IRANNA REHMAN

BREAKING THE SILENCE

GANG-RELATED VIOLENCE

Breaking the Silence: Gang-related Violence

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East Side Story: Disaggregating Gang Homicides in East Los Angeles

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Abstract: This research extends the homicide literature by using latent class analysis methods to examine the neighborhood structural and demographic characteristics of different categories of homicides in the Hollenbeck Community Policing Area of the Los Angeles Police Department (LAPD). The Hollenbeck area itself is a 15 square-mile region with approximately 187,000 residents, the majority of whom are Latino (84 percent). Hollenbeck also has a protracted history of intergenerational Latinx gangs with local neighborhood residents viewing them as a fundamental social problem. Hollenbeck has over 30 active street gangs, each claiming a geographically defined territory, many of which have remained stable during the study period. Over twenty years (1990–2012) of homicide data collected from Hollenbeck's Homicide Division are utilized to create an empirically rigorous typology of homicide incidents and to test whether or not gang homicides are sufficiently distinct in nature to be a unique category in the latent class analysis.

Keywords: homicide; homicide types; disaggregation; street gangs; latent class analysis

1. Introduction

Prior to the Covid-19 Pandemic, which disrupted crime trends (Campedelli et al. 2020; Mohler et al. 2020; Rosenfeld and Lopez 2020), homicide rates across many jurisdictions were at some of the lowest levels on record, yet this has not lessened policymakers and police agencies' desire to further reduce the number of homicides within a given jurisdiction. Despite these overall reductions in violence, gang prevalence continues to be a widespread phenomenon throughout the United States, as witnessed by an increase of over 20 percent in the number of jurisdictions reporting gang problems to the National Gang Youth Survey between 2002 and 2009 (Howell et al. 2011). In fact, approximately 85 percent of gang-related homicides in the United States occur in large cities, populations over 100,000, or in proximate suburban counties (NGC 2017). Howell and Griffiths (2018) investigated this trend by examining gang-related homicides from 1996 to 2012 in 248 large cities. Their findings indicate that in the majority of sampled cities (65.3%), gang-related homicides contribute annually between 30 and 40 percent of all homicides (Howell and Griffiths 2018). Valasik and colleagues (Valasik et al. 2017) have also shown that in disadvantaged communities gang-related homicide remains stubbornly affixed over decades. In contrast, non-gang homicide appears to be more responsive to interventions. Overall, "street gang research has regularly shown a strong, positive relationship between gangs and violence, existing across places and over time" (Valasik and Reid 2020, p. 273).

From a legislative standpoint, the criminal justice system makes a concerted effort to designate a criminal offense as gang-related[1] if that criminal offense involves an individual who is associated with a gang. The NGC (2017) has identified forty-four states and Washington D.C. as having legislation that explicitly defines a gang. The overall majority of these states have also enacted some form of anti-gang legislation that allows for enhancements to be added on to an accused gang member's principal crime (Anderson et al. 2009; Bjerregaard 2003, 2015; Geis 2002). For instance, the use of wide-reaching gang enhancement laws known as STEP Acts, an acronym for Street Terrorism Enforcement and Prevention, permit the felony prosecution of individuals who associate with a criminal gang, assist gang members with their criminal actions, or just have prior knowledge of a gang member's engagement in criminal activity (Bjerregaard 2003, 2015; Geis 2002; Klein and Maxson 2006). For instance, California's STEP Act, penal code 186.22PC, mandates that any gang member committing a felony (e.g., murder) will receive an additional prison sentence consecutive to the penalty received for the original crime. In the case of a murder conviction the STEP Act's gang enhancement would result in an additional 15 years added to an individual's sentence. Prosecutors are then encouraged to aggressively seek justice, which usually entails pursuing an enhancement for any gang-related homicide regardless of the motivation driving the crime (Anderson et al. 2009; Rios 2011). As such, gang-related homicides are frequently considered to be a distinct type of homicide different from other forms of lethal violence. That is, homicides involving gang members are treated as something inherently distinct, from investigating (Katz and Webb 2006; Klein 2004; Leovy 2015; Valasik et al. 2016) to prosecuting (Anderson et al. 2009; Capizzi et al. 1995; Caudill et al. 2017; Pyrooz et al. 2011) to sentencing (Anderson et al. 2009; McCorkle and Miethe 1998; Miethe and McCorkle 1997). But what are the characteristics that make a gang-related homicide so different from a non-gang homicide?

Prior research has disaggregated gang-related homicides from non-gang homicides to answer this question, finding that a variety of micro-, meso-, and macrolevel characteristics impact acts of gang-related violence differently than acts of non-gang violence (Bailey and Unnithan 1994; Barton et al. 2020; Brantingham et al. 2020; Curry and Spergel 1988; Decker and Curry 2002; Egley 2012; Mares 2010; Maxson 1999; Maxson et al. 1985; Maxson and Klein 1990, 1996; Pizarro and McGloin 2006; Pyrooz 2012; Rosenfeld et al. 1999; Smith 2014; Valasik et al. 2017). Despite the robust knowledge gained over the years from these studies, they overlook one crucial element. These prior studies infer in their analyses a level of homogeneity among gang-related homicides. That is, they treat all gang-related homicides as being indistinguishable from one another. Yet, the variation in motivations prompting gang members to participate in violence is wide-ranging, from retaliation against a rival, to being a consequence of another criminal act (e.g., drug sales, robbery), to arising from a domestic dispute. Important nuance exists in gang-related homicides that is being lost in the straightforward analyses of prior research. As such, more meaningful disaggregation must be examined to ascertain just how much variation exists within gang-related homicides and acknowledging the complex nature of gang-related violence.

