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Breaches in the Wall: Imprisonment, Social Support, and Recidivism

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Abstract

Objectives: Drawing on theories that emphasize the salience of social ties, this study examines the different kinds of experiences prisoners have with visitation and the implications of those experiences for behavior after release. *Method:* This study uses data from a release cohort of prisoners to (1) explore how visitation experiences unfold for different cohorts of individuals serving different amounts of time in prison and to (2) test the effects of longitudinal visitation patterns on recidivism. *Results:* Findings suggest that individuals who maintain connections with their social networks outside of prison have lower rates of reoffending and that the timing and consistency with which visitation occurs also affect criminal behavior. Specifically, prisoners who are visited early and who experience a sustained pattern of visitation are less likely to recidivate. *Conclusion:* These findings underscore the importance of social ties for understanding the prisoner experience and its implications for offending. More research is needed that seeks to explain the effects identified here and that explores,

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using nuanced approaches, other prison experiences, and the implications of those experiences.

Keywords
prison experiences, recidivism, social support, visitation, trajectory modeling

> The Visit Room constituted a sort of breach in the wall between the hermetic world of the prison and the universe outside. In it, an inmate could try to reconnect to the real world and prior life, could try to salve the wound of imprisonment. A visitor could contemplate, with more perspective than any prison employee, the effects of incarceration and the prospects of life after it. The Visit Room was about catching up, reconnecting, and looking ahead.
> — Ted Conover in *Newjack: Guarding Sing Sing* (p. 151)

Introduction

Research aimed at understanding inmate behavior and offending has advanced a range of theoretical arguments to help explain variation in offenders' ability to transition successfully back into society and desist from crime. These include accounts that focused on the salience of social ties for providing informal control (Hirschi 1969; Sampson and Laub 1993), for reducing strain during and after incarceration (Adams 1992; Agnew 2005; Hairston 1988), and for helping individuals cope with the stigma of criminal convictions and imprisonment (Pager 2003; Uggen, Manza, and Behrens 2004; Maruna and Toch 2005). Reentry scholarship has highlighted, too, the practical importance of social and familial connections for helping released offenders manage the myriad of challenges they face during reentry, which include finding housing and employment, navigating social services, gaining access to health care, and avoiding criminal influences (Maruna and Immarigeon 2004; Petersilia 2003; Visher and Travis 2003).

This diverse body of scholarship has spurred researchers to examine how the maintenance of social ties during prison, and the extent to which prisoners can reconnect socially after release, contribute to transitions back into society (Berg and Huebner 2011; Cobbina, Huebner, and Berg 2012; Naser and La Vigne 2006; Wolff and Draine 2004). Although theory and research suggest social ties are beneficial for prisoners, questions remain about the effects of access to social networks on future criminal behavior (Hairston 1991). A limited but growing body of research has built on early prison studies by Ohlin (1951) and Glaser (1964) and examined how prisoners' experiences with visitation affect outcomes both during imprisonment and after release (see, e.g., Bales and Mears 2008; Duwe and Clark 2013; Jiang and Winfree 2006). Scholars have focused on visitation because it provides perhaps the only opportunity—a temporary "breach" in the prison's walls—for inmates to have direct contact with family, friends, and community members (Conover 2001:151). Thus, visitation represents a rare nexus between prison life and the outside world, one that affords inmates some ability to preserve, develop, or sustain ties to social networks and to have sources of social capital on which to draw.

One important avenue of visitation research that has yet to be addressed is how different visitation experiences influence offending. This question bears investigation because it responds to calls by scholars for more nuanced approaches to research on the effects of prison experiences (Berg and Huebner 2011; Nagin, Cullen, and Jonson 2009; Reidy, Sorensen, and Cunningham 2012; Schafer 1994). At the same time, it provides an opportunity to investigate theoretical arguments about the nature and implications of prisoner social contact for future offending (Adams 1992; Cobbina et al. 2012; Reisig, Holtfreter, and Morash 2002; Ross and Richards 2009). For example, some prisoners may not be visited at all, while others experience at least some visitation. Among those in the latter group, diverse patterns may exist, such as prisoners who are visited regularly, sporadically, and at different times during imprisonment.

The aim of this study is to investigate these possibilities and, in particular, whether the consistency and timing of visits influence recidivism. Drawing on prior theory and research, this article develops and tests the idea that there are different patterns of visitation and that these patterns may differentially affect reentry. The analyses focus first on identifying types of visitation patterns and, second, on estimating the effects of these patterns on offending after release from prison. The article begins with a discussion of theory and prior research surrounding prisoner social ties, visitation, and offending, and then turns to a discussion about visitation patterns prisoners experience and the potential implications for recidivism.

Background

The Salience of Social Ties for Prisoners

Social ties have emerged as a salient factor in prisoner reentry research for at least two reasons. First, although offenders' social bonds may not have been sufficient to prevent the offending that led to incarceration (La Vigne et al. 2005), scholarship suggests that the loss of social and familial contact is one of the most serious deprivations prisoners experience (Ohlin 1951; Sykes 1958; Adams 1992). In his review of scholarship on social order and adjustment in prison, Adams (1992) concluded that the loss of social contact was the most frequently reported challenge by prisoners. Liebling (1999:326) noted too the "contribution of isolation" and the difficult adjustment prisoners have to make as a result of being separated from their social networks. Many similar reviews and accounts exist and, in fact, the body of scholarship that has developed in the two decades since Adams' review has suggested the same story—the detachment of an offender from social networks and the "removal of sources of support" (Liebling 1999:326) are among the most difficult challenges prisoners face (see, e.g., Bernstein 2005; La Vigne et al. 2005; Maruna 2001; Windzio 2006).

Second, and not surprising given the above observations, scholarship has suggested that connections with social ties constitute one of the critical factors that will help individuals negotiate prison experiences and navigate the transition back into society (Maruna 2001; Turner et al. 2007; Uggen et al. 2004; Visher and Travis 2003; Wolff and Draine 2004). Reconnecting with prosocial contacts is a challenge for prisoners, but it plays a pivotal role in helping offenders desist after reentry (see generally, Maruna and Immarigeon 2004; Petersilia 2003; Visher and Travis 2003). For example, social bonds and social capital are likely to help constrain behavior and to help "bridge" returning inmates' transition from prison back into communities (Wolff and Draine 2004:461). Social ties can also provide resources to help returning prisoners find housing, employment, transportation, and gain access to health care and welfare services (Ekland-Olson et al. 1983; Hairston 1991; La Vigne, Visher, and Castro 2004; La Vigne et al. 2005; Visher and Travis 2003). And they can be critical for helping offenders cope with stigmatization and criminal labels (LeBel 2012; Pager 2003; Uggen et al. 2004; Uggen and Wakefield 2005).

Prior Research on Visitation

Thus, prior scholarship suggests that desistance, following incarceration, may hinge upon individuals' connections to social ties and resources (e.g., Maruna 2001; Sampson and Laub 1993). This possibility raises questions, however, about how individuals access social ties during prison. Accordingly, scholars have turned to studies of visitation since visits are, for the most part, the only method for prisoners to have direct contact with social ties during incarceration.

As part of efforts to understand visitation's implications, a growing body of research has identified visitation as an experience that is viewed by inmates as important for surviving in prison (Adams 1992). For instance, several studies suggest that visitation can have a salient effect on behavior during imprisonment (e.g., Jiang and Winfree 2006; Siennick, Mears, and Bales. 2013). Qualitative accounts evoke a similar idea. For example, George (2010:104), an inmate serving a life sentence, succinctly observed: "Thank God for visits. They are the greatest sustenance I have in here." Another inmate, McCray, interviewed by Bernstein (2005:84), replied: "Those visits we had were the most precious things I had to live for." These and other qualitative studies have highlighted that visits are meaningful and that they have important effects on the incarceration experience.

