CRIMINOLOGY

CRIMINAL GROUP EMBEDDEDNESS AND THE ADVERSE EFFECTS OF ARRESTING A GANG'S LEADER: A COMPARATIVE CASE STUDY*

ROBERT VARGAS^{1,2}

¹Department of Sociology, University of Wisconsin—Madison ²Robert Wood Johnson Scholars in Health Policy Research, Harvard University

KEYWORDS: gang leaders, neighborhoods, violent crime

Although law enforcement agencies arrest criminal group leaders to dismantle organized crime, few studies have assessed whether such interventions produce adverse effects. Through a mixed-method comparative case study of the Latin Kings and 22 Boys street gangs in Chicago, this article examines the consequences of arresting a gang's leader. Using violent crime data, I show that a spike in violent crime took place in the first month after the arrest of the 22 Boys gang leader. In contrast, the arrest of the Latin Kings gang leader produced no change in violent crime. Using several qualitative data sources, I show that the arrest of the 22 Boys gang leader temporarily led to the gang's withdrawal from its territory, which spurred violent aggression from rival gangs in adjacent territories. In contrast, the Latin Kings gang continued its operations because the gang's prison leaders quickly appointed new leadership. The results suggest that criminal group embeddedness (or the social relations between criminal groups) can contribute to adverse effects in interventions targeting gang or other criminal group leaders.

What happens after law enforcement personnel arrest the leader of a criminal group? Although arresting a criminal group's leader has been used in a variety of crime suppression efforts, we know remarkably little about the adverse effects of such interventions. Scholars have identified various forms of adverse effects stemming from law enforcement interventions (McCord, 2003; Reppetto, 1976), but much remains to be understood because, as Sherman et al. (1997) noted, researchers often fail to assess the adverse effects or fail to report them in their results. Given the dearth of research on both interventions targeting criminal group leaders and adverse effects, this article fills a significant gap through a case study evaluating the consequences of arresting the highest ranking leaders of two street gangs in the Little Village neighborhood of Chicago. Specifically, the article

143

^{*} Additional supporting information can be found in the listing for this article in the Wiley Online Library at http://onlinelibrary.wiley.com/doi/10.1111/crim.2011.52.issue-2/issuetoc.

This research was supported by the Institute for Educational Sciences, U.S. Department of Education, through Grant R305B080027 to Northwestern University, and by the National Science Foundation (NSF 1030978). The opinions expressed are those of the author and do not represent the views of the Institute, U.S. Department of Education, or the National Science Foundation. This article was greatly improved by feedback and suggestions from Jeremy Freese, Christine Percheski, Andrew Papachristos, Dan Gillion, and Wes Skogan. Direct correspondence to Robert Vargas, 1730 Cambridge Street, S406, Cambridge, MA 02138 (e-mail: rvargas@rwj.harvard.edu).

introduces the concept of criminal group embeddedness, which is defined as a criminal group's immersion in social relations with other criminal groups over time and space, as a potential source of adverse effects in law enforcement interventions targeting criminal groups. This case study shows that interventions targeting criminal group leaders may affect not only the targeted group but also the targeted group's allies and competitors. In doing so, this article makes two important contributions.

First, although scholars have identified several ways in which law enforcement interventions can produce adverse effects, such as through the spatial displacement of crime (Hunt and Weiner, 1977; Spergel, 2007) or increasing the cohesiveness of criminal groups (Klein, 2011; Wilson and Chermak, 2011), this article introduces criminal group embeddedness as an additional source of adverse effects. Whether law enforcement agencies are targeting mafia groups, terrorist cells, or street gangs, such criminal groups can be embedded in collaborative or competitive relations with other criminal groups. For example, an intervention aimed at dismantling a drug cartel could have unintended adverse effects by, for example, sparking violent competition among rival drug cartels over the market share of the cartel dismantled by law enforcement. This article argues that evaluations of law enforcement interventions targeting criminal group leaders should consider studying the actions of criminal groups with whom the targeted group has had collaborative or competitive relations. Doing so would help scholars develop a more complete understanding of the consequences of law enforcement operations against criminal groups.

Second, although a large body of research has evaluated the effectiveness of various types of gang interventions from increased policing (Weiss and McGarrell, 1999), heightened enforcement of curfew laws (Fritsch, Caeti, and Taylor, 1999), and gang-intervention programs (Braga et al., 2001; Cloward and Ohlin, 1960; Skogan et al., 2008; Spergel, 1995), only a handful of studies has examined the consequences of arresting a street gang's leader (Knox, 2000; Papachristos, 2001; Venkatesh, 2006). These ethnographies, however, do not provide a systematic quantitative evaluation of violent crime trends before and after the gang leader's arrest. By combining a time series analysis of violent crime data with rich ethnographic fieldwork, this article demonstrates how the arrest of a gang leader can have the adverse effect of increasing gang violence by igniting violent competition among gangs. In Little Village, three street gangs—the 22 Boys, Latin Kings, and Satan Disciples—maintained orderly relations with one another by occupying their sidewalks and street corners to signify the occupation of their respective territories. After the arrest of their gang leader, however, the 22 Boys gang stopped occupying spaces in its territory, and rival gangs began violently competing with one another as they encroached and attempted to acquire the territory of the 22 Boys gang. This finding contributes to research on gang interventions by showing that interventions targeting a specific gang also might have unintended consequences for the targeted gang's allies, competitors, or both.

To begin, I briefly review the literature on the adverse effects of law enforcement interventions, as well as the literature on gang interventions. Next, I discuss the concept of criminal group embeddedness and then describe the details of the case study, methods, and results.

GANG INTERVENTIONS AND ADVERSE EFFECTS

As McCord (2003) noted, identifying adverse effects of gang interventions, as well as crime interventions more generally, is an important and understudied research area in

criminology. Many investigators have failed to assess whether an intervention had adverse effects, and many studies have failed to report such effects in their results (Sherman et al., 1997). Despite these limitations, scholars have identified several adverse effects in gang interventions, perhaps the most commonly studied being spatial displacement, or the shift of crime in terms of space, time, or type of offending from the original target areas of crime prevention interventions (Reppetto, 1976). With the development and advancement of crime mapping, place-based crime interventions have become commonly used by police forces across the nation, prompting numerous studies on the spatial displacement of crime (Brantingham and Brantingham, 1999; Roncek, 2000; Sherman, Gartin, and Buerger, 1989). Similarly, evaluations of gang interventions have taken displacement seriously with some showing evidence of displacement (Hunt and Weiner, 1977; Spergel, 2007), whereas others show little or none (Tita and Radil, 2010; Weisburd et al., 2006).

The gang-intervention literature has documented two types of adverse effects stemming from gang interventions: 1) increases in gang cohesiveness and 2) conflict in police community relations. Klein's (1971) evaluation of a gang intervention in California showed that rather than quell gang behaviors, the attention given to a gang by social workers had the opposite effect of bolstering gang members' group identity and increasing delinquent behaviors. Similar processes of increased gang cohesion were suggested to be, in part, an explanation for why a major gang intervention in Pittsburgh caused violent crime to increase (Klein, 2011; Wilson and Chermak, 2011). Gang interventions also have been shown to have the adverse effect of straining police-community relations. For example, in Los Angeles, police implemented massive gang sweeps through a strategy called "Operation Hammer," which used 1,000 officers to arrest hundreds of suspected gang members (Klein, 1995). About half of all arrestees, however, were not gang members and less than 2 percent were convicted of a crime (Klein and Maxson, 2006). The operation was abandoned after community outcry. Similar interventions such as "stop-and-frisk" (Gelman, Fagan, and Kiss, 2007; Reitzel, Rice, and Piquero, 2004; Rice, Reitzel, and Piquero, 2005) and "zero tolerance" policies for gun and drug possession (Fagan, Zimring, and Kim, 1997; Greene, 1999) have been also shown to decrease police legitimacy in high-crime communities.

One gang intervention that has yet to be systematically evaluated for adverse effects is police crackdowns on gang leaders. Most studies on police crackdowns have focused on massive sweeps of drug markets or prostitution rings, which involve the arrest of several low-level gang members but not leadership (Fritsch, Caeti, and Taylor, 1999; Kent and Smith, 2001; Langworthy, 1989). To date, only two studies have examined the arrest of a gang's leader, and each focused on the Gangster Disciples street gang in Chicago during the 1990s. Knox (2000) and Papachristos (2001) interviewed 15 members of the Gangster Disciples and found that the arrest of Larry Hoover (the highest ranking leader) and 37 mid-level leaders had a debilitating effect on the gang's organizational structure. Although these studies highlighted that intragang violence may be an adverse effect of arresting a gang's leader, they relied on interviews with gang members and journalist accounts of violent incidents and provided little insight on the magnitude of violence after the gang leader's arrest.

The absence of research on the effects of arresting a gang's leader on gang violence has stemmed, in part, from the fact that some scholars contend that gangs cannot engage in organized violence (Decker and Curry, 2002; Fleisher, 1998; Klein, 1995). Although scholars have recognized patterns in gang violence such as the consistent use of firearms

(Bjerregaard and Lizotte, 1995; Decker, Pennell, and Caldwell, 1996), its spatial concentration (Block and Block, 1993; Kennedy, Piehl, and Braga, 1996; Maxson, 1999), and its retaliatory nature (Decker, 1996; Maxson, Gordon, and Klein, 1985), some have concluded that most gangs lack the cohesion and structure to generate compliance among members and engage in organized violence (Decker, 1996; Decker and van Winkle, 1996; Klein, 1995; Klein and Maxson, 2006).