The current paper addresses this gap in the literature by using the variation in the circumstances, motive, setting, participant characteristics, and rivalry relationship present in gang-related homicides to explore the diversity of gang-related homicides. Latent class analysis (LCA) is utilized to look for hidden "classes" in data that are mutually exclusive to each other. The goal of this study is to systematically disaggregate gang-related homicides in a measured process and assess how the latent classes of gang-related homicides vary from each other. The broader study objective, however, is to highlight that a more nuanced

[1] Gang-related homicides, sometimes referred to as gang-affiliated or member-based gang homicides, are those events in which at least one gang member is a participant (see Maxson and Klein 1990, 1996). Gang-motivated homicides are a subsample of gang-related events that result directly from "gang behavior or relationships" and are prompted by some group incentive (e.g., reputation/status, revenge, initiation, etc.) (Rosenfeld et al. 1999, p. 500). More discussion on the current study's use of the more inclusive measure, gang-related homicides, is detailed below in the data section.

understanding of gang-related homicide is required if interventions aimed at reducing gang-related homicide are going to be implemented successfully (e.g., focused deterrence, civil gang injunctions, etc.). The remainder of the paper begins with discussing the use of homicide disaggregation in gang studies to highlight the disparities between gang-related and non-gang violence. The prevalent theories guiding this disaggregation process are highlighted along with persistent covariates that remain significant across the extant literature. The unique dataset created out of homicide case files from the Homicide Unit of the Los Angeles Police Department's (LAPD) Hollenbeck Community Policing Area and the LCA used in the current study are then discussed. Results are presented. A discussion about the benefits and applications of disaggregating gang-related homicides concludes the paper.

2. Background

2.1. Homicide Disaggregation and Gang Research

Land and colleagues (Land et al. 1990) indicate that homicide research needs to better investigate whether the associations between a study's community covariates (i.e., population structure, deprivation, and percent divorced) and aggregated homicides are generalizable to disaggregated types of homicide. Scholars have generally taken this to mean that studies should examine if these covariates are similarly or differently associated with distinct types of homicide (e.g., gang, drug, domestic, etc.) (see Corsaro et al. 2017; Kubrin and Wadsworth 2003; Pizarro 2008; Tita and Griffiths 2005). Furthermore, Williams and Flewelling (1988, p. 422) contend that homicide disaggregation "should be guided by the theoretical focus of the research problem" and "into meaningful subtypes of homicide." Homicide disaggregation, as Kubrin (2003) points out, is a valuable tool to better understand how a neighborhood's social structure relates to different types of homicide and their frequency.

Much of the research on gang-related violence disaggregates the incidents into gang and non-gang homicides (Bailey and Unnithan 1994; Barton et al. 2020; Brantingham et al. 2020; Curry and Spergel 1988; Decker and Curry 2002; Egley 2012; Mares 2010; Maxson 1999; Maxson et al. 1985; Maxson and Klein 1990, 1996; Pizarro and McGloin 2006; Pyrooz 2012; Smith 2014; Valasik et al. 2017), or even disaggregating into gang-motivated, gang-affiliated, and non-gang homicides[2] (Rosenfeld et al. 1999) to examine micro-level differences between these homicide subtypes. The results from these studies have been remarkably consistent over time and place. Overall, these comparative studies have highlighted how the characteristics of the participants, the setting/context, and the neighborhood structure/environment are able to differentiate gang-related violence from non-gang acts. The reason for pushing for gang homicides to be disaggregated similar to broader homicides is that by grouping all gang homicides together, there is a limit to our understanding of how multidimensional gang homicides can be. As Kubrin (2003) notes, researchers need to expand on how a range of covariates are associated with different types of homicides and to understand how invariances seen in broader homicide studies apply to gang homicides.

2.2. Covariates of Gang Homicide: Prior Research and Ongoing Conceptual Issues

For over the last three decades there have been two consistent theoretical approaches used to advance our understandings of gang-related homicide, the role of collective behavior (Decker 1996; Klein and Maxson 1989) or the influence of a community's context, principally through the lens of social disorganization theory (Bursik and Grasmick 1993; Sampson and Groves 1989; Shaw and McKay 1942). The former, the role of collective behavior argues that dynamic social processes (e.g., retaliation) are what drive the rates of gang-related homicide (see Bichler et al. 2019; Brantingham et al. 2012, 2019; Brantingham

[2] In the latter case, Rosenfeld and colleagues (Rosenfeld et al. 1999) categorized a homicide as non-gang when the participants involved were not associated with a gang and the event was not the result of any known gang activity.

et al. 2020; Decker 1996; Klein and Maxson 1989; Lewis and Papachristos 2020; Nakamura et al. 2020; Papachristos 2009; Papachristos et al. 2013; Pizarro and McGloin 2006). The latter, the community context of gang-related homicide suggests that a neighborhood's social structure and correlates, including aspects of community social control, influence the ebbs and flows of gang-related violence (see Barton et al. 2020; Curry and Spergel 1988; Kubrin and Wadsworth 2003; Mares 2010; Papachristos and Kirk 2006; Pizarro and McGloin 2006; Pyrooz 2012; Radil et al. 2010; Smith 2014; Valasik 2018; Valasik and Tita 2018; Valasik et al. 2017).

Decker (1996) contends that gang-related violence, particularly sharp upticks in homicides, are driven by the role of collective behavior. Building from Short and Strodbeck's (1965) work, that gangs are more than the sum of their individual members but the notion that group processes heavily influence that activities, Decker (1996, p. 244) stresses that the function of threat, perceived or actual, "plays a role in the origin and growth of gangs, their daily activities, and their belief systems." Klein and Maxson (1989, p. 203) suggest that violent activities can serve both a social and psychological function amongst a gang's membership, which "may contribute to violence escalation" observed in street gangs. On the basis of this point of view, the retaliatory nature of gang-related homicide can be thought of as a series of "escalating" encounters of violence between gangs, catalyzed by an initial act of violence. As Brantingham and colleagues (Brantingham et al. 2020, p. 14) astutely surmise, "group-level processes amplify the dynamics of gang-related violence." Such patterns have been regularly observed in the existing gang literature (see Brantingham et al. 2019, 2020; Lewis and Papachristos 2020; Nakamura et al. 2020; Papachristos et al. 2013; Tita et al. 2003).

