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Criminal Justice Policy Review published online 6 December 2011
DOI: 10.1177/0887403411429724

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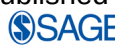
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Criminal Justice Policy Review
XX(X) 1–26
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http://cpj.sagepub.com

Blessed Be the Social Tie That Binds: The Effects of Prison Visitation on Offender Recidivism

Grant Duwe[1] **and Valerie Clark**[1]

Abstract

Following recent studies in Florida and Canada, we examine the effects of prison visitation on recidivism among 16,420 offenders released from Minnesota prisons between 2003 and 2007. Using multiple measures of visitation (any visit, total number of visits, visits per month, timing of visits, and number of individual visitors) and recidivism (new offense conviction and technical violation revocation), we found that visitation significantly decreased the risk of recidivism, a result that was robust across all of the Cox regression models that were estimated. The results also showed that visits from siblings, in-laws, fathers, and clergy were the most beneficial in reducing the risk of recidivism, whereas visits from ex-spouses significantly increased the risk. The findings suggest that revising prison visitation policies to make them more "visitor friendly" could yield public safety benefits by helping offenders establish a continuum of social support from prison to the community. We anticipate, however, that revising existing policies would not likely increase visitation to a significant extent among unvisited inmates, who comprised 39% of our sample. Accordingly, we suggest that correctional systems consider allocating greater resources to increase visitation among inmates with little or no social support.

Keywords

offender reentry, prison, visitation, recidivism, social support

[1]Minnesota Department of Corrections, St. Paul, MN, USA

Corresponding Author:
Grant Duwe, Research Director, Minnesota Department of Corrections, 1450 Energy Park Drive, Suite 200, St. Paul, MN 55108-5219, USA
Email: grant.duwe@state.mn.us

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As the number of individuals housed in state and federal prisons quadrupled over the past 30 years, so did the number of individuals returning to communities from prisons (Sabol, West, & Cooper, 2009). Newly released offenders are often unprepared for life outside (Irwin & Austin, 1994). Returning prisoners face a number of obstacles to successful reintegration, including unemployment, debt, homelessness, substance abuse, and family conflict (Travis, Solomon, & Waul, 2001; Visher, La Vigne, & Travis, 2004).

Saddled with large budget deficits in the wake of the recent financial crisis, many states are realizing the high cost of housing record numbers of prisoners (Pew Center on the States, 2008). Reducing prison populations, and thereby reducing corrections spending, has become a central concern for many states. Indeed, given that research has shown that roughly two thirds of prisoners will be rearrested within 3 years of release (Hughes & Wilson 2003; Langan & Levin, 2002), successfully reintegrating former prisoners is crucial to reducing recidivism and prison populations (Irwin & Austin, 1994).

Findings from recent research have underscored the importance of social support in helping offenders desist from crime and, more narrowly, recidivism (Duwe, 2011; Shinkfield & Graffam, 2009). While offenders are in prison, visits from family and friends offer a means of establishing, maintaining, or enhancing social support networks. Strengthening social bonds for incarcerated offenders may be important not only because it can help prevent them from assuming a criminal identity (Clark, 2001; Rocque, Bierie, & MacKenzie, 2010) but also because many released prisoners rely on family and friends for employment opportunities, financial assistance, and housing (Berg & Huebner, 2011; Visher et al., 2004). The results from recent studies on prisoners in Florida (Bales & Mears, 2008) and Canada (Derkzen, Gobeil, & Gileno, 2009) suggest that both the presence and frequency of prison visits during the last year of confinement were associated with reduced recidivism.

Present Study

In this study, we examine the relationship between prison visitation and recidivism among 16,420 offenders released from Minnesota prisons between 2003 and 2007. Rather than focusing on the impact of visitation during the last year of imprisonment, we extend research on prison visitation and recidivism by using multiple measures of visitation over the entire confinement period to assess the effects of the number, timing, and type of visits (e.g., friend, sibling, mentor, etc.) on reoffending. We also examine whether the size of an offender's social support network, as reflected by the number of individual visitors, is associated with recidivism. Furthermore, given that we tracked the offenders in our sample through June 2010, we use a relatively lengthy follow-up period (an average of nearly 5 years) for recidivism, which was measured two different ways.

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In the ensuing section, we discuss common prison visitation policies that often inhibit visits from family, friends, and others. Next, we review the literature pertaining to prisoner reentry, social support, and prison visitation. Following a description of the data and methods used in this study, we present the findings from the statistical analyses. We conclude the study by discussing the implications of the findings for correctional policy and practice.

Prison Visitation Policies

As prison sentences have increased, offenders have had an increasingly difficult time maintaining social support networks (Lynch & Sabol, 2001). Mailed letters are slow, and phone calls are prohibitively expensive (La Vigne et al., 2005). Visits from family and friends may be a prisoner's best option for maintaining social support networks, but they are often limited.

Families of prisoners have a difficult time visiting inmates for three major reasons. First, although a majority of prison inmates are from urban areas, most major prisons are located in rural areas far from the city center (Austin & Hardyman, 2004; Coughenour, 1995; Holt & Miller, 1972). For example, 30% of Florida state prison inmates are from the Miami–Dade County area, but only 5% of all Florida inmates are housed in Dade County (Austin & Hardyman, 2004, p. 23). Data from the Bureau of Justice Statistics revealed that more than half of prisoners with children live more than 100 miles from where they lived before prison, and 10% lived more than 500 miles away (Schirmer, Nellis, & Mauer, 2009). Given that many prisoners come from poverty, their families cannot typically afford the costs associated with visiting prisons so far away (Christian, 2005).

The second impediment to prison visitation are the administrative policies of prisons (Austin & Hardyman, 2004). Few prison visitation programs are designed to encourage visits. Rather, most visitation programs are subordinate to safety and security procedures. Many prisons perform background checks on potential visitors and bar anyone with a criminal background. The state of Arizona has begun charging visitors for background checks, adding to the financial burdens of visiting families (Goode, 2011). Also, visitation hours are usually limited to a few hours and only on certain days of the week. The Supreme Court has affirmed the rights of prison administrators to limit visitation programs for the sake of facility security and safety (Farrell, 2004).

The last major barrier to visitation involves the nature of many visitation programs and the uncomfortable settings. Generally speaking, prisons are not designed for the comfort of prisoners or visitors (Austin & Hardyman, 2004). The families of inmates often travel long distances to prisons, only to wait in line for hours in rooms that sometimes have no bathrooms or vending machines, and poor circulation (Sturges, 2002). After waiting for hours, visitors usually meet with inmates in large multipurpose rooms, where they are closely watched and allowed little physical contact.

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Prison Visitation Policies in Minnesota

Unlike several other states, most Minnesota state correctional facilities are within 100 miles of the most populous area in the state, the Minneapolis–St. Paul metropolitan area. Of the prisoners incarcerated on July 1, 2011, about 40% were committed from either Hennepin or Ramsey counties, where Minneapolis and St. Paul are located, respectively (Minnesota Department of Corrections, 2011). Although visitation policies vary across facilities, the Minnesota Department of Corrections (MnDOC) has general rules that apply to all state prisons. Visits, for example, cannot last longer than 2 hr, and prisoners receive a maximum number of visiting hours each month. The monthly number of visiting hours inmates may receive, however, depends on the security level of the facility. Offenders in the most secure facilities may receive up to 16 hr of visits per month, while those in facilities with lower security levels may receive up to 36 hr.