The introduction of social network analysis to the study of gang violence, however, has begun to suggest that gang violence in cities such as Boston, Chicago, and Los Angeles can be structured through a series of retaliations between gangs that erupt in short episodes over time (Kennedy, Piehl, and Braga, 1996; McGloin, 2005; Papachristos, 2001; Tita et al., 2003). Papachristos, Hureau, and Braga (2013) found that gangs with adjacent turf and a history of conflict were more likely to engage in patterns of retaliatory violence. These network studies have suggested that, in cities where gang violence is structured and organized, the arrest of a particular gang's leader may significantly alter the behavior of not only the targeted gang but also its rivals. This finding suggests that the arrest of a gang leader might have consequences for relations between rival gangs and, thus, should be explored for potential adverse effects.

CRIMINAL GROUP EMBEDDEDNESS

Social embeddedness refers to the nesting of individuals or groups within larger networks and structures of social relations (Granovetter, 1973). In criminology, the concept of embeddedness has been used to explain the behavior patterns of individual criminals. For example, to explain individual criminal behavior, Hagan (1993) introduced "criminal embeddedness," or an individual's ties to criminal others, involvement in criminal acts, and isolation from prosocial networks. Criminal embeddedness was thought to limit individuals' employment prospects and present opportunities for engaging in criminal acts. Similarly, Pyrooz, Sweeten, and Piquero (2012: 5) have employed the concept of gang embeddedness to explain gang membership, finding that "the varying degrees of involvement, identification, and status among gang members" was a significant predictor of levels of gang involvement among youth.

In this article, I extend the embeddedness concept to the level of criminal groups and demonstrate its importance as a potential source of adverse effects in law enforcement interventions targeting criminal group leaders. I define criminal group embeddedness as a criminal group's immersion in social relations with other criminal groups that unfold over time and space. Although this article uses the case of gangs in Chicago to demonstrate the importance of criminal group embeddedness for law enforcement interventions, gangs are not the only type of criminal group embedded in relations with other criminal groups, nor are gangs the only criminal groups whose leaders are targeted by law enforcement agencies. Journalistic accounts of drug cartel leaders in Mexico (Grant, 2013; PBS Newshour, 2012) and terrorist group leaders (Arena, 2004) have suggested that criminal group embeddedness contributed to the adverse effect of increasing violence after crackdowns on cartel and terrorist leaders. Studying how criminal groups are embedded in social relations may prove useful for evaluating the effectiveness of interventions that target the leadership of various types of criminal groups.

Like individual criminals (Hagan, 1993) or gang members (Pyrooz, Sweeten, and Piquero, 2012), street gangs are embedded in a network of social relations with other

gangs. Studies have described competition over turf and status as some of the key dimensions by which gangs can maintain social ties with one another (Decker, 1996; Sanchez-Jankowski, 1991; Venkatesh, 1997). Gangs also have been shown to relate to one another through reciprocal exchange, or retaliation for perceived threats or insults (Papachristos, 2009; Sanchez-Jankowski, 1991). Paying attention to criminal group embeddedness when evaluating gang interventions can help uncover unintended consequences because an intervention targeting one gang may have implications for the targeted gang's competitors and allies. As Klein and Maxson (2006) have argued, law enforcement agencies rarely take knowledge of gangs and gang processes into account when designing their interventions; thus, it is likely that police rarely take criminal group embeddedness into account when attempting to dismantle a street gang.

Using the case of gangs in the Little Village neighborhood of Chicago, this article argues that arresting a gang's leader can have an adverse effect of increasing gang violence when the targeted gang is embedded in a network with rival gangs who 1) have territory adjacent to the targeted gang and 2) are larger and more organized than the targeted gang. First, the proximity of territories among rival gangs was important because, as other studies have shown (Tita, Cohen, and Engberg, 2005; Venkatesh, 1997), gangs signify strength and power to one another by occupying spaces such as street corners and sidewalks in their territories. Thus, rival gangs adjacent to the targeted gang would be the first to observe changes in the targeted gang's behavior after the arrest of a gang leader. Second, the presence of a larger and more organized rival gang adjacent to the targeted gang also is important because gangs of different sizes are more likely to engage in retaliatory violence with one another. In his network analysis of gang homicide in Chicago, Papachristos (2009) found that size differences between gangs were highly predictive of reciprocal murders between gangs, indicating that larger and more organized gangs were more aggressive and likely to be involved in turf disputes with smaller gangs. In other words, previous research has suggested that larger and more organized gangs are more likely to be aggressive toward smaller gangs weakened by the loss of their leader.

The conditions specified in this case study (gang territory proximity and size differences between gangs) are not meant to be a complete list; instead, this article highlights these conditions in an effort to provide scholars with a useful theoretical framework to begin systematically accounting for criminal group embeddedness when evaluating not only the arrest of gang leaders but also gang interventions more broadly. Although most studies have not evaluated the consequences of arresting a gang's leader but, instead, have evaluated strategies such as providing social services or street intervention workers (Klein, 1971; Kobrin, 1959; Spergel, 2007), gang sweeps (Klein, 1995; Maxson, Hennigan, and Sloan, 2005; Meares and Kahan, 1998), and targeted deterrence (Braga et al., 2001), this article contributes to the gang-intervention literature by demonstrating how an intervention might have effects not only for the gang receiving the intervention but also for that gang's allies and competitors. By introducing criminal group embeddedness, this article provides policy makers and scholars with an important factor, in addition to spatial displacement, increases in gang cohesiveness, and the deterioration of police–community relations, that should be considered when evaluating interventions.

^{1.} By "targeted gang," I refer to a gang whose leader was arrested by law enforcement.

CASE STUDY

In choosing Little Village as a field site, I use a case study approach, that is, to identify important processes for evaluating the arrest of a gang's leader that may manifest in other settings. Although gathering in-depth qualitative data from a representative sample of street gangs within a city would be most ideal for a study of a gang leader's arrest, research on gang interventions typically has used case studies to advance understandings of how gangs and police affect their communities. When it comes to assessing the consequences of arresting a gang's leader, small case studies are especially warranted to help develop a theoretical foundation that can be advanced and refined through larger samples or additional case studies in other settings.

LITTLE VILLAGE NEIGHBORHOOD OF CHICAGO

Demographically, Little Village has a relatively young population: The median age is 25.3 years with nearly a quarter of the population between 5 and 17 years of age. About 90 percent of the population older than 25 years of age has no more than a high-school education. The unemployment rate, according to the 2000 U.S. Census, is relatively low (11.7 percent) by standards of comparable communities; yet poverty is fairly high (27 percent). According to the Chicago Police Department, Little Village's violent crime rate (homicide, aggravated battery, aggravated assault, and robbery) is 12.22 per 1,000 residents compared with the city average of 11.16 per 1,000 residents, which puts it in the upper third group of the most violent neighborhoods in the city. The presence of street gangs in the neighborhood dates back to the 1960s when Little Village began transforming into a Mexican immigrant community. The neighborhood is home to three street gangs: the Two Sixers, Latin Kings, and 22 Boys, two of which experienced the arrest of their highest ranking leaders during the course of this project.

GANG LEADERS

Although ethnographic studies of gangs have shown considerable variation in gangs' organizational structure and leadership (Decker and van Winkle, 1996; Klein, 1971, 1995; Sanchez-Jankowski, 1991), this study focuses on the arrest of one particular type of gang leader: the president (or highest ranking gang leader). Although the leader's rank was the same for both gangs, the leaders' qualities differed as the Latin Kings leader exhibited a more corporate leadership, whereas the 22 Boys leader exhibited charismatic leadership.

For the Latin Kings gang, which is a highly organized gang with a hierarchical leader-ship structure, the president (Augustin Zambrano) oversaw the operations of the gang's activities and mid-level leaders. As the Latin Kings have a large presence in federal prisons, Zambrano answered to Gino Colon, who was the gang's national leader based in federal prison. Despite being in a maximum-security prison, Colon maintained oversight of the Latin Kings through his wife, who served as his eyes and ears for monitoring the gang's activities (FBI Press Room, n.d.). As the highest ranking leader in the streets, Zambrano oversaw the four-square-mile territory of the Latin Kings in Little Village, which was organized into 24-block sections, each with a designated block leader to supervise lower ranking soldiers.

Zambrano's (51 years of age) leadership activities could best be described as what Sanchez-Jankowski (1991: 89) called "structured leadership," where the gang leader was

a key decision maker in the gang's activities but relied on trusted lieutenants to get things done. The FBI's indictment described Zambrano's leadership: "Zambrano did not carry out any violence by himself. He was insulated. He was behind the scenes. He entrusted others to do it. The result was an organization with its own rules, its own laws, and a savage code of violence." Fieldwork supported the FBI's description of Zambrano's behind-the-scenes leadership style, as neither residents nor gang members interviewed knew his identity. Each of the Latin Kings interviewed could describe that the gang had a president or what they called "Inca," but no one knew the Inca's name or had even seen him. Residents only knew the names of mid-level leaders, or "block chiefs," who supervised the soldiers (lowest ranking members) on their blocks.