Alongside of such work are empirical studies that suggest visitation can reduce long-term offending. Early studies consistently identified a significant, negative association between visitation and recidivism, but were limited methodologically—they typically employed bivariate analyses (e.g., Adams and Fischer 1976; Holt and Miller 1972; Howser and MacDonald 1982; see also Hairston 1988, 1991). Only a handful of more recent empirical examinations exist. These studies have incorporated multivariate methods to account for potential selection biases and, in each instance, have identified significant recidivism-reducing effects of visitation (Bales and Mears 2008; Derkzen, Gobeil, and Gileno 2009; Duwe and Clark 2013; Mears et al. 2012).[1]

Visitation and the Life Course of a Prison Term

One question that extends naturally from prior studies is how differences in the longitudinal patterns of visitation affect prisoners, and particularly, prisoner reentry outcomes. Differences in offenders' contact with social ties during incarceration may hold important implications for their social connections and, in turn, future offending. Recent studies have begun to explore the longitudinal nature of prison experiences (see, e.g., Morris et al. 2012; Siennick et al. 2013). A descriptive study by Cochran (2012) is particularly relevant because the author identified four patterns of visitation—nonvisited, late visited, early visited, and consistently visited. The study, however, focused only on a small cohort of prisoners serving 12 months in prison, and, along with the studies by Siennick et al. and Morris et al., focused only on in-prison behavior. Thus, scholarship has not yet explored longitudinal patterns for populations of prisoners serving different amounts of time in prison, and, more importantly, the implications of visitation patterns for recidivism. This study thus focuses on two questions: (1) What are the types of visitation patterns we might expect? and (2) What are the expected implications of those patterns on recidivism?

The most common visitation pattern prisoners experience is no visitation. In fact, prior studies have shown that the vast bulk of inmates do not receive a single visit (Duwe and Clark 2013; Hairston 1988; Jiang and Winfree 2006; Monahan et al. 2011; Siennick et al. 2013). There are several reasons why visitation is rare. Prisoners are likely to have fewer social connections generally, and thus, they are likely to have a limited number of potential visitors. In the instance there are willing visitors, other barriers and challenges exist. Visitors often have to travel long distances, pay fees, take time off from work, and find childcare (Bernstein 2005; Casey-Acevedo and Bakken 2002; Christian 2005; Christian, Mellow, and Thomas 2006). The conditions related to visiting a prison may also be intimidating, and facilities may be in poor condition, have limited space for children, and offer insufficient amenities (e.g., Arditti 2003; Fishman 1990; Tewksbury and DeMichele 2005). What is the result of not being visited? Scholarship suggests that, for several reasons, prisoners will not gain access to contacts and social resources to assist with negotiating prisoner reentry, and thus will be more likely to recidivate.

At the other end of the spectrum are those who are visited regularly. Based on the theoretical reasons described earlier, sustained or consistent visitation may be most effective at maintaining or improving the quality of social connections. Sustained visitation might also help inhibit harmful influences of deviant prison subcultures; that is, to the extent outside ties can help prisoners maintain some "familiarity or similarity" to prosocial norms over the course of imprisonment, it may protect prisoners from proscribing more toward newly introduced deviant norms (Wolff and Draine 2004:460). Consequently, we should expect consistently visited prisoners to benefit the most from visitation, and in turn, to have the lowest rates of recidivism.

Between these two extremes lie at least three other distinct possibilities. One is near entry visitation. Ross and Richards (2009) suggest that many offenders anticipate being visited, but face a reality where preserving relationships is difficult. Other scholars have also noted the fragility of prisoners' social ties (Maruna 2001; Massoglia, Remster, and King 2012; Rose and Clear 2003; Western 2006). Thus, some inmates may be visited early on during incarceration but not afterward, and this might have harmful effects.

Indeed, Liebling's (1999:235) observations support this point, when she noted the strain that may be induced by a lack of visits or by "a visit that does not materialize." Alternatively, nonsustained visitation could stem from other factors, including insufficient access to resources on the part of visitors that is required to make visitation possible (e.g., Christian 2005). In this case, near entry visitation might still hold benefits if it is enough to maintain social connections, or if there are other benefits, such as strain reduction (e.g., Blevins et al. 2010).

Prisoners may experience the opposite pattern, near release visitation, where visitation occurs only near the end of incarceration. Recent studies suggest that near release visitation could have strong recidivism-reducing effects (e.g., Duwe and Clark 2013). What is less clear is how a pattern where prisoners are only visited later might affect recidivism. Near release visitation might occur because social contacts are concerned about the reintegration of an offender as they anticipate release (e.g., Breese, Ra'el, and Grant 2000; Visher and O'Connell 2012). In addition, prisoners have reported that, over time, they begin to worry about maintaining good relationships with staff and other inmates and about encountering problems navigating the administrative system of the prison (Adams 1992:285). To the extent outside ties are aware of that concern, they may become inclined to visit later on. Despite lack of earlier contact, near-release visitation may be beneficial if it helps reduce strain or anxiety, and/or if it allows prisoners to be better prepared for reentry (e.g., Bales and Mears 2008).

Prisoners can experience other patterns too. For example, they may experience a variant on near entry visitation where visits are sustained longer but still not for the duration of incarceration. Ross and Richards' (2009:111) description provides some support for this idea, when they describe how prisoners try to make it work with their spouses on the outside, but it eventually becomes too difficult. They wrote: "The convict saw it coming. Her visits became less frequent, and with each meeting her demeanor was a little less engaging." Another possibility is sustained late visitation, where visitation does not occur early, but the prisoner eventually receives visits that continue until release. Visits may also be sporadic or nonpatterned. In these instances, prior studies would suggest that visits, as opposed to no visits, reduce recidivism.

Data and Method

This study investigates the effects of different visitation patterns on offending. The analyses go beyond prior research on prison experiences by examining how visitation experiences unfold over the life course of a prison term for a large population of prisoners serving varying amounts of time in prison, and then testing the effects of different longitudinal visitation patterns on recidivism. This study contributes to scholarship on prison experiences and answers calls by scholars for research that examines more closely the implications of prison experiences for reentry (Nagin et al. 2009), and that disentangles how prisoners' social ties, or access to social ties, influence future behavior (Berg and Huebner 2011; Cobbina et al. 2012; Cochran and Mears 2013; Hairston 1991; Petersilia 2003; Visher and Travis 2003).

To this end, the study uses data provided by the Florida Department of Corrections (FDOC) that include inmate information for all convicted felony offenders imprisoned and released in Florida between 2000 and 2002. The FDOC data have several attributes that make them ideal for the current analysis. Most importantly, the data contain comprehensive records of visitation events that allow for analyses that can examine visitation experiences longitudinally.[2] In addition, the data include detailed information about demographic, prior record, and offense characteristics that are important control measures for studies of recidivism (see, e.g., Nagin et al. 2009).

Specifically, the multivariate analyses incorporate several demographic measures, including a continuous measure of age, a dichotomous measure of sex (1 = *male*), and three dummy variable measures of race and ethnicity: White non-Hispanic, Black non-Hispanic, and Hispanic. Continuous measures of sentence length and time served (both in months) are also included, and the analyses control for prior offending (e.g., Kurlychek, Brame, and Bushway 2006) using count measures of total prior convictions, total prior convictions by type (violent, property, drug, sex, other), and the total number of prior prison commitments. To account for the potential effect of in-prison misconduct on recidivism (e.g., Cochran et al. 2013; Trulson, DeLisi, and Marquart 2011) and visitation opportunities, the analyses include a variety score measure of in-prison misconduct that ranges from 0 to 7, and counts the number of the following different misconduct types prisoners engaged in: violent, property, disorderly conduct, threats, defiance, and contraband drugs. County dummy variables are included to account for context-level variation in visitation patterns and recidivism.[3] Finally, the outcome measure in the multivariate analyses is a dummy variable that indicates whether a released prisoner was reconvicted of a felony offense within three years after release from prison (1 = *reconvicted*, 0 = *not*).[4]

The analyses proceed in two stages. The first stage focuses on identifying the different longitudinal patterns of visitation. Prisoners are likely to experience a range of different patterns and researchers could employ different approaches, including manually designating groups that seem plausible or are theoretically interesting, to test different visitation effects. Alternatively, statistical techniques can be used to identify common patterns in a set of observations, to avoid the scenario of arbitrarily designating different groups. To this end, this study uses semiparametric group-based trajectory modeling (Nagin 2005) to describe patterns of visitation that emerge in different cohorts of prisoners serving different lengths of time in prison (see Cochran 2012). This method is ideal here because, in the context of minimal prior research exploring longitudinal patterns of visitation, trajectory analyses help identify naturally occurring groups that exist in the data.