Much like other state prison systems, Minnesota has some visitation policies that may inhibit visits from family, friends, and prosocial others. For example, offenders are primarily responsible for conveying visitation rules and visitor application materials to potential visitors. If a visitation application is denied, it is the prisoner's responsibility to relay that information to the would-be visitor. Passing this information along may be difficult for prisoners given their limited communication privileges in the facilities. Also, with the exception of immediate family members, visitors are not permitted to be on more than one current state inmate's visitor list. Thus volunteers, such as mentors, are not allowed to visit multiple inmates during the same general timeframe.

Reentry and Social Support

The prison boom of the past three decades has resulted in a record number of former inmates attempting to reintegrate back into communities (Hughes & Wilson, 2003; Visher & Travis, 2003). The capacity of state and federal corrections systems to manage prisoner reentry has not kept pace with the increasing number of returning prisoners (Lynch & Sabol, 2001; Petersilia, 2003). Supervision agents, who are often overwhelmed with large caseloads, must focus exclusively on supervision and are unable to assist with the reentry process (Petersilia, 1999). Communities are reluctant to accept convicted felons, and released prisoners are not eligible for many forms of public assistance (Travis et al., 2001).

Social bonds and social support are common elements in many criminological theories, both as a key to crime prevention and a mechanism for desistance from crime. According to Hirschi's (1969) social control theory, an individual's attachment, or bond, to a conventional lifestyle prevents him or her from offending. Sensitivity toward family members and other close contacts is a large component of this bond. Longer and more frequent visits with family while in prison could strengthen a prisoner's attachment (LaVigne, Naser, Brooks, & Castro, 2005). Proponents of general

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strain theory would argue that family bonds and social support would ease the stresses related to reentry, making the prisoners less likely to engage in subsequent criminal behavior (Agnew, 1992). Life-course theorists view the release from prison as a potential turning point in the lives of offenders (Sampson & Laub, 1993). An offender's attachment to family members could give him or her both the opportunity and incentive to desist from crime (Horney, Osgood, & Marshall, 1995).

In fact, research has demonstrated that family and friends are a returning prisoner's most valuable source of support. Anywhere from 40% to 80% of newly released offenders rely on their families immediately after release (Berg & Huebner, 2011; Nelson, Deess, & Allen, 1999; Visher et al., 2004). Family and friends are capable of helping returning prisoners overcome reentry obstacles, including unemployment, debt, and homelessness.

Because many offenders lack education, vocational skills, and a steady history of employment (Berstein & Houston, 2000; Petersilia, 2003; Visher et al. 2004; Western, Kling, & Weiman, 2001), obtaining employment represents one of the largest obstacles encountered by returning prisoners (Brees, Ra'el, & Grant, 2000; Rocque et al., 2010; Travis et al, 2001). Social ties are important for anyone seeking employment (Granovetter, 1983), but for a convicted felon they can be particularly salient. A history of serious offending can make an individual appear untrustworthy and, therefore, less employable (Pager, 2003; Petersilia, 2003; Western et al., 2001). An endorsement by a family member can persuade potential employers to overlook the stigma of incarceration. For example, Berg and Huebner (2011) found that released prisoners who had strong family ties were more likely to maintain a job compared to less attached prisoners. Moreover, released prisoners who had jobs and strong family ties were much less likely to reoffend.

In addition to unemployment, returning prisoners tend to have a lot of debt (Levingston & Turetsky, 2007), and are likely to encounter housing issues. While incarcerated, many prisoners accumulate debts from child support, court-imposed fines and assessments, restitution to victims, and other sources. Faced with unemployment and debt, would-be private landlords are unlikely to rent to returning prisoners (Travis et al., 2001). Similarly, federally funded housing is not available to those who have histories of drug or violence-related offenses. Because about half of returning prisoners were serving a sentence for a drug or violence-related conviction, and even more ex-prisoners have at least one prior drug or violence-related conviction, most returning prisoners are not eligible for federal housing assistance (Petersilia, 2003).

Many newly released prisoners rely on their families for financial assistance and housing (e.g., Nelson et al., 1999; Visher et al., 2004). For example, in a study that followed 205 men leaving prison, La Vigne, Visher, and Castro (2004) found that 59% of these men were receiving financial support from spouses, family members, or friends, and 88% were living with family members. Eighty-four percent of the ex-prisoners in Visher, Yahner, and LaVigne's (2010) study were living with family 7 months out of prison, and 92% received cash assistance from their families. In Nelson et al.'s (1999) qualitative study of reentry in New York City, 40 out of the

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49 participants lived with family immediately after release. Perhaps more importantly, released prisoners who lived with family members were less likely to abscond from parole. Although few of this study's participants received cash support from family, most received some other form of material support. Altogether, social support networks appear to be an effective and cheap reentry tool.

Prison Visitation Research

It has been nearly 40 years since the National Advisory Commission on Criminal Justice Standards and Goals (1973) recommended that prisons develop policies more conducive to visitation. Yet, impediments to prison visitation continue despite the fact that researchers and prison administrators have long been aware of the benefits of visitation programs (Farrell, 2004; Schafer, 1994). Decades of research indicate that visits from family improve institutional behavior and lower the likelihood of recidivism for inmates (e.g., Bales & Mears, 2008; Borgman, 1985; Carlson & Cervera, 1992; Casey-Acevedo & Bakken, 2001; Holt & Miller, 1972). In one of the first studies of the effects of prison visitation on recidivism, Holt and Miller (1972) found that only 2% of prisoners who had three or more visitors in their final year of incarceration returned to prison within a year of release, compared to 12% of prisoners who had no visitors. In subsequent studies of prison visits and furlough programs, researchers found similar results (e.g., Adams & Fischer, 1976; Glaser, 1964; Howser & McDonald, 1982; Leclair, 1978). More frequent and intense visits with family and friends, either through visits or furloughs, decrease the likelihood of recidivism and parole failure.

Recent Studies

More recent research has found similar results. Bales and Mears (2008) examined the effects of prison visitation on recidivism among 7,000 Florida state prison inmates. They limited their sample to prisoners who were serving at least a 1-year sentence, and they looked only at visits that occurred during the final year of incarceration. The authors found that the frequency, timing, and type of visitor were all related to the risk of recidivism. Any and more frequent visits during the last year of imprisonment reduced the risk of recidivism. Visits that occurred close to the time of release had the strongest effect on recidivism. Visits from both family and friends reduced the risk of recidivism, but visits from spouses had an even stronger negative effect on the risk of recidivism. Even among the individuals who did reoffend, the prisoners who were visited took longer to do so compared to the 58% of the sample who did not receive any visits.

In another recent study, Derkzen et al. (2009) compared postrelease outcomes among 6,537 Canadian inmates who did not receive any visits, inmates who received standard prison visits, and inmates who received special private family visits. Like Bales and Mears (2008), Derkzen and colleagues (2009) examined visits during the last year of confinement for offenders. The results of this study were similar to the

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results of the Bales and Mears (2008) study, as prisoners who received visits from family and friends were significantly less likely to reoffend or be readmitted to prison. Private family visits were associated with an even larger reduction in recidivism compared to regular visits. Prisoners who participated in the longer, more private family visits were much less likely to reoffend or be readmitted to prison compared to inmates who had shorter, more restricted visits or no visits at all.

