

RESEARCH ARTICLE

Chicago's PSN Parolee Forums

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on Recidivism among High Risk Offenders**

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Desistance and Legitimacy: The Impact of Offender Notification Meetings on Recidivism among High Risk Offenders¹

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Abstract

Legitimacy-based approaches to crime prevention assume that individuals will comply with the law when they believe that the law and its agents are legitimate and act in ways that are “fair” and “just.” Currently, legitimacy-based programs are shown to lower aggregate levels of crime; yet, no study has investigated whether such programs influence individual offending. Using quasi-experimental design and survival analyses, this study evaluates the effectiveness of one such program—Chicago’s Project Safe Neighborhoods’ (PSN) Offender Notification Forums—at reducing individual recidivism among a population of returning prisoners. Results suggest that involvement in PSN significantly reduces the risk of subsequent incarceration and is associated with significantly longer intervals that offenders remain on the street and out of prison. As the first study to provide individual-level evidence promoting legitimacy-based interventions on patterns of individual offending, out study suggests these interventions can and do reduce rates of recidivism.

Running Head: Legitimacy and Recidivism

Key Words: Legitimacy, recidivism, high risk offenders, procedural justice

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INTRODUCTION

While deterrence-based crime reduction strategies remain the mainstay of criminal justice policy, a series of innovative and promising programs have emerged incorporating the concepts of procedural justice and legitimacy into a deterrence framework. The underlying premise of such programs is that individuals—including violent offenders (Papachristos, Meares, & Fagan, 2012)—are more likely to comply with the law when they believe that the law and its agents are legitimate and act in ways that seem inherently “fair” and “just.” This stands in contrast to a notion of lawabidingness that assumes that individuals are most likely to comply when they fear the consequences of failing to do so (Tyler, 1997). These principles suggest that programs enhancing the legitimacy of the law and police should foster higher levels of compliance and cooperation than when legitimacy is absent in such programs. Boston’s Operation Ceasefire (Braga, Piehl, & Hureau, 2009), Chicago’s Project Safe Neighborhoods initiative (Papachristos, Meares, & Fagan, 2007), and North Carolina’s Drug Market Initiative (Kennedy & Wond, 2009) are examples of programs incorporating the principles of procedural justice, a precursor to legitimacy, into what has traditionally been the exclusive domain of deterrence theory. Initiatives such as these relied upon two inter-related strategies: (1) informing high-risk offenders of the consequences of illegal conduct consistent with theories of deterrence, and (2) promoting legitimacy by simultaneously positioning the consequences of offending in the context of choice and by recasting the tone and quality of law enforcement interactions with offenders.

These kinds of programs repackage the way deterrence messages are delivered. Rather than a top-down repressive approach found in traditional deterrence strategies, legitimacy infused deterrence initiatives deliver a firm message in a more egalitarian and perceivably just manner. In place of hierarchical and aggressive tactics that typify deterrence-based police-offender

interactions, these programs convey messages in a non-threatening manner alongside community stakeholders detailing behavioral choices conducive to law-abiding behavior. While these programs promote deterrence by informing offenders of the real consequences of bad choices, the interventions themselves are crafted to be transparent, fair, and promote police legitimacy.

Research supports the efficacy of crime prevention programs which incorporate procedural justice and legitimacy into a focused deterrence approach. In addition to the mounting evidence that legitimacy is related to aggregate crime rates (Corsaro, Brunson, & McGarrell, 2009; Kirk & Matsuda, 2011; Kirk & Papachristos, 2011; McGarrell, Corsaro, Hipple, Bynum, 2010) and more general compliance with the law (Tyler, 1997), experimental policing literature shows that focused deterrence and legitimacy-based policing strategies are associated with reductions in aggregate levels of crime (for a review, see Braga & Weisburd, 2012). However, no study has explored the extent to which such legitimacy-based programs impact the level of *individual* offending². That is, we still do not know the extent to which individual participants in such programs adjust their behavior accordingly.

To address this question, this study uses a quasi-experimental design to examine how a legitimacy guided intervention influences individual recidivism among a group of recently released felons who participated in Chicago's Project Safe Neighborhoods (PSN) program. We combine the design of the PSN field experiment itself (Papachristos et al., 2007) with individual data on recidivism and socio-demographic characteristics to assess the effects of Offender Notification Forums (hereinafter, Forums). The Forums bring together offenders, police, community stakeholders, and service providers in an hour long meeting that address several features of the offenders' past and current lives: levels of violence in their community, the implications of their continued participation in violence, and an offer of social services tailored

specifically to the needs of re-entering offenders. Cox hazard and competing risk hazard models suggest involvement in PSN significantly reduces the risk of future incarceration. Indeed, attendance at PSN Forums is associated with significantly longer intervals in which participating offenders remain on the street and out of prison.

FOCUSED DETERRENCE AND LEGITIMACY STRATEGIES FOR CRIME REDUCTION

PSN Chicago is a gun violence reduction strategy that combines theories of focused deterrence and the social psychology of legitimacy. The strategy, which we describe in greater detail in the next section, draws from the most promising aspects of both theories to create a crime reduction strategy that (1) encourages potential offenders to comply with the law *without* simultaneously alienating them from the law or law enforcement and (2) to potentially encourage a stronger connection between participants and legal authorities.

Mounting experimental and non-experimental research suggests that focused deterrence strategies can significantly reduce crime and violence among specified populations.³ Focused deterrence strategies “honor core deterrence ideas, such as increasing risks faced by offenders, while finding new and creative ways to deploying traditional and nontraditional law enforcement tools to do so” (Braga & Weisburd, 2012, p. 325). Focused deterrence strategies communicate with targeted offenders that the consequences of committing a specified crime will be certain, swift, and severe (Blumstein, Cohen, & Nagin, 1978; Nagin, 1998; Paternoster, 1987). Typically, such programs target violent or chronic offenders, such as gang members or drug users, and involve reaching out to these individuals (Kennedy, 2009; Kennedy, Piehl, & Braga, 1996). The deterrence message typically is offered by a coordinated group of law enforcement officials, community representatives, and social service agencies who come together to pointedly communicate that violence or a specified crime will not be tolerated. Should the behavior continue,

law enforcement will “pull every lever” available to punish the offenders (Kennedy, 1996). These “levers” include a wide variety of options for law enforcement, including increased attention on low level street crime, enforcing stronger bail terms, service of outstanding warrants, and even IRS audits (Braga, Kennedy, Waring, & Piehl, 2001; Kennedy, 1996).

Evaluations of Forums or offender call-ins employing these strategies have been extremely encouraging. Cities employing Forums as part of focused deterrence strategies include Boston (Braga, Hureau, & Papachristos, in press; Braga et al., 2001), Chicago (Papachristos, et al., 2007), Cincinnati (Engel, Tillyer, & Corsaro, 2013), and High Point, NC (Corsaro et al., 2012). In these evaluations, the communities experienced a significant reduction in aggregate rates of violence.

