------ Research Report ------

Visitation and Post-Release Outcome Among Federally-Sentenced Offenders

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EXECUTIVE SUMMARY

Given that maintaining contact and social support with family members while incarcerated has been linked to successful offender reintegration (Schafer, 1994), the Correctional Service of Canada has implemented both general institutional visits and a Private Family Visiting (PFV) program within its federal institutions. The objective of these programs is to encourage inmates to develop and maintain family and community ties that will assist them in becoming lawabiding citizens. To date, however, the extent to which visitation programs contribute to these goals has not been thoroughly examined.

Hensley, Rutland, Gray-Ray, and Durant (2000) examined the effect of visitation on violent institutional behaviour. These researchers found that offenders who had participated in private family visits were generally less likely to threaten or commit a violent act while incarcerated relative to inmates who did participate in visits. More recently, Bales and Mears (2008) conducted the most comprehensive study to date on the effectiveness of visitation in reducing recidivism. These authors found that receiving visits, as well as receiving greater *numbers* of visits, were both associated with a lower likelihood of recidivism. Further, among offenders who did recidivate, visited offenders took longer to do so than their non-visited counterparts.

Altogether, the limited research conducted to date has demonstrated positive relationships between inmates' participation in visitation programs and greater family stability, improved institutional behaviours, and lower rates of recidivism. Most existing research has not been conducted in Canada, and it is therefore unclear whether this pattern of results can be appropriately generalized to the Canadian context. In order to examine this issue, the current study examines the association of both general visits and private family visits with readmission and re-offence rates in a large sample of Canadian federal offenders.

Data from the Correctional Service of Canada's automated offender data system were used to investigate this association. Analyses involved all offenders released in fiscal year 2005-06 for whom all relevant data were available (N = 6,537). Using these data, a series of logistic regressions and Cox regressions were conducted. The results of these analyses conclusively demonstrated that a positive association exists between receiving visits (including private family visits) and lower likelihoods of readmission, after accounting for the influence of ethnicity, gender, age at release, sentence type, offence type, and assessed risk. Analyses based on the number of visits received revealed that offenders who received 6.7 visits (the average among offenders who received visits) had odds of readmission approximately 14% lower than their counterparts who did not receive visits. Similarly, offenders who participated in 2.0 private family visits (the average among those who participated) had odds of readmission about 22% lower than those who did not participate.

Characteristics of the visits were also found to be associated with readmission, with more recent visits and private family visits, visits from parents and children, and private family visits with spouses all associated with a decreased likelihood of readmission. The association between visitation and readmission also differed according to ethnicity, with the effects of visitation on likelihood of readmission being much greater for non-Aboriginal offenders than for their Aboriginal counterparts.

Finally, participation was much more consistently associated with readmission generally than with re-offending – and indeed, in most analyses, participation in visitation was *not* associated with re-offending. Receiving visits from a spouse was the exception, with offenders receiving such visits having lower odds of re-offending than their counterparts who did not receive such visits. This pattern suggests that the impact of visitation may be primarily apparent in readmissions for reasons such as for breaches of conditions.

Given that visited offenders were less likely to be readmitted, but did not re-offend at higher rates than their non-visited offenders, these results suggest that visited offenders can more often be appropriately managed in the community than can their non-visited counterparts. This is important as there are significant cost savings associated with holding an offender in the community rather than an institution (approximately \$65,000 per year; Public Safety Canada, 2007).

Altogether, though this study adds substantially to the state of knowledge surrounding the association between visitation and post-release outcome. Results demonstrate the value of correctional visitation programs, both as a tool in managing risk of readmission and as a contributor to effective correctional practice.

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INTRODUCTION

Though extensive qualitative research has been conducted regarding offenders' perceptions of visitation (e.g., Tewksbury & DeMichele, 2005), very little has focused on the relationship between participation in correctional visitation and recidivism. Moreover, of the limited research that exists, only a small portion has been empirical (though see Bales & Mears, 2008) or conducted in a Canadian context. For this reason, it was seen as necessary to conduct an quantitative examination of the relationship between post-release outcome and participation in both (1) visitation generally and (2) private family visits (PFVs) specifically.

CSC's Visitation Programs

Institutional visitation programs, including general visitation, private family visitation, and conjugal visits,¹ offer an opportunity for offenders to maintain social support and community ties while incarcerated (Goetting, 1982). The ability to maintain family ties is thought to assist with re-entry by normalizing the inmate's lifestyle and maintaining his or her perception of functioning as a member of a family unit (Goetting, 1982; Correctional Service of Canada [CSC], 1983). Indeed, maintaining contact and social support with family members while incarcerated has been linked to successful offender reintegration (Schafer, 1994).

In line with its mission, the core objective of CSC's visitation initiatives is to encourage inmates to develop and maintain family and community ties that will assist them in becoming law-abiding citizens (CSC, 2008). These initiatives have two prongs: general visitation and the Private Family Visiting (PFV) program, which offer the opportunity to visit privately in order to renew or maintain relationships.² General visits are open to all inmates and occur during the established visiting hours for each institution (typically several times weekly). The visitation process requires that the visitor undergo a security verification and be approved by the institutional head, and approved visits are typically conducted in an open environment, though "closed" visits (that is, those conducted through a Plexiglas or similar barrier) can be required to

¹ "Conjugal visits" is a term used mainly in the U.S. to refer to private visits, both with intimate partners and with other family members. The term is roughly equivalent to "private family visits", which is the term used in Canada. The terms used here reflect the jurisdiction where the research was completed.