To better unpack the group dynamics that make gang-related violence unique, studies have evaluated the incident and participant characteristics of gang-related homicides compared to acts of violence that do not involve gang members. Prior research examining the incident characteristics of a gang-related homicides consistently finds that these acts of violence involve a firearm; consist of multiple shots being fired at the victim; transpire outside, in public, on the street; include multiple offenders and victims; and are prompted by gang-related motivations (e.g., retaliation, defending turf, intra-gang conflict, etc.) and statistically less likely to be driven by disputes that are domestic/romantic in nature, and are more likely to involve a mobile offender seeking out the victim (Klein et al. 1991; Maxson 1999; Maxson et al. 1985; Maxson and Klein 1990, 1996; Curry and Spergel 1988; Rosenfeld et al. 1999; Decker and Curry 2002; Pizarro and McGloin 2006; Tita and Griffiths 2005; Valasik 2014). When compared to non-gang violence, studies analyzing the characteristics of the participants, offenders and victims, involved in a gang-related homicide are statistically more likely to be a person of color (i.e., Latinx or Black); be male; be younger in age; participants lack a clear relationship with each other (e.g., strangers); and participants have a prior criminal history (Klein et al. 1991; Maxson 1999; Maxson et al. 1985; Maxson and Klein 1990, 1996; Curry and Spergel 1988; Rosenfeld et al. 1999; Decker and Curry 2002; Pizarro and McGloin 2006; Tita and Griffiths 2005; Valasik 2014). The existing research has reliably shown that both the characteristics of the incident and the participants are "clearly related to the *group* nature of" gang-related homicides making them distinct from non-gang homicides (Maxson et al. 1985, p. 220).

Guided by the social disorganization framework, the community context of gang-related homicide stresses that the spatial concentration of neighborhood-level characteristics are better able to account for the patterns in gang-related homicide (Bursik and Grasmick 1993; Curry and Spergel 1988; Rosenfeld et al. 1999). That is, the social structure and/or built environment of a neighborhood directly influences the trends in the violent acts of gang members (see Barton et al. 2020; Pyrooz 2012; Smith 2014; Valasik 2018; Valasik et al. 2017). Influenced by Short and Strodbeck's (1965) research highlighting the ecologically distinctness of gang homicides, being a localized community problem that adheres to classical theories of poverty, Curry and Spergel (1988) explicitly operationalized the framework of social disorganization to examine both gang-related delinquency and

homicide. Specifically, Curry and Spergel (1988) hypothesized that neighborhoods with residential instability will likely have weak social controls, making these communities more susceptible to gang violence. Conversely, they suspected that delinquency and crime perpetrated by gang members would be more likely to transpire in neighborhoods that are economically deprived (Curry and Spergel 1988). Using two different time periods to analyze the patterns of gang homicide, Curry and Spergel (1988) found that gang-related homicides are spatially concentrated in communities besieged with poverty and population churning, suggesting that social disorganization may be an important influence contributing to the prevalence of gangs and their associated acts of violence. Expanding on how a neighborhood's structural conditions influence gang-related violence, Rosenfeld and colleagues (Rosenfeld et al. 1999) compared and contrasted gang-motivated, gang-affiliated, and non-gang homicides in St. Louis. Consistent with Curry and Spergel (1988), Rosenfeld et al. (1999) find that all three homicide types are concentrated in unstable, disadvantaged neighborhoods that are racially isolated. Gang-motivated homicides were in fact more likely to occur in racially segregated communities, and non-gang homicides were more associated with disadvantaged neighborhoods, suggesting that a neighborhood's racial composition has a greater impact on the prevalence of gang homicides than socioeconomic disadvantage. Additionally, Rosenfeld and colleagues (Rosenfeld et al. 1999) revealed that gang-affiliated homicides were more likely to resemble non-gang violence than gang-motivated violence.

Further contributing to the limited research on the neighborhood-level correlates of gang homicide, Pyrooz (2012) investigated the relationship between gang-related homicide and the structural covariates of a neighborhood (e.g., resource deprivation, residential stability, racial composition, etc.) at the macro-level. Pyrooz (2012) finds that both population density and socioeconomic deprivation impact gang-related homicides across America's 88 largest cities (smallest city had 200,000 residents). A drawback to Pyrooz's (2012) study is that such a broad macro-level analysis can conceal "sub-area and neighborhood cycles that cancel each other out in the aggregate" (Klein 1995, p. 223). More recently, Valasik and colleagues (Valasik et al. 2017) addressed this issue by conducting a meso-level analysis, examining longitudinal trends in gang homicide over a 35-year period in an area of East Los Angeles. Valasik et al.'s (2017) findings reveal that gang-related homicides remain spatially clustered and over-represented in socioeconomically disadvantaged neighborhoods, suggesting that intergenerational gangs and features of the neighborhood are able to exert substantial influence on sustaining gang-related violence over the long term (see also Barton et al. 2020). In fact, Brantingham and colleagues (Brantingham et al. 2020, p. 16) point out that the majority of gang-related violence is not a "contagious offspring event" (i.e., retaliation) but instead suggest that "structural environmental conditions" have a greater influence on gang-related violence than the role of collective behavior.

3. Current Study

Disaggregating homicides between gang and non-gang incidents has produced a more nuanced understanding of the micro-, meso-, and macro-level characteristics that influence these acts of gang-related violence; however, this approach still assumes homogeneity within gang-related homicides. For instance, the motivations that drive gang members to engage in such criminal events can vary widely, from an escalated domestic dispute, to a being the byproduct of a criminal act (e.g., robbery, drug sales). The current study uses homicide case files from the Homicide Unit of LAPD's Hollenbeck Community Policing Area to examine if distinct classes of gang-related homicide actually exist. Utilizing a latent class analysis (LCA), an underutilized, yet worthwhile semiparametric technique, attempts to ascertain if hidden groups are present in data. This approach allows for the creation of groups of "classes" that are mutually exclusive where observations (i.e., homicides) that are similar to each other will be placed in the same class while observations that differ are placed in separate classes (Collins and Lanza 2010; Eggleston et al. 2004; Oberski 2016; Vaughn et al. 2009). This study's goal is addressing the oversight of traditional examina-

tions of gang-related violence by acknowledging that variation exists in the circumstances, motive, setting, participant characteristics, and rivalry relationship in gang-related homicides and assess in a systematic manner if different types of gang-related homicide are present. By ascertaining how the latent classes of gang-related homicides differ will allow for more appropriate interventions to be developed and applied to address gang-related violence.