This study builds on the recent research by Bales and Mears (2008) and Derkzen et al. (2009) in several ways. First, we examine the impact of visitation on recidivism for all released offenders regardless of their length of stay (LOS) in prison. If inmates were limited to an LOS of 12 months or more, we would have excluded 44% of the offenders in our sample and 80% of those who were admitted to prison as parole violators. By including all offenders released from Minnesota prisons during the 2003-2007 period, this study contains a more representative sample of released prisoners, thereby increasing the generalizability of the findings. Second, despite the focus on visitation over the entire confinement period, we still examine whether the timing of visits matters by developing a measure, as described later, that weights visits on the basis of when they occurred during an offender's term of imprisonment. Third, by examining twice the number of inmate–visitor relationship categories (16 vs. 8) than the recent studies on prisoners from Florida and Canada, we identify several types of relationships that have a significant association with recidivism. Fourth, we obtain a more robust assessment of the effects of visitation on recidivism by tracking a larger sample of offenders, on average, for nearly 5 years following their release from prison, which is substantially longer than the 2-year follow-up period used in the Florida and Canada studies. Finally, whereas the Derzken et al. (2009) study defined recidivism as (a) reincarceration for a new offense and (b) any reincarceration, we extend prior research by including a recidivism measure that focuses specifically on returns to prison for "technical violations". Determining whether visitation reduces the risk of a technical violation revocation is important considering that the average revocation costs the State of Minnesota roughly US$9,000 (the average LOS for a release violator in Minnesota is 5 months and the marginal per diem is approximately US$60).

Data and Method

We examined the effects of prison visitation on recidivism among 16,420 inmates released from Minnesota prisons between 2003 and 2007. As noted above, we included all released offenders in the sample regardless of how long they were incarcerated. Because we collected recidivism data on these offenders through June 30, 2010, the follow-up period ranges from 2.5 to 6.5 years, with 4.5 being the average.

Measures

Dependent variable. Recidivism, the outcome variable, was measured two different ways in this study. It was operationalized as (a) a reconviction for a felony-level offense and (b) a revocation for a technical violation. Felony reconvictions strictly

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measure new criminal offenses, whereas technical violation revocations represent a broader measure of rule-breaking behavior. Offenders can have their supervision revoked for violating the conditions of their supervised release. Because these violations can include activity that may not be criminal in nature (e.g., use of alcohol, failing a community-based treatment program, failure to maintain agent contact, failure to follow curfew, etc.), technical violation revocations do not necessarily measure reoffending.

We limited our analyses to these two outcome measures due to the relatively large number of visitation variables (five) we examined. Although misdemeanor and gross misdemeanor offenses were excluded, our analyses still capture serious instances of reoffending (felony reconvictions) as well as less serious rule violations involving both criminal and noncriminal behavior (technical violation revocations).

Data on felony reconvictions were obtained electronically from the Minnesota Bureau of Criminal Apprehension (BCA), whereas technical violation revocation data were derived from the MnDOC's Correctional Operation Management System (COMS) database. Consequently, a limitation with these data is that they measure only reconvictions and revocations that took place in the State of Minnesota. Moreover, as with any recidivism study, official criminal history data will likely underestimate the actual extent to which the offenders examined here recidivated.

In the parole revocation analyses, 775 offenders were excluded because they were discharged at the time of release, leaving a total sample size of 15,645 offenders. Because they were released to no supervision, they were not at risk for revocation.

Visitation measures. In examining the effects of visitation on recidivism, we attempted to assess the effects of any visit, the frequency of visits, and the timing of visits. Moreover, to determine whether the size of an offender's social support network is associated with recidivism, we measured the number of individual visitors an offender had. As a result, we measured visitation five different ways: (a) any visit, (b) number of individual visitors, (c) total number of visits, (d) monthly number of visits, and (e) recent number of visits. The visitation data were obtained from COMS.

To estimate the effects of any visitation, we created a dichotomous measure, any visit, in which visited offenders received a value of 1 and those who were not visited were given a value of 0. We assessed the extent of social support by measuring the total number of individual visitors an offender had while incarcerated. To examine the frequency of visitation, we counted the total number of visits inmates received during their confinement. Yet, because the total number of visits is, to some extent, a function of how long an offender is incarcerated, we attempted to add an additional layer of control for an offender's length of stay in prison by creating a measure, monthly number of visits, in which the total number of visits was divided by the number of months an offender was incarcerated. For example, the monthly number of visits for an offender visited 95 times during a 10-month incarceration period would be 9.5.

In an effort to better measure the effects of more recent visits over the entire length of stay in prison (as opposed to the last 12 months), we developed a measure, Recency Score, to capture these effects. We first assigned a value to each visit an offender

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received on the basis of the following formula: 1 – (Number of days between the visit date and the offender's release date/Number of days incarcerated). The recency value assigned to a visit therefore ranges from a low of 0 (not recent) to a high of 1 (very recent). An offender visited on the first (i.e., oldest) day of his confinement would receive a recency value of 0, whereas a visit on the last day (i.e., most recent) would garner a recency value of 1. The recency values for each visit were then summed and divided by the number of months an offender was incarcerated to form a Recency Score for each offender.

Inmate–visitor relationship. To determine whether the effects of visitation vary according to who visits inmates, we disaggregated the visitation data into the following 16 visitor–offender relationship categories: spouse, ex-spouse, son or daughter, mother, father, other parent or guardian, sibling, in-law, other relative, grandparent, grandchildren, friend, clergy, mentor, other professional, and other. For each of the 16 categories, we developed measures for any visits, total number of visits, monthly number of visits, and recency score. These measures are similar, therefore, to those discussed above for visitation in general except that these pertain specifically to visits by spouses, mothers, fathers, clergy, and so on. We were able to create these four visitation measures (any visit, total number of visits, monthly number of visits, and recent visits) for each visitor–offender relationship category because visits are the unit of analysis. We did not measure the individual number of visitors for each relationship category, however, because the offender (rather than the visit) is the unit of analysis.

Independent variables. The independent, or control, variables included in the statistical models were those that were not only available in the COMS database but also might theoretically have an impact on recidivism. The following lists these variables and describes how they were created:

Offender Sex: dichotomized as male (1) or female (0).
Offender Race: dichotomized as minority (1) or White (0).
Age at Release: the age of the offender in years at the time of release based on the date of birth and release date.
Metro Area: a rough proxy of urban and rural Minnesota, this variable measures an offender's county of commitment, dichotomizing it into either metro area (1) or Greater Minnesota (0). The seven counties in the Minneapolis/St. Paul metropolitan area include Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington. The remaining 80 counties were coded as nonmetro area or Greater Minnesota counties.
Prior Supervision Failures: the number of prior revocations while under correctional supervision (probation or supervised release).
Prior Felony Convictions: the number of prior felony convictions, excluding the conviction(s) that resulted in the offender's incarceration.
Admission Type: three dummy variables were created to measure prison admission type. The three variables were new commitment (1 = *new commitment*,

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0 = *probation or release violator*), probation violator (1 = *probation violator*, 0 = *new commitment or release violator*), and release violator (1= *release violator*, 0 = *new commitment or probation violator*). Release violator serves as the reference in the statistical analyses.

Length of Stay (LOS): the number of months between prison admission and release dates.