In contrast, the leadership style of Rudy Cantu (27 years of age) was much more based on charisma as the 22 Boys were a much less organized gang. The 22 Boys, with an estimated membership of at least 150 members (Chicago Crime Commission, 2012), had no set of written rules, formal mid-level managers, nor prison leadership. The gang consisted of its president, Cantu, and his group of close friends whom he supervised to operate the gang's drug- and weapon-selling activities in their small three-block territory. Unlike Zambrano and the Latin Kings, most residents and 22 Boys gang members interviewed knew Cantu and attested to his influence over the neighborhood. For example, Miranda, a resident living in 22 Boys territory, described him by stating: "The chief knew everybody on the block. He lived across the alley from me and would invite my husband to play basketball on the rim on his garage. They would be playing 'til late at night sometimes." George, Cantu's neighbor, described the gang leader by saying, "He always told us to come to him if we ever had any problems. Once, I saw a 22 Boy walking on the street carelessly holding a gun, and I gave the chief a call telling him one of his boys is out there being stupid. And he went out there and grabbed the kid off the street."

Residents and gang members remembered Cantu most for his charisma, which they observed through his strong desire to protect residents and gang members. In fact, 22 Boys gang members recalled stories that sounded more like myths than factual accounts. For example, Spikey, an 18-year-old member of the 22 Boys, recalled: "I once heard the chief broke a dude's jaw for fucking with an old man on the block. He didn't fuck around when one of us was messing with anyone on our blocks. He really cared about this block." In response, I asked, "have you ever met him?" Spikey answered "Yeah, he would run our meetings. I didn't get to talk with him much, but he was really cool." Another 22 Boys gang member, Angel, recalled a story where Cantu went to a grocery store on their corner and was confronted by members of the rival Satan Disciples (SDs) street gang. "He was pissed that they came on our turf, so he came home and got into his van, pulled up next to the SDs, and blasted them." After asking Angel whether he witnessed the event, he answered, "No, but everyone knows about it." Most of the stories about Cantu were not witnessed by the residents or gang members interviewed, but it was clear that the 22 Boys gang leader was known for his charismatic trait of protecting residents and gang members.

ARRESTS OF THE GANG LEADERS

On September 24, 2008, the FBI served arrest warrants on the home of Augustin Zambrano and 17 Latin Kings block leaders in Little Village (U.S. District Court, 2008). The names and addresses of the gang leaders were published in the indictment released by the U.S. Attorney's office (U.S. District Court, 2008). Zambrano was denied bail

because of the severity of the charges against him, which included murder, identity theft, and intent to distribute fake identification. For the 22 Boys street gang, their president, Rudy Cantu, was arrested as part of a law enforcement operation to shut down their drug- and gun-selling ring. On January 14, 2010, Chicago Police raided the home of Rudy Cantu, who was arrested on drug and weapons charges (*County of Cook v. Rudy Cantu*, 2010). Rudy Cantu also was denied bail as a result of his charges related to supervising a major drug-selling operation.

DATA AND METHODS

OUALITATIVE DATA COLLECTION AND STUDY MOTIVATION

The motivation for this article emerged during data collection for a separate project that involved administering household surveys in Little Village during spring and summer 2010. While implementing the surveys, residents and gang members encountered on the street were asked the following open-ended questions: What do you think about the violence on your block? What do you think of the police? And what do you think about local politicians' efforts to stop gang violence? It was in response to the first question that several residents and gang members explained that violence had increased since the arrest of the 22 Boys gang leader. In total, these inductive and informal interviews were conducted with 20 residents in 22 Boys territory, 70 residents in Latin Kings territory, 8 violence-prevention workers, and 15 gang members. Several residents and gang members were interviewed multiple times for follow-up and to confirm the accounts of others. During these follow-up interviews, I was careful to avoid asking research subjects leading questions and, instead, asked general questions about specific processes. For example, instead of asking, "Do you think gang violence increased after the arrest of the gang's leader?" I would ask, "Do you think there has been more violence this year than last year?" I did not include details of events related to the gang leader's arrest in questions and, instead, asked general questions about gang violence on the block to learn respondents' unique observations of the aftermath of each gang leader's arrest. Interviews with residents took place in a backyard or doorway where residents tended to be more vocal and descriptive about their stories.

Access to the gangs was achieved through nonprofit organizations that operated gang-intervention programs (specifically, Enlace Chicago and the YMCA). Violence-prevention workers introduced me to the gang members by inviting me to participate in their recreational basketball league, which was composed entirely of Latin Kings gang members. To help me gain access to members of the 22 Boys gang, the violence-prevention workers introduced me to the gang during the gang's billiards tournaments at the local YMCA. Establishing rapport with the gangs through violence-prevention workers allowed me to conduct informal interviews during breaks of basketball games or on the streets while canvassing the neighborhood. Gang members refused to be audio recorded but were willing to answer my questions only because I had been introduced by the violence-prevention workers. Interviews with gang members took place informally on the sidelines of a basketball game or on street sidewalks lasting 15–20 minutes.

Additional qualitative data sources were used to confirm research subjects' accounts of events taking place after the gang leader arrests. These data came from 1) the *Chicago Crime Commission Gang Book* (Chicago Crime Commission, 2012), 2) court case records

from the Cook County Criminal Court Records Office, and 3) the Chicago Police Department's Division of Research and Development. First, the *Chicago Crime Commission Gang Book* (Chicago Crime Commission, 2012) confirmed the names and dates of birth of arrested gang leaders, as well as other high-ranking members of the Latin Kings and 22 Boys gangs in Little Village. Second, the Cook County Criminal Records Division stored court case documents with details on each of the violent crimes that had taken place after the arrest of the 22 Boys gang leader, as well as the dates of the gang leader arrests. Finally, data from the Chicago Police contained the demographic, geographic, and gang affiliation of both the offender and the victim involved in all gang-related shootings in Little Village as recorded by homicide detectives. Together, these data provide critical insight on the consequences of the gang leader arrests.

QUANTITATIVE DATA

The data set used for this analysis consisted of the monthly violent crime rates (from January 2006 to May 2012) of the two gang territories where the leaders were arrested (e.g., the Latin Kings and 22 Boys gang territories), seven control gang territories, and the city overall.² Violent crime data come from the City of Chicago Urban Data Portal (City of Chicago, 2013), which has the date and location of every reported crime in the city from 2001 to the present. These data were compiled by crime type, date, and block (such as the 5600 Block of Main Street). Using the geocoding tool in geographic information systems, I calculated a monthly violent crime rate (per 1,000 residents) for each of the nine gang territories in the analysis. Population figures of the blocks within the gang territories were calculated by summing block-level census population estimates (U.S. Bureau of the Census, 2010). Thus, my violent crime measure consisted of the total number of homicides, aggravated batteries, and aggravated assaults involving the use of a firearm divided by the population of the gang territories and city. The data set (N = 760) consisted of monthly violent crime rates nested within ten geographic groups (nine gang territories and the city of Chicago). Maps of gang territories came from the Chicago Crime Commission Gang Book (Chicago Crime Commission, 2012), which presents a detailed profile of each major street gang in Chicago, as well as yearly maps of each gang's territory from 2006 to 2012. As gang boundaries can change on a year-by-year basis, the analysis is limited to the years in which intelligence maps of gang territories were publicly available (2006–2012). The maps were created by the Chicago Crime Commission, which consisted of representatives from various local and federal law enforcement agencies. Additional data on daily temperature and precipitation came from the U.S. Department of Commerce (2012).

^{2.} Ideally, one would study trends in gang violence by using relations between gangs as the unit of analysis; for example, by assessing change in the rate of violence between the Latin Kings and 22 Boys before and after the gang leader's arrest. This approach would allow for an analysis of whether the gang leader's arrest sparked violence outside any particular geographic space. Although I acquired police reports on all gang-related shootings from the Chicago Police Department's Research and Development Division, the majority had missing data on the gang affiliation of either the perpetrator or the victim. Thus, alternatively, I chose to compare violent crime rates between gang territories that were and were not subject to the police intervention.

QUANTITATIVE ANALYSIS

The purpose of the quantitative analysis was to determine whether the gang leaders' arrests contributed to short- or long-term changes in violent crime within the territories of gangs targeted by law enforcement. The quantitative analysis does not aim to demonstrate changes in gang behavior but rather changes in the rates of violent crime. The qualitative data based on field work, police reports, and court cases in the subsequent section provides the evidence of change in gang behavior. Thus, the quantitative analysis is only meant to determine the magnitude of change in violent crime after the gang leader's arrest and compare these changes over time and between gang territories.

To identify changes in violent crime rates after the gang leader's arrest, I use a difference-in-difference modeling strategy that takes the differences in violent crime rates within gang territories of interest (Latin Kings and 22 Boys territory) and compares it with the change in the reference group (the overall Chicago violent crime rate). By differencing the before–after violent crime rates in the raided gang territories with the before–after for the Chicago crime rate, I get an estimate of the gang leader arrest effect that controls (differences out) time-stable characteristics in the gang territories and the city (see Angrist and Krueger, 1999).