4. Methods

4.1. Data

The data include all 844 known gang-related homicides from 1978 through 2012. The data were manually gathered from the individual homicide case files maintained at LAPD's Hollenbeck Community Policing Area (Barton et al. 2020; Brantingham et al. 2012, 2019; Tita and Radil 2011; Valasik 2018; Valasik et al. 2017). The data include both open and closed cases and contain a copious number of potential variables related to the participants involved (e.g., age, gender, gang affiliation, residence, etc.) and the characteristics of the incident (e.g., weapon, participants relationship, motivation, weapon used, etc.). Additionally, the data include the street address of a homicide's location. Griffiths and Tita (2009, p. 480) point out that concerns about using official police data exist (i.e., reporting, recording, etc.); however, "homicide is known to suffer from fewer of these limitations than other offenses, is most likely to come to the attention of the police, and is the least biased source of official crime data available" (see also Decker and Pyrooz 2010; Katz et al. 2000). Directly culling the data from homicide detective's case files allowed for gang-related events to be coded as either member- or motive-based offenses[3]. For a homicide to be labeled gang-related under a motive-based definition requires the incident to be a direct function of gang activity (e.g., recruitment, retaliation, territoriality, etc.). In contrast, a member-based definition is a broader designation that includes any homicide in which any participant, suspect(s) or victim, is affiliated with a gang. As such, the member-based designation is more inclusive by capturing homicides that may be the result of an individual member's sole motivation, "after all, gang members can and do act of their own accord" (Papachristos 2009, p. 86). Conversely, a motive-based definition errs by "sampling too heavily on the dependent variable by capturing only those cases in which a group motive was determined" (Papachristos 2009, p. 86). Motive-based gang homicides are a subsample of member-based designated incidents, and artificially restricting a data sample could discard potentially valuable information (Pyrooz 2012). Regardless of whether a member- or a motive-definition is used to designate a gang homicide, Maxson and Klein (1996, p. 10) attest that for "all intents and purposes identical" results are produced with the same variables being able to statistically differentiate a non-gang homicide from gang homicide. Even though the definition of a "gang" homicide remains unsettled in the literature (see Maxson and Klein 1990, 1996), the current study employs the more inclusive member-based definition.

4.2. Research Site

A 15.2 square mile region, the Hollenbeck Community Policing Area, is just east of the Los Angeles River and the downtown metro area. Over the current study's time period there have been approximately 170,000 residents living throughout Hollenbeck's eight communities: Boyle Heights, El Sereno, Hermon, Hillside Village, Lincoln Heights, Montecito Heights, Monterey Hills, and University Hills (Valasik et al. 2017). The area is over 80 percent Latino and remains a disadvantaged portion of the city with over 25 percent of residents living below the poverty line (Minnesota Population Center 2011). Intergenerational gangs have a protracted history in Hollenbeck, and while the number of

[3] The LAPD traditionally utilizes a member-based definition to demarcate gang-related homicides. The current Department Manual (Line Procedures 4/269.10) states that "any crime may constitute a gang-related crime when the suspect or victim is an active or affiliate gang member, or when circumstances indicate that the crime is consistent with gang activity." A near identical definition is reported by Maxson and Klein (1990) for how LAPD designated such crimes in 1980, supporting the consistent reporting practices by the department during the current study's time window.

active street gangs has varied, since the late 1990s there has been approximately 30 active street gangs, each claiming a geographically demarcated territory (see Barton et al. 2020; Brantingham et al. 2012, 2019; Moore 1991; Tita et al. 2003; Valasik 2018; Valasik et al. 2017; Vigil 2007). The quasi-institutional nature of Hollenbeck's gangs has anchored them to particular barrios (i.e., neighborhoods) greatly restricting the presence and activity patterns of gang members in four of Hollenbeck's communities (i.e., Hermon, Monterey Hills, Hillside Village, and University Hills) (Valasik et al. 2017). While not impenetrable, Hollenbeck's jurisdictional boundaries greatly inhibit the local communities from the adjacent neighborhoods' activities. Tita and colleagues (Tita et al. 2003; Tita and Radil 2011) further indicate that the both the political boundaries along with the built and natural environments buffer Hollenbeck's gangs from interactions with outside groups in proximate areas while also producing a setting in which gang rivalries in Hollenbeck are self-contained, creating a natural field site.

4.3. Latent Class Analysis

The current study utilizes an analysis plan that is aimed at uncovering patterns in gang-related homicides. Since this project is aimed at uncovering whether or not gang-related homicides group together by specific characteristics, the most appropriate technique is a Latent Class Analysis (LCA). LCA is a measurement model in which cases can be classified into mutually exclusive and exhaustive types, or latent classes, based on their pattern of answers on a set of categorical indicator variables. The LCA was conducted using the Mplus software package (Muthén and Muthén 2012). The Mplus software package allows for the statistical control of nonnormality and outliers through the use of robust maximum likelihood estimation (Curran et al. 1996). In order to conduct tests of model fit, the first step is to estimate the mixture model based on the latent profile indicators with an increasing number of classes. LCA model fit was compared using log-likelihood, Akaike information criteria (AIC), Bayes information criteria (BIC), and entropy, as is recommended in evaluating these kinds of models (Grant et al. 2006). Smaller values of log-likelihood, AIC, and BIC indicate better fit to the data or increased probability of replication, and higher values of entropy reflect better distinctions between groups (Kline 2015). Since some evidence suggests that the BIC performs best of the information criterion indices (Nylund et al. 2007), this index was prioritized in interpreting the current data.

4.4. Measures

The manual collection of the highly detailed data from individual homicide case files allowed for a multitude of participant- and incident-level characteristics to be coded and used in the subsequent analyses. The selection of variables was guided by the larger literature on disaggregating homicides and key elements of gang-related violence (see Klein and Maxson 2006; Kubrin 2003; Kubrin and Wadsworth 2003; Pizarro 2008; Skott 2019; Tita and Griffiths 2005). All of the data culled from the individual case files were collected and coded by a sole researcher. All of the personal identifiers (e.g., name, birthdate, etc.) in the dataset were anonymized. Each measure used in the current study and the rationale for how that measure was created and coded in the data is discussed below in the related subsections (i.e., participant- or incident-level). Descriptive statistics for the measures are listed in Table 1 below.

Table 1. Descriptive statistics for gang-related homicides, 1978–2012 (N = 844).