Offense Type: five dummy variables were created to quantify offense type; that is, the governing offense at the time of release. The five variables were person offense (1 = *person offense*, 0 = *nonperson offense*); property offense (1 = *property offense*, 0 = *nonproperty offense*); drug offense (1 = *drug offense*, 0 = *nondrug offense*); felony driving while intoxicated (DWI) offense (1 = *DWI offense*, 0 = *non-DWI offense*); and other offense (1 = *other offense*, 0 = *nonother offense*). The person offense variable serves as the reference in the statistical analyses.

Institutional Discipline: the number of discipline convictions received during the term of imprisonment prior to release.

Chemical Dependency (CD) Treatment: this variable measures whether offenders had, by the time they were released from prison, entered CD treatment (1) or were untreated (0) during their current prison sentence.

Sex Offender Treatment: this variable measures whether offenders had, by the time they were released from prison, entered sex offender treatment (1) or were untreated (0) during their current prison sentence.

Type of Postrelease Supervision: five dummy variables were created to measure the level of postrelease supervision to which offenders were released. The five variables were intensive supervised release (ISR; 1 = *ISR*, 0 = *non-ISR*); supervised release (SR; 1 = *SR*, 0 = *non-SR*); work release (1 = *work release*, 0 = *non–work release*); Challenge Incarceration Program (CIP; 1 = *CIP*, 0 = *discharge*), and discharge (1 = *discharge or no supervision*, 0 = *released to supervision*). Work release and CIP are early release programs operated by the MnDOC. Offenders placed on work release are subject to regular supervised release, whereas offenders who complete the institutional phase of CIP, a correctional boot camp that has been found to be effective in reducing recidivism (Duwe & Kerschner, 2008), are placed on intensive supervised release. Supervised release is the variable that serves as the reference in the statistical analyses.

Release Year: measuring the year in which offenders were first released from prison for the instant offense, this variable is included to control for any unobserved differences between the different release year cohorts from 2003 to 2007.

Supervised Release Revocations (SRRs): to control for the potential effects of technical violation revocations on reoffending, this measure was included in the models that specifically examined new criminal offenses (reconviction). This variable measured the number of times an offender returned to prison

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as a supervised release violator (for a technical violation) between the date of his or her release from prison and the date of his or her first reoffense (for those who reoffended), or June 30, 2010 (the end of the follow-up period), for those who did not reoffend.

Analysis

In analyzing recidivism, survival analysis models are preferable in that they use time-dependent data, which are important in determining not only whether offenders recidivate but also when they recidivate. As a result, this study uses a Cox regression model, which uses both "time" and "status" variables in estimating the impact of the independent variables on recidivism. For the analyses presented here, the "time" variable measures the amount of time from the date of release until the date of first reconviction, technical violation revocation, or June 30, 2010, for those who did not recidivate. The "status" variable, meanwhile, measures whether an offender recidivated (felony reconviction or technical violation revocation) during the period in which she or he was at risk to recidivate. In the analyses presented below, Cox regression models were estimated for both recidivism measures.

To accurately measure the total amount of time an offender was actually at risk to reoffend (i.e., "street time"), it was necessary to account for instances in which an offender was not at risk to recidivate following release from prison. Failure to do so would bias the findings by artificially increasing the lengths of offenders' at-risk periods. Accordingly, for the felony reconviction analyses, the time offenders spent in prison as supervised release violators was subtracted from their total at-risk period as long as it (a) preceded a felony reconviction, or (b) occurred prior to July 1, 2010 (the end of the follow-up period) for those who were not reconvicted.

As shown later, several of the Cox regression models contain a relatively large number of predictors, which raises concerns about multicollinearity. To be sure, methods such as principal components analysis (PCA) are often helpful in identifying a smaller number of predictors that account for much of the variance observed within a larger set of variables. We did not use PCA, however, for several reasons. First, the degrees of freedom in the analyses were sufficient due to the large sample size ($N = 16{,}420$). Second, the results from the correlation matrix we estimated, which are not shown here, indicate that while nine correlations were above 0.50 (any sibling visit-any mother visit = 0.513; number of father visits-number of mother visits = 0.555; monthly father visits-monthly mother visits = 0.542; recent father visits-recent mother visits = 0.527; number of visitors-any mother visits = 0.555; number of visitors-any sibling visits = 0.610; number of visitors-any relative visits = 0.592; number of visitors-any friend visits = 0.577; number of visitors-number of friend visits = 0.514), none exceeded 0.610. Finally, we estimated ordinary least squares (OLS) regression models with both outcome measures, and none of the covariates had tolerance values below .05 or variance inflation factor (VIF) values that exceeded 20.

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Results

As shown in Table 1, 61% of the 16,420 inmates were visited at least once during their confinement, which is higher than that reported by either Bales and Mears (2008; 41%) or Derkzen et al. (2009; 46%). The higher visitation rate observed here is likely due to the fact we measured visitation over the entire incarceration period, as opposed to the last year of confinement. The average number of visits per inmate was 36, which amounted to nearly two visits each month. In addition, offenders were, on average, visited by three individuals. When we look at inmate–visitor relationship, we see that nearly half of the offenders (47%) were visited by a friend. Nearly one third of the inmates were visited by their mothers, and a little more than one fourth were visited by a sibling. Finally, the results show that 38% of the offenders were reconvicted of a felony by the end of June 2010, whereas 42% had their supervision revoked for a technical violation.

The findings from the Cox regression model presented in Table 2 show that each measure of visitation has a statistically significant effect on the risk of reconviction. For example, the hazard of reconviction for a felony was 13% lower for the visited inmates than for those who were not visited. Each visit in prison reduced the risk of reconviction by 0.1%, whereas one visit per month was associated with a 0.9% decrease. The findings also suggest that visits closer to an offender's release date are more important, as reflected by a 3.6% decrease in the reconviction hazard. Last, the results show that the number of individual visitors had a significant effect, reducing the risk of reconviction by 3% for each additional visitor.

The findings presented in Table 3 suggest that visitation has a larger effect on technical violation revocations. Indeed, compared to unvisited inmates, the hazard of revocation was 25% lower for those who were visited. Although the reduction for each visit was the same at 0.1%, we see that each monthly visit reduced the risk of revocation by 3.3%. Whereas more recent visits reduced the hazard of revocation by 12.5%, each additional visitor lowered the risk of revocation by 4.8%.

In Tables 4 and 5, we take a closer look at whether the beneficial effects of visitation varied according to the relationship between the inmate and visitor. In Table 4, we see that any visit from a mentor reduced the risk of reconviction by 29%, while a visit by clergy lowered it by 24%. Visits from certain family members and relatives also had an impact. The risk of reconviction was reduced by 21% for at least one in-law visit, 10% for a sibling visit, and 9% for a visit by other relatives. In addition, we see that any visit from a friend reduced the risk by 7%. Friends and mentors did not have a significant impact for the other three visitation measures although we see that siblings, in-laws, other relatives, and clergy each a significant effect. The findings also suggest, however, that more recent visits from ex-spouses significantly increased the risk of reconviction.

