 RVs were assigned to the treatment group. However, 53 of these RVs (24 percent) were eliminated from

\(^9\) During the first wave of grant funding (April 2011 to October 2011), the RVs could be located at either the Minnesota Correctional Facility (MCF)-Lino Lakes or the MCF-Rush City. Due to a reduction in grant funds during the second wave of grant funding (November 2011 to April 2012) the RVs could only be located at the MCF-Lino Lakes.

\(^10\) The four participating counties were Anoka, Dakota, Hennepin, and Ramsey, which are the largest counties in Minnesota and central to the Minneapolis-St. Paul metropolitan area.

\(^11\) The seriousness of new pending charges were determined by the reentry coordinators and other grant staff who would determine whether the new charges would likely result in a new sentence of incarceration.

\(^12\) A comparison of means between the randomly selected control group and the RVs assigned to the control group by default (because they were located at non-participating facilities) was conducted using several key variables, including the following: race, age at the time of release, prior supervision failures, prior convictions, LSI-R scores, type of offense, accountability time, institutional disciplinary convictions for the entire length of their sentences, completion of GED or high school diploma at the time of release, completion of chemical dependency treatment during entire sentence period, type of post-release supervision, as well as the four outcome measures of recidivism. With the exception of race (there were significantly more minority RVs in the default control group compared to the randomly assigned control group) there were no other significant differences between the groups.
the program because they were found to be ineligible after selection. The most common reasons for elimination from the study group for both treatment and control group members were that RVs were held in the facility for too long (i.e., more than 180 days), they were released from the facility too soon (i.e., they spent less than 60 days in the facility), or they returned to a county outside of the four counties included in this project.\textsuperscript{13}

By the end of the one year enrollment period covered in this study, there were 165 HRRR participants and 79 control group members. Five of these RVs (three treatment group members and two control group members) did not have LSI-R scores prior to their releases from prison. Because the LSI-R score is a key variable in predicting recidivism, these five RVs are not included in the analyses. Thus, 162 HRRR participants and 77 control group members are included in this study.

**Evaluability Assessment**

In early 2013, Research Triangle Institute (RTI) International and the Urban Institute worked in collaboration to conduct an evaluability assessment of the HRRR program (Walters et al. 2013). Generally, evaluability assessments measure the following four program elements (Mihalic 2002; Dane and Schneider 1998): (1) the extent to which the program was delivered as it was planned, (2) the amount of exposure each participant received to the program, (3) the degree to which program participants were engaged with the program, and (4) the preparedness of the staff delivering the program. The assessment conducted by Walters and colleagues (2013)\textsuperscript{13} RVs removed from both the treatment and control groups were compared to determine whether there were systematic differences between these groups that could have introduced bias into the study. It was found that removed RVs for both the treatment and control groups had significantly fewer prior supervision failures and stayed for significantly longer times in confinement after selection. Additionally, a significantly larger percentage of removed control group members were under ISR after release. Besides those differences, there were no other significant differences between removed RVs and RVs included in the study.
found that the HRRR program had some implementation challenges, including but not limited to the following:

**State government shutdown:** Because of a state budget impasse, the Minnesota state government was shutdown for 20 days in July 2011. This shutdown occurred just as the first selected participants were released from prison. Because of the state government shutdown, these offenders were not able to access some grant services, including the community hub and employment services. However, the reentry coordinators were still working with offenders during this period.

**Limited pre-release services:** The HRRR program originally included a six-week victim impact class offered in each of the participating facilities. However, due to scheduling and facility limitations, the class was eliminated from the program after one run at each facility. Only 20 HRRR participants were able to complete the class. There are no other programs or services offered to HRRR participants in the facility besides access to the reentry coordinators.

**Budget reduction:** Due to the DOC’s limited ability to match grant funds and a reduction in the available SCA grant funds, the HRRR program was virtually cut in half after the first year. The program was originally offered in two state correctional facilities and employed two reentry coordinators, but was reduced to one correctional facility in the Fall of 2011 and one reentry coordinator in the Summer of 2012.

**Changes in community partnerships and grant staff:** Contracted grant services for housing and mentoring were changed during this grant period. There was also staff turnover among program-involved DOC staff and contracted service providers.
Despite these challenges and others, the authors of the evaluability assessment concluded the HRRR program has several positive attributes that make it evaluable, including a strong collaborative effort between the DOC and its key community partners, rich individual-level data, and an experimental design that was implemented with integrity (Walters et al. 2013). Overall, the authors found the HRRR program is stable and maintains fidelity to its original design enough to merit a full outcome evaluation.