Group-based trajectory models use finite mixture models to identify clusters of individuals based on patterns of behavior or experiences that occur over time (Brame, Nagin, and Tremblay 2001); that is, groups of inmates who experience similar patterns of visitation during the course of incarceration. For the analyses here, months served in prison are used as observation points, and the outcome for the trajectory models is a binary measure of whether a prisoner was visited in a given month. Visitation events were dichotomized by month to address skew in monthly visitation counts that otherwise made the convergence of trajectory models difficult. For example, typically only a small proportion of prisoners, 4 percent or less in a given month, recorded more than one visit. Based on the dichotomous coding of visitation by month, the trajectory analyses use the binary logit modeling specification (Jones, Nagin, and Roeder 2001). In addition, the original sample included 16,782 prisoners who served 6 to 31 months in prison. Variation in the number of months served between inmates, however, leads to variance in the number of observation periods each contributes. To address this, prisoners were separated into cohorts by the number of months they served in prison (e.g., six-month cohort, seven-month cohort), and each cohort's trajectories were analyzed separately.[5]

The second stage of the analysis uses the results from the trajectory models to assign prisoners to groups based on trajectories of visitation, and tests the effects of group membership on recidivism. The multivariate analyses estimate the effects of visitation group membership, compared to not being visited, on the likelihood of reconviction within three years of release. These models include controls for potential confounding factors in the relationship between visitation and recidivism, and provide insight about whether different visitation patterns exert different effects on recidivism.

Table 1. Descriptive Statistics, Inmates Serving 8 to 17 Months ($n = 11{,}395$).

	M	*SD*	Minimum	Maximum
Reconviction within three years (1/0)	0.45	0.50	0	1
Number of visits	2.31	6.70	0	94
Age at admission	32.07	9.85	15	74
Male (1/0)	0.88	0.32	0	1
White (1/0)	0.42	0.49	0	1
Black (1/0)	0.50	0.50	0	1
Hispanic (1/0)	0.08	0.27	0	1
Prison sentence length (months)	21.03	18.67	12	600
Time served (months)	11.66	2.75	8	17
Number of prior convictions (count)	5.94	6.58	0	92
Number of prior violent convictions (count)	0.76	1.52	0	21
Number of prior property convictions (count)	2.62	5.14	0	87
Number of prior drug convictions (count)	1.86	3.46	0	76
Number of prior sex convictions (count)	0.07	0.47	0	11
Number of prior other convictions (count)	0.63	1.37	0	28
Number of prior prison commitments (count)	0.86	1.42	0	12
Primary offense—violent (1/0)	0.18	0.38	0	1
Primary offense—property (1/0)	0.31	0.46	0	1
Primary offense—drugs (1/0)	0.35	0.48	0	1
Primary offense—sex (1/0)	0.02	0.15	0	1
Primary offense—other (1/0)	0.13	0.34	0	1
Misconduct variety score (count)	0.53	1.03	0	7
67 county dummy variables (1/0)	—	—	—	—

Findings

Table 1 provides a descriptive overview of the population of prisoners included in the analyses. The descriptive statistics are provided here for 11,395 prisoners who served between 8 and 17 months in prison. As described in more detail below, the analyses use only prisoners who served time between 8 and 17 months because those are the cohorts for which the trajectory analyses could be undertaken. The ability to investigate 10 cohorts allows for systematically determining if visitation patterns exist and if they are robust across a range of sentence lengths. As shown in Table 1, descriptive statistics for the prisoners in this sample are typical of prisoners analyzed in prior studies of recidivism (e.g., see Nagin et al. 2009). That is, the prisoners here are mostly male (88 percent), are disproportionately Black (50 percent), and have an average age of 32. Of the prisoners in this cohort, 45 percent were reconvicted within 3 years of release, and they were most commonly incarcerated for drug (35 percent), property (31 percent), and violent (18 percent) offenses; these recidivism rates are largely consistent with national averages (Langan and Levin 2002). Prisoners, on average, were visited slightly more than two times during the course of incarceration (2.31) and served, on average, about 12 months in prison (11.66).

The first stage of the analysis addresses two questions: (1) What patterns of visitation do prisoners experience and (2) Are these patterns consistent across different cohorts serving different amounts of time in prison? Semiparametric group-based trajectory analyses are used to address each question. Group-based trajectory models use parameters that are allowed to vary so that each trajectory can be specified as an intercept or with a linear, quadratic, or cubic functional form. These specifications, along with the total number of groups estimated, are made manually; thus, the modeling procedure requires a systematic examination of different group totals and functional form specifications. Per Nagin (2005), the Bayesian Information Criterion (BIC) statistic is used as the primary indicator for determining best fit, while also considering the substantive value gained by including additional groups in the model (e.g., Blokland, Nagin, and Nieuwbeerta 2005). Two-, three-, four-, five-, and six-group models were estimated for each prisoner cohort, and systematic alterations of the group functional form specifications were used, in each instance, to establish model fit.

This procedure led to several findings. For some cohorts, identifying trajectories proved difficult. Specifically, for prisoners who served less than 8 months or more than 17 months, the results from those analyses became substantially less consistent and attaining model convergence was substantially more difficult than for the cohorts in the 8- to 17-month range. The modeling challenges stemmed in part from minimal observation periods for cohorts serving fewer than 8 months and from substantially reduced sample sizes for cohorts who served beyond 17 months. For cohorts in the 8- to 17-month range, results of the trajectory analyses were relatively stable. Based solely on BIC score, for all but four cohorts in this range, the four-group model provided the best fit and revealed trajectories of visitation that were similar across each cohort. For the 9-, 13-, 14-, and 16-month cohorts, the BIC score suggested a minor improvement to model fit when moving from a four-group to a five-group specification. For these four cohorts, the fifth group introduced a slight variation on the near-entry trajectory (see Figure 1, below), one that generally had a slightly lower probability of visitation (results available upon request). This fifth group closely resembled

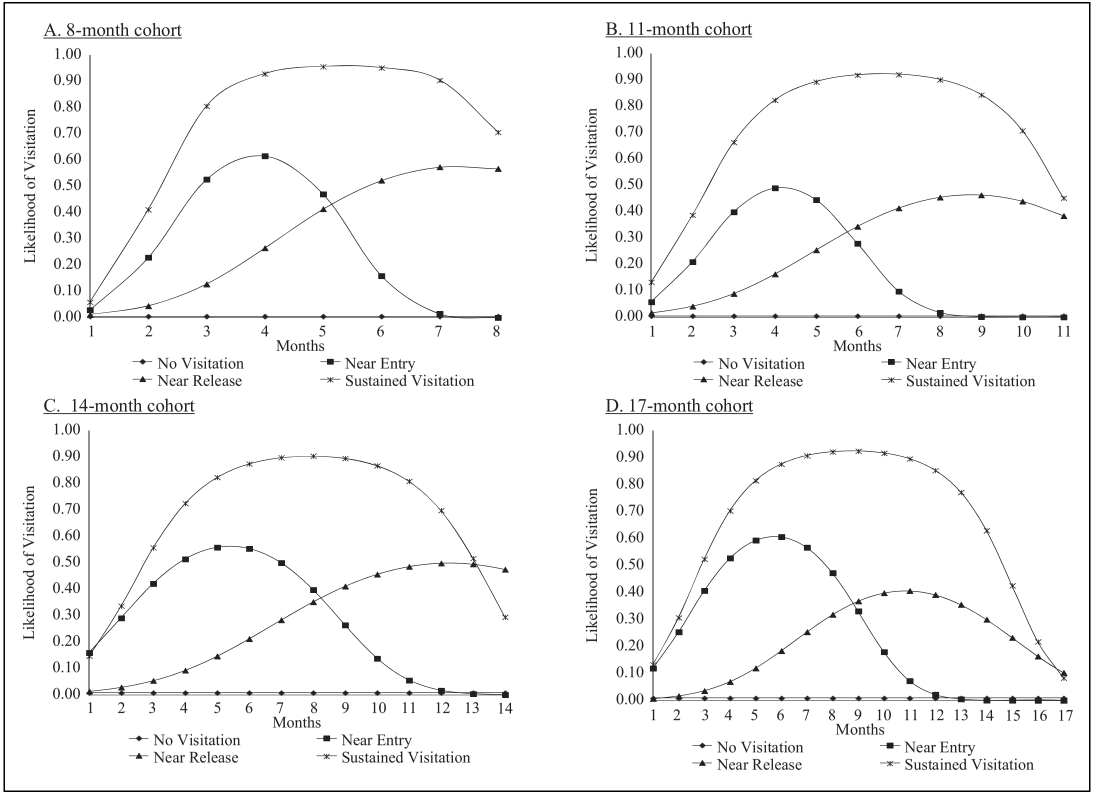

Figure 1. Trajectories of inmate visitation.

the near entry group, which emerges in both the four- and five-group model specification.