 $^{^{2}}$ CSC manages a total of 58 institutions, classified as minimum, medium, or maximum security (or, in some cases, multi-level), distributed across Canada. In accordance with policy (CSC, 2008), visitation is available to offenders housed at each of these institutions. That being said, it must be noted that geographical proximity and other factors can influence the extent to which visits are feasible for offenders and their community supports.

ensure the visitor or institution's security. Eligible offenders³ can also apply for the PFV program, and if approved, are permitted one PFV, lasting up to 72 hours, every two months.

CSC has conducted a number of evaluations of its PFV program (Carter, 1989; CSC, 1983). These involved administering surveys and completing interviews with staff members, family visitors, and offenders to examine the impacts of the PFV program on participants and institutions. In one study (Carter, 1989), the majority of offenders reported that the program positively influenced their attitude towards their incarceration. Moreover, the author found the program to have a positive effect on offenders' relationships with their family. Further, results from the interviews with family visitors and offenders reinforced the importance of consistent support from families in helping offenders to cope with their incarceration and to assist with their reintegration upon release. Of the family visitors interviewed, many reported that the program was successful in attaining its objectives of maintaining and renewing relationships. Most visitors indicated that they planned to continue to support the offender after his or her release.

The vast majority of institutional staff members surveyed in both studies relayed that the PFV program had a positive impact on the institution as a whole (Carter, 1989; CSC, 1983). Many of these also suggested that the introduction of the PFV program had led to improvements in institutional behaviour. Further, a very large proportion of staff members perceived positive effects for inmates. Unfortunately, these results all stem from qualitative data, and to date, there have been no quantitative evaluations of the PFV program to complement the qualitative findings.

Family Stability

One of the perceived benefits of PFVs or conjugal visits is the ability to maintain and strengthen family bonds while an offender is incarcerated. A number of studies have found that visitation programs aid in keeping marriages intact during incarceration (Hopper, 1989; Rutland, 1995 as cited in Hensley, Rutland & Gray-Ray, 2000). Research has also focused on family stability more generally. In this vein, Hensley and colleagues (2000b) examined the impact of conjugal visits by surveying 266 state offenders in Mississippi. Results indicated that participation in conjugal visits was associated with higher levels of family stability. These

³ Exclusion criteria for the PFV program include being incarcerated in a Special Handling Unit, already having unescorted temporary absences for family visitation purposes, and being assessed as being at risk for family violence.

results do not imply a causal relationship; indeed, it is difficult to discern whether visitation is a consequence of pre-existing family stability or whether visitation in and of itself contributes to family stability. Regardless, visitation programs play an important role by providing the opportunity to, at the very least, *maintain* family stability while the offender is incarcerated. For many such programs, this is in fact their goal.

Institutional Behaviour

In most correctional jurisdictions, one criterion for participation in family visitation programs is an absence or a low rate of institutional misconducts. As such, participation is commonly viewed as an earned privilege within the correctional context. Visitation programs can therefore be seen as a control mechanism, whereby an offender may lose or fail to gain the privilege of participation in visitation as a result of inappropriate institutional behaviour. Consequently, visitation programs may influence levels of institutional misconducts (Hensley, Rutland, & Gray-Ray, 2000). Qualitative research supports this interpretation: In interviews conducted as part of the evaluation of CSC's PFV program, 75% of offenders indicated that they attempted to avoid situations which could ultimately jeopardize their visiting privileges (Carter, 1989).

More recently, Hensley, Rutland, Gray-Ray, and Durant (2000, as cited in Hensley, Koscheski, & Tewksbury, 2002) examined the effects of visitation programs on violent institutional misconducts among Mississippi inmates. In general, offenders who participated in conjugal visits were less likely to threaten or commit a violent act while incarcerated than inmates who did not participate in conjugal visits. In a series of follow-up analyses which involved disaggregating data by security level, gender, and race, the researchers found that this decrease in violent behaviour was only present for male offenders, as no reduction in violent behaviour in relation to visits was present for female offenders. In terms of security level, those having participated in visits within a medium security institution were less likely to engage in violent acts than minimum security inmates. Furthermore, Black offenders reaped greater benefits from participation in conjugal visits than their Caucasian counterparts, as Black offenders were less likely to exhibit violent behaviour.

In a similar study, Hensley, Koscheski, and Tewksbury (2002) examined potential effects of participation in conjugal visits on both threats of violence and actual violent acts within an

institution, again in a sample of Mississippi inmates. Previous studies had aggregated indices of violence, but these authors chose to examine each index separately. Their results were inconsistent with previous studies in that the authors found that participating in conjugal visits failed to reduce the number of violent threats or violent acts within the institution. Nonetheless, the authors remained optimistic regarding the outcomes associated with conjugal visits given that the majority of previous studies have demonstrated positive outcomes in terms of decreasing institutional violence. They concluded that though most findings in the area are promising, further research is needed to determine the extent to which visitation programs act as a control mechanism for institutional misconducts (Hensley, Koscheski, & Tewksbury, 2002).