A noted critique of focused deterrence strategies, however, is the confounding and overlapping of focused deterrence principles with those ideas surrounding legitimacy. In this respect, it is often difficult to tease out the true effects of focused deterrence from elements of legitimacy (Braga & Weisburd, 2012). Broadly defined, legitimacy is “the widespread belief among members of the public that the police, the courts, and the legal systems are authorities entitled to make decisions and who should be deferred to concerning matters of criminal justice” (Tyler, 2010, p. 127; also, Tyler, 1997). The legitimacy of the police and courts is often determined through the perceived fairness of the manner in which this authority is exercised—a process called *procedural justice* (Tyler, 1997). Briefly, if interactions with legal authorities and the procedures for criminal justice are thought to be fair and just, then individuals are more likely to (a) view those agents of the law as legitimate, and (b) comply with the law, even when behavior is not directly monitored (Tyler & Fagan, 2008; Tyler & Huo, 2002). In turn, persons who place greater value on compliance with those norms tend to weigh sanction risks more heavily, and are more likely to discount the rewards of crime (Fagan & Piquero, 2007). Programmatic efforts focusing on

procedural justice aim to increase the legitimacy of legal actors and authorities, thereby increasing levels of compliance to the law.

Several studies support the efficacy of legitimacy-based programming. Paternoster and colleagues (1997) found that domestic violence offenders were more likely to say their detention or sentence was “fair” when they were treated with respect by police and prosecutors. Fagan and Piquero (2007) reported similar results among 1,357 male offenders charged with serious non-lethal felonies. Those offenders who rated their interactions with police and judges as more procedurally fair reported higher levels of police legitimacy and lower levels of legal cynicism; in turn, higher ratings of police legitimacy predicted lower rates of self-reported offending over three years (Ibid.). More recently, Papachristos et al.’s (2012) study on 141 active gun offenders in Chicago finds that respondents’ opinions of the law were indistinguishable from those found in the general population estimates (e.g., Tyler & Huo, 2002)—i.e., criminals, not just non-criminals, express a belief in the moral foundation and legitimacy of the law. Criminals differ from non-criminals, however, in more negative interactions and opinions of the police (Ibid.). Furthermore, Papachristos et al. (2012) found that perceptions of legitimacy *do* influence compliance as offenders with more positive views of the police were *less* likely to carry a gun or get into a fight.

Only a single study—the evaluation of Chicago PSN by Papachristos et al. (2007)—has tested the effect of the combination of legitimacy and deterrence based messages of offender call-in programs on reducing crime. This study was designed to explicitly leverage the potential benefits of legitimacy-based compliance by comparing the effect of attending a Forum compared to other deterrence aspects of intervention, especially enhanced federal sentencing and average prison sentences. Papachristos and colleagues (2007) find that *aggregate* crime reduction effects increase with an increase in the percentage of the offending population that attends a Forum. The

effect of the Forum was greater than the effects of federal prosecutions, sentence length, and increased risk of arrest from more intensive police gun enforcement.

Unfortunately, little research to date has considered the impact such strategies have on individual-level offending outcomes. To our knowledge, only one study—the Hawaii HOPE Program—examines individual level outcomes (Hawken & Kleiman, 2009). HOPE is a community-based supervision program for probationers with a substance abuse problem that involved mandatory drug testing and swift and certain sanctions—typically a few days in jail—for violations like failed drug tests or missed probation appointments (Hawken & Kleiman, 2009). Evaluation results found HOPE probationers saw a reduction in re-arrest when compared to the control group, as well as reductions in the number of positive urine samples, missed appointments, and new arrests for the HOPE probationers versus the control probationers (Hawken & Kleiman, 2009). While HOPE demonstrates that these types of programs work on individual level outcomes for drug offenders, research needs to consider the effectiveness of such efforts on a broader range of offenders and individual outcomes. This study seeks to follow such a line of inquiry by identifying the impacts of Forum participation on *individual* recidivism among persons recently released from prison who participated in the Chicago PSN.

PROJECT SAFE NEIGHBORHOODS IN CHICAGO

Since 2002 the U.S. Department of Justice has funded the Project Safe Neighborhoods (PSN) in Chicago. PSN was given the specific charge of reducing the city’s high levels of homicide and gun violence. Under the direction of the U.S. Attorney for the Northern District of Illinois, PSN brought together local, state, and federal law enforcement agencies with community-based organizations and researchers to devise context-specific gun violence reduction strategies. In practice, PSN entailed not one program, but a series of connected initiatives directed towards

specified Chicago neighborhoods. The components included: (1) increased federal prosecutorial attention on all gun-related crimes; (2) the creation of a local and federal review system of all gun-related cases brought before the court; (3) the creation of a multi-agency gun enforcement team; (4) community and media outreach campaigns; (5) school-based educational programs; and (6) Offender Notification Forums (Papachristos et al., 2007). This study looks at the relationship between the Forums and individual outcomes.

PSN efforts were focused in two ways: geographically and individually. Geographically, all of these efforts were initially directed towards specific neighborhoods: two police districts on Chicago's west-side that include the West Garfield Park, North Lawndale, and the Austin community areas. While PSN intervention areas may have been selected because of political pressure as much as overall rates of violence, subsequent analyses showed that these areas (at least in part) would have risen as likely candidates for PSN since they had some of the highest and most stable crime rates in the city at the outset of the intervention (Papachristos et al., 2007). Indeed, homicide rates in the PSN districts in 2002 were approximately 75.5 per 100,000, a staggering 350% higher rate than the overall city average of 22.3 per 100,000 (which itself was considerably higher than the national average at the time). This non-random site selection notwithstanding, propensity score modeling and the timing of the intervention made possible a quasi-experimental design that matched neighborhoods in intervention areas with other high-crime neighborhoods in other parts of the city. Within the intervention areas, PSN programs were aimed specifically at "active" offenders, meaning those individuals who were known by authorities to likely be involved in criminal and gang activities. Prior research suggests that the majority of violence is highly concentrated among small segments of the male population, especially those involved in gangs or other delinquent groups/crews/gangs (Braga, 2003; Loeber & Farrington, 2011; Papachristos,

Braga, & Hureau, 2012; Wolfgang, 1958). Such findings encouraged those involved in PSN's design, suggesting that focused deterrence and legitimacy-based efforts directed at this population might very well be the most efficient way to reduce overall levels of homicide and gun violence.

The individual aspect of PSN primarily involves the Offender Notification Forums, which, as described above, are one element that combines legitimacy-based and deterrence-based approaches for reducing recidivism. At their core, Forums are brief, one-hour meetings that bring together law enforcement, community stakeholders, service providers, and active offenders.⁴ The message of the meeting is simple: "Your community needs the violence to stop and we'd like to help you stop that violence." Participants are warned that they have been "put on notice": law enforcement is aware of their involvement and, should they continue their involvement in gun violence, law enforcement will be working together to address the violence in this area. Any subsequent violent behavior on their part results in stakeholders pulling every available "lever" against the offender (Corsaro et al., 2012; Kennedy, 1996; McGarrell et al., 2010).

The principles of procedural justice guide the Forums' message and architecture, especially the notion that an offender's compliance with the law can be increased through positive interactions with police and that such actions might simultaneously enhance the perceived legitimacy of the police. One might think this a Herculean task since the offender population invited to the Forums are primarily young minority males, a population more likely to have added interactions with law enforcement agents than other groups and view police with cynicism, suspicion, and even hostility (Carr, Napolitano, & Keating, 2007; Hagan, Shedd, & Payne, 2005). Accordingly, not only does the PSN Forum take as its goal changing the actions of Forum attendees *and* the perceptions of legitimacy among a population of young men known to have high levels of mistrust and cynicism towards the criminal justice system, the Forums also hope to alter offenders'

perceptions of the law—a population that many criminological theories assume to have *less* regard for the law and its agents than their law-abiding counterparts (Sherman, 1993).