Based on the facts that the inclusion of a fifth group provided only slight improvement to model fit, that it did so only in a handful of cases and that its substantive value was trivial in those instances, the four-group model specification was selected for each cohort serving between 8 and 17 months. Figure 1 presents four panels that depict visitation trajectories for four different cohorts. Figures for the 8-month (panel A), 11-month (panel B), 14-month (panel C), and 17-month cohorts (panel D) are presented and are representative of the trajectories for the other six cohorts not shown here (available upon request). Each graph depicts the likelihood of visitation in a given month for different groups of prisoners.

As can be seen across each panel in Figure 1, the four-group model produced substantively similar results for each cohort—that is, we can see a distinct group of prisoners who were never visited, represented by a straight line across the bottom, and then three different visitation groups. One group, labeled near entry, shows a pattern of early visitation that is consistent with many prior qualitative accounts (e.g., Ross and Richards 2009). For this group, prisoners have a moderately high probability of being visited with the likelihood of visitation peaking from .5 to .6 across cohorts during the first half of a prison term, but this likelihood reduces rapidly during the second half of imprisonment, so that the trajectory closely resembles the nonvisited group during that period. A second visitation group, labeled here as near release, has almost the opposite pattern. Prisoners in this group receive almost no visits in the first half of incarceration, but have moderately high chances of visitation going into the end of the prison term. The third group is the sustained visitation group, and these prisoners have substantially high likelihoods of visitation for nearly their entire stay in prison, with likelihoods peaking above .9 for the bulk of their time served.

It seems reasonable to anticipate that as prisoners serve longer periods of time, the patterns of visitation would be more diverse, or that different types of patterns would surface. Notable then is the fact that the analyses are remarkably consistent. For these cohorts, the four-group typology is supported, regardless of time served. By 8 months, these groups can be identified, and they are consistent up until at least 17 months of time served.

Of course, these results are generalizable only to inmates who serve 8 to 17 months in prison, but, notably, a substantial proportion of the prison population falls within that range. Indeed, according to the FDOC, less than 1

Table 2. Group Assignment Percentages by Cohort.

Cohort	Not Visited (%)	Near Entry (%)	Near Release (%)	Sustained (%)	*N*
8-Month	82.8	7.4	5.3	4.5	1,485
9-Month	85.2	3.9	5.2	5.7	1,724
10-Month	82.9	6.5	5.1	5.5	1,591
11-Month	77.8	9.0	7.6	5.7	1,251
12-Month	79.2	9.7	6.6	4.4	1,129
13-Month	79.1	8.3	6.2	6.5	1,017
14-Month	77.7	12.8	3.8	5.7	936
15-Month	73.7	13.7	7.2	5.4	875
16-Month	73.8	15.2	7.6	3.3	748
17-Month	74.5	11.4	8.6	5.5	639

percent of released inmates served less than 6 months in prison between 2005 and 2006 (the latest years statewide statistics were available), and 56 percent served less than 24 months.[6] Nationally, the median number of months served among released state prison inmates in 2008 was 16 months (Bureau of Justice Statistics 2011), which falls within this coverage range. For inmates who serve longer sentences, although they may be less likely to be visited at all or to be visited regularly (see, e.g., Richard and Jones 2004), there is no clear reason to expect that, for those who are visited, visitation experiences will be substantially different.

Now, we turn to Table 2 to examine the proportion of prisoners from each cohort assigned to each visitation trajectory. Group assignment was determined by designating individuals to the trajectory group for which they had the highest posterior probability (Nagin 2005). Substantively, the results in Table 2 provide insight into the prevalence of visitation generally, and of the different groups. Similar to the results of prior research on visitation, the majority of inmates are never visited in prison. In fact, depending on the cohort, 73 to 85 percent of prisoners fall in the nonvisited trajectory. Of those who are visited, the most common pattern across cohorts is near-entry visitation. The percentage of prisoners in this group ranged typically from 7 to 15 percent. This pattern could be indicative of the challenges visitors face trying to sustain visits to the prison (e.g., Christian 2005; Comfort 2008; Fishman 1990), and how difficult it is to maintain relationships with relatives and community members while incarcerated. Notable too is the fact that as prisoners serve longer terms, the prevalence of near entry group membership becomes higher, which may suggest that sustaining visits becomes more difficult when prisoners serve lengthier sentences. After near entry visitation, near release is the second most likely group assignment, with percentages ranging from 4 to 9 percent, and sustained visitation is the least common pattern of all four, with percentages ranging from 3 to 7 percent across cohorts. Again, considering the resources needed to visit (e.g., transportation, fees, flexible work schedule, childcare), it is no surprise that monthly visitation is difficult to sustain and experienced by only a small proportion of prisoners.

Additional information about the trajectory analyses for each cohort is included in Table 3. Average posterior probabilities (APP) and odds of correct classification statistics (OCC) can be used to evaluate the accuracy of trajectory models. Nagin (2005) suggested, for assessing APPs, a cutoff point of .7 to be confident that the trajectories are measuring distinct groups in the data and that "the model is well fitting" (Blokland et al. 2005:932). Inspection of Table 3 shows that this criterion is met. For each group in each cohort, the APPs for individuals in their assigned group never go below .7 and are typically above .9. For evaluating OCCs, again, larger values are better and indicative of assignment accuracy. It is recommended that OCCs be above 5 to have confidence in the models, and the OCCs for each trajectory here have values greater than 5, and they are for the most part substantially above this threshold.

We next turn to the main focus of the article. Specifically, what are the effects of different visitation patterns on recidivism? Table 4 addresses this question using visitation group assignments as independent variables to predict the likelihood of recidivism. One option for conducting these analyses is to estimate visitation effects separately for each cohort. An added advantage, however, of the uniformity in the group specifications and the substantive similarities in the trajectories across each cohort is that it provides an opportunity to pool the cohorts together. Pooling the cases creates a larger sample that will provide more statistical power and produce more accurate coefficient estimates. Thus, the analyses in Table 4 use prisoners from all 10 cohorts (11,395).

Model 1 in Table 4 uses logistic regression to estimate a base model, without controls, of the effects of visitation group membership on the likelihood of a reconviction within three years of release from prison. The nonvisited group is excluded as the reference category. Findings from model 1 suggest that all three visitation groups are associated with a reduction in the likelihood of recidivism, but sustained visitation and early visitation are the only two groups that reach statistical significance. As anticipated, sustained visitation is associated most strongly with reductions in recidivism (−.246). Prisoners in this group

Table 3. Average Posterior Probabilities of Assignment and Odds of Correct Classification (OCC) by Assigned Group.