Recidivism

Holt and Miller (1972) authored the most influential and cited study to date regarding the role of family support, as evidenced by institutional visitation, in successful offender re-entry. This study examined the frequency and total number of institutional visits during the 12 months prior to release for 412 male offenders in California. Results demonstrated that after a 12-month post-release follow-up, individuals with more visits while incarcerated had experienced fewer difficulties while on parole than those with fewer visits. Moreover, offenders who received visits from at least three different relatives or friends were six times less likely to re-offend than those who received fewer visitors. Pre-release results were more mixed. While the frequency of visits did not impact the number of institutional misconducts, the number of visitors positively influenced both parole planning and the likelihood of being paroled.

Glaser (1964) also reported positive outcomes for offenders with regular visitation – rates of parole success were 74% for visited inmates in comparison to 43% for those offenders without regular visits (Glaser, 1964, as cited in Bennett, 1989). Likewise, Ohlin (1954, as cited in Bennett, 1989) examined a sample of 17,000 male offenders and reported a 61% reduction in parole violations for those with frequent visitations relative to those with no visits while incarcerated. Notably, these and other studies (e.g., Adams & Fischer, 1976; Howser & McDonald, 1972; Leclair, 1978, as cited in Hairston, 1988) in the domain are now quite dated. Their continued relevance is uncertain. Moreover, some studies have used alternative conceptualizations of visitation (e.g., "furloughs", where offenders are granted a leave of absence from their institution to return to their family for a period of time), or were conducted in contexts not easily generalizable to Canadian federal corrections.

To date, Bales and Mears (2008) have conducted the most comprehensive study examining the association between visitation and recidivism. Various aspects of visitation were examined including the frequency of visits, type of visitors (e.g., spouse, parent, child, relative) and the timing of visits relative to release. All variables were examined in relation to re-offence and the length of time to re-offence. Descriptive statistics indicate that of the 7,000 Florida offenders included in the study, the majority were not visited during the year prior to their release. However, of the 42% of offenders who received one or more visitors, the average number of visits during the year was 10.21. These authors found a clear difference in re-offending according to both the occurrence and the frequency of visitation. Receiving visits during the 12 months prior to release was associated with a decrease in the odds of re-offence of 31%. Furthermore, the number of visits also contributed significantly to decreasing recidivism as for each visit, the odds of recidivism declined by nearly 4%. These associations were strongest for visits from spouses, with visits from significant others, friends, and relatives also associated with decreased re-offending. Notably, visits occurring closer to the release date were associated with the greatest reduction in re-offending. Finally, analyses also demonstrated that visitation was also associated with decreased re-offending by delaying its onset. That is, of those visited offenders who ultimately did re-offend, the timing of re-offence was significantly later than that of their non-visited counterparts, indicating that they succeeded longer in the community. Collectively, results from Bales and Mears' (2008) study offer strong support for the notion that visitation is associated with lower recidivism.

Current Study

The literature to date has demonstrated positive relationships between inmates' participation in visitation programs and increased family stability, positive institutional behaviour, and lower rates of recidivism. Although significant and noteworthy relationships have been established in the literature, their applicability to Canadian federally-sentenced inmates is far from evident as there are a number of gaps in the existing body of literature. First and foremost, the majority of the literature is based on American samples and is considerably outdated. Indeed, many of the studies were conducted in the 1970s or earlier. Second, few

studies took a comprehensive approach to examining the effects of participation in visitation programs on post-release outcome by considering both re-offence and readmission. Moreover, many of the studies examined participation in *either* general visitation or a PFV program – none of the research published to date has examined both types of visitation using the same sample. The current study aims to fill a number of these gaps in the literature by examining the association between participation in both regular institutional visits and PFVs with readmission and re-offence rates among Canadian federal inmates.

METHOD

Data for this investigation were collected from the Offender Management System (OMS), CSC's automated offender data system, for all offenders who were released in fiscal year 2005-06.⁴ For each, data were collected regarding demographic and control variables, participation in visitation in the year prior to release,⁵ and post-release outcome in the two year period immediately after release. Only offenders for whom all data were available were retained for analyses, resulting in a sample size of 6,537.

Demographic and Control Variables

Given that the analyses conducted in this investigation aimed to identify the association of visitation with recidivism, independent of differences between offenders, it was important that a number of the factors associated with inter-offender differences be statistically controlled in the analyses. The variables included as control variables were selected based on previous findings that they are associated with post-release outcome. Specifically, the analyses included the following control variables: gender; ethnicity (Caucasian, Aboriginal, other / unknown); sentence type (determinate, indeterminate); length of time served on current sentence prior to release; offence type (violent, drug, property, other); and, risk. The latter was particularly important, as offenders' level of risk to re-offend is in itself an assessment of many other relevant factors. Therefore, this control variable acts as a proxy for a number of other variables, including institutional behaviour and criminal history.

Visitation

In order to fully assess the association of visitation with recidivism, a number of measures of visitation were used. These were, in large part, modeled on those in Bales and Mears (2008). First, dichotomous variables were created to assess whether the offender received *any visit* and *any PFV* in the last 12 months of incarceration. Second, the *number of visits* and the *number of*

⁴ It should be noted that the releases used to establish this study cohort were the first within the 2005-06 fiscal year, but were not necessarily the offenders' first releases overall. For example, an offender may have originally been granted full parole, but have returned to custody as a result of breaching the conditions of his or her conditional release. If the original release occurred prior to the time of interest in this study, and a second release occurred within the study period, the latter is the one reflected here.