**Control Group Survey**

Despite not being a part of the HRRR program, control group members could have received similar services through their supervision agents or various community programs that serve returning prisoners. Thus, this research sought to include data on any similar services received by control group members. Data on pre-release services provided to both HRRR participants and control group members were available from the DOC’s Corrections Offender Management System (COMS). However, post-release services are not recorded in the COMS. The HRRR participants were tracked closely by reentry coordinators and other grant staff in a separate database, so data on their post-release activities were readily available. But that was not the case for control group members.

For most offenders, post-release activities are tracked by supervision agents while they are still under supervision. To access data on post-release programs and services provided to control group members, and to measure whether control group members received services that mirrored what is offered through the HRRR program, an eight-item survey was sent to each control group member’s supervision agent. This survey questioned whether each control group RV received any of the following services:

- Chemical dependency treatment paid for by the county via a special assessment
• Chemical dependency treatment from any source
• Cognitive-behavioral programming (e.g., sex offender treatment, domestic violence prevention)
• Employment assistance (e.g., résumé assistance, transitional/subsidized employment)
• Housing assistance (e.g., transitional housing, cash assistance)
• Mentoring (including both one-on-one or group mentoring)
• Transportation assistance (e.g., reduced-price/free public transportation)
• Any other reentry assistance (open-ended question)

Seventy-nine surveys were distributed to 46 different supervision agents in Anoka, Dakota, Hennepin, and Ramsey counties. Seventy-five of these surveys were completed, resulting in a 95 percent response rate. Due to missing survey data and missing LSI-R scores, there are 73 control group members included in analyses that involve survey data.

**Independent Variables**

The present research uses both an intent-to-treat and as-treated research design. In the intent-to-treat portion of the analyses, HRRR program membership is the primary independent variable. RVs who were randomly assigned to the HRRR program were assigned a value of “1,” while control group members were assigned a value of “0” for the participation measure. RVs randomly assigned to the HRRR program are included in this group regardless of whether they received or participated in any of the offered reentry services.

In the as-treated portion of the analyses, the sum of reentry services received by each RV in the total sample (regardless of treatment group membership) is the primary independent variable. In other words, each reentry service, regardless of whether it was provided by the HRRR program or some other source, was assigned a value of “1.”
variable is the sum of services received. Data on reentry services received by treatment group members was collected from the COMS and from the HRRR staff, while data on reentry services received by control group members was collected from the aforementioned control group survey.

In addition to the measures of HRRR participation and number of reentry services received, several other theoretically relevant control variables were used in this research. Most of these control variables were pulled from the COMS, including each RV’s race and ethnicity, age at time of release, and LSI-R score. The RVs’ prior conviction histories were provided by the Minnesota Bureau of Criminal Apprehension (BCA). A description of all of the variables used in this research is located in Table 1. There was a large pool of potential variables to use in the full multivariate analyses, and several of these measures were used in the descriptive portion of the analyses. However, only the most pertinent and useful measures were used in the multivariate analyses in an effort to reduce the number of events per variable and to preserve statistical power (explained in more detail below).

**Dependent Variables**

Recidivism, the outcome variable in this study, is measured four different ways: 1) revocation for a technical violation of supervised release, 2) rearrest, 3) felony reconviction, and 4) reincarceration in prison for a new offense. Reincarceration data (supervision revocations and new offense reincarcerations) were obtained from the COMS. Rearrest and reconviction data were obtained from the BCA. Recidivism was tracked through the end of June 2013, and all of the RVs in this study had at least one year of post-release follow-up time. For all of the RVs included in the data, follow-up time ranged from one year to a little over two years (24.5 months) and was about a year and a half on average (18.6 months).
Table 1. Description of Covariate Pool