The results in Table 5 show that, once again, visits from siblings, in-laws, and other relatives appeared to be important in reducing the risk of revocation. In these analyses, however, we see that visits from fathers were significantly associated with a reduced

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Table 1. Descriptive Statistics

	Any visit		Total number		Per month		Recent	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Visitation measure	0.610	0.487	35.720	88.044	1.773	3.696	0.449	0.880
Spouse	0.080	0.266	2.670	19.576	0.125	0.769	0.061	0.397
Ex-spouse	0.010	0.115	0.130	3.037	0.007	0.131	0.004	0.073
Son or daughter	0.190	0.393	2.900	13.195	0.146	0.599	0.074	0.311
Mother	0.310	0.463	4.260	14.023	0.217	0.651	0.109	0.333
Father	0.160	0.367	2.020	9.401	0.104	0.451	0.053	0.234
Other parent/guardian	0.050	0.227	0.410	3.379	0.020	0.158	0.010	0.083
Sibling	0.260	0.439	2.500	10.701	0.110	0.422	0.057	0.226
In-law	0.070	0.259	0.420	3.051	0.020	0.169	0.010	0.092
Other relative	0.180	0.382	1.340	6.736	0.060	0.279	0.032	0.149
Grandparent	0.070	0.252	0.500	4.122	0.025	0.177	0.013	0.095
Grandchildren	0.010	0.114	0.140	2.991	0.005	0.082	0.003	0.040
Friend	0.470	0.499	9.960	27.427	0.535	1.336	0.274	0.705
Clergy	0.020	0.131	0.120	2.021	0.005	0.068	0.003	0.042
Mentor	0.010	0.100	0.140	2.179	0.004	0.054	0.003	0.039
Other professional	0.000	0.061	0.010	0.287	0.001	0.016	0.000	0.012
Other	0.010	0.091	0.070	1.652	0.003	0.076	0.002	0.042
Number of individual visitors	3.070	4.249						
Male	0.910	0.292						
Minority	0.470	0.499						
Age at release (years)	33.833	9.821						
Metro commit	0.520	0.500						
Prior supervision failures	0.910	1.158						
Prior felony convictions	2.590	3.243						
Admission type								
New commitment	0.560	0.497						
Probation violator	0.340	0.475						
Sentence length	46.421	70.363						
Offense type								
Criminal sexual conduct	0.120	0.329						
Property	0.220	0.417						
Drugs	0.280	0.449						
Felony DWI	0.030	0.174						
Other	0.120	0.324						
Institutional discipline	4.610	10.003						
Drug treatment	0.160	0.362						
Sex offender treatment	0.020	0.145						
Supervision type								
ISR	0.200	0.403						
Work release	0.170	0.372						

(continued)

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Table 1. (continued)

	Any visit		Total number		Per month		Recent	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
CIP	0.060	0.236						
Discharge	0.050	0.212						
Release year	2004.81	1.447						
Dependent variables								
Felony reconviction	0.380	0.486						
Technical violation revocation	0.420	0.494						
N	16,420							

Note: ISR = Intensive Supervised Release; CIP = Challenge Incarceration Program.

risk of revocation for each visitation measure. In addition, visits from friends were associated with a decreased risk of revocation for two of the visitation measures. Again, we see that visits from ex-spouses significantly increased the risk of recidivism for at least one visitation measure.

Overall, the findings from Tables 4 and 5 suggest that visits from siblings, in-laws, and other relatives matter the most when it comes to reducing recidivism. Is it possible, however, that the salutary effects of these visits are due more to the fact that offenders visited by siblings, in-laws, and other relatives simply have broader networks of social support? To address this issue, we estimated Cox regression models for both recidivism measures in which we estimated the same models presented in Tables 4 and 5 but included the number of individual visitors as a control. We present the findings from these models in Table 6 but, for the sake of brevity, include only the hazard ratio results for the visitation measures.

The results from Table 6 show that the salutary effects of visits from fathers (technical violation revocation), clergy (felony reconviction), and mentors (the any visit measure for felony reconviction) were relatively unaffected by the introduction of the number of individual visitors, which was statistically significant in all eight models, as a control variable. In addition, we see in Table 6 that ex-spouse visits was not only a significant predictor of recidivism for the same two measures shown earlier in Tables 4 and 5 but it also significantly increased the risk of revocation for any visit. In contrast, the findings reveal that the significant effects for sibling, in-law, other relative, and friend visits were due, in part, to the number of individual visitors an offender had. Most notably, whereas other relative visits significantly reduced recidivism in all eight of the models shown earlier, it had only one significant effect in Table 6. Similarly, after controlling for the number of individual visitors, visits from friends were no longer significant. Although three of the effects for sibling visits were no longer significant in Table 6, sibling visits still had an impact on three of the four measures for reoffending. Furthermore, while two of the effects for in-law visits failed to achieve significance in Table 6, it still had a significant effect in the other six models.

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Table 2. Cox Regression Models: Impact of Visitation on Time to First Felony Reconviction

	Any		Number		Per month		Recent		Visitors	
	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*
Visitation	0.869**	0.027	0.999**	0.000	0.991*	0.004	0.964*	0.015	0.970**	0.004
Male	1.283**	0.050	1.295**	0.050	1.292**	0.050	1.292**	0.050	1.274**	0.050
Minority	1.179**	0.028	1.198**	0.027	1.200**	0.027	1.198**	0.027	1.171**	0.028
Age at release (years)	0.966**	0.002	0.966**	0.002	0.967**	0.002	0.967**	0.002	0.965**	0.002
Metro commit	1.187**	0.027	1.188**	0.027	1.181**	0.027	1.183**	0.028	1.194**	0.027
Prior supervision failures	1.089**	0.011	1.089**	0.011	1.088**	0.011	1.089**	0.011	1.086**	0.011
Prior felony convictions	1.169**	0.003	1.169**	0.003	1.169**	0.003	1.169**	0.003	1.169**	0.003
Admission type										
New commitment	0.866**	0.053	0.853**	0.053	0.838**	0.053	0.838**	0.053	0.880*	0.053
Probation violator	0.919	0.052	0.906	0.052	0.896*	0.052	0.896*	0.052	0.927	0.052
Sentence length	0.998**	0.000	0.998**	0.000	0.998**	0.000	0.998**	0.000	0.999**	0.000
Offense type										
Criminal sexual conduct	0.708**	0.058	0.702**	0.058	0.705**	0.058	0.706**	0.058	0.701**	0.058
Property	0.989	0.040	0.987	0.040	0.991	0.040	0.992	0.040	0.979	0.040
Drugs	0.964	0.041	0.957	0.041	0.957	0.041	0.956	0.041	0.963	0.041
Felony DWI	1.370**	0.095	1.336**	0.095	1.348**	0.095	1.350**	0.095	1.347**	0.095
Other	1.064	0.044	1.061	0.044	1.058	0.044	1.058	0.044	1.068	0.044
Institutional discipline	1.003*	0.001	1.003*	0.001	1.003*	0.001	1.003*	0.001	1.003*	0.001
Drug treatment	0.952	0.046	0.955	0.046	0.936	0.046	0.937	0.046	0.977	0.047
Sex offender treatment	0.613**	0.161	0.611**	0.161	0.604**	0.161	0.603**	0.161	0.614**	0.161
Supervision type										
ISR	0.953	0.039	0.945	0.039	0.947	0.039	0.947	0.039	0.949	0.039
Work release	0.917*	0.038	0.920*	0.038	0.918*	0.038	0.918*	0.038	0.926*	0.038
CIP	0.559**	0.098	0.548**	0.098	0.560**	0.098	0.556**	0.098	0.557**	0.098
Discharge	1.225**	0.061	1.238**	0.061	1.241**	0.061	1.240**	0.061	1.227**	0.061
Release year	0.907**	0.010	0.908**	0.010	0.905**	0.010	0.905**	0.010	0.909**	0.010
Supervised release revocations	1.014	0.017	1.015	0.017	1.017	0.017	1.017	0.017	1.009	0.017
N	16,420		16,420		16,420		16,420		16,420	

Note: ISR = Intensive Supervised Release; CIP = Challenge Incarceration Program.
*$p < .05$. **$p < .01$.