⁵ Though OMS data are not collected primarily for research purposes, and therefore are sometimes not as reliable for this use as would be desired, data related to the primary independent variables (that is, visitation and PFVs) were of very good quality. Comprehensive records, including dates, names, and relationship-to-inmate, were recorded for each visitor.

PFVs in the last year were also examined. Since both of these variables were positively skewed, values were truncated at 12 for visits overall and at 3 for PFVs.⁶ This truncation ensured the data were appropriate for statistical analysis. Third, dichotomous variables were developed according to the relationship between the visitor and the offender. In other words, separate variables were developed representing whether the offender received visits and PFVs from a *parent, spouse, significant other, child, other relative, friend,* and an *other person*. Finally, variables were calculated to represent the *recency* of both general visits and PFVs within the last year of incarceration. This variable was based on the months in which the offender received visits and PFVs, with those occurring in the month immediately preceding release being ascribed the most weight and those occurring 12 months prior to release ascribed the least weight.⁷

Post-Release Outcome

Two measures of post-release outcome were used in this study: *any readmission within two years* and *readmission with a new offence within two years*. The first referred to any readmission to federal custody (e.g., suspension of parole, revocation of parole, new offence) while the second referred to any readmission to federal custody due to a new offence (i.e., revocation of conditional release due to a new offence; new conviction). This procedure allowed the association of visitation with re-offending to be examined separately from that of visitation with any return to custody.

It must be acknowledged that for offenders who reached the end of their sentence during the two year follow-up, any new conviction occurring after this period that resulted in a provincial / territorial sentence (that is, one of less than two years) was *not* reflected in these data. The inclusion of such data requires hand coding of Royal Canadian Mounted Police files, and, given human resource constraints, was not feasible in the present study.

⁶ The truncation does not result in a misrepresentation of the data, as only 14.6% of the sample received 13 or more visits overall, and only 2.1% received 4 or more PFVs. Further, this procedure was also used by Bales and Mears (2008).

⁷ The calculation of this variable was identical to Bales and Mears' (2008) calculation. Briefly, a summed weighted variable was created, with a maximum of one visit per month being included in the calculation. Any visit in the month most recent to release being granted full weight, those in the preceding month given 11/12 weight, and so on. The summed variable could range from 0 to 6.5.

RESULTS

Sample Description

Table 1 provides an overview of the variables included in this study. The large majority of study participants were male; therefore, descriptive information was provided separately for men and women. For both genders, most offenders were Caucasian. About one-in-five male offenders, and about a quarter of their female counterparts, were Aboriginal. On average, offenders were about 35 or 36 years old at the time of their release.

Many offenders had been convicted of multiple types of offences, with about two-thirds being convicted of violent offences. For men, the next most common type of offence (at just less than half) was property offences; for women, however, drug offences ranked next, with about two-in-five women being convicted of this type of crime. More than half of the offenders in each group were also convicted of "other" offences, typically administration of justice offences such as failure to appear at a court hearing. The average time served prior to release was quite different for men and women: men typically served just under three and a half years, while, on average, women served barely over two years.

Again, there were also important differences in the levels of risk at which men and women were assessed prior to their release. While relatively few men were assessed as low risk, over a third of women received this rating. Conversely, while less than a quarter of women were assessed as being high risk prior to their release, this rating was the most common one among their male counterparts. In keeping with this pattern, much larger proportions of women were granted day (51%) and full (5%) parole than was the case for their male counterparts (29% and 3% respectively).⁸ Further, 43% of women and 66% of their male counterparts received an automatic (non-discretionary) statutory release, after serving two-thirds of their sentence. One percent of the women in this sample, and three percent of the men, were detained past their statutory release date and released only at the end of their sentences.

⁸ Day parole is a form of conditional release whereby offenders are released to the community but must reside in an accredited location and meet curfew rules (among other regulations). Full parole is a less restrictive form of conditional release that does not include this residency condition. It is quite typical for full parole to be granted only after a period of successful community functioning on day parole.

Involvement in Visitation

The proportions of men and women offenders who received visits within the last year of incarceration prior to their release differed considerably. Indeed, the two groups differed by eight percentage points – 46% of men and 54% of women received visits. That being said, of those who received visits, men tended to receive a slightly higher average number of visits. Overall, a much smaller proportion of offenders participated in PFVs (9% of men and 10% of women); of those who did, again, men received a slightly higher average number of PFVs than did women.

When examining who visited these offenders, it was evident that visits from parents, other relatives, spouses, and friends were most common. Examination of gender differences demonstrated that greater proportions of men received visits from their spouses, while greater proportions of women received visits from their children and from friends.

Post-Release Outcome

Overall, just under half of the offenders in this sample were readmitted to federal custody for any reason within two years, with the proportion for men being greater than for women. Of the men who were readmitted, 40% (or 18% overall) were readmitted due to a new offence; among the women, 27% (or 10% overall) were readmitted due to a new offence.