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>Minority</td>
<td>Binary indicator of whether RV is from a racial/ethnic minority group (1) or is white/non-Hispanic (0)</td>
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<tr>
<td>Age at Release</td>
<td>RV’s age at the time of release measured in years</td>
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<tr>
<td>Prior Record</td>
<td>A scale comprised of the RV’s number of prior supervision revocations and felony convictions, excluding the most recent revocation and conviction. Eigen value = 1.49, factor loadings &gt; 0.850</td>
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<tr>
<td>LSI-R</td>
<td>Most recent Level of Service Inventory-Revised score prior to release (0 to 54)</td>
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<tr>
<td>Offense Type</td>
<td>Binary indicators of whether the RV’s current offense was a person, property, drug, criminal sexual conduct (CSC), felony driving while intoxicated (DWI), or other type of offense</td>
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<tr>
<td>Sentence Length</td>
<td>The total length of the sentence the RV is serving at the time of selection.</td>
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<tr>
<td>Length of Stay</td>
<td>Number of months between most recent supervised release revocation (at the time of selection into the HRRR program or control group) and release from prison</td>
</tr>
<tr>
<td>Institutional Discipline</td>
<td>Number of discipline convictions received during entire sentence prior to release</td>
</tr>
<tr>
<td>GED/High School Degree</td>
<td>Binary indicator of whether RV had at least a GED or high school diploma upon release</td>
</tr>
<tr>
<td>Completion of any Treatment</td>
<td>Binary indicator of whether offender completed chemical dependency or sex offender treatment in the facility during entire sentence prior to release</td>
</tr>
<tr>
<td>Intensive Supervised Release (ISR)</td>
<td>Binary indicator of whether offender was under ISR upon most recent release from prison; standard supervision serves as the reference category</td>
</tr>
</tbody>
</table>

Because many of the RVs in this study who were arrested, reconvicted, and reincarcerated also likely spent time in confinement for a technical violation, it was necessary to account for this loss of at-risk time in the analyses. To accurately measure the actual amount of time offenders were at risk to reoffend, any time spent in confinement for a supervised release violation prior to the other recidivism events or June 30, 2013, (whichever came first) was deducted from the at-risk period for rearrest, reconviction, and reincarceration.

**Multivariate Analyses**

Survival analysis (Cox regression) was used in this study because key dates (i.e., date of release from prison, date of recidivism event) and the timing to each event were available. Cox
regression is preferable for this research in that it maximizes the use of time-dependent data, which are useful in determining whether the RVs reoffended, but also how soon after release those recidivism events occurred. In this study, Cox regression models use both “time” and “status” variables in estimating the impact of HRRR participation and other independent variables on recidivism. For the recidivism analyses, the “time” variable measures the amount of time from the date of release until the date of first supervised release revocation, rearrest, reconviction, new offense reincarceration, or June 30, 2013, (for those who did not recidivate). The “status” variable for each recidivism event has a value of “1” if that event occurred or a value of “0” if it did not.

Although this research design has several strengths, one issue that may inhibit reliable and unbiased multivariate results is the sample size relative to the number of variables included in the analyses and the number of recidivism events. Traditionally, researchers have called for a minimum of ten events per independent variable (EPV) in multivariate analyses with binary outcomes (Peduzzi et al. 1996). That is, for every one independent variable added to a Cox regression model predicting supervised release violations, for example, there needs to be at least ten supervised release revocations in the sample. In the present study, meeting this threshold is not a problem for Cox regression models predicting supervised release violations because this type of recidivism event was common in the data (165 events). Meeting this threshold in analyses predicting less common recidivism events, including rearrest (117 events), reconviction (61 events), and reincarceration (28 events) is more difficult. However, more recent scholarship has argued that a standard of five events per variable may be more appropriate (Vittinghoff and McCulloch 2007). Moreover, the EPV standard needs to be balanced with the need to adequately control for confounding variables.
In an effort to meet an acceptable EPV ratio, maintain statistical power, preserve degrees of freedom, and to adequately control for factors that may affect the outcome variables, stepwise regression analyses were performed using varying combinations of independent variables, including condensed offense type categories and different measures of confinement time (entire sentence length, total confinement time during the life of the sentence, and revocation confinement time). Using backward elimination stepwise regression analyses (likelihood ratio), nine measures (in addition to the primary independent variables) that provide optimal model fit and adequately control for potential confounding factors were identified: age at release, prior record, LSI-R score, person (violent) type offense, original sentence length, institutional discipline, education level, completion of any prison-based chemical dependency or sex offender treatment, and post-release ISR. Using a total of 10 independent variables in the analyses kept the EPV ratio between 2.8 (reincarceration) and 16.5 (supervision revocation).