THE INTERVENTION: FORUM DESIGN, ARCHITECTURE, AND IMPLEMENTATION

The Forums are one-hour long meetings in which members of the PSN team sit down with a group of about 25 individuals recently released from prison. Individuals are *randomly selected* to attend the Forums based on three criteria: (1) residence in the intervention communities, (2) at least one prior gun-related or violent offense in their criminal records, and (3) recently (3-6 months prior) release from prison. Individuals selected to attend the meeting received a standardized invitation letter in the mail, as well as a follow-up letter and phone call from their parole/probation officer. The first Forum was held in January 2003 and continues to the present day.

Again, the overarching goal of the Forums is two-fold: (1) to deliver a message regarding the consequences of offending, and (2) to alter the generally negative opinions offenders might have of law and law enforcement by making clear that offenders have a real choice regarding a life outside of serious offending. The message regarding legal consequences of gun violence is similar to programs like Boston Ceasefire, which brought a focused message directly to those engaged in community violence. The novelty of the PSN Forums was changing the *context* in which such a message was delivered. Specifically, the interactions between law enforcement and offenders shifted from narrow deterrence messages that heighten awareness of the risks and costs of offending, to a combination of incentives and supports for compliance to the law in a context designed to enhance the procedural justice of the message delivery. While many focused deterrence offender call-ins have also involved a variety of supports for offenders, the construction of these call-ins and such supports have not been rooted in the practical application of legitimacy

or procedural justice messages. The PSN team drafted and monitored the Forums to ensure that they concurred with principles of legitimacy and procedural justice during all aspects of program.⁵

The PSN team believes that the design and setting of the Forums is just as critical as the substance of the message delivered in order to reinforce the principles of procedural justice. To create an environment that conveys equity among all parties and participants the Forums are held at places of “civic importance,” such as parks, community colleges, or churches as opposed to a law enforcement venue, as did prior programs. The idea is that a neutral setting makes the offenders more comfortable, and such a setting also changes the power dynamics between law enforcement and offenders (see Meares, 2000, p. 404-11). The signal may be subtle, but is essential from a theoretical perspective and conveys a simple message: “You are not in custody; this is a safe place in *your* community. You belong here.”

The physical arrangement of the Forum is also designed to promote an egalitarian atmosphere. Speakers are not segregated to the front of the room with the participants facing them lecture-style. Instead, tables and chairs are arranged in a circle; speakers and participants face each other and speakers generally do not stand when they give their message. In this way, the Forum atmosphere is not didactic or authoritarian, but rather “we’re all at the same table”—a message that works alongside the egalitarian, procedurally just message of the Forum.

The substantive message delivered at the Forum reinforces the tone of egalitarianism and personal choice. This message has three parts: (1) law enforcement efforts, (2) the ex-offender experience, and (3) social service provision. The Forums begin with the simple law enforcement message: if you pick up a gun or are involved in a gun-related crime after this meeting, the people in this room will “pull every [deterrent] lever” at their disposal to enforce the law (Kennedy, 1996). The important part of this message is a neutral and fair deterrence principle: treat people like

‘normal’ adult citizens, give them a choice, and respond as promised when they re-offend. Representatives from law enforcement agencies speak regarding the various avenues they can take to arrest and prosecute gun offenders should they choose to re-offend. Special attention is paid to the consequences of federal prosecutions relative to state-level penalties. Recent PSN related cases occurring within PSN districts are described in detail, and while forum attendees are often familiar with the defendant, they are often surprised to hear the sentencing outcomes.

While the law enforcement message emphasizes the legal consequences of engaging in violence or having a gun, that message is delivered in a manner that highlights individual choice and respect for the participants. This is not “Scared Straight;” rather, the law enforcement speakers attempt to promote the dignity of participants by recognizing their autonomy and avoiding the denigration that may have infected their prior interactions with legal actors (Fagan, 2013).

Law enforcement speakers stress their concern for the overall levels of violence in the community, but also express the hope the offenders “change their ways” since they are most likely to be a victim of gun violence. This enhances the legitimacy of the law enforcement agents given that their tone is not the typical “stick” found in focused deterrence programs. Illustrative of this approach, one local prosecutor’s remarks concluded his Forum remarks as follows:

We don’t want to see you again, because, if we do, it’ll be either on a piece of paper as someone who picked up a gun, or as a victim. I see too many people hurt and, believe it or not, I don’t want to see you on a slab. Go out and be producers. Don’t destroy the community any more.⁶

Thus, after the powerful delivery of the deterrence-centered messages, law enforcement speakers reiterate the central themes of fairness, encouraging the attendees to engage rather than offend.

The ex-offender segment of the Forum is usually run by a single individual who has successfully stayed away from offending for several years and, most often, is actively engaged in community activities. This speaker’s message stresses the seriousness of the current levels of

violence in the community, the problems of intra-racial violence, the truth about gang life (including its meager financial rewards), the troubles offenders face when looking for work, and the seriousness of the PSN enforcement efforts. Sometimes the speaker will talk about how they remained crime-free or removed themselves from gang life. This section tends to be the most motivational and emotional as the speaker makes particular empathetic connections to the attendees. Consistent with the legitimacy-based message, the ex-offender messages underscore the theme of change and how the PSN team is giving them a “heads up” regarding what will happen to them should they pick up a gun. Change is difficult but possible as one speaker put it:

There’s a saying, ‘Change is a choice, but accountability is a guarantee.’ They [pointing to the law enforcement members] are sitting here and telling you they [are] coming after you [if you leave here and pick up a gun]. Gonna hold you accountable. Ain’t no one ever tell me that. Now, I don’t mean no disrespect, but if you ain’t listening, you got to be a fool...I changed. It was a choice, a real hard one. But I did it...Once you change your life around, you’ll have a whole new respect for others and yourself.

The final segment of the Forums entails a series of presentations and discussions by representatives from community, educational, health, and employment service providers. The speakers from the local social service providers enforce the message that re-offending is a choice, and, in tandem with that point, they offer options and support. These speakers often talk about the programs where they work and services that they offer. In essence, their message is “we’re here for you; here are some *local* things you might need to succeed.” For example, one local service provider often discusses how their agency helps ex-offenders obtain licenses and other documents they need to apply for jobs. Rather than a deterrence message, the ex-offender and the community social service providers convey that it is possible to stay crime-free, and there is local support to help the ex-offender remain crime free. These messages, while not coming directly from law

enforcement, are supported and organized by law environment, and therefore also reinforce the procedural justice messages in the Forum.

In summary, while past research demonstrates that Chicago's PSN Forums (and similar programs) are associated with significant decrease in neighborhood level crime rates, no study has yet assessed the influence of such Forums on *individual* level offending patterns. As such, the central objective of the present study is to assess whether or not attending a PSN Forum in Chicago is associated with reductions in individual recidivism.

DATA AND METHODS

Design

We employ a quasi-experimental design to test the effects of PSN Forums on recidivism for eligible parolees in two Chicago Police Districts and then compare those parolees to eligible parolees in two comparison districts. Political and logistic factors obviated a true randomized experiment, and the PSN treatment area was selected precisely because it was the "worst" area of the city at the outset of the PSN experiment in 2002. Treatment and control districts were selected from the city's 25 police districts based mainly on the concentration of homicide and gun violence. Control districts were selected based on Papachristos et al.'s (2007) initial study, which enabled us to roughly approximate the high homicide, gun violence, and social/demographic patterns of the PSN areas. On the key dependent variable of homicide, the PSN treatment group had the highest levels of homicide in the city from 1980-2002, while the control group had the second highest. Furthermore, control districts were geographically and socially separated from the PSN treatment area to avoid possible program contamination and to reduce known spatial autocorrelation of gun violence. Lastly, there is very little interaction among community-level PSN

actors in these four areas: the treatment and control districts are distinct units for all law enforcement agents involved with PSN.