Table 1:

	Males (N = 6,206)				Females $(N = 331)$			
Variable	М	SD	%	<i>(n)</i>	М	SD	%	<i>(n)</i>
Ethnicity Caucasian Aboriginal			70 19	4,339 1,179			57 27	188 90
Other / Unknown			11	688			16	53
Age at Release	35.8	10.5			35.1	9.2		
Offence Type ^a Violent Drug Property Other			69 26 45 71	4,309 1,627 2,763 4,379			61 38 30 58	202 126 98 191
Sentence Indeterminate Sentence Time Served, Current Sentence (in months)	40.5	52.8	3	181	25.0	35.0	3	9
Most Recent Assessment of Risk Level Low Moderate High			12 43 45	734 2,690 2,782			39 39 22	128 129 74
Visitation Within Last Year of				<i>,</i>				
Incarceration Received Visit			46	2,854			54	180
Received PFV Number of Visits (for all inmates) Number of PFVs (for all inmates) Number of Visits (visited inmates) Number of PFVs (inmates who received PFVs)	3.1 0.2 6.8 2.0	4.5 0.6 4.5 0.9	9	567	3.3 0.2 6.1 1.6	4.5 0.5 4.5 0.8	10	32
Visited by Parent			22	1,385			23	77
Visited by Spouse Visited by Significant Other Visited by Child Visited by Other Relative Visited by Friend Visited by Other Person			14 4 3 19 14 6	870 217 165 1,152 858 353			11 4 8 19 20 6	37 14 27 62 66 21
Recency Scores Visit Recency Score PFV Recency Score	1.3 0.1	2.0 0.5			1.3 0.1	1.8 0.5		
Post-Release Outcome (Within 2 Years) Readmitted (Any Reason) Re-offence Re-offence (for readmitted inmates)			44 18 40	2,736 1,085 1,085			38 10 27	124 34 34

Descriptive Statistics of Study Variables

Note. ^a Offence types sum to more than totals because some offenders were convicted of multiple types of offences. ^b Visitor numbers sum to more than the number receiving visits because offenders can receive multiple visitors simultaneously.

Influence of Gender

Given that men vastly outnumber women in this sample, it was important to consider whether it was most appropriate to conduct analyses separately or together for men and for women. This was especially critical because there were differences between the rates of involvement in visitation among men and women. Moreover, a substantial body of literature stemming from Miller's (1976) work on relational-cultural theory argues that women ascribe considerable value to their relationships with others, and often define themselves according to their relationships. It has argued that this tends to be more the case for women than for men. This body of literature would support an argument that visits could differentially impact men and women.

That being said, it was also important to examine the appropriateness of conducting separate analyses by gender from a statistical point of view. More specifically, it is inappropriate to conduct statistical analyses for separate groups if the grouping variable (in this case, gender) is not associated with the relationship between a study's independent and dependent variables (in this case, visitation and post-release outcome). For this reason, a number of logistic regressions were conducted to test the statistical significance of such interaction terms.⁹ Results demonstrated that no such interaction effects existed. This means that the patterns of association between the visitation and post-release outcome variables used in this study are *not influenced* by the gender of the offender. For this reason, all subsequent analyses were conducted with men and women grouped together

Relationships between Visitation and Post-Release Outcome

Logistic regressions were calculated in order to investigate the relationship between visitation and post-release outcome. In each analysis, the control variables of gender, ethnicity, age at release, sentence type (determinate vs. indeterminate), time served on current sentence, offence type (violent, drug, property, other),¹⁰ and risk were all entered in a first block. The visitation variables were always entered as a second block. This procedure allowed for the identification of any unique effects of visitation on post-release outcome after accounting for the influence of each of the control variables.

⁹ Interaction effects are discussed more fully later in this report, along with a discussion of the results of the most pertinent analyses involving interaction terms.

¹⁰ Categories are non-exclusive, as some offenders were convicted of offences within different categories.

Though the multiple conceptualizations of visitation and of post-release outcome meant that quite a few regression analyses were necessary, Table 2 presents the results of two analyses which are generally representative of the full pattern of findings. After accounting for the associations of the control variables with readmission, both the number of visits and the number of PFVs in which the offender participated were associated with readmission. Specifically, the higher the number of visits, the lower the odds of readmission within two years. As demonstrated by the relatively low Nagelkerke R^2 values, however, the effects of these variables explained only a small portion of the variance in readmission outcome. In other words, many other variables, not represented in these equations, also contribute importantly to understanding post-release outcome. This, of course, is perfectly logical, as factors such as an offender's community support, substance use, program participation, and relationships status are all also associated with post-release outcome

Nonetheless, the association of visitation with readmission was significant in both statistical and in practical terms. As can be seen in Model 1, for each visit in which the offender participated, the odds of readmission¹¹ declined by 2.2% (i.e., $1 - \exp[-.022]$). This effect was cumulative, such that an offender who received 6.7 visits (the average among those receiving visits) would have odds of readmission 13.7% lower than one who did not receive any (i.e., $1 - \exp[6.7 \times -.022]$). For PFVs (see Model 2), the odds of readmission declined by 12.2% per visit, such that an offender who participated in 2.0 PFVs (the average among those who participated in PFVs) would have odds of readmission 21.7% lower than an offender who received no PFVs.

¹¹ It should be noted that the term "odds", in this context, is used to refer to the mathematical concept of odds and odds ratios (that is, the odds of an outcome for participants with a certain characteristic divided by the odds of the same outcome for participants without the characteristic). This term is not equivalent to "likelihood" or to "probability".