	Group						Group				
	None	Near Entry	Near Release	Sustained	OCC		None	Near Entry	Near Release	Sustained	OCC
8-Month						13-Month					
None	0.977	0.008	0.014	0.000	8.95	None	0.991	0.004	0.005	0.000	30.32
Near entry	0.190	0.708	0.081	0.021	30.28	Near entry	0.018	0.929	0.029	0.024	146.39
Near release	0.005	0.031	0.924	0.040	219.01	Near release	0.030	0.035	0.896	0.039	130.29
Sustained	0.000	0.004	0.004	0.888	167.22	Sustained	0.000	0.007	0.059	0.934	203.81
9-Month						14-Month					
None	0.977	0.007	0.016	0.000	7.38	None	0.988	0.010	0.002	0.000	23.20
Near entry	0.007	0.918	0.057	0.018	277.08	Near entry	0.036	0.912	0.034	0.019	70.17
Near release	0.014	0.020	0.883	0.083	137.48	Near release	0.050	0.021	0.883	0.047	187.85
Sustained	0.000	0.006	0.054	0.940	260.37	Sustained	0.000	0.053	0.020	0.927	212.20
10-Month						15-Month					
None	0.983	0.013	0.005	0.000	11.89	None	0.983	0.012	0.005	0.000	20.99
Near entry	0.020	0.916	0.043	0.020	157.65	Near entry	0.015	0.938	0.032	0.014	95.83
Near release	0.026	0.022	0.840	0.112	98.20	Near release	0.046	0.037	0.891	0.027	105.14
Sustained	0.000	0.008	0.039	0.954	352.27	Sustained	0.000	0.020	0.036	0.944	297.20
11-Month						16-Month					
None	0.975	0.014	0.012	0.000	10.98	None	0.992	0.002	0.005	0.000	46.88
Near entry	0.187	0.758	0.046	0.008	31.88	Near entry	0.052	0.913	0.031	0.005	58.35
Near release	0.010	0.023	0.928	0.039	157.59	Near release	0.028	0.052	0.915	0.005	130.54
Sustained	0.000	0.003	0.047	0.950	312.79	Sustained	0.000	0.017	0.002	0.982	1,539.39
12-Month						17-Month					
None	0.968	0.027	0.005	0.000	7.87	None	0.984	0.007	0.009	0.000	21.08
Near entry	0.006	0.929	0.049	0.016	121.60	Near entry	0.021	0.938	0.035	0.007	117.19
Near release	0.016	0.058	0.862	0.064	87.66	Near release	0.052	0.034	0.910	0.004	106.88
Sustained	0.000	0.013	0.042	0.945	371.47	Sustained	0.000	0.020	0.029	0.951	337.08

Table 4. Logistic Regression of Reconviction on Visitation Groups and Controls.

	Model 1			Model 2		
	b	*SE*	*OR*	*b*	*SE*	*OR*
Visitation trajectory groups						
Near entry	−0.201**	0.07	0.818	−0.148*	0.07	0.862
Near release	−0.107	0.08	0.898	−0.075	0.08	0.928
Sustained	−0.246**	0.09	0.782	−0.182*	0.09	0.833
Control variables						
Age	—	—	—	−0.039***	0.00	0.961
Male (1/0)	—	—	—	0.228***	0.06	1.256
Black (1/0)	—	—	—	0.433***	0.05	1.542
Hispanic (1/0)	—	—	—	−0.248**	0.08	0.780
Sentence length (months)	—	—	—	−0.007***	0.00	0.993
Time served (months)	—	—	—	−0.016*	0.01	0.984
Prior convictions (count)	—	—	—	0.042***	0.01	1.043
Prior violent convictions (count)	—	—	—	−0.020	0.02	0.980
Prior property convictions (count)	—	—	—	−0.027***	0.01	0.973
Prior sex convictions (count)	—	—	—	0.051	0.05	1.052
Prior other convictions (count)	—	—	—	0.035*	0.02	1.036
Prior prison commitments (count)	—	—	—	0.214***	0.02	1.238
Primary offense—violent (1/0)	—	—	—	−0.330***	0.07	0.719
Primary offense—property (1/0)	—	—	—	0.150**	0.05	1.162
Primary offense—sex (1/0)	—	—	—	−0.665***	0.18	0.514
Primary offense—other (1/0)	—	—	—	0.148*	0.07	1.160
Misconduct variety score (count)	—	—	—	0.151***	0.02	1.163
67 county dummy variables (1/0)	—	—	—			
Constant	−0.180***	0.02		0.208	0.39	1.231
Log likelihood	−7,823.10			−7,190.54		

Note: OR = odds ratio; *SE* = standard error.
White, prior drug convictions (count), and primary offense—drug (1/0) serve as reference variables; 67 county dummy variables, not shown here, are included in model 2.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

have an estimated 22 percent lower chance of recidivating than nonvisited prisoners (odds ration [OR] = 0.782).

Near-entry visitation also has a significant effect (−0.201) that is slightly smaller than the effect of sustained visitation, but prisoners in this group were still 18 percent less likely to recidivate than nonvisited prisoners (OR = 0.818). As discussed previously, qualitative accounts have suggested that near-entry visitation may be a typical experience for prisoners because of the challenges of maintaining relationships throughout a prison term (e.g., Ross and Richards 2009). Although it seems plausible that discontinued visitation could have detrimental effects on future behavior, the findings here suggest that, generally, being visited early may be beneficial, even if visits are not sustained.

Perhaps surprisingly, especially given scholarship emphasizing the salience of prerelease ties, near-release visitation did not emerge as having a significant relationship with recidivism. This finding is seemingly anomalous considering the potential implications of late visits for helping offenders reconnect with social ties and prepare for reentry (Bales and Mears 2008; Wolff, Shi, and Schumann 2012). It may be, however, that for some prisoners in this group, visits occur too late to counteract the strains experienced during imprisonment (Adams 1992; Sykes 1958) or to be helpful for reconnecting with ties that have already been severed by lack of contact (Gordon and McConnell 1999).

Although model 1 finds significant effects of visitation patterns on recidivism, there are questions about whether these effects are spurious or attributable to other factors such as age, time served, or prior record. Model 2 addresses this question by including a range of measures, the omission of which might result in biased estimates of the visitation effect. Some of the important potential confounders controlled for are measures of a prisoner's prior offending (e.g., Kurlychek et al. 2006), including counts of different offense types, and in-prison offenses, measured as a variety score.

The results in model 2 suggest that, even after controlling for these covariates, visitation patterns remain significantly associated with recidivism. There are reductions in each of the visitation coefficients, but the same substantive findings emerge. That is, sustained visitation is statistically significant and emerges as having the strongest association with reduced recidivism (−.182); near-entry visitation is significant and has an association in the same direction but slightly weaker (−.148); and near-release visitation is not statistically significant (−.075). The control variables, for the most part, yield significant effects on the recidivism likelihood that are in the expected direction. For instance, older inmates and females are less likely to recidivate, and prisoners who have more prior convictions, more prior prison commitments, and who engage in misconduct in prison are more likely to recidivate. As discussed below, it is possible that there are other confounding factors that have not been accounted for in these analyses. However, as shown in the Appendix, visited and nonvisited inmates differ significantly across several different variables, which suggests that the models are at least accounting for those potential selection biases that stem from the dimensions included here.[7,8]

Discussion and Conclusion

Scholars have proposed that efforts to understand the effects of imprisonment can be strengthened by examining more closely the experiences prisoners have during incarceration (e.g., Nagin et al. 2009). In addition, prior theory and research suggest that the maintenance of social ties during incarceration is one way to improve inmates' chances of successful reintegration (e.g., Bales and Mears 2008; Berg and Huebner 2011; Cobbina et al. 2012; Hairston 1991). The goal of this study was to advance research on prison experiences and inmate social ties by examining more systematically the experiences prisoners have with visitation and, in turn, the effects of visitation on recidivism. There have been several recent studies of visitation effects, but this study departed significantly from prior studies by focusing on the timing and continuity of visitation, and by focusing on released prisoners who served varying amounts of time in prison.

Several findings emerged that warrant mention. First, the trajectory modeling analyses found that, typically, prisoners tend to experience one of the four patterns of visitation: (1) no visits, (2) near-entry visitation, (3) near-release visitation, or (4) sustained visitation. This is not to suggest that prisoners do not experience other patterns, but that generally, prisoners may fall into one of these groups. Second, these patterns are robust across groups of prisoners serving varying lengths of time in prison. Third, prisoners who were visited early in their prison term and who were visited consistently were significantly less likely to recidivate than prisoners who were never visited.