Sample and Data Sources

In order to test the association that the PSN program may have with recidivism, we employ individual level recidivism data provided by the Illinois Department of Corrections (IDOC).⁷ The sample contains the population of individuals released from prison between 2001 and 2006 in Cook County, Illinois, who have had a felony weapons violation at any point in their criminal history and whom live in the PSN treatment and control districts. This is the entire population of offenders eligible to receive the PSN treatment, regardless of whether they attended a Forum or not. We leverage this sample in our analyses by estimating treatment effects *both* between participants and non-participants *within* the treatment districts, as well as participants in the treatment districts and non-participants in the comparison districts. Data contain detailed information on each re-entering individual, including any re-incarcerations during the study years, individual social and demographic characteristics, date of release, offense description, gang membership, zip code of release, and finally, participation in the PSN program.

Dependent Variables: Recidivism and Time to Re-Incarceration Measures

Recidivism is defined as any re-incarceration during the study years of 2001 to 2006. Because of the length of the study period, there is the possibility of multiple re-incarcerations for one individual. Therefore, we explore only the first re-incarceration event contained within the data. In the event that an individual is re-incarcerated, we calculate, in months, the time between their releases into the community from the prior offense to the date of their re-incarceration; we refer to this measure as *time to re-incarceration*.

Incarceration events were characterized in three ways. First, we delineated recidivism as a binomial variable of zero meaning not incarcerated and one meaning re-incarcerated. Second, we characterized recidivism from a competing risks stand point, where zero shows that an individual did not recidivate, one shows an individual was incarcerated for a new offense, and two shows an individual was incarcerated for a technical violation. Lastly, we also characterized re-incarceration for specific charges using the aggregate Uniform Crime Report offense types: murder, violent crimes, violent property crimes, drug sales, drug possession, weapons violations, other property crime, drug conspiracies, and other crimes. Because violence, especially gun violence, is the incarceration event relevant to PSN, recidivism events are coded as incarceration for the UCR Part 1 crime of interest, which are detailed below, versus re-incarceration for some other crime.

Independent Variables and Controls

The independent variable is participation in a PSN forum; a dummy variable designating zero if the offender did not participate in a PSN Forum and one if they did. Of the 4,420 individuals in the sample, 238 (approximately 5%) attended a PSN Forum. Controls included dummy variables for whether or not the subject was Black (1 = yes), whether the returning prisoner had a high school diploma or equivalent (1 = yes), parent of one or more children (1 = yes), married (1 = yes) or, cohabitating with a significant other following release from prison (1 = yes), or was identified by IDOC as a known gang member (1 = yes).⁸ Additionally, we also control for age in years at release from prison, and the number of prior incarcerations before the most recent release (0, 1, 2 or 3 or more prior incarcerations). Table 1 shows summary statistics for all variables used in our models, which we differentiate by our control and treatment groups. In brief, individuals in the experimental neighborhood who were not a PSN attendee generally are less likely to have a high school education, have higher numbers of prior incarcerations, and are more likely to be a gang

member than PSN attendees. These differences between the treatment and control group remain when examining the differences between PSN attendees and non-attendees throughout all of Chicago. However, on other major individual characteristics that are also risk factors for recidivism, specifically race, age, children and marital status, there are no differences between the PSN and non-PSN groups.

[--- Table 1 about here ---]

Modeling Strategy

In the first analysis of PSN effects on the neighborhoods (Papachristos et al., 2007), the authors estimated propensity scores to account for any effects of non-random group assignments (e.g., Berk, Li, & Hickman, 2005; Rosenbaum & Rubin, 1983). In this analysis, we do not estimate propensity scores, for two reasons. First, we see no reason *ex ante* to suspect that parolees in any of the PSN districts or comparison districts are more or less amenable to the PSN intervention than are the control districts. Second, the sampling units in the first analysis of PSN effects were neighborhoods that were purposively selected based on both observable characteristics and political considerations. Here, we analyze *individuals* who were sentenced by a single court district (Cook County) and a single prosecutorial authority (the Cook County State Attorney) based on criminal convictions produced by Chicago Police Department arrests. In other words, the legal contexts of selection of individuals for punishment were consistent across the sample. Assignment in this case was not the result of an allocation process, but instead, was the result of residential “selection” to one of four ecologically comparable areas.

To estimate parameters of recidivism for the two groups, we employ two types of survival analysis: Cox proportional hazard models, and competing risk hazard models. Survival models will allow us to understand whether participation in the PSN program has an effect on time to re-

incarceration. Rather than simply aiming to assess if the treatment (i.e., offender notification forum attendance) was effective, by using survival models, we will be able to assess the efficacy of treatment in keeping offenders who are most at risk for repeat offending crime free for specific periods of time. Furthermore, survival models will also us to understand within and between neighborhood effects of the PSN program. Given that PSN was implemented in multiple neighborhoods, it is important to distinguish if recipients of PSN have different survival times for re-incarceration than other individuals in their neighborhood (within neighborhood model) and also if recipients of PSN are different in regards to survival time for re-incarceration across neighborhoods (between neighborhood models).

First, we estimate the time to re-incarceration from their previous incarceration using a Cox proportional hazard model. Cox models assume no specific shape for the underlying survival function (Yamaguchi, 1991). Here, the hazard rate is affected by the independent variables, not the survival function (Allison, 1995). The general analytic model is:

$$h(t) = h_0(t) \exp(\beta_1 x_1 + \dots + \beta_k x_k)$$

The hazard function given the values of the covariates x_k for cases one through k is denoted by $h(t, \dots)$ for survival time t . The baseline hazard is represented by $h_0(t)$. Failure is measured as any re-incarceration within the time period of our study. Individuals who were not re-incarcerated during the study period are right censored. Additionally, we tested whether our models met the assumption of proportional hazards through the proportional hazards test. We found that certain variables in our models did not satisfy the proportional hazards assumption. The concern here was whether the variables violate the assumption to such a degree that the inference in our models was impaired. To assess this, we tested whether these variables, which were all categorical, generate parallel hazard curves; if they do, this would suggest these variables do not impact inference and

could remain in the model(s) in their current form (Steyerberg et al., 2010). Overall, all variables violating the proportional hazards assumption generated parallel hazard curves (one such example would be Figure 1), suggesting that the violation of the proportional hazards assumption for these variables is not large enough to impact inference. As such, we proceed with our models. While the PSN program aimed to reduce recidivism generally, it focused on preventing reoccurrence of new violent and gun offenses specifically. Standardized Cox models, however, do not allow for the differentiation between various classifications of re-incarceration events. Therefore, we employ competing risk models to determine the risk of re-incarceration for one type of offense versus another (Fine & Gray, 1999; Schmidt & Witte, 1989). Competing risk models are most commonly specified in medical and public health research where the researcher is interested in time to failure (for example, death) from the disease of interest, controlling for the possibility that failure can occur through other means, like accidental death (Heckman & Honoré, 1989). Given our interest in decreasing new crime among those who attended PSN Forums, our competing risks are failure through a re-incarceration for a new offense and failure for re-incarceration for a technical violation. The competing risk models can be specified as such:

$$\bar{h}_1(t|x) = \bar{h}_{1,0}(t)\exp(x\beta)$$

where $\bar{h}_1(t|x)$ is the hazard rate for the subdistribution of risk t given x , $\bar{h}_{1,0}(t)$ is the baseline subhazard, and $\exp(x\beta)$ is the exponentiated subhazard ratios for the predictors.