Table 2:

		lodel 1: ber of V	isits	Model 2: Number of PFVs			
Variable	β	SE	O.R.	β	SE	O.R.	
Block 1							
Gender (Male)	013	.125	.987	013	.125	.987	
Aboriginal Ethnicity (No)	555***	.104	.574	548***	.105	.578	
Caucasian Ethnicity (No)	403***	.092	.668	396***	.092	.673	
Age at Release	003***	.000	.997	003***	.000	.997	
Sentence Type (Determinate)	340	.204	.712	319	.204	.727	
Time Served	003***	.001	.997	003***	.001	.997	
Violent Offence (No)	197**	.062	.821	195**	.062	.823	
Drug Offence (No)	147*	.063	.863	146*	.063	.864	
Property Offence (No)	612***	.057	.542	625***	.057	.535	
Other Offence (No)	414***	.063	.661	412***	.063	.662	
Risk	.392***	.042	1.480	.404**	.042	1.497	
Block 2							
Visitation Variable (No)	022***	.006	.978	130**	.043	.878	
Constant	1.639	.285		1.526	.283		
Block χ^2	13.95 (1)***			9.19 (1)**			
Model χ^2	682.09 (12)***			677.33 (12)***			
Nagelkerke R^2	.13 .13						

Logistic Regression of Any Readmission on Number of Visits

* p < .05. ** p < .01. *** p < .001. Reference categories appear in parentheses after each variable name.

The numerous analyses completed allowed several conclusions to be reached. First, it was quite clear that the association of visitation with any readmission was considerably greater than was the association of visitation with re-offence. In other words, according to the definition of post-release outcome, quite different results were found. Visitation was associated with decreased readmission, but generally not with decreased re-offending. Of note, however, was that being visited by one's spouse was the exception, with offenders receiving visits from a spouse having lower odds of re-offending than their counterparts who did not receive such visits.

In regards to only the readmission definition of post-release outcome, both visitation generally and participation in PFVs tended to be associated with better outcomes. The one exception was with regard to the *any visit* variable. Having received *any visit* was not associated with differential post-release outcome, but the number of visits received was. This difference may be explainable by the pattern of visitation received: offenders who received multiple visits may have benefited from ongoing support that was not necessarily available to their counterparts who received only one or minimal visits. For PFVs, on the other hand, both having participated in *any PFV* and the number of PFVs were associated with outcome. This might reflect the greater commitment necessary on the part of the visitor in participating in these extended visits; such commitment may be associated with support or other constructs that contributed to assisting an offender not to be readmitted.

Follow-up analyses demonstrated both that the timing of the visit and the type of visitor also contributed to the likelihood of readmission. The recency scores calculated for both visits generally and for PFVs were both associated with readmission after accounting for the influence of the control variables, such that offenders who had received visits and participated in PFVs more recently were significantly less likely to be readmitted. Further, receiving visits from a parent or from a child, and participating in a PFV with a spouse, were all associated with a decreased likelihood of readmission.

Survival Analyses

A series of Cox regressions were also calculated in order to examine whether involvement in visitation was related to the *rate* at which offenders were readmitted or re-offended. These analyses included the same first block of variables as above, such that results reflect only the influence of visitation above and beyond that of the control variables. Findings were very similar to those of the earlier analyses, in that they demonstrated that receiving visits and participating in PFVs were both significantly associated with remaining in the community *longer* (see Figure 1). Analyses also confirmed that greater numbers of visits and PFVs were both associated with delayed readmission. As was the case for most of the analyses reported earlier, however, there were no associations between the various visitation variables and re-offending.

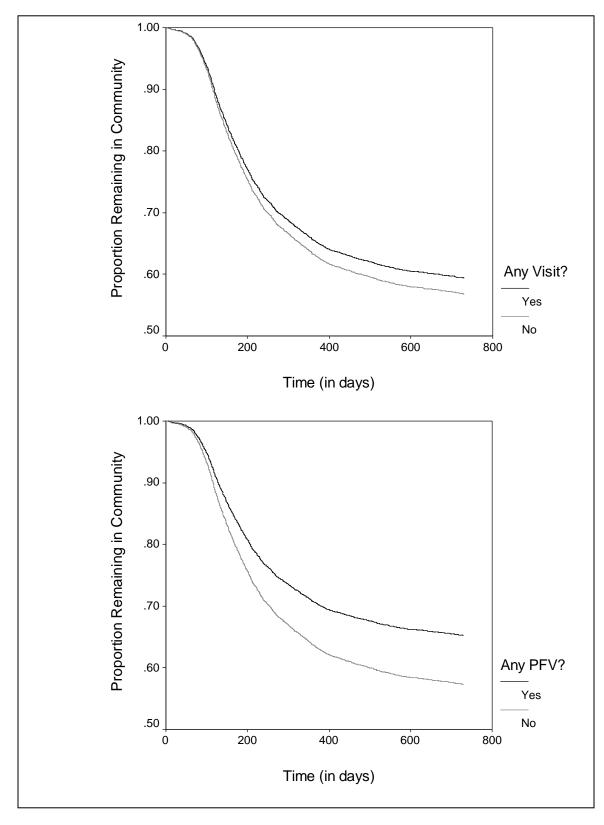


Figure 1: Proportion of offenders remaining in the community according to whether visits were received

Interaction Effects

Also of interest was whether there were any demographic or offence characteristics that interacted with visitation in impacting post-release outcome. In simple terms, an interaction effect is the reason that associations can be stronger or different (e.g., in the opposite direction) for individuals possessing a certain characteristic than their counterparts not possessing that characteristic. Another series of logistic regressions was used to examine the possible influence of the following interaction effects: interactions between the dichotomous visitation variables (that is, *any visit* and *any PFV*) and each of gender, ethnicity, time served, and risk. Only regressions using the general readmission measure of post-release outcome are reported, as very few significant results were originally found when considering re-offence.