In the models, I have attempted to control for several alternative explanations. Weather data were used to control for the possibility that the crime spike after a gang leader's arrest could have been the result of unseasonably warm and dry weather. Temperature was measured as the average daily temperature for each month, and precipitation represents the total amount of rain or snow per month. In addition, I have added the violent crime rates of an additional seven Latino gang territories in the city as covariates to rule out an alternative explanation that some unobserved variable was affecting gang violence throughout the city. The models were run with additional controls for the poverty rates and residential stability of the blocks within each gang territory, but neither was significant (the results of these models are available upon request). This was likely the case because the gang territories in this analysis were all in neighborhoods with very similar high poverty rates and low residential stability.

The small but substantial ethnographic literature on gang violence suggests that interpersonal factors may be an alternative explanation for sudden increases in gang violence (Anderson, 1999; Papachristos, 2009; Venkatesh, 1997), but modeling interpersonal triggers of gang violence has been difficult because of the spontaneity and randomness of interpersonal conflicts among gang members. For example, one gang member may insult another or compete for the romantic attention of a woman, and violence can ensue from such a conflict. Unfortunately, we know very little about the conditions sparking such interpersonal conflicts among gang members that could be included in statistical models. Thus, the qualitative data in this article were meant to supplement the quantitative analysis in order to rule out interpersonal conflict as an alternative explanation for the violent crime spike observed.

Table 1 shows the descriptive statistics for the variables used in the analysis, as well as the monthly violent crime rate in each gang territory and the city. The seven control gang territories consisted of the Latin Kings in Humboldt Park, Latin Kings in Brighton Park, Two Sixers in Little Village, Maniac Latin Disciples in Pilsen, Satan Disciples in Brighton Park, and the Two Sixers in Brighton

Variable	Mean	Standard Deviation	Min	Max
Temperature	51.161	17.977	17.911	80.096
Precipitation	0.102	0.064	0.016	0.309
Chicago crime rate	0.556	0.119	0.121	0.767
Brighton Park Latin Kings crime rate	0.337	0.113	0.044	0.639
Humboldt Park Latin Kings crime rate	0.129	0.054	0.035	0.266
Pilsen Maniac Latin Disciples crime rate	0.364	0.183	0.032	0.859
Brighton Park Satan Disciples crime rate	0.159	0.101	0.047	0.482
Brighton Park Two Sixers crime rate	0.314	0.122	0.044	0.646
Little Village Two Sixers crime rate	0.262	0.122	0	0.527
Little Village Latin Kings crime rate	0.224	0.109	0.032	0.517
Little Village Satan Disciples crime rate	0.237	0.132	0	0.553
22 Boys crime rate	0.401	0.632	0	2.566

Table 1. Descriptive Statistics

Park.³ These gangs were all Hispanic street gangs in Chicago that ranged from the most highly organized (such as the Satan Disciples) to those with much smaller memberships and only a local presence (such as the Maniac Latin Disciples). These gangs were chosen because they most closely resembled the Latin Kings and 22 Boys in Little Village.

I estimate the difference-in-difference estimator using ordinary least squares regression, as the outcome (violent crime rate) was a continuous variable. I estimated separate models for the two gang leaders' arrests, both of which assess violent crime rates in each of the first 6 months after the arrest. Each model takes on the following form:

$$W_{it} = \beta_0 + \beta_1(\text{Temp}_t) + \beta_2(\text{Precipitation}_t)$$

+ $\beta_3(\text{LGT}_i) + \beta_4(\text{CGT}_i) + \beta_5(\text{After 1 month}_t) + \beta_6(\text{LGT}_i \times \text{After 1 month}_t) + \beta_7(\text{CGT}_i \times \text{After 1 month}_t) + e_{it}$

where W is the outcome variable (violent crime rate) for the gang territory (i) in month (t).

LGT is a binary variable identifying the gang territory that experienced gang leader arrest, and CGT represents the binary variables identifying control gang territories. "After 1 month" is a binary variable indicating the first month after the gang leader's arrest. Lag variables for months two through six after the gang leader's arrest also were included in the model.

MODEL RESULTS

Table 2 presents the analysis of change in violent crime rates (per 1,000 residents) in the Latin Kings and 22 Boys gang territories for the first through sixth months after the date of their leader's arrest.

^{3.} The Latin Kings in Humboldt Park and Brighton Park were separate regions of the Latin Kings street gang. As the Latin Kings were a super gang with territories throughout the city, I include the other Latin Kings territories in the analysis to test whether an unobservable factor may have been driving an increase in all of the Latin Kings territories at the same time as the arrest of the Latin Kings leader in Little Village.

Table 2. Effects of Gang Leader Arrest on Gang Territory Violent Crime Rates

		Model 1		Model 2	
Variables		b	SE	b	SE
Seasonality Controls	Temperature (per 10 degrees)	.04**	(.01)	.03**	(.01)
	Precipitation	.03	(.34)	.53	(.37)
	Brighton Park Latin Kings	21	(.09)	22*	(.38)
	Humboldt Park Latin Kings	42***	(.09)	42***	(.09)
	Little Village Latin Kings	33***	(.09)	33***	(.09)
	Pilsen Maniac Latin Disciples	21*	(.09)	18*	(.09)
	Little Village Satan Disciples	14	(.09)	13	(.09)
	Brighton Park Satan Disciples	41*	(0.9)	39***	(.09)
	Brighton Park Two Sixers	24	(.09)	24**	(.09)
	Little Village Two Sixers	29***	(.09)	29***	(.09)
	22 Boys	1.56***	(.09)	1.62***	(.09)
	Lagged dependent variable (1 month after)	.01*	(.54)	01*	(.54)
	Lagged dependent variable (2 months after)	.11	(.54)	.09	(.54)
	Lagged dependent variable (3 months after)	01	(.54)	.03	(.54)
	Lagged dependent variable (4 months after)	03	(.54)	.01	(.54)
	Lagged dependent variable (5 months after)	.05	(.54)	14	(.55)
	Lagged dependent variable (6 months after)	.00	(.54)	13	(.55)
Control Gang	Brighton Park Latin Kings × after raid	13	(.77)	.16	(.77)
Territories	Humboldt Park Latin Kings × after raid	09	(.77)	.10	(.77)
	Pilsen Maniac Latin Disciples × after raid	.37	(.77)	.06	(.77)
	Brighton Park Satan Disciples × after raid	04	(.77)	.06	(.77)
	Brighton Park Two Sixers × after raid	12	(.77)	.14	(.77)
	Little Village Two Sixers × after raid	17	(.77)	.11	(.77)
Treatment Gang Territories	Latin Kings 1-month lag	11	(.77)	02	(.77)
	Latin Kings 2-month lag	.08	(.77)	12	(.77)
	Latin Kings 3-month lag	.02	(.77)	07	(.77)
	Latin Kings 4-month lag	.08	(.77)	.10	(.77)
	Latin Kings 5-month lag	.16	(.77)	03	(.77)
	Latin Kings 6-month lag	.02	(.77)	09	(.77)
	22 Boys 1-month lag	1.21	(.77)	1.38*	(.77)
	22 Boys 2-month lag	-1.17	(.77)	-1.34*	(.77)
	22 Boys 3-month lag	12	(.77)	51	(.77)
	22 Boys 4-month lag	1.01	(.77)	55	(.77)
	22 Boys 5-month lag	-1.17 1.21	(.77)	35	(.77)
	22 Boys 6-month lag	.17	(.77)	49	(.77)
	Satan Disciples 1-month lag	05	(.77)	.19	(.77)
	Satan Disciples 2-month lag Satan Disciples 3-month lag	05 08	(.77)	.03 .01	(.77)
	Satan Disciples 3-month lag Satan Disciples 4-month lag	08 04	(.77) (.77)	.01	(.77) (.77)
	Satan Disciples 4-month lag Satan Disciples 5-month lag	04 .14	(.77)	18	. ,
		.01		18 24	(.77)
	Satan Disciples 6-month lag Constant	.36***	(.77) (.08)	24 .34***	(.77) (.08)
	N	760		760	

ABBREVIATION: SE = standard error.

Model 1 examined the effect of the arrest of the Latin Kings leader and showed a slight decrease in violent crime (-.11) in the first month after and slight increases during the second through sixth months after the event, but none of these coefficients was statistically significant. In addition, none of the gang territories adjacent to Latin Kings territory

^{*}p < .05 (two-tailed); **p < .01 (two-tailed); ***p < .001 (two-tailed).

experienced a statistically significant change in their violent crime rates during any of the 6 months after the leader's arrest. Figure S.1 in the online supporting information graphically displays the violent crime rates in Latin Kings gang territory for 6 years and shows that violent crime remained stable in the months after the arrest.⁴ This model indicated that arresting the Latin Kings gang leader had no effect on violent crime in the long or short term in Latin Kings territory.