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Table 3. Cox Regression Models: Impact of Visitation on Time to First Revocation

	Any		Number		Per month		Recent		Visitors	
	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*
Visitation	0.751**	0.026	0.999**	0.000	0.967**	0.004	0.885**	0.017	0.952**	0.004
Male	1.352**	0.051	1.367**	0.051	1.342**	0.051	1.345**	0.051	1.335**	0.051
Minority	1.246**	0.027	1.289**	0.026	1.277**	0.026	1.274**	0.026	1.233**	0.027
Age at release (years)	0.980**	0.001	0.981**	0.001	0.981**	0.001	0.981**	0.001	0.979**	0.001
Metro commit	1.146**	0.026	1.142**	0.026	1.146**	0.026	1.150**	0.026	1.157**	0.026
Prior supervision failures	1.140**	0.011	1.143**	0.011	1.141**	0.011	1.141**	0.011	1.138**	0.011
Prior felony convictions	1.061**	0.004	1.061**	0.004	1.061**	0.004	1.061**	0.004	1.059**	0.004
Admission type										
New commitment	0.921	0.052	0.890*	0.052	0.868**	0.052	0.863**	0.052	0.939	0.052
Probation violator	0.928	0.050	0.897*	0.050	0.885*	0.050	0.882**	0.050	0.931	0.050
Sentence length	0.999**	0.000	0.999**	0.000	0.999**	0.000	0.999**	0.000	1.000	0.000
Offense type										
Criminal sexual conduct	1.665**	0.043	1.649**	0.043	1.656**	0.043	1.668**	0.043	1.623**	0.043
Property	0.937	0.040	0.931	0.040	0.937	0.040	0.939	0.040	0.916*	0.040
Drugs	0.796**	0.041	0.784**	0.041	0.789**	0.041	0.786**	0.041	0.786**	0.041
Felony DWI	1.374**	0.077	1.316**	0.077	1.331**	0.077	1.337**	0.077	1.313**	0.077
Other	0.884**	0.045	0.878**	0.045	0.883**	0.045	0.880**	0.045	0.884**	0.045
Institutional discipline	1.016**	0.001	1.015**	0.001	1.015**	0.001	1.015**	0.001	1.016**	0.001
Drug treatment	0.974	0.041	0.973	0.041	0.956	0.041	0.958	0.041	1.010	0.042
Sex offender treatment	0.625**	0.097	0.619**	0.097	0.607**	0.097	0.607**	0.096	0.633**	0.096
Supervision type										
ISR	1.761**	0.034	1.736**	0.034	1.744**	0.034	1.746**	0.034	1.741**	0.033
Work Release	1.971**	0.035	1.969**	0.035	1.981**	0.035	1.980**	0.035	2.012**	0.035
CIP	1.361**	0.075	1.304**	0.075	1.348**	0.075	1.320**	0.075	1.336**	0.075
Release year	1.006	0.009	1.008	0.009	1.005	0.009	1.003	0.009	1.010	0.009
N	15,645		15,645		15,645		15,645		15,645	

Note: ISR = Intensive Supervised Release; CIP = Challenge Incarceration Program.
*$p < .05$. **$p < .01$.

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Table 4. Cox Regression Models: Inmate–Visitor Relationship on Time to First Reconviction

	Any		Number		Per month		Recent	
	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*
Inmate–visitor relationship								
Spouse	0.920	0.056	1.000	0.001	0.996	0.019	0.997	0.035
Ex-spouse	1.147	0.125	1.002	0.005	1.169	0.088	1.353*	0.155
Son or daughter	1.015	0.040	0.999	0.001	0.999	0.024	0.982	0.045
Mother	1.037	0.037	0.999	0.002	1.002	0.027	1.014	0.052
Father	0.967	0.043	0.996	0.002	0.973	0.039	0.943	0.071
Other parent/guardian	0.979	0.064	0.998	0.005	0.950	0.094	0.917	0.176
Sibling	0.898**	0.040	0.994**	0.002	0.891**	0.040	0.818**	0.072
In-law	0.792**	0.069	0.982*	0.008	0.737*	0.122	0.579*	0.225
Other relative	0.912*	0.043	0.993*	0.003	0.894*	0.053	0.816*	0.098
Grandparent	0.999	0.059	1.006	0.004	1.164	0.071	1.367	0.128
Grandchildren	0.979	0.146	1.002	0.008	0.992	0.232	1.192	0.413
Friend	0.935*	0.030	1.000	0.001	1.003	0.010	1.008	0.019
Clergy	0.756*	0.123	0.950**	0.016	0.483**	0.256	0.284**	0.458
Mentor	0.706*	0.170	0.989	0.010	0.703	0.321	0.618	0.440
Other professional	1.565	0.188	1.047	0.037	2.393	0.541	2.787	0.755
Other	0.917	0.152	1.000	0.009	1.074	0.181	1.059	0.314
Male	1.262**	0.051	1.261**	0.051	1.253**	0.051	1.255**	0.051
Minority	1.177**	0.029	1.183**	0.028	1.193**	0.028	1.196**	0.028
Age at release (years)	0.966**	0.002	0.966**	0.002	0.967**	0.002	0.967**	0.002
Metro Commit	1.189**	0.027	1.191**	0.028	1.183**	0.028	1.182**	0.028
Prior supervision failures	1.086**	0.011	1.085**	0.011	1.086**	0.011	1.086**	0.011
Prior felony convictions	1.169**	0.003	1.170**	0.003	1.171**	0.003	1.171**	0.003
Admission type								
New commitment	0.882*	0.053	0.862**	0.053	0.848**	0.053	0.847**	0.053
Probation violator	0.931	0.052	0.913	0.052	0.904	0.052	0.904	0.052
Sentence length	0.999**	0.000	0.999	0.000	0.998**	0.000	0.998**	0.000
Offense type								
Criminal sexual conduct	0.711**	0.058	0.706	0.058	0.707**	0.058	0.706**	0.058
Property	0.982	0.040	0.979	0.040	0.983	0.040	0.985	0.040
Drugs	0.964	0.041	0.957	0.041	0.959	0.041	0.958	0.041
Felony DWI	1.354**	0.095	1.331**	0.095	1.344**	0.095	1.344**	0.095
Other	1.069	0.044	1.059	0.044	1.058	0.044	1.058	0.044
Institutional discipline	1.003*	0.001	1.003*	0.001	1.003**	0.001	1.003*	0.001
Drug treatment	0.973	0.047	0.956	0.047	0.939	0.046	0.938	0.046
Sex offender treatment	0.623**	0.161	0.616**	0.161	0.605**	0.161	0.605**	0.161
Supervision type								
ISR	0.951	0.039	0.947	0.039	0.947	0.039	0.947	0.039
Work release	0.922*	0.038	0.921*	0.038	0.919*	0.038	0.919*	0.038
CIP	0.558**	0.098	0.552**	0.098	0.565**	0.098	0.561**	0.098
Discharge	1.228**	0.061	1.238**	0.061	1.245**	0.061	1.245**	0.061
Release year	0.906**	0.010	0.906**	0.010	0.904**	0.010	0.903**	0.010
Supervised release revocations	1.009	0.017	1.012	0.017	1.014	0.017	1.014	0.017
N	16,420		16,420		16,420		16,420	

Note: ISR = Intensive Supervised Release; CIP = Challenge Incarceration Program.
*$p < .05$. **$p < .01$.