RESULTS

This research employed random assignment to achieve balanced treatment and control groups on several key variables in an effort to isolate any observable effect of HRRR participation on the four recidivism outcomes. The results displayed in Table 2 show a comparison of means between HRRR participants and control group members on several key measures and the four recidivism outcomes. These results show few significant differences between the two groups on most variables. There are significantly more racial and ethnic minorities in the control group than the HRRR group (74 percent versus 68 percent, respectively), as well as a higher percentage of property offenders (4 percent versus 10 percent, respectively). Control group members also have significantly more institutional disciplinary infractions than HRRR participants (17.9 convictions versus 12.2 convictions, respectively).
Table 2. Comparison of Means between SCA Participants and Control Group Members

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment</th>
<th>Control</th>
<th>t-test p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td>68%</td>
<td>74%</td>
<td>0.044</td>
</tr>
<tr>
<td>Age at Release (years)</td>
<td>36.4</td>
<td>36.0</td>
<td>0.227</td>
</tr>
<tr>
<td>Prior Record</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.540</td>
</tr>
<tr>
<td>Prior Supervision Failures</td>
<td>2.8</td>
<td>2.7</td>
<td>0.885</td>
</tr>
<tr>
<td>Prior Convictions</td>
<td>4.0</td>
<td>4.4</td>
<td>0.681</td>
</tr>
<tr>
<td>LSI-R</td>
<td>27.4</td>
<td>27.8</td>
<td>0.936</td>
</tr>
<tr>
<td>Type of Offense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person</td>
<td>26%</td>
<td>29%</td>
<td>0.400</td>
</tr>
<tr>
<td>Property</td>
<td>4%</td>
<td>10%</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Drug</td>
<td>12%</td>
<td>9%</td>
<td>0.217</td>
</tr>
<tr>
<td>Criminal Sexual Conduct</td>
<td>28%</td>
<td>26%</td>
<td>0.555</td>
</tr>
<tr>
<td>DWI</td>
<td>17%</td>
<td>14%</td>
<td>0.236</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
<td>12%</td>
<td>0.414</td>
</tr>
<tr>
<td>Length of Stay (months)</td>
<td>3.7</td>
<td>3.7</td>
<td>0.622</td>
</tr>
<tr>
<td>Sentence Length (months)</td>
<td>71.6</td>
<td>73.8</td>
<td>0.913</td>
</tr>
<tr>
<td>Institutional Discipline</td>
<td>12.2</td>
<td>17.9</td>
<td><strong>0.003</strong></td>
</tr>
<tr>
<td>GED/HS Diploma</td>
<td>75%</td>
<td>70%</td>
<td>0.153</td>
</tr>
<tr>
<td>Any Treatment Completion</td>
<td>29%</td>
<td>31%</td>
<td>0.506</td>
</tr>
<tr>
<td>ISR</td>
<td>54%</td>
<td>60%</td>
<td>0.062</td>
</tr>
<tr>
<td>Recidivism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revocation</td>
<td>64%</td>
<td>79%</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Rearrest</td>
<td>47%</td>
<td>53%</td>
<td>0.963</td>
</tr>
<tr>
<td>Reconviction</td>
<td>23%</td>
<td>31%</td>
<td><strong>0.010</strong></td>
</tr>
<tr>
<td>Reincarceration</td>
<td>10%</td>
<td>14%</td>
<td>0.095</td>
</tr>
<tr>
<td>N</td>
<td>162</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>

The bottom of Table 2 displays differences in means between treatment and control group members for the four recidivism outcomes. A significantly larger percentage of control group members were returned to prison for supervised release revocations than HRRR participants (79 percent compared to 64 percent, respectively), and they had significantly more reconvictions (31 percent versus 23 percent, respectively). Although a larger percentage of
control group members had more rearrests and new offense reincarcerations than treatment group members, these differences were not statistically significant.