Characteristic	Obs	Percent
Participant-level		
Victim age range		
11–14	11	1.97%
15–18	110	19.75%
18–21	244	43.81%
22–25	123	22.08%
26–30	67	12.03%
30+	2	0.36%
Motivation		
Crime	34	4.03%
Drug	74	8.77%
Gang	409	48.46%
Dispute	209	24.76%
Domestic	28	3.32%
Other	90	10.66%
Victim/Suspect Relationship		
Stranger	195	23.10%
Non-stranger	649	76.90%
Gang Relationship		
Rival	335	39.69%
Non-rival	113	13.39%
Intra-gang	69	8.18%
None	219	26.05%
Unknown	108	12.80%
Incident-level		
Location		
Street	567	67.90%
Inside a structure	104	12.46%
Outside a structure	731	87.54%
Public Housing Community	130	15.40%
Gang Turf	731	86.61%
Multiple victims	57	6.75%
Drive-By shooting	241	28.55%
Time of Day		
Overnight	369	43.72%
Work Hours	180	21.33%
Early Evening	295	34.95%

4.4.1. Participant-Level Characteristics

Age of the victim is included and was organized into six age categories to capture crime-prone age ranges[4]. Race/ethnicity and gender were not included in the analysis as Hollenbeck's population is overwhelmingly Latinx (over 80 percent), including the local intergenerational gangs. The lack of variation in gang violence, being concentrated among Latino males, 96.0% of victims and 99.1% of suspects, prohibited the inclusion of these variables as it substantially reduced the statistical power of the subsequent analyses. Prior research (Griffiths and Tita 2009; Tita and Griffiths 2005) guided the creation of five mutually exclusive dichotomous variables to capture the suspect's primary motivation for the violent act: gang, criminal, drug, dispute, domestic/romantic, and other. A homicide was only coded as gang-motivated if the incident involved initiation practices, territorial disputes, targeted attacks, inter-gang rivalries or feuds, or planned retaliations. That is, homicides were only coded as gang-motivated if it was a decisive act that contributed to that gang member maintaining his status in the group. Otherwise, a homicide was coded based upon

[4] Due to missing data for the suspect (e.g., unknown individual), only the victim's age was included in the analysis.

the participating gang member's primary motive (e.g., dispute, domestic/romantic, etc.). Any incident that was drug-related or substance-induced was coded as drug; the majority of these incidents (74.3 percent) were centered around drug dealing, arguments between participants, or dealer stickups. Likewise, homicides that resulted from a nondrug-related crime (e.g., burglary, robbery, etc.) were coded as criminal. Homicides that involved domestic disputes or romantic love interests (e.g., love triangles) were grouped together and coded as domestic/romantic. Generally, these events involve family members or intimates and tend to have a much different character than the other motive categories. A dispute involves any type of argument or fight that escalates into a murder. Generally, these are spontaneous actions or stem from an existing feud specifically between the participants involved in the homicide and are not driven or planned out by the members' respective gangs. These events include physical altercations that evolve into lethal violence, the redressing of an ad hominem insult or self-defense. The final category, other, includes homicides that were accidental, business-related (nondrug-related), facilitated by mental illness, or unknown.

The relationship between the participants, suspect and victim, is a dichotomous variable indicating if they were strangers (1 = yes and 0 = no) or if they were non-strangers (i.e., family members, friends, acquaintances). As Tita and Griffiths (2005, p. 283) argue, "those who kill within the realm of gang motivated incidents or drug-market activities "know" their victims, maybe not on a personal level but at least on an organizational/status level." To further tease apart the relationship between the participants involved in a gang-related homicide, the gang affiliation of the suspect and victim was compared to establish four mutually exclusive dichotomous variables. This categorization process is only possible due to the robust investigation of Hollenbeck's gangs over the course of three decades has provided a rich history documenting the enduring, intergenerational feuds between gangs in the community policing area (see Brantingham et al. 2012, 2019; Fremon 2008; Moore 1978, 1991; Tita et al. 2003; Tita and Radil 2011; Valasik 2014, 2018; Vigil 1988, 2007). Beyond the detailed academic sources, detailed gang intelligence maintained by Gang Impact Team (GIT) officers and gang detectives were also used in establishing this metric (see Valasik et al. 2016). Rival (1 = yes and 0 = no) indicates that both of the participants involved in a homicide were members of gangs that have an active rivalry with ongoing hostilities. Events that involved participants from separate gangs without ongoing hostilities are designated as non-rival (1 = yes and 0 = no). A homicide occurring where both the victim and suspect were affiliated with the same gang is considered to be an *intra-gang* (1 = yes and 0 = no) event. The final category, none (1 = yes and 0 = no) involves one participant, either suspect or victim, who was not affiliated with any known gang at the time of the homicide.

4.4.2. Incident-Level Characteristics

Prior research (Corsaro et al. 2017; Tita and Griffiths 2005) indicates that the location of where a homicide occurs will differ between various types of homicides. Given gang-related violence to transpire on the street, a variable was created to specifically capture this phenomenon (1 = yes and 0 = no). Further, differentiating where a homicide takes place, incidents are outside in open, public areas or inside a building or structure (1 = inside and 0 = outside). Gang turf (1 = yes and 0 = no) indicates if a homicide occurred within one of the participant's gang's claimed territory or outside of those boundaries. Again, the robust gang scholarship by Hollenbeck and gang intelligence allowed for this metric to be created (see Brantingham et al. 2012, 2019; Radil et al. 2010; Tita et al. 2003; Valasik 2014). Prior research (Griffiths and Tita 2009; Holloway and McNulty 2003; Popkin et al. 2000; Venkatesh 1997; Vigil 2007; Weatherburn et al. 1999) has also suggested that public housing communities experience dramatically higher levels of gang-related violence. Griffiths and Tita (2009, p. 480) find that they are in fact "hotbeds of violence" where the participants involved are more likely to local residents. Therefore, public housing (1 = yes and 0 = no) is a measure specifically accounting for the influence of these disadvantaged areas by designating if a homicide transpired within a public housing complex. It should be noted

that all of the public housing communities within Hollenbeck have a well-documented history of entrenched gang activity and violence (see Barton et al. 2020; Fremon 2008; Vigil 2007).

The literature on gang violence indicates that gang-related incidents are also more likely to involve multiple victims (Maxson et al. 1985; Maxson and Klein 1990, 1996). A dichotomous variable was used to capture this difference (1 = multiple individuals and 0 = a singular individual). Gang research has also indicated that gangs routinely employ the drive-by as a technique to attack rival gangs (Bolden 2020; Klein 1971; Sanders 1994; Huff 1996; Valdez et al. 2009; Vasquez et al. 2010). Moore and colleagues (Moore et al. 1983) further suggest that it is not uncommon for East Los Angeles gang members to reside outside of their claimed turf and to routinely travel back to these locations to socialize (see also Valasik and Tita 2018). Therefore, it is reasonable to suspect that if a vehicle is being utilized by a gang member to return to their gang's turf that it would also be accessible for a directed attack on a rival if needed. This study defines a drive-by (1 = yes and 0 = no) as an incident in which one gang member discharged a firearm towards another gang member from a moving vehicle. Lastly, from a routine activities perspective, time of day influences the activity patterns of gang members, thereby impacting gang-related violence. Three dichotomous variables are constructed to capture the different times of day in which a homicide could transpire: work hours, early evening, and overnight. Incidents were coded based on when the homicide event transpired (1 = transpired in the time period and 0 = did not transpire in the time period), with work hours being from 7 a.m. to 6 p.m., early evening being from 6 p.m. to 11 p.m., and overnight being from 11 p.m. to 7 a.m.