Model 2 examined change in violent crime rates after the arrest of Rudy Cantu, the leader of the 22 Boys, and figure S.2 in the online supporting information displays violent crime rates over the 6-year period. Model 2 shows a substantial and statistically significant increase (b = 1.38) in violent crime during the initial month after the arrest and then a statistically significant drop in violent crime during the second month after the arrest (b = -1.38). None of the lag variables for changes in 22 Boys territory violent crime rates during months three through six after the raid were statistically significant. Even more, changes in the violent crime rates in the adjacent gang territories (Latin Kings and Satan Disciples) were not statistically significant.

These results show that violent crime significantly increased in the first month after the gang leader's arrest, and then significantly declined in the second month after the arrest. Figure S.2 displays the spike in violent crime in 22 Boys gang territory compared with those of other gang territories and the city, showing that 22 Boys gang territory experienced one of the highest spikes in violent crime over the 6-year time frame. These results were robust to alternative model specifications, as well as to controls for weather (temperature was modestly related to violent crime rates but statistically significant nonetheless) and changes in the violent crime rates in comparable gang territories.

Overall, the results from the models showed that neither of the gang leader's arrests contributed to long-term changes in violent crime, but that violent crime underwent a statistically significant spike in the initial month after the arrest of the 22 Boys gang leader. Was the increase in violence related to the arrest of the 22 Boys gang leader? If so, then how? To answer this, I turn to the qualitative data.

OUALITATIVE FINDINGS

SHOOTINGS IN 22 BOY TERRITORY AFTER GANG LEADER'S ARREST

According to police records, the violent crime spike after the arrest of the 22 Boys gang leader consisted of three shootings (see map S.2).

SHOOTING 1—FEBRUARY 3, 2010, LATIN KINGS MEMBER SHOOTS SATAN DISCIPLES MEMBER IN 22 BOYS TERRITORY

According to court documents (*County of Cook v. Jesus Rios*, 2010), Christian Correa (known member of the Satan Disciples gang) was walking in 22 Boys territory when a car pulled up and the assailant, Jesus Rios (member of the Latin Kings gang), fired multiple shots. The victim was struck in the shoulder and ear, and he was rushed to the hospital where he survived. The offender, Jesus Rios, was charged with attempted first-degree

^{4.} Additional supporting information can be found in the listing for this article in the Wiley Online Library at http://onlinelibrary.wiley.com/doi/10.1111/crim.2011.52.issue-2/issuetoc.

murder. This shooting was committed by the Latin Kings gang against the Satan Disciples gang within 22 Boys gang territory. The Chicago Crime Commission (2012) described the area near the shooting as the primary site of violent conflict between the 22 Boys and their rivals in the area, but in the case of this shooting, the Latin Kings had advanced far deeper into 22 Boys territory to take out their rivals and claim the area as their own. During an interview with Juliana, a resident in 22 Boys territory who lived on the corner home where the shooting occurred, I asked whether a shooting had taken place in front of her home in the past year. She responded, "Yeah, after they arrested the chief [Rudy Cantu], Latin Kings started coming from the other side to fight these guys [the Satan Disciples]. Thankfully when the shooting took place here on the corner my house didn't get hit, but now I don't let my kids out the house anymore."

SHOOTING 2—FEBRUARY 6, 2010, SATAN DISCIPLES GANG MEMBER SHOOTS AT LATIN KINGS GANG MEMBER BUT ACCIDENTALLY STRIKES INNOCENT BYSTANDER IN 22 BOYS TERRITORY

Three days after the first shooting, Fernando Correa (member of the Satan Disciples gang and cousin of Christian Correa who was shot 3 days before) saw members of the Latin Kings street gang standing on the corner of Cermak and California, a corner typically occupied by the 22 Boys street gang. According to police records (City of Chicago, 2013),⁵ after seeing the group of Latin Kings, Correa retrieved a gun, and with the help of a fellow gang member, he fired into the crowd of Latin Kings on the street corner in retaliation for the shooting of his cousin. No Latin Kings gang members were injured, but two innocent bystanders at a bus stop were struck multiple times and rushed to the hospital where they survived. The street corner where the shooting took place was home to a restaurant where the owner, Juan, vividly remembered the bullets damaging his store windows. Standing by the glass with bullet holes, I asked, "What happened?" Juan answered, "It was the stupid gang bangers. In February there were all these Kings in their black and gold standing outside. Then all of a sudden, I heard these pops and the gang members all ran away and two ladies were on the ground screaming for help."

SHOOTING 3—FEBRUARY 23, 2010, 22 BOYS GANG MEMBER SHOOTS SATAN DISCIPLES GANG MEMBER

Two weeks later, Carlos Villagomez (a member of the 22 Boys) spotted a member of the Satan Disciples walking near 2877 W. 22nd Place, a block occupied by the 22 Boys (see map S.2). Villagomez retrieved a gun and fired multiple times at the victim, Jose Fuentes (member of the Satan Disciples), who was struck in the leg and torso. As the victim survived, Villagomez was charged with attempted first-degree murder and unlawful use of a weapon.

According to court documents (*County of Cook v. Carlos Villagomez*, 2010), Villagomez's residential address was listed in the western suburbs of Chicago, and it was suspected that he came to the 22 Boys territory in Chicago to help the gang hold on to their territory. The Chicago Crime Commission (2012) described Villagomez as a 22 Boys

^{5.} No court case data are available as the trial of Fernando Correa is currently in process because of the numerous additional crimes with which he has been charged.

member who provided muscle for the gang. Villagomez, known on the street as "assassin," succeeded in reclaiming the territory for the 22 Boys through his act of violence against the Satan Disciples. According to residents, additional fights had broken out between the gangs in the area, although they did not involve guns or result in serious bodily harm. Javier, who lived next door to where the shooting took place, recalled the shooting and how it restored some order to the block:

"Did you know Carlos Villagomez?" I asked.

Javier responded, "Yeah."

"What happened to him?"

Javier explained, "He got arrested. For a little while, there was nobody from the 22 Boys out representing the block. But then Carlos came out of the house next door and started blasting away at the SDs walking down our block. Since then, the Kings and SDs have stopped coming over here."

Police records and resident accounts suggest that this violent incident helped the 22 Boys reclaim their territory. Residents shared that, after this shooting, 22 Boys members returned to occupying sidewalks and street corners and that many of them were now visibly carrying weapons and even firing shots into the air to make everyone aware they were armed.

PATTERNS OF SHOOTINGS BETWEEN GANGS IN 22 BOYS TERRITORY

How common were violent incidents between the Latin Kings and Satan Disciples in 22 Boys territory? Answering this question would help verify whether the shootings after the arrest of the 22 Boys leader exemplified a drastic change in relations among the neighborhood's gangs were unique, or simply a continuation of previous patterns. Using police reports on shootings taking place within 22 Boys territory between 2009 and 2011, which contain the gang affiliation of victims and offenders, I analyzed the frequency of violent incidents between Satan Disciples and Latin Kings gang members in 22 Boys territory. The results, shown in figure S.3 in the online supporting information, illustrate that prior to the gang leader's arrest, the Satan Disciples and Latin Kings had not engaged in violence toward one another in 22 Boys territory. This shows that the gang leader's arrest drastically altered the violent relations between the Satan Disciples and Latin Kings. Figure S.3 shows the importance of criminal group embeddedness, as the arrest of the 22 Boys leader sparked violence between gangs in neighboring territories who, in the year prior, had not engaged in violent conflict with one another in 22 Boys territory.

To this point, the data from court documents, police reports, and residents confirmed that the gang leader's arrest sparked an unprecedented level of violent aggression between rival adjacent gangs attempting to occupy 22 Boys territory. In the final section,

^{6.} I only use data from 2009 to 2011 because the reports of gang-related shootings in this time period, and in this geographic location, had no missing data. Seventy percent of police reports of shootings in 22 Boys territory prior to 2009 had missing data on either the victim or the offender of the incidents and, thus, were not used in this analysis.

I describe why the arrest of the gang's leader significantly affected the 22 Boys and not the Latin Kings.

HOW VIOLENCE SPIKED IN 22 BOYS TERRITORY

IMPORTANCE OF GANG'S USE OF SPACE

The most important difference between the response of the Latin Kings and that of the 22 Boys to the loss of their leader pertained to their use of space within their territory. Four months after the arrest of their leader, I interviewed Deron (a member of the 22 Boys) who recalled the gang's withdrawal from spaces within its territory while putting a collar on his pit bull:

Robert: Many residents have complained about the block being more violent than it's ever been these past couple months. Is that true?

Deron: Yeah, we was in trouble a few months ago, when our boy [Rudy Cantu] got locked up. A lot of us didn't leave our houses for months because we knew Latin Kings and SDs would be coming in from both sides [of the block] shooting each other up for this block. They've been eyeing our territory for years, and when word got around that Rudy got locked up, shit broke out like the Wild Wild West. Thankfully, we eventually got some help from our older guys in the 'burbs who came in and helped us hold this shit down, but it's still dangerous to be out here. I still don't go out on the street much.

The most important aspect of this statement was Deron's description of how the gang withdrew from occupying its set spaces in its territory. On most days, before the gang leader's arrest, 22 Boys gang members could be seen standing on street corners, walking on sidewalks, or sitting on the front steps of their homes. After the arrest of their leader, they stopped occupying their spaces out of the fear that rivals would aggressively confront them. Unknowingly, it was their withdrawal from their territory that triggered violent aggression from rivals. In addition, Deron's description confirmed that older gang members, like Carlos Villagomez, from the suburbs came to help secure the territory.