These findings provide further support for the idea that social networks are important for reentry and that contact during prison may be particularly salient (see, generally, Maruna and Immarigeon 2004; Rose and Clear 2003; Visher and Travis 2003). For visitation research specifically, the findings here highlight that different experiences with visitation might have different effects on recidivism. For instance, sustained contact appears to be most effective at reducing future offending. Separately, near-entry visitation also emerged as a predictor of reduced recidivism, which suggests that there may be something about the early period of incarceration that makes visits more beneficial. One plausible explanation is that visits early on are useful for helping prisoners acclimate to the prison environment. Qualitative accounts have highlighted the challenges prisoners face adjusting to prison (e.g., Adams 1992; Hassine 2009). It seems possible that earlier visits can reduce strain or at least provide temporary relief from strain, and this effect could have long-term implications.

Not least, the findings hold potential implications for policy focused on prisoner experiences and reentry. Scholarship has previously highlighted the potential utility of visitation as a programming option (Hairston 1988, 1991) but also a range of barriers and challenges that make visitation difficult (Christian 2005). Thus, there may be cost-effective strategies that allow prison facilities to help family members and friends overcome these challenges and increase visitation. Notably, however, the removal of barriers will have currently unknown effects. It is not clear, for instance, whether changes can substantially increase the percentage of inmates who are visited. With that said, even if the removal of barriers does not dramatically increase the overall percentage of visited inmates, it may still provide opportunities for those who are visited to be visited more frequently or consistently.

More research on visitation is required, however, to increase confidence in the results and to continue to advance research in this area. Studies are needed that examine the factors that might condition visitation effects, including age, gender, and race (see, e.g., Adams 1992; Cobbina et al. 2012; Cochran and Mears 2013; Schafer 1994). For example, pursuant to a Reviewer's suggestion, ancillary analyses here explored whether time served influenced visitation's impact; that is, whether near-entry and sustained visitation are less salient for long-term prisoners than for those with short stays. Although the idea of a conditioning effect of time served on visitation was not supported here, it is possible that inmates who serve substantially longer sentences, say, sentences of several years or more, are less affected by contact with social ties. Longer sentences grant more opportunities for adverse experiences—such as increased social isolation, strain, deteriorating interpersonal relationships, facility transfers, victimization, and misconduct—and these may work to undermine the benefits of maintained social connections. More research is needed that considers this possibility and that systematically assesses the specific mechanisms that might offset, or perhaps augment, the benefits of social ties.

Studies are also needed that can better account for potential selection effects. The comparison included in the Appendix highlighted notable differences between visited and nonvisited inmates. Generally, visited inmates appeared to be younger, White, and had fewer prior convictions. These differences provide some clues about other underlying factors that might be at work. For example, individuals' socioeconomic status might be important. Visitation typically requires the availability of economic resources and inmate groups, such as Blacks and Latinos, may be less likely to be visited than Whites because they come from families and communities that lack necessary resources to travel to the prison. In addition, if inmates are married, have kids, or have living parents, they may be more likely to be visited or experience different visitation patterns. The strength of preexisting social relationships may also matter. Visited inmates on average have fewer prior convictions, which might suggest that family and friends are more willing to visit less serious offenders. Alternatively, it is possible that prior convictions act simply as a proxy measure of the strength of preexisting social ties. Unfortunately, measures to control for social ties and the strength of social ties, and to account for possible selection biases related to them, were not available for this analysis. Investigation of these possibilities will require more detailed data that can account for dimensions of inmates' social networks. With these data, future studies should also consider using matching methodologies to better account for selection biases and to systematically compare the effects of visitation, and visitation over time, across a range of offender groups. Efforts to collect these kinds of data and to explore these analyses will be critical for advancing theory and policy related to social support and its impact during and after incarceration.

Appendix

Descriptive Statistics for Nonvisited Inmates Versus Visited Inmates.

	Nonvisited (n = 8,350)		Visited (n = 3,045)	
	M	*SD*	*M*	*SD*
Reconviction within three years (1/0)*	0.46	0.50	0.41	0.49
Age at admission*	33.07	10.05	29.33	8.68
Male (1/0)*	0.89	0.32	0.87	0.34
White (1/0)*	0.38	0.48	0.53	0.50
Black (1/0)*	0.54	0.50	0.37	0.48
Hispanic (1/0)*	0.08	0.27	0.10	0.30
Prison sentence length (months)	20.88	18.99	21.44	17.77
Time served (months)*	11.48	2.71	12.16	2.80
Number of prior convictions (count)*	6.01	6.45	5.72	6.93
Number of prior violent convictions (count)	0.78	1.53	0.72	1.48
Number of prior property convictions (count)	2.63	4.98	2.58	5.56
Number of prior drug convictions (count)*	1.93	3.45	1.68	3.48
Number of prior sex convictions (count)	0.07	0.49	0.05	0.41
Number of prior other convictions (count)*	0.61	1.36	0.68	1.41
Number of prior prison commitments (count)*	0.98	1.51	0.53	1.03
Primary offense—violent (1/0)	0.18	0.38	0.18	0.39
Primary offense—property (1/0)*	0.32	0.47	0.30	0.46
Primary offense—drugs (1/0)	0.36	0.48	0.34	0.47
Primary offense—sex (1/0)	0.02	0.15	0.02	0.15
Primary offense—other (1/0)*	0.12	0.33	0.16	0.37
Misconduct variety score (count)	0.53	1.04	0.53	1.00

Note: $*p < .05$ (statistically significant differences between groups).

Authors' Note

The views expressed here are those of the author and do not necessarily reflect those of the Department of Corrections.

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Notes

1. Reviews of visitation literature sometimes also consider studies of home furloughs, which may, in theory, have effects similar to visitation (see, e.g., Baumer, O'Donnell, and Hughes 2009).
2. The focus here is on general visitation, but several prior studies have accounted for different types of visitors (see, e.g., Bales and Mears 2008; Duwe and Clark 2013; Siennick et al. 2013). Although there are compelling theoretical arguments to suggest that visitor type might condition visitation effects, as a conceptual concern, it is not clear how to account for both the longitudinal patterns an inmate experiences and the type of visitor. It is likely the case that inmates are visited by several different visitor types (e.g., parent, spouse, child), but it would be difficult to account for that variation in the trajectory analyses. One could analyze separate trajectories of, say, parental visitation and spousal visitation, but these trajectories, when observed separately, do not accurately describe an inmate's overall and combined experiences with visitation. Regardless, researchers should continue to try and better understand how different visitation characteristics, like visitor type, influence visitation effects.
3. County dummy variables are included to account for the clustering of inmates within their home counties and to account for context-level variation in the likelihood of visitation and recidivism (see, e.g., Kubrin and Stewart 2006; Wang, Mears, and Bales 2010). The specific coefficients for these dummy variables, however, do not provide substantial theoretical meaning for the purposes of understanding visitation effects. To conserve space, they were omitted, but are available upon request.
4. A dichotomous measure of reconviction is the most frequently used measure of recidivism (e.g., Killias, Villettaz, and Zoder 2006) and it is often appropriate because it focuses on more serious types of offending. In addition, observing recidivism within three years represents a conservative test of visitation effects, ensuring that the analyses do not include only those individuals who would be considered most likely to "fail" within one or two years of release (see, e.g., Kurlychek et al. 2006; Langan and Levin 2002).

5. Months here are defined as 28-day periods so that, in the case that visits are more likely to occur on weekends, each cohort is exposed to an equal number of weekends.
6. See table 4c, Time Served in DC Custody, Florida Department of Corrections Inmate Release reports (http://www.dc.state.fl.us/pub/release/0506/custody1.html).
7. Ancillary analyses using reimprisonment as the outcome variable revealed substantively similar findings. An additional series of analyses was conducted using propensity score matching to estimate average treatment effects of visitation on recidivism using the covariates included here as matching variables, then matching prisoners in each of the visitation trajectories to prisoners in the non-visited pool. Results from the matching analyses were substantively similar as those presented here and are available upon request.
8. It is theoretically plausible that certain types or groups of inmates experience greater or lesser benefits, or even experience harm, as a result of visitation or different visitation patterns. To explore this idea in part, I conducted ancillary analyses that examined interactions between visitation trajectories and offense type, to test whether there was an increased or decreased effect for specific offender types. However, no significant interaction effects emerged, suggesting that visitation effects do not vary across inmate groups when differentiated by offense type.