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Table 5. Cox Regression Models: Inmate–Visitor Relationship on Time to First Revocation

	Any		Number		Per month		Recent	
	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*	Hazard ratio	*SE*
Inmate–visitor relationship								
Spouse	0.927	0.052	0.999	0.001	0.988	0.019	0.978	0.035
Ex-spouse	1.196	0.109	1.007**	0.003	1.144	0.087	1.312	0.149
Son or daughter	0.946	0.038	0.999	0.001	0.971	0.029	0.946	0.053
Mother	0.934	0.035	1.000	0.001	0.988	0.030	0.986	0.057
Father	0.850**	0.041	0.993**	0.002	0.829**	0.045	0.700**	0.086
Other parent/guardian	0.987	0.059	0.994	0.005	0.809*	0.108	0.689	0.200
Sibling	0.890**	0.037	0.997	0.002	0.891*	0.047	0.820*	0.086
In-law	0.806**	0.061	0.979**	0.007	0.802*	0.104	0.698*	0.184
Other relative	0.887**	0.040	0.989**	0.003	0.830**	0.061	0.701**	0.116
Grandparent	1.046	0.054	1.002	0.003	1.072	0.080	1.174	0.147
Grandchildren	1.047	0.126	1.003	0.006	1.151	0.188	1.297	0.368
Friend	0.902**	0.029	0.999	0.001	0.965**	0.011	0.945**	0.021
Clergy	1.064	0.099	1.004	0.005	0.958	0.194	0.926	0.315
Mentor	0.898	0.127	0.991	0.007	0.887	0.262	0.838	0.355
Other professional	1.274	0.182	0.997	0.040	0.745	0.843	0.83	1.084
Other	0.995	0.141	1.001	0.008	0.967	0.194	0.941	0.336
Male	1.343**	0.051	1.361**	0.051	1.335**	0.051	1.339**	0.051
Minority	1.215**	0.027	1.268**	0.027	1.249**	0.027	1.254**	0.027
Age at release (years)	0.979**	0.001	0.981**	0.001	0.980**	0.001	0.980**	0.001
Metro commit	1.151**	0.026	1.143**	0.026	1.148**	0.026	1.149**	0.026
Prior supervision failures	1.137**	0.011	1.142**	0.011	1.140**	0.011	1.140**	0.011
Prior felony convictions	1.059**	0.004	1.060**	0.004	1.060**	0.004	1.060**	0.004
Admission type								
New commitment	0.943	0.052	0.901	0.052	0.880*	0.052	0.880*	0.052
Probation violator	0.942	0.050	0.905	0.050	0.895*	0.050	0.898*	0.050
Sentence length	0.999	0.000	0.999*	0.000	0.999**	0.000	0.999**	0.000
Offense type								
Criminal sexual conduct	1.644**	0.043	1.650**	0.043	1.655**	0.043	1.658**	0.044
Property	0.924	0.040	0.929	0.040	0.931	0.040	0.933	0.040
Drugs	0.794**	0.041	0.782**	0.041	0.786**	0.041	0.784**	0.041
Felony DWI	1.354**	0.077	1.310**	0.077	1.327**	0.077	1.325**	0.077
Other	0.887**	0.045	0.879**	0.045	0.882**	0.045	0.881**	0.045
Institutional discipline	1.016**	0.001	1.015**	0.001	1.015**	0.001	1.015**	0.001
Drug treatment	0.995	0.042	0.973	0.041	0.959	0.041	0.96	0.041
Sex offender treatment	0.637**	0.097	0.628**	0.097	0.609**	0.097	0.608**	0.097
Supervision type								
ISR	1.757**	0.034	1.737**	0.034	1.747**	0.034	1.746**	0.034
Work release	2.001**	0.035	1.981**	0.035	1.993**	0.035	1.991**	0.035
CIP	1.385**	0.075	1.320**	0.075	1.371**	0.075	1.346**	0.075
Release year	1.008	0.009	1.009	0.009	1.005	0.009	1.003	0.009
N	15,645		15,645		15,645		15,645	

Note: ISR = Intensive Supervised Release. CIP = Challenge Incarceration Program.
*$p < .05$. **$p < .01$.

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Table 6. Effects of Inmate–Visitor Relationship on Recidivism Controlling for Number of Individual Visitors

	Any		Number		Per month		Recent	
	Felony	Revocation	Felony	Revocation	Felony	Revocation	Felony	Revocation
Inmate–visitor relationship								
Spouse	0.943	0.961	1.000	1.000	1.005	0.999	1.013	0.999
Ex-spouse	1.180	1.246*	1.002	1.007**	1.159	1.109	1.310*	1.210
Son or daughter	1.054	0.999	1.000	1.000	1.015	1.002	1.013	1.001
Mother	1.062	0.969	1.000	1.002	1.027	1.025	1.067	1.063
Father	0.997	0.892**	0.997	0.995*	0.995	0.871**	0.984	0.771**
Other parent/ guardian	1.007	1.026	1.000	0.998	1.009	0.886	1.028	0.822
Sibling	0.933	0.945	0.996*	1.000	0.927*	0.973	0.876*	0.965
In-law	0.827**	0.864*	0.986*	0.988*	0.796*	0.879	0.673*	0.829
Other relative	0.960	0.960	0.995	0.994*	0.948	0.921	0.909	0.869
Grandparent	1.042	1.112	1.007	1.004	1.199	1.126	1.438	1.270
Grandchildren	1.012	1.125	1.001	1.001	1.044	1.205	1.331	1.470
Friend	0.975	0.963	1.001	1.001	1.017	0.987	1.036	0.988
Clergy	0.788*	1.135	0.953**	1.004	0.514**	1.036	0.317**	1.022
Mentor	0.721*	0.934	0.990	0.993	0.764	0.974	0.694	0.951
Other professional	1.616	1.327	1.051	1.004	2.516	0.821	2.927	0.893
Other	0.958	1.064	1.001	1.004	1.104	1.016	1.125	1.035
Number of individual visitors	0.977**	0.966**	0.976**	0.953**	0.969**	0.958**	0.968**	0.956**
N	16,420	15,645	16,420	15,645	16,420	15,645	16,420	15,645

*$p < .05$. **$p < .01$.

Conclusion

Consistent with the results from prior research, the findings reported here suggest that prison visitation can significantly improve the transition offenders make from the institution to the community. Any visit reduced the risk of recidivism by 13% for felony reconvictions and 25% for technical violation revocations, which reflects the fact that visitation generally had a greater impact on revocations. The findings further showed that more frequent and recent visits were associated with a decreased risk of recidivism. The results also suggest that the more sources of social support an offender has, the lower the risk of recidivism.

While visits in general reduced recidivism, we found that visits from some individuals were more beneficial than others. After controlling for the number of individual visitors offenders had, we found that visits from in-laws significantly reduced the risk of reconviction for all four visitation measures and revocation for two of the measures. There were several relationships that had an impact on a specific type of

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recidivism. For example, the risk of reconviction was reduced by clergy visits for all four visitation measures and by sibling visits for three of the measures. In contrast, the risk of revocation was decreased by father visits for all four visitation measures. Visits by mentors and other relatives, meanwhile, reduced the risk of reconviction and revocation, respectively, for at least one visitation measure. And we also found that not all types of visitation have a beneficial effect on recidivism, as visits from ex-spouses significantly increased the risk of recidivism for several visitation measures.