These gangs' use of space was an important manner in which they were embedded in social relations. When the 22 Boys members withdrew from their sidewalks and street corners, they signified to rival gangs that their turf was up for grabs. Interviews with Latin Kings also confirmed that it was the withdrawal of the presence of 22 Boys members on street corners that spurred violent competition over their turf. Eusebio (a member of the Latin Kings) shared how graffiti tagging and a gang's physical presence on streets were important symbols of their strength or vulnerability:

Robert: The other day I saw a crown [the Latin Kings' symbol] sprayed on the side-walk in front of a home in 22 Boys territory, but it was old and faded like it was done a long time ago.

Eusebio: Yeah, one of our guys probably did that shit.

Robert: Really, it seems dangerous to go that far into a gang's territory to tag something. It's mostly streets near your border with other gangs that I see your graffiti.

How do you know when it's safe to spray something so deep into another gang's territory?

Eusebio: Soldiers be always going back and forth over blocks and territories. A 22 Boy will spray "Latin King Killer" on one of our blocks and we'll go back and spray "22 Boy Killer" to let them know we ain't gonna take their bullshit. But after a while, if you don't protect your turf, then dudes will see that and think you weak. First, we spray graffiti on your territory, and if you don't do anything, we take your corner. If you don't protect your corner, we take your block. So when those 22 Boys weren't holding down their [corners and blocks], some of our boys tried to take them over.

Robert: Wow, when did that all happen?

Eusebio: At the beginning of the year, January and February.

In this conversation about the dynamics of spraying graffiti in rival gang territories, Eusebio confirmed that the Latin Kings attempted to take over 22 Boys territory. In contrast to Deron's belief that the Latin Kings had somehow found out about the arrest of their leader, the Latin Kings were actually unaware of the arrest of the 22 Boys gang leader. Rather, the Latin Kings observed that the 22 Boys were no longer occupying their street corners and sidewalks and, in response, sought to claim 22 Boys territory. By standing out on street corners and spraying their gang's symbols on sidewalks and corner buildings, the 22 Boys signified to rivals that any aggression would be swiftly retaliated against. The arrest of the 22 Boys' leader, however, altered relations between the gangs by sending the 22 Boys into hiding, which decreased their physical presence and graffiti on streets and sidewalks and thereby signified to the Latin Kings that 22 Boys territory was up for the taking. Even further, Eusebio confirmed the time (February) when the Latin Kings attempted to occupy 22 Boys territory, which was the month that saw the sudden increase in violence.

In light of these details, how was it that the Latin Kings managed to stay strong after the arrest of their leader? In the next sections, I describe how the different levels of organization among the Latin Kings and 22 Boys contributed to these different outcomes.

DISORGANIZATION AND CHANGE IN USE OF SPACE BY 22 BOYS AFTER THE ARREST

After the arrest of the 22 Boys leader, the gang went into hiding and withdrew from occupying street corners and spraying graffiti, which warded off rivals from encroaching on their territory. Recognizing the potential to exploit the perceived weakness of the 22 Boys, members of the Latin Kings and Satan Disciples went on the offensive. Meanwhile, the 22 Boys gang had no formal organizational structure to replace quickly the charismatic leadership of their chief Rudy Cantu. As Deron (a member of the 22 Boys) shared, much of the gang went into hiding after the leader's arrest, and no one was around to order them otherwise. Unlike the Latin Kings, who were highly organized with prison leadership and 18-block sections, the 22 Boys lay claim to just three parallel residential blocks in the neighborhood with just one leader and three groups of youth operating the drug- and gun-selling operations. In the absence of their leader, gang members like Deron chose

to play it safe and stay inside as members of larger and more violent gangs like the Latin Kings and Satan Disciples took notice of the decreased presence of 22 Boys gang members and attempted to take over the block.

Residents recalled observing differences in the use of space by 22 Boys members before and after the leader's arrest. I asked a resident, Juliana, "What has changed since the gang leader's arrest?" She replied:

Before they used to listen to me. Like... a 22 Boy was sitting on my front steps, and when he got up to talk to his friend, I came out and asked if he was looking for someone. He said "no," so I told him ... I don't mean any disrespect, but I don't like it when you sit on my front porch. I have two daughters, and if you get shot, the bullets coming through my house put my kids in danger. He apologized and no one ever sat on my front porch again. But then, in February [the month after the gang leader's arrest], I saw a group of SDs with bats and bottles, looking as if they were headed to a fight. I got out and told them not to fight because everyone on this block is innocent, the gang leader isn't living here anymore, he got locked up. And this SD tells me to not worry, that they are here to protect me and my kids now. When the 22 Boys on the block disappeared, the block became the worst I have ever seen in the 12 years I've lived here.

According to the violent crime data, Juliana was correct in pointing out that February 2010 was the most violent month in the past 10 years in that area. Residents explained that if the gang leader knew your face and knew that you lived on the block, then you could expect no confrontations or problems from the 22 Boys, but after the gang leader's arrest, this was no longer the case.

The fact that the 22 Boys street gang became disorganized after the arrest of their leader illustrated that arresting the highest ranking leader of a gang might have a particularly powerful effect on debilitating gangs that lack the organizational structure to replace a leader easily. The counterexample of the Latin Kings, whose prison leadership quickly replaced their street-level leaders, supports the importance of gangs' level of organization.

LATIN KINGS ORGANIZATION, PRISON LEADERSHIP, AND CONSISTENT USE OF SPACE AFTER ARREST

As the Latin Kings were one of the most organized street gangs in the United States, the arrest of their highest ranking leader had little effect on the gang's use of set space. Specifically, the gang's prison leadership quickly appointed replacements not only for Zambrano (the highest ranking leader) but also for the other 17 block leaders arrested in the law enforcement operation. In a second follow-up interview with Freddy (to help interpret the quantitative results), I asked Freddy what changed after the police arrested Zambrano:

Freddy: It got quiet for a week. (laughs) That's about it. No one was causing any trouble on the streets or anything, but things got back to normal quick. It actually made us [violence-prevention workers] more busy because we had to figure out who was calling the shots now. After a couple days, we figured out who replaced the old [Latin King] leader.

Robert: How did you find out who was in charge?

Freddy: After riding around the neighborhood asking soldiers [lowest ranking Latin Kings gang members] who was calling the shots now, I was given an address and I went and visited the new guy [leader].

Robert: How do you know he was the new leader?

Freddy: Everyone in the house was calling him jefe [boss], and he was fresh out of prison, which is where the new guys usually come from. He still had a GPS tag on his ankle. He said he was put in charge by the jefes [bosses] in prison.

In the aftermath of the 2008 arrest of Zambrano, blocks in Latin Kings territory experienced little change other than a week of "quiet," and the gang was able to continue its activities with the appointment of new leadership. Most importantly, Freddy confirmed that the new Latin Kings leader in the neighborhood had been appointed by the gang's prison leadership.

Accounts from residents living in Latin Kings territory during spring and summer 2010 supported the idea that the Latin Kings replaced their leaders quickly, as residents overwhelmingly agreed that the gang's activities on their blocks did not change much after the police intervention. For example, after asking Maurice (who has resided in his home in Latin Kings territory for 15 years) whether he had heard of police raids on the gang, he quickly recalled the 2008 raid: "There were tons of unmarked police cars everywhere and SWAT teams with machine guns. They went into one of the homes on our block and got some of the Kings living there." In response, I asked, "Do you think these raids work?" Maurice responded, "I've seen these raids happen before and it's all the same. They come in, arrest the guys, it gets quiet for a day or two, and then it goes back to normal. They have their meetings where they collect dues, and their peewees [youngest gang members] are still out patrolling the streets on their bikes." The accounts of both Freddy and Maurice, as well as the results from the quantitative analysis, indicated that little changed after the arrest of Zambrano and that the gang continued its operations as usual.

DISCUSSION AND CONCLUSION

Previous studies have identified spatial displacement of crime (Hunt and Weiner, 1977; Reppetto, 1976), increased criminal group cohesiveness (Klein, 1971; Wilson and Chermak, 2011), and strained police-community relations (Klein, 1995; Klein and Maxson, 2006; Reitzel, Rice, and Piquero, 2004) as potential adverse effects of law enforcement gang interventions. This article introduced criminal group embeddedness as an additional source of adverse effects through a case study of the Chicago police's crackdown on the leaders of two street gangs. Using a time-series analysis, the quantitative results showed that violent crime significantly increased in the month after the arrest of the 22 Boys leader, whereas violent crime did not change after the arrest of the Latin Kings leader. Qualitative data revealed that the arrest of the 22 Boys leader increased violence by triggering violent competition among adjacent gangs seeking to occupy 22 Boys territory. As the 22 Boys gang was embedded in competitive relations with gangs in

adjacent territory, the arrest of their leader had adverse effects by altering the state of relationships between gangs in the neighborhood. In contrast, the arrest of the Latin Kings leader had no effects on violent crime as the gang's prison leaders quickly appointed new leadership to continue its daily operations. Overall, these findings make several important contributions.