5. Results

On the basis of the analyses, there were five separate classes of gang-related homicides. One of the key results is that stranger versus non-stranger homicides had to be separated out since this distinction drove much of the variation in classes. Once it was realized that the main distinguishing characteristic between the classes was whether or not the participants, victim and suspect, knew each other or were strangers, the dataset was broken into two separate LCAs. Overall there were five separate classes found in the homicide data: three were non-strangers and two were strangers. In order to identify the best-fitting number of profiles, latent class models containing one through four classes for the non-stranger data and one to three classes for the stranger data were fit to exhaust the available models. To decide the final number of classes, we examined both fit statistics and whether or not the added class provided additional nuance to our understanding of gang homicide. Overall, improvements in fit (measured using AIC, BIC, and log-likelihood) occurred as the number of classes increased up to three classes for non-stranger gang homicides and two classes for stranger gang homicides.

For the non-stranger homicides there were three categories. Class 1, or Rival Drive-by (n = 321), homicides were characterized by the participants being from rival gangs. These homicides tend to employ a vehicle to facilitate a drive-by shooting. As such, the location of the incident is outside. Rival Drive-by homicides are also more likely to take place overnight, (i.e., very late at night or very early in the morning). Lastly, these homicides are not precipitated by a known crime or dispute.

To make these findings more tangible, the above results were used to identify an example of a "modal" Rival Drive-by homicide in our dataset.

> *April 2001: Around 1:50 a.m., two State Street gang members (a 36-year-old, Latino male and a 17-year old, Latino male) were repairing a vehicle on a street alongside a curb inside their gang's claimed turf. Two rival Primera Flats gang members (a 21-year-old, Latinx male and an unidentified Latinx male) proceeded to drive by and opened fire on the victims, striking both of them multiple times. The suspects fled southbound in their vehicle. The victims were transported to the LAC+USC Medical Center where they both succumbed to their wounds.*

Note that the suspect and victims involved were from rival gangs, a drive-by was used, the incident took place outside on the street, it transpired overnight, and was a directed attack. That is, another crime or dispute did not facilitate the homicide.

Class 2, or Non-gang Involved Victim (n = 97), homicides are primarily characterized by the victim not being associated with a documented gang. Usually, these homicides are precipitated by another criminal act or drug-related activity. Non-gang Involved Victim homicides are more likely to involve multiple victims. In addition, these homicides may have the occasional drive-by, but they remain uncommon.

Selecting on the significant characteristics of this type, an incident from the case files of a modal Non-gang Involved Victim homicide is presented.

> *January 2001: At approximately 6:30 a.m., the two victims (33-year-old, Latino male and a 42-year-old, Latino male) were sitting in a vehicle when they were approached by two Lincoln Heights gang members (25-year-old, Latino male and a 29-year old, Latino male) who carjacked the vehicle with them inside. Two additional Lincoln Heights gang members (34-year-old, Latino male and an unidentified Latina, female) followed in another vehicle. The first victim was shot in the upper torso and was pushed out of the vehicle while it drove away. The next day, in the neighboring LAPD police division, the second victim was found executed with his hands tied behind his back. The murders were in response to the victims stealing drugs from Lincoln Heights gang members.*

Notice that the multiple victims involved were not associated with any gang, the murders were in response to a drug rip-off, and while a vehicle was involved in crime, there was not drive-by. Instead, one victim was shot and left at the scene while the other was taken to a secure location to likely be interrogated in hopes that Lincoln Heights gang members will be able to recover the stolen drugs.

Rival Confrontation (n = 231), or class 3, homicides involve both participants being from rival gangs. These homicides often take place overnight (i.e., very late at night or very early in the morning). They are also more likely to transpire within the boundaries of public housing complexes. Rival Confrontation homicides are motivated by a dispute, either the result of an unplanned encounter or being driven by an enduring feud. These homicides seem to be more directed, resulting in a single victim as illustrated in the incident below.

> *July 1998: Around 5:30 a.m., two gang members, the suspects, from Cuatro Flats (25-year-old, Latino male and a 13-year-old, Latino male) approached a rival ELA 13 Dukes gang member (18-year-old, Latinx male) in the Aliso Village Public Housing Community. The prior week a group of ELA 13 Dukes had intervened in a head to head fight between the younger suspect, who was winning, and another ELA 13 Duke. The ELA 13 Dukes beat up the younger Cuatro Flats gang member and he wanted to get even. As the suspects approached the ELA 13 Dukes gang member they asked for some crack cocaine as a distraction, before pulling out their guns and shooting the victim. The suspects then fled the scene on foot.*

The above example highlights that a prior altercation, in this case a fight, was what facilitated the homicide, involved participants from rival gangs, the event transpired in a public housing community where the suspects' gang claims turf, and the event took place in the early morning.

For stranger homicides there are two classes. Class 4, or Crime Prone Age (n = 134), homicides are characterized by the victim being in the 14–22 years old age group. Additionally, there is no gang relationship between the participants, given that the victims do not have any known associations with any Hollenbeck gangs. These homicides are also likely to be the result of a drive-by shooting and are more likely to take place overnight (i.e., very late at night or very early in the morning).

The case narrative presented below illustrates the characteristics which distinguish Crime Prone Age homicides.

> *December 2010: Around 2 p.m., the victim (18-year-old, Latino male) was sitting on a bench waiting for a bus. The two suspects, gang members from Cuatro Flats (18-year-old,*

Latino male and a 26-year-old, Latino male) were driving down the road when they saw the victim sitting on the bench. The suspects quickly pulled over, exited the vehicle, and fired multiple shots at the victim. LAPD was approaching the scene as the suspects were about to flee, in which they abandoned their vehicle and ran away. Both suspects failed to elude LAPD and were taken into custody shortly after committing the murder. The detectives believe that the suspects mistook the victim for a Primera Flats gang member, since he was in their territory and both gangs are rivals. The victim never associated with any Hollenbeck gang and was only in the area to visit a friend.