Because one of the main goals of the HRRR program is to provide released offenders with comprehensive case planning and to connect them with community-based services that can assist with the reentry process, this study examined whether HRRR participants actually received more reentry services than control group members. These results are displayed in Table 3. Nearly all of the HRRR participants (94 percent) completed TAPs and SMART goals while in the facility and worked with grant staff as they transitioned back into the community. Ten of the HRRR group members refused to work with any of the program staff members and never received any grant services. A large majority (84 percent) of the HRRR participants visited the community reentry hub at least once and interacted with the hub coordinator after release. Only a slightly larger percentage of HRRR participants received community-based chemical dependency treatment than control group members (30 percent compared to 29 percent, respectively), and this difference was not statistically significant. A significantly larger percentage of HRRR participants than control group members received community-based cognitive-behavioral programming (42 percent compared to 16 percent, respectively), as well as employment assistance (43 percent compared to 25 percent, respectively), including transitional employment (25 percent compared to 0 percent, respectively).

The middle of Table 3 reveals that a larger percentage of control group members than HRRR participants received housing assistance (52 percent compared to 46 percent, respectively), although that difference was not statistically significant. However, a significantly larger percentage of control group members lived in transitional housing than HRRR participants (40 percent compared to 31 percent). Similar percentages of HRRR participants and control
group members received mentoring services, but a significantly larger proportion of HRRR participants received transportation assistance (52 percent compared to 14 percent, respectively). On average, HRRR participants received a greater number of reentry services than control group members (3.2 compared to 1.5 services, respectively), but this difference was not statistically significant.

Table 3. Comparison of Means for Reentry Services Received between HRRR Participants and Control Group Members

<table>
<thead>
<tr>
<th>Service</th>
<th>SCA Participants (N = 162)</th>
<th>Control Group (N = 73)</th>
<th>t-test p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced Case Planning</td>
<td>152 (94%)</td>
<td>0 (0%)</td>
<td>0.000</td>
</tr>
<tr>
<td>Community Reentry Hub Engagement</td>
<td>136 (84%)</td>
<td>0 (0%)</td>
<td>0.000</td>
</tr>
<tr>
<td>Community-Based Chemical Dependency Treatment</td>
<td>48 (30%)</td>
<td>21 (29%)</td>
<td>0.788</td>
</tr>
<tr>
<td>Community-Based Cognitive-Behavioral Programming</td>
<td>68 (42%)</td>
<td>12 (16%)</td>
<td>0.000</td>
</tr>
<tr>
<td>Employment Assistance</td>
<td>70 (43%)</td>
<td>18 (25%)</td>
<td>0.000</td>
</tr>
<tr>
<td>Subsidized Employment</td>
<td>40 (25%)</td>
<td>0 (0%)</td>
<td>0.000</td>
</tr>
<tr>
<td>Housing Assistance</td>
<td>75 (46%)</td>
<td>38 (52%)</td>
<td>0.682</td>
</tr>
<tr>
<td>Transitional Housing</td>
<td>51 (31%)</td>
<td>29 (40%)</td>
<td>0.043</td>
</tr>
<tr>
<td>Mentoring</td>
<td>24 (15%)</td>
<td>8 (11%)</td>
<td>0.105</td>
</tr>
<tr>
<td>Transportation Assistance</td>
<td>85 (52%)</td>
<td>10 (14%)</td>
<td>0.000</td>
</tr>
<tr>
<td>Average Number of Reentry Services Received</td>
<td>4.1 (--)</td>
<td>1.5 (--)</td>
<td>0.108</td>
</tr>
</tbody>
</table>
Multivariate Analyses Results

Table 4 displays the results of the four Cox regression models predicting supervised release revocations, rearrests, reconvictions, and reincarcerations for new offenses based on HRRR group assignment, controlling for multiple relevant variables. The results show that HRRR group membership significantly reduced the risk of a new supervised release revocation by 28 percent and the risk of a reconviction by nearly 42 percent. The significant differences in rates of revocation and reconviction between the treatment and control groups displayed in Table 2 persisted in the multivariate analyses. HRRR group membership decreased the risk of rearrest by 26 percent and the risk of new offense reincarceration by nearly 34 percent, but these relationships were not statistically significant (p-values were 0.134 and 0.324, respectively). The results for the models predicting reconviction and reincarceration should be interpreted with some caution given the low frequency of these outcomes and the limited statistical power in those analyses, which ranged between 0.62 and 0.64.