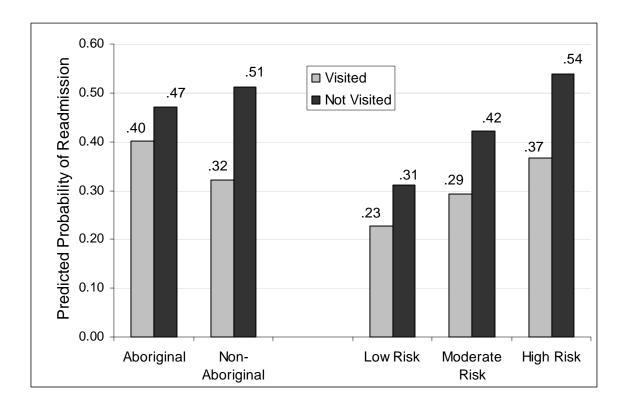


Figure 2: Association of visitation with readmission by Aboriginal ethnicity and by risk

Only one statistically significant interaction term was found: that of visitation and Aboriginal ethnicity, p < .01. Notably, no interactions involving PFVs were significant or approached significance. Figure 2 is useful in interpreting the interaction between visitation and ethnicity – it displays the predicted probabilities of readmission, holding all control variables constant, at each level of the interaction. As can be seen, the effects of visitation on likelihood of readmission were much greater for non-Aboriginal offenders than for their Aboriginal counterparts.

Of the interaction terms considered, that of visitation and risk also approached significance, p = .09. Again, Figure 2 provides a visual representation of the predicted probabilities of readmission of offenders according to this interaction term. While lower risk offenders had a lower likelihood of readmission overall, the protective effect of visitation was less pronounced at lower levels of risk.

DISCUSSION

The purpose of this study was to examine the association between participation in visitation and post-release outcome. Study findings conclusively demonstrate that such an association exists, and that characteristics of the visitation influence the association. Specifically, greater numbers of visits and PFVs, more recent visits and PFVs, visits from parents and children, and PFVs with spouses were all associated with decreased likelihood of readmission after accounting for the effects of race, gender, age at release, sentence type, offence type, and risk. Receiving visits and PFVs were also both associated with delayed readmission.

It was evident that certain demographic and offence characteristics influenced the magnitude of the relationship between visitation and readmission. Most notable among these was ethnicity, with the gap in predicted probabilities of visited and non-visited offenders being of 19 percentage points for non-Aboriginal offenders and of only 7 percentage points for their Aboriginal counterparts. It is likely that certain cultural components contribute to explaining this difference, but more research will be necessary before the reasons for this finding can be confidently understood.

It was also remarkable that participation in visitation was much more consistently associated with readmission generally than with re-offending – and indeed, many of the analyses conducted here demonstrated that participation in visitation was *not* associated with re-offending. The exception was receiving visits from a spouse, which was associated with decreased odds of re-offending. Generally speaking, this pattern of results suggests that the impact of visitation may be primarily apparent in readmissions for reasons other than re-offending, such as for breaches of conditions.

Interpretation of Findings

At first glance, it is unclear why participation in visitation should be associated with a decrease in breaches of supervision conditions, but not with a decrease in re-offending. Perhaps a more likely interpretation, then, is that visitation is associated with both a decrease in breaches of supervision conditions *and* with the parole officer's response to any breaches of conditions. Community parole officers have considerable discretion in how they react to breaches. In practical terms, this means that parole officers can choose to simply discuss the behaviour with the offender, recommend that the offender's release be suspended, or anything in between.

Ultimately, the chosen response depends on the parole officer's perception of the impact of the breach on the extent to which the offender can successfully and safely be managed in the community. When the parole officer perceives that the breach demonstrates that the offender's risk to re-offend has become unmanageable, he or she may choose to recommend a suspension of release.

Within this context, the association between visitation and readmission, in the absence of any similar link between visitation and re-offence, may mean that offenders who had participated in visitation are perceived by their parole officers to present more manageable levels of risk than their counterparts who were less or not active in the visitation program. Research clearly demonstrates that visitation is associated with greater family stability (Hopper, 1989; Rutland, 1995 as cited in Hensley, Rutland, & Gray-Ray, 2000). Moreover, stable family support, especially that of a spouse or significant other, has been found to promote successful community reintegration (Sampson & Laub, 1990). Parole officers seem aware of this fact – indeed, in one study wherein Canadian parole officers were asked what newly released federal offenders needed to succeed, one of the seven themes which emerged was *structure*, which was characterized by constructs including *significant other, community support*, and *positive role model* (Brown, 2004). As such, it is easy to imagine that a parole officer, faced with two otherwise similar offenders involved in the same breach of condition, would perceive that the greater family support available to one offender (as exemplified, in part, by the offender's involvement in visitation) would render this offender a more manageable risk than the other.