   One additional possibility is that visitation exerts a stronger effect on inmates who serve shorter sentences than those who serve longer ones. It is possible that for longer term inmates, more time in prison creates more opportunities for adverse prison effects and heightened social isolation, which could offset the benefits of contact with social ties. Unfortunately, inmates in this sample all served relatively short terms of incarceration. With that said, I conducted several ancillary analyses to explore the potential impact of time served even within this 8- to 17-month range. First, I tested for an interaction effect between time served and visitation by including in the regression equation interaction terms between time served and each visitation trajectory. No significant interaction effects emerged.

   Second, I conducted a series of regression analyses that examined each inmate cohort separately. The objective here was to systematically examine the effects of visitation across cohorts and to see if a pattern emerged across time served; either a diminishing influence of visitation trajectories as time served increased or perhaps a cutoff point among the cohorts where effects were no longer significant. However, no clear pattern emerged across cohorts in regard to visitation effect sizes or statistical significance of effects over time. This finding supports the null effects of the interactions described above.

   Despite the lack of support for a conditioning effect of time served here, it is important that future studies consider further the potential influence of time served and other conditioning factors, including those that might lead to reduced or adverse effects. I thank one of the anonymous reviewers for bringing attention to these possibilities. The results of these ancillary analyses are all available upon request.

References

Adams, Kenneth. 1992. "Adjusting to Prison Life." *Crime and Justice* 16:275-359.

Adams, Don and Joel Fischer. 1976. "The Effects of Prison Residents' Community Contacts on Recidivism Rates." *Corrective and Social Psychiatry and Journal of Behavioral Technology, Methods, and Therapy* 22:21-27.

Agnew, Robert. 2005. *Why Do Criminals Offend? A General Theory of Crime and Delinquency*. Los Angeles, CA: Roxbury.

Arditti, Joyce A. 2003. "Locked Doors and Glass Walls: Family Visiting at a Local Jail." *Journal of Loss and Trauma* 8:115-38.

Bales, William D. and Daniel P. Mears. 2008. "Inmate Social Ties and the Transition to Society." *Journal of Research in Crime and Delinquency* 45:287-321.

Baumer, Eric P., Ian O'Donnell, and Nicola Hughes. 2009. "The Porous Prison: A Note on the Rehabilitative Potential of Visits Home." *The Prison Journal* 89:119-26.

Berg, Mark T. and Beth M. Huebner. 2011. "Reentry and the Ties that Bind: An Examination of Social Ties, Employment, and Recidivism." *Justice Quarterly* 28:382-410.

Bernstein, Nell. 2005. *All Alone in the World: Children of the Incarcerated*. New York: The New Press.

Blevins, Kristie R., Shelley Johnson Listwan, Francis T. Cullen, and Cheryl Lero Jonson. 2010. "A General Strain Theory of Prison Violence and Misconduct: An Integrated Model of Inmate Behavior." *Journal of Contemporary Criminal Justice* 26:148-66.

Blokland, Arjan A. J., Daniel Nagin, and Paul Nieuwbeerta. 2005. "Life Span Offending Trajectories of a Dutch Conviction Cohort." *Criminology* 43: 919-54.

Brame, Bobby, Daniel S. Nagin, and Richard E. Tremblay. 2001. "Developmental Trajectories of Physical Aggression from School Entry to Late Adolescence." *Journal of Child Psychology and Psychiatry* 42:503-12.

Breese, Jeffrey R., Khaz Ra'el, and G. K. Grant. 2000. "No Place Like Home: A Qualitative Investigation of Social Support and its Effects on Recidivism." *Sociological Practice: A Journal of Clinical and Applied Research* 2:1-21.

Bureau of Justice Statistics. 2011. *Table 8. State Prison Releases, 2008: Time Served in Prison, by Offense and Release Type*. Washington, DC: Bureau of Justice Statistics.

Casey-Acevedo, Karen and Tim Bakken. 2002. "Visiting Women in Prison: Who Visits and Who Cares?" *Journal of Offender Rehabilitation* 34:67-83.

Christian, Johnna. 2005. "Riding the Bus: Barriers to Prison Visitation and Family Management Strategies." *Journal of Contemporary Criminal Justice* 21:31-48.

Christian, Johnna, Jeff Mellow, and Shenique Thomas. 2006. "Social and Economic Implications of Family Connections to Prison." *Journal of Criminal Justice* 34: 443-52.

Cobbina, Jennifer E., Beth M. Huebner, and Mark T. Berg. 2012. "Men, Women, and Postrelease Offending: An Examination of the Nature of the Link Between Relational Ties and Recidivism." *Crime and Delinquency* 58:331-61.

Cochran, Joshua C. 2012. "The Ties that Bind or the Ties that Break: Examining the Relationship between Visitation and Prisoner Misconduct." *Journal of Criminal Justice* 40:433-40.

Cochran, Joshua C. and Daniel P. Mears 2013. "Social Isolation and Inmate Behavior: A Conceptual Framework for Theorizing Prison Visitation and Guiding and Assessing Research." *Journal of Criminal Justice* 41:252-261.

Cochran, Joshua C., Daniel P. Mears, William D. Bales, and Eric A. Stewart. 2013. "Does Inmate Behavior Affect Post-Release Offending? Investigating the Misconduct-Recidivism Relationship among Youth and Adults." *Justice Quarterly*. DOI: 10.1080/07418825.2012.736526.

Comfort, Megan L. 2008. *Doing Time Together: Love and Family in the Shadow of the Prison*. Chicago, IL: University of Chicago Press.

Conover, Ted. 2001. *Newjack: Guarding Sing Sing*. New York: Random House.

Derkzen, Dena, Renee Gobeil, and Justin Gileno. 2009. *Visitation and Post-Release Outcome Among Federally-Sentenced Offenders*. Ottawa, Canada: Correctional Service of Canada.

Duwe, Grant and Valerie Clark. 2013. "Blessed Be the Social Tie That Binds: The Effects of Prison Visitation on Offender Recidivism." *Criminal Justice Policy Review*. 24: 271-296.

Ekland-Olson, Sheldon, Michael Supancic, James Campbell, and Kenneth J. Lenihan. 1983. "Postrelease Depression and the Importance of Familial Support." *Criminology* 21:253-75.

Fishman, Laura T. 1990. *Women at the Wall: A Study of Prisoners' Wives Doing Time on the Outside*. Albany, NY: SUNY Press.

George, Erin. 2010. *A Woman Doing Life: Notes from a Prison for Women*. New York: Oxford University Press.

Glaser, Daniel. 1964. *The Effectiveness of a Prison and Parole System*. Indianapolis, IN: Bobbs-Merrill.

Gordon, Jill and Elizabeth H. McConnell. 1999. "Are Conjugal and Familial Visitations Effective Rehabilitative Concepts?: Yes." *The Prison Journal* 79:119-35.

Hairston, Creasie F. 1988. "Family Ties During Imprisonment: Do They Influence Future Criminal Activity?" *Federal Probation* 52:48-52.

Hairston, Creasie F. 1991. "Family Ties During Imprisonment: Important to Whom and For What?" *Journal of Sociology and Social Welfare* 18:87-104.

Hassine, Victor. 2009. *Life Without Parole: Living in Prison Today*. New York: Oxford University Press.

Hirschi, Travis. 1969. *Causes of Delinquency*. Berkeley, CA: University of California Press.

Holt, Norman and Donald Miller. 1972. *Explorations in Inmate-Family Relationships*. California: California Department of Corrections.

Howser, Jamie and Donald MacDonald. 1982. "Maintaining Family Ties." *Corrections Today*. August: 96-97.

Jiang, Shanhe and Thomas L. Winfree. 2006. "Social Support, Gender, and Inmate Adjustment to Prison Life: Insights from a National Sample." *The Prison Journal* 86:32-55.

Jones, Bobby L., Daniel S. Nagin, and Kathryn Roeder. 2001. "A SAS Procedure Based on Mixture Models for Estimating Developmental Trajectories." *Sociological Methods and Research* 29:374-93.

Killias, Martin, Patrice Villettaz, and Isabel Zoder. 2006. "The Effects of Custodial versus Non-Custodial Sentences on Re-offending." Report to the Campbell Collaboration Crime and Justice Group. Lausanne, Switzerland: University of Lausanne, Institute of Criminology and Criminal Law. Retrieved November 9, 2010 (http://campbellcollaboration.org/lib/download/108/).