First, by introducing the concept of criminal group embeddedness, this article brings the logic of social networks to the study of gang interventions. As studies have shown that gang violence is rarely an isolated event and, instead, operates through a series of retaliations rippling through gang members' social networks (Papachristos, 2009; Papachristos, Hureau, and Braga, 2013; Tita et al., 2003), research on gang interventions needs to consider that interventions may have consequences beyond the targeted gang. Street gangs can be engaged in an array of competitive and collaborative relations with other organizations in a neighborhood that may preserve an unconventional social order. Although this article focused on competitive relations among rival gangs, studies have shown that gangs also can be embedded in collaborative relations with political leaders, nonprofit organizations, and churches to help maintain order (Sanchez-Jankowski, 1991; Venkatesh, 1997). Thus, when gang interventions are planned, implemented, and evaluated, scholars and policy makers need to consider the consequences of these interventions for the targeted gang's relationships with allies and competitors. Under what conditions would the removal of a gang leader spark violent competition? Under what conditions would it decrease violence? More research on the embeddedness of criminal groups is sorely needed to understand how these processes unfold outside of the Chicago context used in this case study. Other fields within criminology, however, have benefited greatly from studying embeddedness at the individual level. For example, research on the social consequences of mass incarceration has shown that incarcerated individuals are embedded in families and communities, and thus, incarceration can have the additional consequence of disrupting family and community life (Clear, 2007). Bringing embeddedness to the study of law enforcement interventions targeting criminal groups may help uncover additional hidden costs of the criminal justice system.

Second, the article highlights an important and understudied process in the study of gang violence: events or changes in neighborhood conditions that disrupt social order and trigger episodes of retaliatory gang violence. Much of the ethnographic literature on gang violence has shown that identifying and modeling events triggering gang violence is difficult as violence can erupt through random interpersonal beefs or acts of disrespect (Anderson, 1999; Papachristos, 2009). The findings in this article, however, demonstrate that law enforcement may play an important role in the social structure of gang violence through interventions targeting gang leadership that may trigger episodes of retaliatory violence by disrupting a neighborhood's social order. More research is sorely needed to identify and understand the social structures triggering episodes of gang violence, but the evidence presented in this case study demonstrates that law enforcement interventions should be studied as a key player in the social structure of gang violence.

Third, this study illustrates the usefulness of mixed methodology for evaluating law enforcement interventions targeting criminals who are difficult to study or observe (e.g., gang leaders). In this study, detailed fieldwork was used to confirm and make sense of quantitative results. Although randomized control trials would be ideal, evaluating interventions that are difficult to randomize (such as law enforcement crackdown on a gang's

leaders) is still possible through careful comparative research designs. Future studies can identify events, like the arrest of a gang leader, and assess how they affect violent crime trends while using qualitative methods to interpret the findings. Such designs are needed to identify the conditions when law enforcement interventions may spark additional violence, produce no effects, or decrease violent crime.

Fourth, although the findings presented in this study apply most directly to the case of street gangs, the methods used in the study can be applied toward evaluating interventions targeting other criminal groups such as drug cartels, smuggling rings, and terrorist groups. For example, terrorist organizations have been shown to operate in subunits (or cells) that operate largely independent from terrorist leaders, and thus, some argue that the arrest or assassination of terrorist leaders may have little or no effect (Sageman, 2008). In contrast, accounts of Mexican President Felipe Calderon's crackdown on drug cartels suggest that the arrest of cartel leaders contributed to a sharp increase in drug-related violence along Mexico's border (PBS Newshour, 2012). Through the use of mixed methods, this article demonstrates that such hypotheses can be rigorously evaluated by identifying the relations in which criminal groups are embedded and by evaluating trends in violence or criminal activity over time. Replicating the methodological approach outlined in this article may help scholars better understand the consequences of interventions targeting leadership of these other criminal groups.

This study, however, was not without limitations as the analysis focused on changes in violent crime trends within gang territories. As a result of missing data in police reports, it was not possible to examine changes in violent crime between gangs outside the territory of the targeted gangs. Thus, the findings may actually be underestimating the consequences of arresting a gang's leader. Future studies evaluating crackdowns on leaders could benefit from evaluating violent crime trends between gangs over time and without the geographic restrictions used in this article. Such an analysis would allow for tests of whether arresting a gang's leader can contribute to increased intragang violence (as members of the same gang may fight for a leadership position) or trigger a series of retaliatory shootings between rival gangs traveling to and from one another's territory.

Finally, in relation to policy implications, this study could begin a discussion about the need to evaluate more fully law enforcement strategies for controlling gangs. Although additional research is needed on the effects of arresting a gang's leader, the findings in this article suggest the need for collaboration between violence-prevention organizations and law enforcement agencies in efforts to identify and mitigate potential adverse effects from arresting a gang's leader. For example, violence-prevention organizations might help prevent violent competition among gangs by being informed when law enforcement agencies take down a gang's leader so that services could be administered immediately in the aftermath of the arrest. In addition, as gang territory location was important for understanding when arresting a gang's leader can spark gang violence, it would be simple for law enforcement officials to map the gang territories of an entire city and determine which gangs are located in vulnerable areas (e.g., adjacent to multiple rival gangs). Being aware of the conditions producing violent competition after arresting a gang's leader might help police and violence-prevention organizations prevent an outbreak of shootings.

REFERENCES

- Anderson, Elijah. 1999. Code of the Street: Decency, Violence, and the Moral Life of the Inner City. New York: Norton.
- Angrist, Joshua D., and Alan B. Krueger. 1999. Empirical strategies in labor economics. *Handbook of Labor Economics* 3:1277–366.
- Arena, Kelli. 2004. Experts: War on terrorism could spawn new enemies. World News. http://www.cnn.com/2004/WORLD/meast/03/15/alqaeda.splinter/.
- Bjerregaard, Beth, and Alan J. Lizotte. 1995. Gun ownership and gang membership. *The Journal of Criminal Law and Criminology* 86:37–58.
- Block, Carolyn R., and Richard Block. 1993. *Street Gang Crime in Chicago*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Braga, Anthony A., David M. Kennedy, Elin J. Waring, and Anne Morrison Piehl. 2001. Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinquency* 38:195–225.
- Brantingham, Patricia L., and Paul J. Brantingham. 1999. A theoretical model of crime hot spot generation. *Studies on Crime & Crime Prevention* 8:7–26.
- Chicago Crime Commission. 2012. *The Chicago Crime Commission Gang Book*. Chicago, IL: The Chicago Crime Commission.
- City of Chicago. 2013. Urban Data Portal: Crimes 2001–Present. https://data.cityofchicago.org/.
- Clear, Todd R. 2007. *Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse*. Oxford, U.K.: Oxford University Press.
- Cloward, Richard A., and Lloyd E. Ohlin. 1960. *Delinquency and Opportunity: A Theory of Delinquent Gangs*. New York: Free Press.
- County of Cook v. Carlos Villagomez. 2010. Cook County Criminal Records Division. Case Number 10CR0556701.
- County of Cook v. Jesus Rios. 2010. Cook County Criminal Records Division. Case Number 10CR0424501.
- County of Cook v. Rudy Cantu. 2010. Cook County Criminal Records Division. Case Number 09CR1710901.
- Decker, Scott H. 1996. Collective and normative features of gang violence. *Justice Quarterly* 13:243–64.
- Decker, Scott H., and G. David Curry. 2002. Gangs, gang homicides, and gang loyalty: Organized crimes or disorganized criminals. *Journal of Criminal Justice* 30:343–52.
- Decker, Scott H., Susan Pennell, and Ami Caldwell. 1996. *Arrestees and Guns: Monitoring the Illegal Firearms Market*. Washington, DC: National Institute of Justice.
- Decker, Scott H., and Barrik van Winkle. 1996. *Life in the Gang: Family, Friends, and Violence*. Cambridge, U.K.: Cambridge University Press.
- Fagan, Jeffrey, Franklin E. Zimring, and June Kim. 1997. Declining homicide in New York City: A tale of two trends. *Journal of Criminal Law and Criminology* 88:1277.
- FBI Press Room. n.d. The federal bureau of investigation newsroom. http://www.fbi.gov/chicago/news-and-outreach/press-room.
- Fleisher, Mark S. 1998. *Dead End Kids: Gang Girls and the Boys They Know*. Madison: University of Wisconsin Press.