Also, we are concerned with new offenses that are considered UCR Part 1 crimes. Thus, in addition to modeling the risk of re-incarceration due to a new offense versus a technical violation, we apply the competing risk models to estimating the risks for specific offenses. Specifically, we focus on (1) murder versus non-murder re-incarceration, (2) violent crimes versus non-violent crime re-incarceration, (3) violent property crimes versus non-violent property crime re-

incarceration, (4) drug sales versus non-drug sale re-incarceration, (5) drug possession versus non-drug possession re-incarceration, (6) weapons violations versus non-weapons violations re-incarceration, (7) other property crime versus non-other property crime re-incarceration, (8) drug conspiracies versus non-drug conspiracies re-incarceration, and finally, (9) other UCR crimes versus non-other UCR crime re-incarceration.

RESULTS

Overall Recidivism: Within and Between Neighborhoods

Table 2 displays the coefficients and hazard ratios for the Cox hazard models estimating the time to failure for any incidence of recidivism. These models give us a general perspective on how the PSN treatment and control groups compare on their hazards of recidivism, controlling for the neighborhoods that received treatment. Model 1 compares individuals within the PSN neighborhood who attended a Forum to those who did not attend a Forum but also live in the same neighborhood. This model shows that returning prisoners who are Black, a current gang member, or have one or more prior incarcerations have a significantly higher hazard of overall recidivism. Returning prisoners who are older also have an increased hazard of recidivating, though this effect is only marginally significant ($p < 0.1$). Conversely, returning prisoners with a high school or equivalent degree and who have children have a significantly lower likelihood of recidivating. Additionally, the PSN treatment variable is significant and negative, estimating that the recidivism hazard for returning prisoners who attended a Forum is 43% the hazard of individuals within the same neighborhood who did not attend a Forum. At first glance, the results offer a positive assessment of PSN: attendance at a PSN forum *lengthens* a returning prisoner's time on the street.

[--- Table 2 about here ---]

Model 2 is a between-neighborhood model that compares individuals returning to either the PSN treatment neighborhoods or the control neighborhoods, and then tests their participation in the Forums. Similar to the results in Model 1, many of the same predictors are significant: Blacks, current gang members and older individuals have significantly higher recidivism hazards, while returning prisoners with a high school diploma or GED, those who are married, and those with children have a significantly lower recidivism hazard. Importantly, the PSN treatment variable is significant demonstrating that Forum attendees have a hazard rate that is 42.7% lower than returning prisoners who did not receive exposure to PSN treatment. The PSN experimental neighborhood is not significant, meaning individuals in the experimental and control neighborhood are no different in regards to recidivism.

Similar to Model 1, Model 2 shows that participants in the PSN program remain crime-free significantly longer in their neighborhoods than do than returning prisoners in the same neighborhood who do not participate. For instance, when looking at the within-neighborhood model, the recidivism hazard of individuals in the PSN program is 56.9% less than those individuals who do not participate in program. Figure 1 shows the hazard curves for the two treatment and control groups, adjusted for all control variables. In either the within-neighborhood or between-neighborhood findings, both the treatment and control groups have similar hazards for re-incarceration upon leaving prison. However, after approximately 12 months, the hazard curves are differentiated with the treatment group (the top line) having higher survival rates. At 60 months, 40% of the treatment group has not recidivated compared to 10% of the control group.

[--- Figure 1 about here ---]

New Sentences versus Technical Violation Recidivism: Competing Risk Hazard Models

Table 3 presents a competing risk hazard model where the primary risk is recidivism due to new crimes and the competing risk is recidivism due to a technical violation of parole. We again present the results for both within neighborhood competing risks and between-neighborhood competing risks models. Model 1 in Table 3 shows that individuals with a high school diploma or equivalent and those who are older have a significantly reduced incidence of a new sentence failure due to a technical violation compared to younger returning prisoners or those without a high school diploma. Conversely, current gang members and individuals with prior incarcerations have a significantly higher incidence of a new sentence failure due to a technical violation. The treatment variable offers additional insight into the effect of the PSN on recidivism for offenders who attended a Forum. The sub-hazard for the PSN is about 70% lower than the subhazard for the control group. That is, the cohort of returning prisoners receiving PSN treatment have a significantly reduced incidence of a new sentence failure compared to the control group, after controlling for background characteristics and the possibility of a technical violation. Put simply, offenders in the PSN experimental group were less likely to commit a new crime and more likely to have a technical violation compared to their counterparts. Since the estimates for the PSN Experimental Group are nearly identical for the within- and between-neighborhood models, we interpret the hazard ratio similarly. Thus, PSN Forum attendees face a hazard of committing a new offense that is 30% less than those individuals who did not attend.

[--- Table 3 about here ---]

The between neighborhood model (Model 2) displays similar results. As before, we see that returning prisoners with a high school diploma or equivalent have a reduced risk for new sentence failures. Similarly, there is a reduced hazard of new sentences for older ages. On the other hand, individuals with multiple prior incarcerations, and those who are current gang members have

a significantly increased risk of failure due to new sentences versus a technical violation. So too do Black parolees, though the effect here is marginally significant ($p < 0.1$). The PSN treatment variable is again statistically significant. The sub-hazard for the PSN group controlling for other variables is about 69.8% lower than the sub-hazard for the control group. As before, there are no significant effects on the likelihood of failure time to new sentences or technical violations from simply residing in a PSN experimental neighborhood. Figure 2 compares the cumulative incidence of new sentences and technical violation failures for our two treatment groups. The cumulative incidence shown here is the ratio of individuals in that particular group who have failed to those in the total population over time. In both graphs, the cumulative incidence rate is lower for each of the treatment groups than the control group.

[--- Figure 2 about here ---]

To contrast the hazard of new sentences, Table 4 presents a competing risks model where technical violations are the primary risk of interest. Technical violations are of particular concern to PSN; while the project's goal is to lower new gun crimes, PSN hopes to keep returning prisoners from incarceration through exposure to resources often needed to meet their parole conditions. Interestingly, some differences emerge in this comparison among the controls which are significant. Specifically, the hazards of a technical violation among Blacks are not significantly different from the hazards for other racial or ethnic groups. Additionally, individuals with children have only 95% of the hazard of recidivism for technical violation recidivism across the two models compared to those without children. As we saw in the new sentence competing risk models, the PSN experimental group has a significantly lower hazard of technical violations than their counterparts; indeed, they have only 30% of the hazard for technical violations than those in the control group. This finding is consistent across both the within and between neighborhood models.

[--- Table 4 about here ---]

In sum, all models presented here show that the PSN experimental group is less likely to fail over the full observation period. Additionally, their hazard for failing from a new sentence is only 60% that of the control group. For technical violations, the difference is even more drastic: they have only 30% of the hazard of failing from a technical violation when controlling for the possibility of new sentences. Specifically, the individuals in the PSN experiment are not only less likely to return to prison due to a new sentence, but also much less likely to return to prison because of a technical violation. For the PSN's first cohort, participating in PSN message reduces new crimes and technical violations among these individuals.