Given that rates of readmission are lower for those who participated in visitation, and that offenders who participated in visitation were *slower* to be readmitted, greater proportions of visited offenders than of their non-visited counterparts remain in the community after release. As such, greater proportions of visited offenders would have an *opportunity* to re-offend (as opportunities to re-offend are more common in the community than in the highly structured context of an institution). Therefore, if visited and non-visited offenders actually breached conditions at the same rate, and there was truly no difference in the manageability of these offenders' risk, one would expect visited offenders to re-offend at *higher* rates as a result of their greater opportunity. In other words, the fact that no difference was detected in rates of re-offending between visited and non-visited offenders, despite this difference in opportunity,

indicates that visited offenders who breached conditions were in fact appropriately manageable in the community.

An alternative explanation is possible: it may be that the breaches of conditions or other behaviours by the non-visited offenders were more serious or indicative of a greater likelihood of re-offending. As mentioned, parole officers recommend suspension of release when they perceive that the risk of an offender committing a new offence is not assumable. Relative to visited offenders, greater proportions of non-visited offenders may have displayed behaviours that parole officers felt rendered their risk to re-offend unmanageable in the community. As such, the higher rates of re-admission of non-visited offenders may be partially attributable to cases that would have resulted in re-offence, had the parole officers allowed the offender to remain in the community. In other words, a portion of the re-admissions may represent reoffences that were *avoided* through proper case management.

Regardless of which of the above interpretations is correct – and it may very well be that both are partially correct – the data clearly lead to one conclusion: visited offenders manage to remain in the community longer than their non-visited counterparts, with no associated increase in re-offending. This finding directly demonstrates that visited offenders are less costly to manage than their non-visited counterparts. Specifically, correctional costs are much greater for incarcerated offenders than for those managed in the community – on average, \$88,067 per year versus \$23,105 per year, respectively (Public Safety Canada, 2007). Since greater proportions of visited offenders can be managed in the community, without any associated differences in reoffending, greater proportions of visited offenders entrain this lower cost.

Operational Implications

First and foremost, the present results demonstrate that participation in visitation and PFVs is not associated with negative post-release outcome. Moreover, as discussed, these data demonstrate that visited offenders can be managed more effectively post-release than their non-visited counterparts, given that a smaller proportion of visited offenders is readmitted. This latter point may become even more salient in the future, as the costs associated with maintaining offenders in penitentiaries have increased substantially in recent years, from \$363 per offender per day in 2000-01 to \$467 per offender per day in 2005-06 (in constant dollars; Public Safety Canada, 2006; 2007).

From an operational point of view, there are other notable points regarding visitation. Qualitative research has demonstrated that offenders are appreciative of their visitation privileges, and that they are not willing to compromise them (Carter, 1989). Indeed, participation in visitation has been associated with decreased violent behaviour among incarcerated offenders (Hensley, Rutland, Gray-Ray, & Durant, 2000). Several explanations are possible, including that: (a) offenders behave better in order not to jeopardize their visitation privileges, or (b) offenders participating in visitation reap some benefit from this experience, such that they subsequently engage in less violent misconduct. Once the direction of the link between institutional behaviour and visitation is better understood, correctional authorities could regulate visitation in such a way as to promote positive behaviour and / or discourage negative behaviour.

Limitations and Future Directions

While this study was comprehensive in nature, it is important to acknowledge areas where further attention may be necessary. First, while many control variables were included in the analyses reported here, it is possible that certain relevant variables were omitted. For example, criminal history indicators were excluded, with the rationale that they were appropriately represented by the *risk* variable, but it is nonetheless possible that the use of a larger family of control variables may have led to slightly different results. This being said, the pattern of findings presented here was sufficiently clear-cut to make it doubtful that considerable changes to the pattern of findings would be likely.

More pressing than research including more control variables would likely be that which extends the present study. Of primary interest would be qualitative or experimental research conducted with parole officers to examine the accuracy of the interpretation of findings suggested above – that is, that parole officers react less punitively to breaches of condition on the part of visited offenders than on the part of their non-visited counterparts given that they perceive these offenders to be more manageable in the community. Also worthwhile would be research conducted to better understand the explanations for the interaction effects identified in this study, especially in regards the differences in impact of visitation for Aboriginal and non-Aboriginal offenders. Finally, of interest would be an expanded examination of the association of visitation with behaviour. Though limited research (e.g., Hensley, Rutland, Gray-Ray, &

Durant, 2000; Hensley et al., 2002) has been conducted to investigate the link between visitation and institutional behaviour, at present, no research conducted in the last three decades seems to exist investigating the links between all three: visitation, institutional behaviour, and post-release outcome (but see Holt & Miller, 1972). It would be informative to examine the inter-relations of these three constructs in order to assess whether the association between visitation and postrelease outcome is caused by an earlier effect on institutional behaviour, or if an association between visitation and post-release outcome exists independently of that with institutional behaviour.

Conclusion

This study has contributed substantially to responding to the dearth of research in the area of visitation and post-release outcome, yet there is still room for continued research in the area. Perhaps the study's most important contribution is a clear demonstration of the association between visitation and lower rates of returns to custody. Knowledge of this link reinforces the value of correctional visitation programs, both as a potential tool in managing risk of readmission and as a contributor to effective correctional practice. Further, this knowledge sets the stage for further investigation intended to further increase understanding of visitation. Ultimately, it may be possible to discover ways to maximize the positive effects of visitation, thereby ultimately contributing to more successful offender reintegration efforts.

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