That ex-spouse visits increased recidivism is likely due to the conflict generally present in severed relationships, which could create instability for offenders who remain in contact with former spouses. But why were visits from fathers, siblings, in-laws, and clergy the most important in reducing recidivism, whereas visits from presumably more significant sources such as mothers, spouses, and children had less impact? Although the data and methodology we used in this study do not permit drawing firm conclusions, it is possible to speculate why some of these relationships appeared to be more important than others. The different effects of visits from mothers and fathers, for example, may reflect the fact that, compared to growing up with a single parent (usually the mother), a two-parent household is generally a protective factor against criminal offending (Entner Wright, & Younts, 2009) or, in this case, recidivism. In offering more of a peer perspective, siblings may help offenders remain accountable by providing them with more honest support and feedback. For those who are married, visits with either spouses or children may be difficult because they create more stress and are often reminders of how their incarceration is preventing them from raising their children or helping provide for their families. In-laws, on the other hand, may be able to provide offenders with supportive visits from family members that are generally free of the difficulties that may accompany visits with spouses or children. Finally, considering that clergy often receive training in helping individuals through difficult life circumstances, they may be able to give offenders effective counsel and support.

As with prior studies on prison visitation, the main limitation with this study is that we were unable to control for whether the results we obtained were due to preincarceration differences in social support. That is, the findings may simply reflect that offenders with stronger preincarceration social support systems were more likely to be visited and were more likely to have support following their release from prison. As Bales and Mears (2008) pointed out in their study, however, the effect that timing of visitation has on recidivism does not support the idea that a prior bond is the cause of the recidivism reduction. Moreover, we statistically controlled for factors typically associated with an increased risk of recidivism, such as prior supervision failures and prior felonies convictions, as well as those that have been demonstrated to decrease the risk among Minnesota prisoners, such as participation in prison-based chemical dependency treatment (Duwe, 2010), sex offender treatment (Duwe & Goldman, 2009), and correctional boot camp programming (Duwe & Kerschner, 2008).

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Implications for Correctional Policy and Practice

Despite this limitation, the findings suggest that prison visitation can improve recidivism outcomes by helping offenders not only maintain social ties with both nuclear and extended family members (especially fathers, siblings, and in-laws) while incarcerated but also develop new bonds such as those with clergy or mentors. In doing so, offenders can sustain or broaden their networks of social support, which we found was important in lowering recidivism. Given the public safety benefits that appear to be associated with prison visitation, we posit that correctional systems should make efforts to promote greater visitation while still, at the same time, ensuring that these efforts do not compromise the safety and security of correctional staff, inmates, and visitors.

In their study on Florida prisoners, Bales and Mears (2008) suggested that prisons can foster greater visitation by (a) placing inmates in facilities as close to their home communities as possible, (b) encouraging community service agencies and organizations to visit inmates, (c) ensuring parking is available for visitors, (d) expanding visiting hours to evenings and weekends to accommodate visitors who are employed or have to travel long distances, (e) decreasing bureaucratic barriers to visitation, (f) increasing the cultural sensitivity of staff members, and (g) making sure that visitation rooms are clean, comfortable, and hospitable. Because most of these suggestions would entail revising visitation policies, we suggest that the cost (mainly staff time) involved with revising these policies, which would be relatively minimal in comparison to developing, implementing, and operating a visitation program, would likely be more than offset by the public safety benefits resulting from decreased recidivism. Recall, for example, that release violators cost the State of Minnesota, on average, US$9,000 for every return to prison. Moreover, research has shown that criminal offending can be even more costly to society (Cohen & Piquero, 2009). Revising visitation policies to make them more "visitor friendly" may therefore represent a relatively low cost–potentially high benefit measure that correctional systems could take to help ease the burden of prison overcrowding and budget deficits.

While policies that are more visitor friendly would likely help increase visitation overall, we do not anticipate that these types of policy changes would necessarily increase visitation to a significant extent among inmates who have little or no social support. Moreover, prison caseworkers and community supervision agents typically have high caseloads that make it challenging to adequately address offender social support issues in either prison or the community. To encourage the development of social bonds among unvisited inmates, who comprised nearly 40% of our sample, we suggest that correctional systems consider allocating greater resources that are geared toward identifying sources of social support for high-risk offenders who are less likely to be visited. In particular, we propose that the implementation of visitation programming, including the addition of staff, could be an effective strategy to increase visitation among unvisited inmates. Because many offenders have burned bridges with loved

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ones by the time they reach prison, facilitating visits from friends and family may not be an option. Yet, considering the impact visits from clergy and, to a lesser extent, mentors appear to have on reoffending, it may be beneficial for visitation programs to focus on facilitating visits from clergy, mentors, and other volunteers from the community.

To be sure, developing and implementing a visitation program would exact a greater cost in comparison to policy revisions, but the potential public safety benefits resulting from the identification of social support for unvisited inmates could be substantial. In addition to increasing visitation among low social support inmates, the implementation of a visitation program would provide an opportunity to further clarify the causal relationship between visits and recidivism. Assuming that observed differences in preincarceration social support would be controlled for statistically or by research design, an evaluation could help determine the efficacy of visitation by assessing whether a visitation program (a) increased visits and (b) decreased recidivism for inmate participants.

Future studies on prison visitation should also examine more closely the factors that affect whether and to what extent prisoners receive visits. In particular, research should determine the degree to which visitation is influenced by the physical distance between the facility where an offender is incarcerated and the location(s) where friends and family members reside. Although the proximity of friends and family is seldom an influential criterion in determining the facility at which to place an offender, at least in Minnesota, perhaps it should receive greater consideration in the event there is a significant association between visitation and the distances sources of social support must travel to visit inmates.

Research suggests that correctional programming tends to be more effective when there is a continuum of care, or service delivery, from the institution to the community. Indeed, evaluations of drug treatment (Inciardi, Martin, & Butzin, 2004), employment programming (Duwe, in press), and reentry programming in general (Duwe, 2011) have shown that connecting programming delivered in the community to that provided in prison produces better recidivism outcomes. Similarly, to strengthen the salutary effects of prison visitation, we suggest that efforts should also be made in the community to help to preserve the social ties that were established or maintained in prison. Conceptualizing prison visitation as part of a broader continuum of social support from the institution to the community would likely require greater collaboration between institutional caseworkers, community supervision agents, and community service agencies. Again, however, the public safety benefits resulting from increased social support for offenders—both in the institution and the community—would likely outweigh the costs involved to bring about systemic change.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Bios

Grant Duwe is the director of research and evaluation for the Minnesota Department of Corrections. His research has been published in *Criminology*, *Journal of Experimental Criminology*, *Criminal Justice Policy Review*, *Sexual Abuse: A Journal of Research and Treatment*, *Criminal Justice and Behavior*, *Crime & Delinquency*, *Justice Quarterly*, *Homicide Studies*, and *Western Criminology Review*. The author of the book, "Mass Murder in the United States: A History" (McFarland), he holds a PhD in criminology and criminal justice from Florida State University.

Valerie Clark is a research analyst at the Minnesota Department of Corrections. In addition to prisoner reentry, her research has focused on sentencing, victimization, and intimate partner violence. She earned a PhD from Pennsylvania State University.

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