Table 4 also shows that age was a significant predictor of three out of four of the recidivism measures; an increase in age reduced the risk of revocation, rearrest, and reconviction, but not new offense reincarceration. As expected, prior record (the index of prior supervision revocations and felony convictions) was a salient factor, significantly increasing the risk of revocations, rearrests, and reconvictions. Curiously, the LSI-R score, which is calculated using an instrument specifically designed to predict multiple types of recidivism, was very weakly and not significantly associated with risk of revocation and reincarceration. An increase in the LSI-R score slightly and significantly increased the risk of rearrest and reconviction. It is important to note that the researchers are controlling for factors included in the LSI-R (e.g., prior record, education), which may influence its ability to be a significant and robust predictor of recidivism.
for all of the outcomes. Serving time for a person offense (compared to all of the other offense
types) increased the risk of revocation, rearrest, and reconviction, but this relationship was
significant and much larger only for the analysis predicting revocation. The violent offenders in
this study did have higher risk assessment scores and were serving longer sentences on average.

The fact that post-release ISR significantly increased the risk of supervision revocation
should not be surprising considering that offenders under ISR face close scrutiny after release,
including surprise home and work visits, a minimum of four face-to-face supervision agent
contacts per week, and electronic monitoring in the first few months after release (Minnesota
Department of Corrections, 2014c). In other words, release violations by offenders under ISR are
more easily detected and there are more restrictions that can be violated. While ISR increased the
risk of supervision revocations among these RVs, it significantly decreased the risk of rearrest
and reconviction (a 41 percent and 45 percent reduction in the odds, respectively). It appears that
the close monitoring provided by ISR among these RVs paid off for preventing new offenses.

The results of the models predicting the four recidivism outcomes based on the number of
reentry services received by both the HRRR program and control group members are displayed
in Table 5. An increase in the number of reentry services received corresponds to an 11 percent
reduction in the risk of a supervised release revocation and 9 percent reduction in the risk of
rearrest. An increase in the number of reentry services received by the RVs also reduced the risk
of reconviction and reincarceration, but these relationships were not statistically significant.
Unlike the results displayed in the previous set of analyses (Table 4), the results in Table 5 show age was negatively and significantly associated with two out of the four recidivism outcomes (rearrest and reconviction) instead of three. Also, an increase in prior record score significantly increased the risk of all four recidivism outcomes, instead of just three as it did in the previous set of analyses. The relationships between LSI-R score, type of offense (person), and post-release supervision (ISR) were very similar in the analyses presented in Table 5 compared to the results displayed in Table 4.

The fact that an increase in reentry services received significantly influenced the risk of recidivism raised another question: were any of the specific services received (e.g., employment, housing) more salient than others in influencing the four recidivism outcomes? In Table 6, hazard ratios from Cox regression analyses predicting the four recidivism outcomes using each of the reentry services offered are displayed.

### Table 4. Cox Regression Models: Impact of HRRR Assignment on Four Recidivism Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Revocation</th>
<th>Rearrest</th>
<th>Reconviction</th>
<th>Reincarceration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard Ratio</td>
<td>SE</td>
<td>Hazard Ratio</td>
<td>SE</td>
</tr>
<tr>
<td>HRRR Assignment</td>
<td>0.715*</td>
<td>0.170</td>
<td>0.738</td>
<td>0.204</td>
</tr>
<tr>
<td>Age at Release (years)</td>
<td>0.977*</td>
<td>0.010</td>
<td>0.933***</td>
<td>0.013</td>
</tr>
<tr>
<td>Prior Record</td>
<td>1.239*</td>
<td>0.091</td>
<td>1.640***</td>
<td>0.055</td>
</tr>
<tr>
<td>LSI-R Score</td>
<td>0.997</td>
<td>0.012</td>
<td>1.033*</td>
<td>0.015</td>
</tr>
<tr>
<td>Person Offense</td>
<td>2.320***</td>
<td>0.196</td>
<td>1.415</td>
<td>0.246</td>
</tr>
<tr>
<td>Original Sentence Length</td>
<td>0.998</td>
<td>0.002</td>
<td>1.001</td>
<td>0.083</td>
</tr>
<tr>
<td>Institutional Discipline</td>
<td>1.000</td>
<td>0.005</td>
<td>0.997</td>
<td>0.005</td>
</tr>
<tr>
<td>GED/High School Degree</td>
<td>1.008</td>
<td>0.195</td>
<td>1.153</td>
<td>0.231</td>
</tr>
<tr>
<td>Any Treatment Completion</td>
<td>1.012</td>
<td>0.197</td>
<td>1.098</td>
<td>0.239</td>
</tr>
<tr>
<td>ISR</td>
<td>1.495*</td>
<td>0.182</td>
<td>0.590*</td>
<td>0.237</td>
</tr>
</tbody>
</table>