This homicide highlights the fact that these incidents are likely to be the result of gang members having greater levels of entitativity (Vasquez et al. 2015). That is, gang members tend to consider any individual who is loitering within a rival gang's territory as being associated with that rival gang. As such, that individual becomes a potential target for violence, with gang-related violence spilling over into the non-gang population. Thus, Crime Prone Age homicides are likely to include a lot of cases in which a younger victim is being mistakenly identified as a rival gang member by the suspect.

Lastly, class 5, or Older Dispute (n = 61), homicides feature a victim in an older age category. The gang relationship between participants is that the victim and suspect are members of gangs that are not rivals with each other. Older Dispute homicides are preceded by some type of dispute that escalates to lethal violence. These homicides also are more likely to transpire inside a building or residence and take place after work hours in the early evening.

On the basis of the significant characteristics of this type, an incident from the case files of a modal Older Dispute homicide is presented below.

May 2007: Just after 7:00 p.m., the victim, an Indiana Dukes gang member (26-year-old, Latino male) was shopping with his girlfriend and their child at a Food 4 Less grocery store. Two Laguna Park Vikings gang members (21-year-old, Latino male and a 17-year-old, Latino male) began verbally accosting the victim with a "Where you from?" The victim called them for disrespecting him in front of his family. The suspects apologized, but the victim said it was too late. Each party flashed knives at each other, and the suspects said they would wait outside in the parking lot for the victim. As the victim exited, he struck a suspect in the face and then was shot by the other suspect.

The above example illustrates that these incidents involve a suspect and victim who are gang members, but whose gangs are not actively feuding or rivals. Instead, the violence is sparked by some form of disrespect or affront to on the participants, culminating in lethal violence. Additionally, the incident transpired in a neutral location, outside of either participant's gang's turf.

6. Discussion and Conclusions

In building on the literature on homicide disaggregation, this study addresses an important gap in the literature: How does the variation in the circumstances, motive, setting, participant characteristics, and rivalry relationship in gang-related homicides distinguish one type of event from another? The objective was to systematically ascertain which participant and incident characteristics differentiate discrete subtypes or classes of gang-related homicide using LCA. The results of the LCA clearly indicate that there are substantial differences in gang-related homicides, supporting the premise that further disaggregation is needed to fully understand that nature of these incidents of lethal violence. Specifically, the LCA revealed that a five class solution (three classes for non-stranger and two classes for stranger) was both appropriate and meaningful in terms of the theoretical focus in understanding gang-related violence. The relationship between the participants, victim and suspect, is an important characteristic driving the creation of the five subtypes/classes of gang-related homicide detected in this study. There clearly exists distinct patterns in gang-related homicides.

While the five classes of gang-related homicide tend to be quite distinct from one another, in terms of the participant and incident characteristics, there does appear to be

similarities between class 1, Rival Drive-by, and class 4, Crime Prone Age. Gang violence between rivals quickly becomes an intergenerational process with younger members being provided with a well-known adversary to attack. The gang literature indicates that group solidarity is a fundamental feature that drives gang-related violence with street gangs adhering to a principle of collective responsibility (see Bolden 2020; Densley 2013). That is, any member of gang acts as a representative for the entire group. Thus, if a gang member is attacked by a rival gang member the act is considered to be an affront by the entire rival gang. As such, gang members tend to have greater levels of entitativity, making "all members of the offending group blameworthy" (Vasquez et al. 2015, p. 249). Additionally, gangs tend to view any individual that resides in a rival gang's territory and resembles the demographics of the rival gang as being associated with that rival gang and a potential target for retaliatory violence. It is not shocking when retaliatory gang-related violence (e.g., Rival Drive-by homicides) spills over into the civilian population ensnaring victims not associated with a street gang (e.g., Crime Prone Age homicides). Leovy (2015, p. 206) documents this phenomenon in South Central Los Angeles affirming that "a black assailant looking to kill a gang rival is looking before anything else, for another black male ... a presumed combatant, con-scripted into a dismal existence 'outside the law' whether he wanted to be or not." It seems likely that Crime Prone Age, class 4, homicides are essentially defective class 1, Rival Drive-by, homicides.

The contributions of this study provide a more nuanced understanding of the variation that exists in gang-related homicides; however, it is not without limitations that future research could work to address. First, the focus is on a relatively small area within one police jurisdiction (LAPD). As such, the results may be restricted to areas more similar to Hollenbeck. Future research could remedy this by expanding from the division level out to include other jurisdictions, and researchers will be better able to understand if these classes maintain across place and improve generalizability. Second, Hollenbeck's gangs are also very homogenous. Demographically the gangs are predominately composed of members of Mexican American descent. Structurally the gangs are considered to be "traditional" in nature, with strong territorial dispositions and intergenerational linkages (Klein and Maxson 2006). It is possible the findings from this study may be limited to communities where only "traditional" gangs are dominant. Third, the dataset includes several years of increased levels of gang violence in a highly active gang area (see Costanza and Helms 2012; Howell et al. 2011; Howell and Griffiths 2018; Valasik et al. 2017). Additional replications across a variety of jurisdictions will help validate how these classifications hold across time periods. There may also be other variables captured in different databases that would better capture the variations the exist within gang-related homicides.

Noting such limitations, the goal of this study was to test whether or not gang-related homicides could (and should) be disaggregated in a manner similar to how researchers currently disaggregate other homicide types. The purpose for disaggregating homicides is to be better able to understand important differences between types of homicides for policy, law enforcement response, and research. Since patterning is found in gang-related homicides, it does not make sense to continue to lump all gang homicides together in larger studies. Policy and practice should take this into consideration when targeting/investigating gang homicides. By understanding variation in covariates of different homicide types, this micro-analysis of gang-related homicides in a local setting is important to uncover how this variation can be used to better understand non-structural characteristics of gang-related homicide. Since this study is exploratory in nature, it is the first step for future research to continue disaggregating gang-related homicides across time and place to see how covariates vary, considering the type of gang-related homicide may impact a planned intervention. For example, not all gang-related homicides will respond equally to the same intervention (i.e., k- rails for drive-bys) (see Lasley 1998). Just as no two gangs are identical, the same idiom applies to acts of gang-related violence.