Kubrin, Charis E. and Eric A. Stewart. 2006. "Predicting Who Reoffends: The Neglected Role of Neighborhood Context in Recidivism Studies." *Criminology* 44:165-97.

Kurlychek, Megan C., Robert Brame, and Shawn D. Bushway. 2006. "Scarlet Letters and Recidivism: Does an Old Criminal Record Predict Future Offending?" *Criminology and Public Policy* 3:1101-22.

Kurlychek, Megan C., Robert Brame, and Shawn D. Bushway. 2006. "Scarlet Letters and Recidivism: Does an Old Criminal Record Predict Future Offending." *Criminology and Public Policy* 5: 483-504.

Langan, Patrick A. and David J. Levin. 2002. *Recidivism of Prisoners Released in 1994*. Washington, DC: Bureau of Justice Statistics.

La, Vigne, Nancy G., Rebecca L. Naser, Lisa E. Brooks, and Jennifer L. Castro. 2005. "Examining the Effect of Incarceration and In-Prison Family Contact on Prisoners' Family Relationships." *Journal of Contemporary Criminal Justice* 21:314-35.

La, Vigne, Nancy G., Christy Visher, and Jennifer Castro. 2004. *Chicago Prisoners' Experiences Returning Home*. Washington, DC: The Urban Institute.

LeBel, Thomas P. 2012. "Invisible Stripes? Formerly Incarcerated Persons' Perceptions of Stigma." *Deviant Behavior* 33:89-107.

Liebling, Alison. 1999. "Prison Suicide and Prisoner Coping." *Crime and Justice* 26:283-359.

Maruna, Shadd. 2001. *Making Good: How Ex-Convicts Reform and Rebuild Their Lives*. Washington, DC: American Psychological Association.

Maruna, Shadd and Ross Immarigeon. 2004. *After Crime and Punishment: Pathways to Offender Reintegration*. Devon, England: William Publishing.

Maruna, Shadd and Hans Toch. 2005. "The Impact of Imprisonment on the Desistance Process." Pp. 139-78 in *Prisoner Reentry and Crime in America*, edited by Jeremy Travis and Christy Visher. New York: Cambridge University Press.

Massoglia, Michael, Brianna Remster, and Ryan D. King. 2012. "Stigma or Separation? Understanding the Incarceration-Divorce Relationship." *Social Forces* 90:133-56.

Mears, Daniel P., Joshua C. Cochran, Sonja E. Siennick, and William D. Bales. 2012. "Prison Visitation and Recidivism." *Justice Quarterly* 29:888-918.

Monahan, Kathryn, C., Asha Goldweber, and Elizabeth Cauffman. 2011. "The Effects of Visitation on Incarcerated Juvenile Offenders: How Contact with the Outside Impacts Adjustment on the Inside." *Law and Human Behavior* 35: 143-151.

Morris, Robert G., Michael L. Carriaga, Brie Diamond, Nicole Leeper Piquero, and Alex R. Piquero. 2012. "Does Prison Strain Lead to Prison Misbehavior? An Application of General Strain Theory to Inmate Misconduct." *Journal of Criminal Justice* 40:194-201.

Nagin, Daniel S. 2005. *Group-Based Modeling of Development*. Cambridge, MA: Harvard University Press.

Nagin, Daniel S., Francis T. Cullen, and Cheryl L. Jonson. 2009. "Imprisonment and Reoffending." *Crime and Justice* 38:115-200.

Naser, Rebecca L. and Nancy G. La Vigne. 2006. "Family Support in the Prisoner Reentry Process: Expectations and Realities." *Journal of Offender Rehabilitation* 43:93-106.

Ohlin, Lloyd E. 1951. *Selection for Parole*. New York: Russell Sage.

Pager, Devah. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108:937-75.

Petersilia, Joan. 2003. *When Prisoners Come Home: Parole and Prisoner Reentry*. New York: Oxford University Press.

Reidy, Thomas J., Jon R. Sorensen, and Mark D. Cunningham. 2012. "Community Violence to Prison Assault: A Test of the Behavioral Continuity Hypothesis." *Law and Human Behavior* 36:356-63.

Reisig, Michael D., Kristy Holtfreter, and Merry Morash. 2002. "Social Capital Among Women Offenders: Examining the Distribution of Social Networks and Resources." *Journal of Contemporary Criminal Justice* 18:167-87.

Rose, Dina R. and Todd R. Clear. 2003. "Incarceration, Reentry, and Social Capital: Social Networks in the Balance." Pp. 313-41 in *Prisoners Once Removed: The Impact of Incarceration and Reentry on Children, Families, and Communities*, edited by Jeremy Travis and Michelle Waul. Washington, DC: The Urban Institute Press.

Ross, Jeffrey I. and Stephen C. Richards. 2009. *Beyond Bars: Rejoining Society After Prison*. New York: Alpha Books.

Sampson, Robert J. and John H. Laub. 1993. *Crime in the Making: Pathways and Turning Points Through Life*. Cambridge, MA: Harvard University Press.

Schafer, Nance E. 1994. "Exploring the Link Between Visits and Parole Success." *International Journal of Offender Therapy and Comparative Criminology* 38:17-32.

Siennick, Sonja E., Daniel P. Mears, and William D. Bales. 2012. "Here and Gone: Anticipation and Separation Effects of Prison Visits on Inmate Infractions." *Journal of Research in Crime and Delinquency*. 50:417-444.

Sykes, Gresham M. 1958. *The Society of Captives*. Princeton, NJ: Princeton University Press.

Tewksbury, Richard and Matthew DeMichele. 2005. "Going to Prison: A Prison Visitation Program." *The Prison Journal* 85:292-310.

Trulson, Chad R., Matt DeLisi, and James W. Marquart. 2011. "Institutional Misconduct, Delinquent Background, and Rearrest Frequency Among Serious and Violent Delinquent Offenders." *Crime and Delinquency* 57:709-31.

Turner, Susan, Randy Myers, Lori Sexton, and Sarah Smith. 2007. "What Crime Rates Tell Us about Where to Focus Programs and Services for Prisoners." *Criminology & Public Policy* 6:623-31.

Uggen, Christopher, Jeff Manza, and Angela Behrens. 2004. "Less than the Average Citizen: Stigma, Role Transition, and the Civic Reintegration of Convicted Felons." *Pp. 258-90 in After Crime and Punishment: Pathways to Offender Reintegration*, edited by Shadd Maruna and Ross Immarigeon. Devon, England: William Publishing.

Uggen, Christopher and Sara Wakefield. 2005. "Young Adults Reentering the Community from the Criminal Justice System: The Challenge." Pp. 114-44 in *On Your Own without a Net*, edited by D. Wayne Osgood, E. Michael Foster, Constance Flanagan, and Gretchen R. Ruth. Chicago, IL: University of Chicago Press.

Visher, Christy A. and Daniel J. O'Connell. 2012. "Incarceration and Inmates' Self Perceptions about Returning Home." *Journal of Criminal Justice* 40:386-93.

Visher, Christy A. and Jeremy Travis. 2003. "Transitions from Prison to Community: Understanding Individual Pathways." *Annual Review of Sociology* 29:89-113.

Wang, Xia, Daniel P. Mears, and William D. Bales. 2010. "Race-Specific Employment Contexts and Recidivism." *Criminology* 48:1171-211.

Western, Bruce. 2006. *Punishment and Inequality in America*. New York: Russell Sage Foundation.

Windzio, Michael. 2006. "Is There a Deterrent Effect of Pains of Imprisonment?: The Impact of 'Social Costs' of First Incarceration on the Hazard Rate of Recidivism." *Punishment and Society* 8:341-64.

Wolff, Nancy and Jeffrey Draine. 2004. "Dynamics of Social Capital of Prisoners and Community Reentry: Ties That Bind?" *Journal of Correctional Health Care* 10:457-90.

Wolff, Nancy, Jing Shi, and Brooke E. Schumann. 2012. "Reentry Preparedness among Soon-to-be-Released Inmates and the Role of Time Served." *Journal of Criminal Justice* 40:379-85.

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