N = 239

* p < .05, ** p < .01, *** p < .001
Table 5. Cox Regression Models: Impact of Number of Reentry Services Received on Four Recidivism Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Revocation</th>
<th>Rearrest</th>
<th>Reconviction</th>
<th>Reincarceration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard Ratio</td>
<td>SE</td>
<td>Hazard Ratio</td>
<td>SE</td>
</tr>
<tr>
<td>Reentry Services</td>
<td>0.893**</td>
<td>0.041</td>
<td>0.911*</td>
<td>0.048</td>
</tr>
<tr>
<td>Age at Release (years)</td>
<td>0.982</td>
<td>0.010</td>
<td>0.933***</td>
<td>0.013</td>
</tr>
<tr>
<td>Prior Record</td>
<td>1.200*</td>
<td>0.093</td>
<td>1.685***</td>
<td>0.106</td>
</tr>
<tr>
<td>LSI-R Score</td>
<td>0.994</td>
<td>0.012</td>
<td>1.032*</td>
<td>0.015</td>
</tr>
<tr>
<td>Person Offense</td>
<td>2.461***</td>
<td>0.199</td>
<td>1.411</td>
<td>0.225</td>
</tr>
<tr>
<td>Original Sentence Length</td>
<td>0.997</td>
<td>0.002</td>
<td>1.001</td>
<td>0.003</td>
</tr>
<tr>
<td>Institutional Discipline</td>
<td>1.002</td>
<td>0.005</td>
<td>0.997</td>
<td>0.006</td>
</tr>
<tr>
<td>GED/High School Degree</td>
<td>1.071</td>
<td>0.200</td>
<td>1.271</td>
<td>0.240</td>
</tr>
<tr>
<td>Any Treatment Completion</td>
<td>0.980</td>
<td>0.199</td>
<td>1.089</td>
<td>0.234</td>
</tr>
<tr>
<td>ISR</td>
<td>1.570*</td>
<td>0.193</td>
<td>0.628*</td>
<td>0.218</td>
</tr>
</tbody>
</table>

N = 235
* p < .05, ** p < .01, *** p < .001

The results of the analyses displayed in Table 6 reveal that employment assistance, including subsidized employment, was one of the most influential factors in reducing recidivism risk in this study population. Receipt of employment assistance, including résumé and job search assistance or job referrals, significantly reduced the risk of supervision revocation (33 percent reduction), rearrest (39 percent reduction), and reincarceration (68 percent reduction). Subsidized employment significantly reduced the risk of revocation (57 percent reduction), rearrest (70 percent reduction), and reconviction (76 percent reduction). The fact that employment can reduce the risk of recidivism is consistent with prior research (e.g., Bloom et al. 2009; Duwe 2012b; Uggen 2000). Not only can employment keep returning offenders occupied with constructive and pro-social activities, it can also give them an incentive to desist from criminal behavior.
Enhanced case planning, community hub engagement, and participation in community-based cognitive-behavioral programming all significantly reduced the risk of supervision revocation. Transportation assistance significantly decreased the likelihood of supervision revocation (35 percent reduction) and rearrest (33 percent reduction). Although transportation assistance does not have a logical or theoretical direct effect on recidivism, it appears that access to reliable transportation may facilitate other reentry activities that do have a conceivable direct effect on recidivism (e.g., employment).
Surprisingly, participation in community-based chemical dependency treatment and housing assistance (including transitional housing) had positive, yet non-significant, relationships with some of the recidivism outcomes. It is possible that participating in chemical dependency treatment could be indicative of addiction issues, which could disrupt successful prisoner reentry. Also, living in transitional housing could increase an individual’s risk of recidivism not because they are more likely to reoffend or violate the terms of release, but because they are monitored more closely than offenders residing at private housing.