Recidivism by Type of Crime: Competing Risks Hazard Models

Given that the ultimate goal of PSN is reducing gun violence—a message central to the Forums—our final set of results considers the hazard of recidivism for specific types of crime. Table 5 displays the abbreviated results from both the within- and between-neighborhood models, displaying only the effect of the PSN treatment⁹ variable.

Of the nine UCR crimes we examined, the PSN treatment group had significantly reduced hazards for recidivating on several crimes across the models. Consider first, the within models. Central to our analysis, is the effect of PSN treatment on the hazard of committing a weapons crime, a murder, or a violent crime versus any other crime. Overall, the results of the within models reflect the PSN message being offered to returning offenders seems to be effective in reducing the hazard of these crimes. First, the sub-hazard of committing murder (versus any other crime) for the PSN group is significantly lower than the sub-hazard for the control group, so small that the sub-hazard is only 1/100,000th of a percent. The within-neighborhood model, demonstrates that the sub-hazard of a drug possession crime (versus any other crime) for the PSN group is 63% lower

than the sub-hazard for the control group. Finally, the sub-hazard of committing a weapons crime for the PSN group is about 11% lower than the sub-hazard for the control group.

[--- Table 5 about here ---]

The between-neighborhood model accounts for all neighborhoods in the study, and it, too, shows that the PSN treatment group had significantly lower sub-hazards of committing several crimes than non-PSN individuals. For instance, the sub-hazard for PSN treatment group for murder (as compared to other crimes) is 3/10,000th of a percent of the control group's sub-hazard. The PSN treatment group also had a significantly lower sub-hazard for committing a violent crime compared to the hazard of committing other crime. That is, the sub-hazard for the experimental group is 51.4% of the sub-hazard of the control group. The sub-hazard for committing a weapons crime over any other crime is also lower for the treatment group: 10% of the sub-hazard for committing a weapons crime than any other crime.

In conclusion, the competing risk models for crime type show that the hazard of recidivating through any of the crimes particularly targeted in the PSN treatment is much lower for the experimental group than for the control group. Thus, the PSN message that balances sanction risks and costs with fair treatment, material support and respect, is effectively lowering the incidence of these types of crimes among the target population.

DISCUSSION AND CONCLUSION

Legitimacy-based violence prevention and crime reduction programs like PSN's Offender Notification Forums are guided by a central belief that strengthening perceptions of legitimacy and the perceived fairness of the law leads to higher compliance with the law, even among highly-criminal populations and even when delivering a deterrence-based message. Prior research on such call-ins have been shown to reduce aggregate levels of crime (Braga et. al., in press; Braga et al.,

2001; Corsaro, Hunt, Hipple, & McGarrell, 2012; Engel et al., 2013; Papachristos et. al., 2007), yet, to our knowledge, no study has investigated the role that legitimacy plays in changing individuals' behavior. This study address this gap and finds notable reductions in recidivism among a population of parolees returning to Chicago neighborhoods. In sum, our findings clearly demonstrate that for returning prisoners, being exposed to an offender call-in that has a legitimacy message in addition to traditional focused deterrence elements common on call-ins reduces recidivism; we disaggregate and discuss this finding in three parts below.

First, our results show that attendance at a PSN Forum effectively lengthens participants' time on the street: people who attend a forum, on average, stay out of prison for longer periods of time. When comparing individuals within the same neighborhood, individuals who attended a PSN Forum have a 41% chance of recidivating *before* offenders in the control group do; effectively, they are more likely to remain on the street longer than the control group. Thus, holding constant the neighborhood conditions, PSN participation considerably lowers the likelihood of recidivating. We find this effect across all PSN neighborhoods. This finding suggests that the addition of a legitimacy-based message to offender call in programs that have been predominately based in focused deterrence has an effect on individual behavior *within* neighborhoods that tend to have high-levels of legal cynicism (Kirk & Papachristos, 2011).

Second, we find that the PSN effect holds for new offenses net of technical violations. Individuals who attended PSN Forum face a hazard of committing a new offense that is 30% less than those individuals who did not attend a forum. Keep in mind that using competing risk hazard models, we control for the possibility of a technical violation in addition to controlling for individual characteristics. This finding is telling: attending a PSN reduces the hazard of being arrested for a *new* criminal offense, thus facilitating at least some types of criminal desistance.

Finally, and perhaps most importantly, we show that the PSN attendees have lower hazards of committing certain serious crimes, such as a weapons crime or a murder than the control group. For instance, the sub-hazard for committing a weapons crime over any other crime is lower for the PSN group: 10% of the sub-hazard for committing a weapons crime than any other crime. The competing risk models for crime type show that the hazard for PSN treatment group of committing certain crimes (i.e., murder, drug possession, and weapons crimes) is lower than the control group. For instance, the PSN treatment group has a 9% chance of committing a weapon crime or a less than 1% chance of committing murder *before* the control group. Consequently, PSN is shown to be rather powerful in reducing the likelihood of committing new offenses.

The study is not without limitations. First, while the benefit of the PSN sample is that it consists of serious, active offenders, it is also a downfall: we do not know how the Forums might influence less serious offenders whose commitment to crime both as a source of material support and through immersion in crime networks may be weaker than among violent offenders. Still, evidence of heterogeneity and inconsistency in offending patterns and specialization among serious offenders (Piquero et al., 2004; but see Sullivan, McGloin, Pratt, Piquero, 2006) suggest that these findings may apply to other offender populations. Second, our sample includes only adults; it is possible that altering perceptions of legitimacy and procedural justice have differing effects on juveniles given that their peer groups are more important during this stage of adult development, especially where deviance is concerned (Haynie & Kreager, 2013; Warr, 2002). Third, the study takes place in Chicago, which is unique in that it has areas of durable inequality and crime (Sampson, 2012). Future research on legitimacy and procedural justice would be benefited by examining individuals in other cities, such as juveniles or those who are less serious offenders. Fourth, as Braga and Weisburd (2012) noted of other focused deterrence programs, our

study does not have the ability to differentiate the impact that legitimacy has on re-offending from that of focused deterrence. While findings suggest that legitimacy-based programming is effective, especially when used in conjunction with deterrence-based messages, future work needs to be able to distinguish between these two driving principles. The available data simply does not allow us to disentangle which of the observed effects are associated with the deterrence message and which are associated with the manner in which said message is delivered. To answer this question, additional pre- and post-intervention survey data are needed for both treatment and control groups. However, as compared to more traditional methods, it is worth noting that such legitimacy-based approaches are producing consistent results at both the aggregate and individual level. The convergence of our individual-level findings with prior aggregate-level findings (Papachristos et al., 2007) produces important consistency around these guiding theoretical principles.

Limitations notwithstanding, this study has weighty implications for legitimacy-based and focused deterrence strategies. Programs like the Offender Notification Forums appear to exert significant effects on individual behaviors when directed towards those most likely to be engaged in street violence. In short, when individual offenders are engaged in a fair and just manner, our results suggest that they modify their behavior (stay out of prison longer by re-offending at lower rates). In a sense, this finding provides a partial answer to the question posed by Papachristos et al. (2012): “Why do criminals obey the law?” Although further research is clearly needed, our results suggest that offenders—just like the general citizenry—are more likely to comply with the law when they are treated fairly and perceive the agents of the law as acting fairly. More than that, our findings suggest that negative perceptions of the law might be altered based on positive interactions and initiatives. And, programs like Chicago’s PSN Offender Notification Forums might offer one such option.