- Fritsch, Eric J., Tory J. Caeti, and Robert W. Taylor. 1999. Gang suppression through saturation patrol, aggressive curfew, and truancy enforcement: A quasi-experimental test of the Dallas Anti-Gang Initiative. *Crime & Delinquency* 45:122–39.
- Gelman, Andrew, Jeffrey Fagan, and Alex Kiss. 2007. An analysis of the New York City police department's "stop-and-frisk" policy in the context of claims of racial bias. *Journal of the American Statistical Association* 102:813–23.
- Granovetter, Mark S. 1973. The strength of weak ties. *American Journal of Sociology* 78:1360–80.
- Grant, Will. 2013. Mexico Zetas leader Miguel Angel Trevino captured. BBC News. July 16. http://www.bbc.co.uk/news/world-latin-america-23323963.
- Greene, Judith A. 1999. Zero tolerance: A case study of policies and practices in New York City. *Crime & Delinquency* 45:171–87.
- Hagan, John. 1993. The social embeddedness of crime and unemployment. *Criminology* 31:465-91.
- Hunt, A. Lee, and Ken Weiner. 1977. The impact of a juvenile curfew: Suppression and displacement in patterns of juvenile offenses. *Journal of Police Science and Administration* 5:407–12.
- Kennedy, David M., Anne Morrison Piehl, and Anthony A. Braga. 1996. Youth violence in Boston: Gun markets, serious youth offenders, and a use-reduction strategy. *Law and Contemporary Problems* 59:147–96.
- Kent, Douglas R., and Peggy Smith. 2001. The Tri-Agency Resource Gang Enforcement Team: A selective approach to reduce gang crime. In *The Modern Gang Reader*, ed. Cheryl L. Maxson, Malcolm W. Klein, and Jody Miller. Los Angeles: Roxbury.
- Klein, Malcolm W. 1971. Street Gangs and Street Workers. Oxford, U.K.: Oxford University Press.
- Klein, Malcolm W. 1995. *The American Street Gang: Its Nature, Prevalence, and Control.* Oxford, U.K.: Oxford University Press.
- Klein, Malcolm W. 2011. Comprehensive gang and violence reduction programs. *Criminology & Public Policy* 10:1037–44.
- Klein, Malcolm W., and Cheryl L Maxson. 2006. *Street Gang Patterns and Policies*. Oxford, U.K.: Oxford University Press.
- Knox, George. 2000. The impact of the federal prosecution of the gangster disciples. *Journal of Gang Research* 7:1–64.
- Kobrin, Solomon. 1959. The Chicago area project—a 25-year assessment. *The ANNALS of the American Academy of Political and Social Science* 322:19–29.
- Langworthy, Robert H. 1989. Do stings control crime? An evaluation of a police fencing operation. *Justice Quarterly* 6:27–45.
- Maxson, Cheryl L. 1999. Gang homicide: A review and extension of the literature. In *Homicide: A Sourcebook of Social Research*, eds. M. Dwayne Smith and Margaret A. Zahn. Thousand Oaks, CA: Sage.
- Maxson, Cheryl L., Margaret A. Gordon, and Malcolm W. Klein. 1985. Differences between gang and nongang homicide. *Criminology* 23:209–22.
- Maxson, Cheryl L., Karen M Hennigan, and David C. Sloane. 2005. It's getting crazy out there: Can a civil gang injunction change a community. *Criminology & Public Policy* 4:577–606.

- McCord, Joan. 2003. Cures that harm: Unanticipated outcomes of crime prevention programs. *The ANNALS of the American Academy of Political and Social Science* 587:16–30.
- McGloin, Jean Marie. 2005. Policy and intervention considerations of a network analysis of street gangs. *Criminology & Public Policy* 4:607-35.
- Meares, Tracey L., and Dan M. Kahan. 1998. Law and (norms of) order in the inner city. *Law & Society Review* 32:805–38.
- Papachristos, Andrew V. 2001. A.D., After the Disciples: The Neighborhood Impact of Federal Gang Prosecution. Peotone, IL: National Gang Crime Research Center.
- Papachristos, Andrew V. 2009. Murder by structure: The social structure of gang homicide. *American Journal of Sociology* 115:74–128.
- Papachristos, Andrew V., David M. Hureau, and Anthony A. Braga. 2013. The corner and the crew: The influence of geography and social networks on gang violence. *American Sociological Review* 78:417–47.
- PBS Newshour. 2012. In Mexico, War Against Drug Cartels Inflicts High Cost. June 27. http://www.pbs.org/newshour/bb/world/jan-june12/mexico_06–27.html.
- Pyrooz, David C., Gary Sweeten, and Alex R. Piquero. 2013. Continuity and change in gang membership and gang embeddedness. *Journal of Research in Crime and Delinquency* 50:239–71.
- Reitzel, John D., Stephen K. Rice, and Alex R. Piquero. 2004. Lines and shadows: Perceptions of racial profiling and the Hispanic experience. *Journal of Criminal Justice* 32:607–16.
- Reppetto, Thomas A. 1976. Crime prevention and the displacement phenomenon. *Crime & Delinquency* 22:166–77.
- Rice, Stephen K., John D. Reitzel, and Alex R. Piquero. 2005. Shades of brown: Perceptions of racial profiling and the intra-ethnic differential. *Journal of Ethnicity in Criminal Justice* 3:47–70.
- Roncek, Dennis W. 2000. Schools and crime. In *Analyzing Crime Patterns: Frontiers of Practice*, eds. Victor Goldsmith, Philip G. McGuire, John H. Mollenkopf, and Timothy A. Ross. Thousand Oaks, CA: Sage.
- Sageman, Marc. 2008. *Leaderless Jihad: Terror Networks in the Twenty-First Century*. Philadelphia: University of Pennsylvania Press.
- Sanchez-Jankowski, Martin. 1991. *Islands in the Street: Gangs and American Urban Society*. Berkeley: University of California Press.
- Sherman, Lawrence W., Patrick R. Gartin, and Michael E. Buerger. 1989. Hot spots of predatory crime: Routine activities and the criminology of place. *Criminology* 27:27–55.
- Sherman, Lawrence W., Denise Gottfredson, Doris MacKenzie, John Eck, Peter Reuter, and Shawn D. Bushway. 1997. Preventing crime: What works. In *What Doesn't Work, What's Promising, A Report to the United States Congress* (NCJ 171676). Washington, DC: U.S. Department of Justice, Office of Justice Programs.
- Skogan, Wesley G., Susan M. Hartnett, Natalie Bump, and Jill Dubois. 2008. *Evaluation of CeaseFire-Chicago*. Chicago, IL: Northwestern University Press.
- Spergel, Irving A. 1995. *The Youth Gang Problem: A Community Approach*. Oxford, U.K.: Oxford University Press.
- Spergel, Irving A. 2007. Reducing Youth Gang Violence: The Little Village Gang Project in Chicago. Lanham, MA: AltaMira Press.

- Tita, George E., Jacqueline Cohen, and John Engberg. 2005. An ecological study of the location of gang set space. *Social Problems* 52:272-99.
- Tita, George E., and Steven M. Radil. 2010. Making space for theory: The challenges of theorizing space and place for spatial analysis in criminology. *Journal of Quantitative Criminology* 26:467–79.
- Tita, George E., K. Jack Riley, Greg Ridgeway, Clifford Crammich, Allan F. Abrahamse, and Peter W. Greenwood. 2003. *Reducing Gun Violence: Results from an Intervention in East Los Angeles*. Santa Monica, CA: RAND.
- U.S. Bureau of the Census. 2010. 2010 Census Interactive Map. http://2010.census.gov/2010census/popmap/.
- U.S. Department of Commerce. 2012. *National Climatic Data Center*. http://www.ncdc.noaa.gov/cdo-web/.
- U.S. District Court Northern District of Illinois Eastern Division. 2008. United States of America v. Augustin Zambrano, Vicente Garcia, Valentin Baez, Ruben Caquias, Alphonso Chavez, Juan DeJesus, Danny Dominguez, Luis Garcia, Ernesto Grimaldo, Samuel Gutierrez, Jose Guzman, Nedal Issa, Fernando King, Polin Lopez, Javier Ramirez, Wilfredo Rivera Jr., Fernando Vazquez, Felipe Zamora. "Superceding Indictment." No. 08 CT 746. www.justice.gov/usao/iln/pr/chicago/2009/pr1001_01a.pdf.
- Venkatesh, Sudhir A. 1997. The social organization of street gang activity in an urban ghetto. *American Journal of Sociology* 103:82–111.
- Venkatesh, Sudhir A. 2006. Off the Books: The Underground Economy of the Urban Poor. Cambridge, MA: Harvard University Press.
- Weisburd, David, Laura Wyckoff, Justin Ready, John E. Eck, Joshua C. Hinkle, and Frank Gajewski. 2006. Does crime just move around the corner? A controlled study of spatial displacement and diffusion of crime control benefits. *Criminology* 443: 549–91.
- Weiss, Alexander, and Edmund McGarrell. 1999. Traffic enforcement & crime: Another look. *Police Chief* 66:25–9.
- Wilson, Jeremy M., and Steven Chermak. 2011. Community-driven violence reduction programs. *Criminology & Public Policy* 10:993–1027.

Robert Vargas is an assistant professor of sociology at the University of Wisconsin—Madison and a Robert Wood Johnson Scholar at Harvard University. His primary research interests are in the fields of urban sociology, urban politics, health, and criminology. He is currently completing a book manuscript on how politics and governance undermine community-based efforts to prevent gang violence in Chicago.

SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article at the publisher's web site:

Figure S.1. Violent Crime Rate in Latin Kings Territory 2006-2012

Figure S.2. Violent Crime Rates in 22 Boys Territory, Chicago, and Other Gang Territories 2006-2012

Figure S.3. Shootings Between Latin Kings and Satan Disciples in 22 Boys Territory 2009-2010

Map S.1. Gang Territories in Little Village

Map S.2. Location of Shootings in 22 Boys Territory After Gang Leader