**DISCUSSION AND CONCLUSION**

To date, this study represents one of the first efforts to evaluate a SCA reentry program. Taken together, the results of this research demonstrate that dedicating some extra planning and resources towards these high-risk short-term offenders can significantly reduce recidivism. Selection into the HRRR program significantly reduced the risk of two out of the four recidivism measures included in this study. The findings from this research echo previous research on reentry programs, demonstrating that early release planning and multiagency collaborations can have significant effects on recidivism outcomes. However, the lack of significant effects on all forms of recidivism (especially rearrest) may be the result of limitations in the research design, existing shortcomings in the HRRR program (e.g., lack of more pre-release services), or a combination of both.

This study revealed that the HRRR program was more successful at reducing recidivism than some earlier reentry efforts in Minnesota, including the PRI and Minnesota’s SVORI program. One of the main reasons for the HRRR program’s success over these previous reentry efforts is likely that, despite some early implementation hurdles, the HRRR program was implemented with fidelity (Walters et al. 2013). Further, unlike these two previous reentry
programs, the HRRR program had fewer limitations on the types of offenders it would enroll (i.e., sex offenders, ISR offenders), allowing it to reach more high-risk offenders. High-dosage programs, such as the HRRR program, are best-suited for the highest risk offenders (e.g., Andrews et al. 1990; Bonta, Wallace-Capretta, and Rooney 2000). Finally, while the PRI struggled with the added reentry coordinator, the HRRR administrators were proactive in ensuring that the grant-funded reentry staff supplemented the case planning of release violators rather than diffusing the caseloads of facility-based case managers and community supervision agents.

In addition to the low number of events per variable in some of the analyses, post-hoc Cox regression analyses found that statistical power fell below 0.80 (the standard threshold for sufficient statistical power) in some of the analyses.14 Thus, there may have been significant effects of the HRRR program on some of the outcomes, but the analyses did not have sufficient power to detect those effects. This limitation could be overcome in future evaluations of the HRRR program with more participants and longer follow-up times.

Another limitation of the present research design is that the assessed needs of the treatment and control group members were not factored into this research because these data were not available for the control group. It is important to note that not all of the RVs in the data needed any or all of the reentry services offered. For example, a significantly larger proportion of RVs in the HRRR group received community-based cognitive-behavioral programming than control group members, but that figure does not represent whether all of the RVs who needed that service received that service.

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14 Statistical power in analyses predicting recidivism based on HRRR participation fell below 0.80 for Rearrest (0.51), Reconviction (0.64), and Reincarceration (0.62).
Second, this study is an early evaluation of the HRRR program. This research examined the outcomes for the first year’s selection of participants. While the main components of the HRRR program have remained stable (i.e., individualized case planning, transitional employment, transitional housing, the community hub), some of the program elements have evolved over time. For example, the program administrators found that group mentoring was better-suited for the target population than individual mentoring after the first wave of enrollment. As the program evolves, its effect on recidivism outcomes may also evolve. Also, a future evaluation that tracks treatment and control group members after at least three years of post-release time will reveal whether differences in rates of all four recidivism outcomes diverge further, change direction, or converge over time.

The HRRR program has several strengths that put it in line with established principles of effective correctional treatment (e.g., Andrews, Bonta, and Hoge 1990; Gendreau 1996). These strengths include the targeting of high-risk offenders for intensive programming, the use of highly trained staff in a structured program, the use of reliable and validated risk and needs assessment tools, and timely dynamic case planning that targets individual criminogenic needs. Additionally, the HRRR program has strengthened relationships between the DOC, community corrections departments, and local nonprofit organizations.

Despite its strengths, the HRRR program still has room for improvement. As mentioned earlier, the HRRR program currently lacks pre-release programming. Previous evaluations of DOC projects have found that programs that begin in the facilities and continue into the communities can have the greatest effects on offender behavior (Duwe and King 2013; Duwe 2012a; Duwe 2014). Additionally, while many of the HRRR programs are directed towards offenders who have been assessed as needing those programs (e.g., chemical dependency,
employment, housing) at least two of the HRRR services (domestic violence prevention and mentoring) are directed towards all of the offenders, regardless of assessed risks and needs. All services should be directed towards offenders based on assessed risks and needs.

Finally, HRRR program administrators need to focus on future sustainability of services for RVs. As federal grant funds and state prison budgets stagnate, the DOC may not have the funds to support additional staff, services, or facilities in the community. Given the moderate success of the HRRR program, administrators should consider how existing resources and infrastructure can be used to deliver comparable services to future RVs and high-risk offenders.
REFERENCES