Table 1: Summary Statistics

	<i>Within Experimental Neighborhood Comparison</i>						Statistically Different
	Treatment Group			Control Group			
	Mean	SD	N	Mean	SD	N	
Time on the Street (Months)	27.756	16.246	202	17.322	16.193	2362	*
Recidivated	0.356	0.480	202	0.773	0.419	2362	*
Black	0.936	0.246	202	0.963	0.189	2362	
Age in Years	35.272	8.099	202	35.323	8.527	2362	
High School Educated	0.624	0.486	202	0.480	0.500	2362	*
Children	1.901	1.651	202	1.962	1.631	2362	
Married	0.144	0.352	202	0.130	0.336	2362	
Cohabiting	0.010	0.099	202	0.015	0.123	2362	
Number of IL Incarcerations	1.861	1.003	202	2.249	0.994	2362	*
Gang Member	0.421	0.495	202	0.630	0.483	2362	*

	<i>Between Neighborhood Comparison</i>						Statistically Different
	Treatment Group			Control Group			
	Mean	SD	N	Mean	SD	N	
Time on the Street (Months)	27.756	16.246	202	17.688	16.461	4018	*
Recidivated	0.356	0.480	202	0.747	0.435	4018	*
Black	0.936	0.246	202	0.958	0.201	4018	
Age in Years	35.272	8.099	202	35.275	8.778	4018	
High School Educated	0.624	0.486	202	0.513	0.500	4018	
Children	1.901	1.651	202	1.920	1.625	4018	
Married	0.144	0.352	202	0.138	0.345	4018	
Cohabiting	0.010	0.099	202	0.012	0.108	4018	
Number of IL Incarcerations	1.861	1.003	202	2.126	1.033	4018	*
Gang Member	0.421	0.495	202	0.587	0.493	4018	*
Experimental Neighborhood	1.000	0.000	202	0.562	0.496	4018	*

* $p < 0.05$

Table 2: Cox Hazard Models Modeling Time on the Street and Overall Recidivism

	Within Neighborhood Model		Between Neighborhood Model	
	Coefficients	Hazard Ratios	Coefficients	Hazard Ratios
Black	0.457*** (0.116)	1.580*** (0.183)	0.247*** (0.0930)	1.281*** (0.119)
Age	0.00529* (0.00314)	1.005* (0.00316)	0.00432* (0.00245)	1.004* (0.00246)
High School Educated	-0.588*** (0.0519)	0.556*** (0.0289)	-0.569*** (0.0403)	0.566*** (0.0228)
Children	-0.0665*** (0.0150)	0.936*** (0.0141)	-0.0555*** (0.0116)	0.946*** (0.0110)
Married	-0.0766 (0.0661)	0.926 (0.0612)	-0.120** (0.0513)	0.887** (0.0455)
Cohabiting	0.295* (0.155)	1.343* (0.208)	-0.0231 (0.143)	0.977 (0.140)
Gang Member	0.0174 (0.0284)	1.018 (0.0289)	0.00608 (0.0216)	1.006 (0.0218)
Number of IL Incarcerations	1.288*** (0.0694)	3.624*** (0.251)	1.301*** (0.0513)	3.674*** (0.188)
PSN Experimental Group	-0.841*** (0.0995)	0.431*** (0.0429)	-0.852*** (0.0983)	0.427*** (0.0419)
PSN Experimental Neighborhood	-	-	-0.0290 (0.0379)	0.971 (0.0368)
Observations	2564	2564	4220	4220
Chi-Square	958.8	958.8	1585	1585

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.10

Table 3: Competing Risk Models with New Sentences as the Primary Risk of Interest

	Within Neighborhood Model		Between Neighborhood Model	
	Coefficients	Hazard Ratios	Coefficients	Hazard Ratios
Black	0.328 (0.229)	1.388 (0.318)	0.346* (0.179)	1.413* (0.254)
Age	-0.0110* (0.00571)	0.989* (0.00565)	-0.0180*** (0.00444)	0.982*** (0.00436)
High School Educated	-0.305*** (0.0869)	0.737*** (0.0641)	-0.358*** (0.0695)	0.699*** (0.0486)
Children	-0.0196 (0.0238)	0.981 (0.0233)	-0.0122 (0.0190)	0.988 (0.0188)
Married	-0.0745 (0.110)	0.928 (0.102)	-0.0486 (0.0857)	0.953 (0.0816)
Cohabiting	0.141 (0.295)	1.151 (0.340)	0.256 (0.239)	1.291 (0.309)
Gang Member	0.504*** (0.0498)	1.656*** (0.0824)	0.557*** (0.0381)	1.745*** (0.0665)
Number of IL Incarcerations	0.790*** (0.112)	2.203*** (0.248)	0.676*** (0.0830)	1.966*** (0.163)
PSN Experimental Group	-0.359** (0.181)	0.699** (0.127)	-0.359** (0.181)	0.698** (0.126)
PSN Experimental Neighborhood	-	-	0.0353 (0.0618)	1.036 (0.0640)
Observations	2564	2564	4220	4220
Chi-Square	317.2	317.2	538.4	538.4

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.10

Table 4: Competing Risk Models with Technical Violations as the Primary Risk of Interest

	Within Neighborhood Model		Between Neighborhood Model	
	Coefficients	Hazard Ratios	Coefficients	Hazard Ratios
Black	0.327 (0.202)	1.386 (0.281)	0.0845 (0.134)	1.088 (0.146)
Age	0.00934** (0.00474)	1.009** (0.00478)	0.0131*** (0.00350)	1.013*** (0.00355)
High School Educated	-0.431*** (0.0875)	0.650*** (0.0568)	-0.436*** (0.0668)	0.647*** (0.0432)
Children	-0.0576** (0.0232)	0.944** (0.0219)	-0.0514*** (0.0177)	0.950*** (0.0168)
Married	0.0508 (0.109)	1.052 (0.114)	-0.0376 (0.0803)	0.963 (0.0773)
Cohabiting	0.117 (0.286)	1.125 (0.322)	-0.283 (0.270)	0.753 (0.204)
Gang Member	-0.307*** (0.0376)	0.735*** (0.0277)	-0.327*** (0.0278)	0.721*** (0.0200)
Number of IL Incarcerations	0.996*** (0.105)	2.706*** (0.284)	1.067*** (0.0789)	2.905*** (0.229)
PSN Experimental Group	-1.184*** (0.202)	0.306*** (0.0617)	-1.206*** (0.200)	0.299*** (0.0599)
PSN Experimental Neighborhood	-	-	-0.0484 (0.0548)	0.953 (0.0522)
Observations	2564	2564	4220	4220
Chi-Square	314.0	314.0	571.4	571.4

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.10

Table 5: Cox results for separate crimes (coefficients)

	Within Neighborhood Comparison	Between Neighborhood Comparison
Murder	-18.22*** (0.408)	-14.93*** (0.293)
Violent Crime	-0.660 (0.403)	-0.666** (0.403)
Violent Property Crime	-0.505 (0.391)	-0.453 (0.390)
Drug Sales	-0.205 (0.324)	-0.187 (0.321)
Drug Possession	-0.455*** (0.137)	-0.474** (0.137)
Weapons	-2.216*** (0.709)	-2.281*** (0.707)
Other Property Crime	0.584 (0.609)	0.683 (0.597)
Drug Conspiracy	0.738 (0.854)	0.812 (0.818)
Other Crime	0.301 (0.340)	0.322 (0.331)
N	2,564	4,220

*** p<0.01, ** p<0.05, * p<0.10

Robust standard errors in parentheses

Figure 1: A Comparison of the Hazard Curves for the Two Treatment and Control groups

Hazard Curves for the Two Treatment and Control Groups

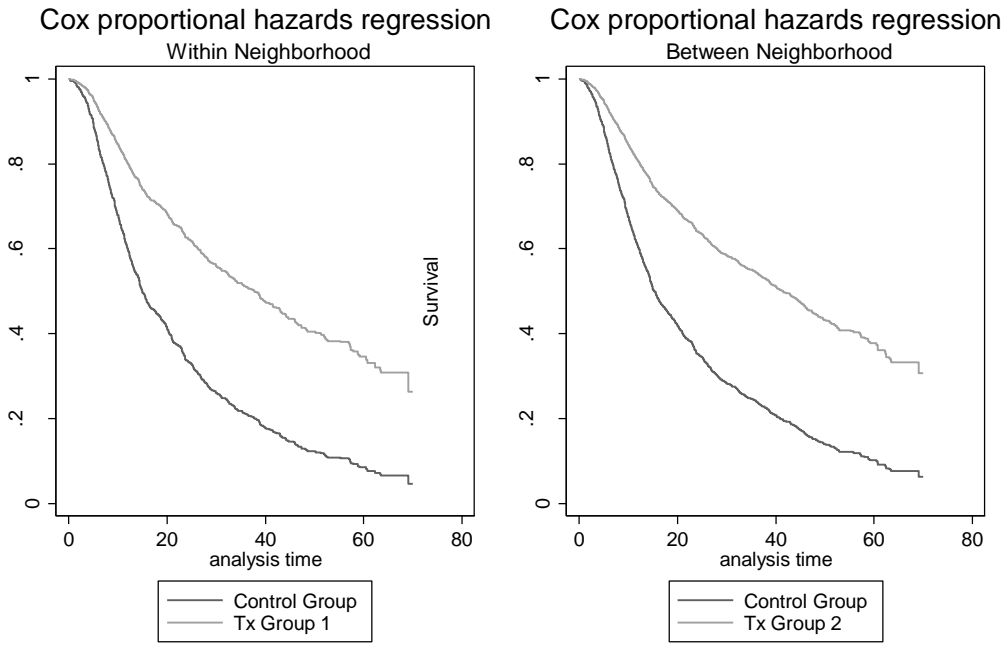
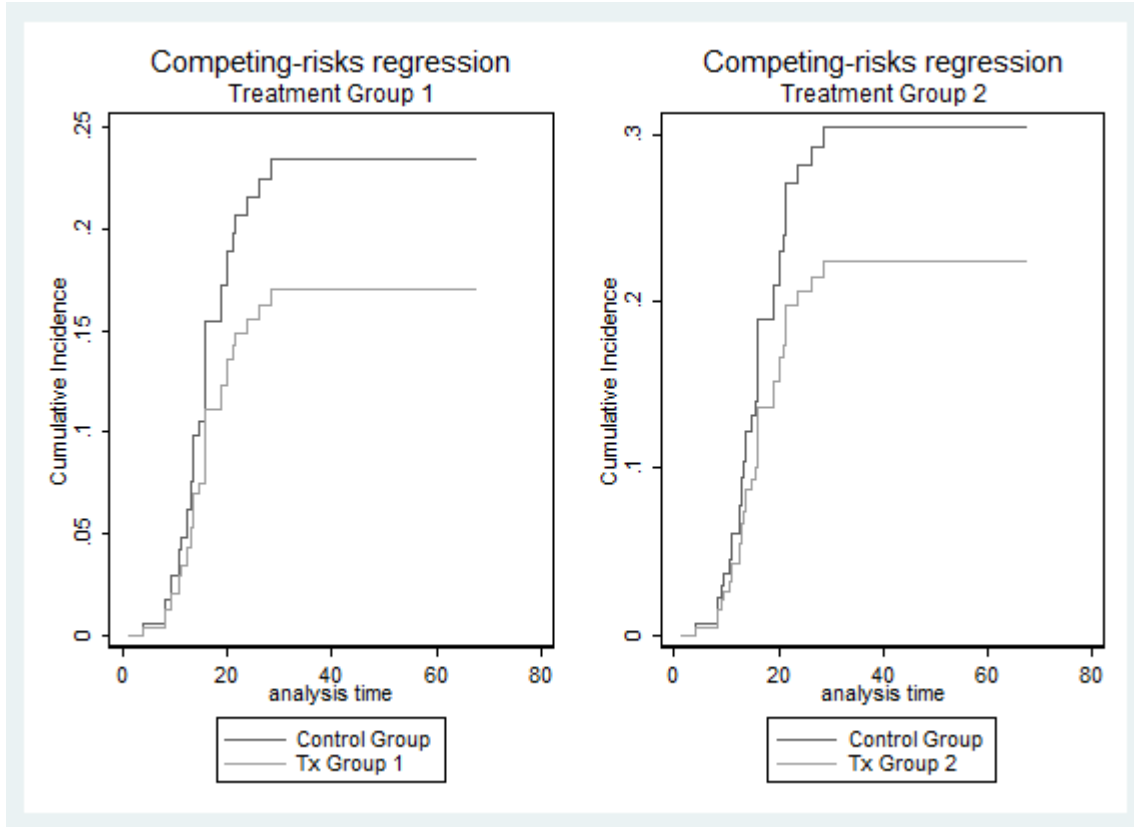


Figure 2: Comparison of Time on the Street by New Sentences and Technical Violation Failures



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End Notes

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² There is one focused deterrence program that examines the effect of such programming on individual outcomes: the Hawaii HOPE Program (Hawken and Kleiman, 2009).

³ For a recent meta-analysis of focused deterrence programs that utilized some kind of experimental evaluation, see Braga and Weisburd (2012). See also, Durluf and Nagin (2011).

⁴ The Forums were conducted in several police districts and each district had slight variations in forum structure due to the space available within the district (i.e., the Forum location) but also the varying actors that were involved. Overall, though, the variations across Forums are slight.

⁵ The PSN team was vigilant of the structure and implementation of the Forums, often conducting "re-boot" sessions when new individuals joined the efforts to ensure the consistency of the message and its delivery.

⁶ The following quotes are taken from the ethnographic field notes of the second author whom observed dozens of these meetings during the study period.

⁷ All data analysis represents the views of the authors, not the state of Illinois or the Illinois Department of Corrections.

⁸ The life course literature (i.e., Sampson & Laub (1995) suggests that certain life changes, such as marriage, cohabitation, and having children, act as turning points in an offender's criminal career that facilitate desistance. As such, we control for some of these turning points.

⁹ No controls are displayed since they behave similar to models already discussed. Controls in the model include: Black, Age, High School Educated, Children, Married, Cohabiting, Gang Member, and Number of Illinois Incarcerations. Additionally, for the within-neighborhood models, we include a control for the PSN experimental group while for the between-neighborhood models, we include both the variables for the PSN experimental group and the PSN neighborhood group.