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References

Anderson, John, Mark Nye, Ron Freitas, and Jarrett Wolf. 2009. *Gang Prosecution Manual*; Washington: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice & Delinquency Prevention.

Bailey, Gary W., and N. Prabha Unnithan. 1994. Gang homicides in California: A discriminant analysis. *Journal of Criminal Justice* 22: 267–75. [CrossRef]

Barton, Michael S., Matthew A. Valasik, Elizabeth Brault, and George E. Tita. 2020. "Gentefication" in the Barrio: Examining the relationship between gentrification and homicide in East Los Angeles. *Crime & Delinquency* 66: 1888–913.

Bichler, Gisella, Alexis Norris, Jared R. Dmello, and Jasmin Randle. 2019. The impact of civil gang injunctions on networked violence between the bloods and the crips. *Crime & Delinquency* 65: 875–915.

Bjerregaard, Beth E. 2003. Antigang legislation and its potential impact: The promises and the pitfalls. *Criminal Justice Policy Review* 14: 171–92. [CrossRef]

Bjerregaard, Beth E. 2015. Legislative approaches to addressing gangs and gang-related crime. In *The Handbook of Gangs*. Edited by Scott H. Decker and David C. Pyrooz. Malden: John Wiley & Sons, pp. 345–68.

Bolden, Christian L. 2020. *Out of the Red: My Life of Gangs, Prison, and Redemption*. New Brunswick: Rutgers University Press.

Brantingham, P. Jeffrey, George E. Tita, Martin B. Short, and Shannon E. Reid. 2012. The ecology of gang territorial boundaries. *Criminology* 50: 851–85. [CrossRef]

Brantingham, P. Jeffrey, Matthew Valasik, and George E. Tita. 2019. Competitive dominance, gang size and the directionality of gang violence. *Crime Science* 8: 7. [CrossRef]

Brantingham, P. Jeffrey, Baichuan Yuan, and Denise Herz. 2020. Is Gang Violent Crime More Contagious than Non-Gang Violent Crime? *Journal of Quantitative Criminology*. [CrossRef]

Bursik, Robert J., Jr., and Harold G. Grasmick. 1993. *Neighborhoods and Crime: The Dimensions of Effective Community Control*. New York: Lexington Books.

Campedelli, Gian Maria, Alberto Aziani, and Serena Favarin. 2020. Exploring the Immediate Effects of COVID-19 Containment Policies on Crime: An Empirical Analysis of the Short-Term Aftermath in Los Angeles. *American Journal of Criminal Justice*. [CrossRef]

Capizzi, Michael, James I. Cook, and M. Schumacher. 1995. The TARGET model: A new approach to the prosecution of gang cases. *The Prosecutor* 29: 18–21.

Caudill, Jonathan W., Chad R. Trulson, James W. Marquart, and Matt DeLisi. 2017. On gang affiliation, gang databases, and prosecutorial outcomes. *Crime & Delinquency* 63: 210–29.

Collins, Linda M., and Stephanie T. Lanza. 2010. *Latent Class and Latent Transition Analysis: With Applications in the Social, Behavioral, and Health Sciences*. New York: John Wiley & Sons.

Corsaro, Nicholas, Jesenia M. Pizarro, and Jillian Shafer. 2017. The Influence of Planned Aggression on the Journey to Homicide: An Examination across Typology. *Homicide Studies* 21: 179–98. [CrossRef]

Costanza, S. E., and Ronald Helms. 2012. Street gangs and aggregate homicides: An analysis of effects during the 1990s violent crime peak. *Homicide Studies* 16: 280–307. [CrossRef]

Curran, Patrick J., Stephen G. West, and John F. Finch. 1996. The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods* 1: 16–29. [CrossRef]

Curry, G. David, and Irving A. Spergel. 1988. Gang homicide, delinquency, and community. *Criminology* 26: 381–406. [CrossRef]

Decker, Scott H. 1996. Collective and Normative Features of Gang Violence. *Justice Quarterly* 13: 243–64. [CrossRef]

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. [CrossRef]

Decker, Scott H., and David C. Pyrooz. 2010. On the validity and reliability of gang homicide: A comparison of disparate sources. *Homicide Studies* 14: 359–76. [CrossRef]

Densley, James. 2013. *How Gangs Work*. New York: NY, Palgrave Macmillan.

Eggleston, Elaine P., John H. Laub, and Robert J. Sampson. 2004. Methodological sensitivities to latent class analysis of long-term criminal trajectories. *Journal of Quantitative Criminology* 20: 1–26. [CrossRef]

Egley, Arlen, Jr. 2012. Gang Homicides—Five U.S. Cities, 2003–2008. *Morbidity and Mortality Weekly Report* 61: 46–51.
Fremon, Celeste. 2008. *G-Dog and the Homeboys: Father Greg Boyle and the Gangs of East Los Angeles*. Albuquerque: University of New Mexico Press.
Geis, Gilbert. 2002. Ganging Up on Gangs: Anti-Loitering and Public Nuisance Laws. In *Gangs in America*, 3rd ed. Edited by Huff C. Ronald. Thousand Oaks: Sage Publications, pp. 257–70.
Grant, Julia D., Jeffrey F. Scherrer, Rosalind J. Neuman, Alexandre A. Todorov, Rumi K. Price, and Kathleen K. Bucholz. 2006. A comparison of the latent class structure of cannabis problems among adult men and women who have used cannabis repeatedly. *Addiction* 101: 1133–42. [CrossRef]
Griffiths, Elizabeth, and George Tita. 2009. Homicide In and Around Public Housing: Is Public Housing a Hotbed, a Magnet, or a Generator of Violence for the Surrounding Community? *Social Problems* 56: 474–93. [CrossRef]
Holloway, Steven R., and Thomas L. McNulty. 2003. Contingent urban geographies of violent crime: Racial segregation and the impact of public housing in Atlanta. *Urban Geography* 24: 187–211. [CrossRef]
Howell, James C., and Elizabeth Griffiths. 2018. *Gangs in America's Communities*, 3rd ed. Thousand Oaks: Sage Publications.
Howell, James C., Arlen Egley Jr., George E. Tita, and Elizabeth Griffiths. 2011. *US Gang Problem Trends and Seriousness, 1996–2009*; Washington: Bureau of Justice Assistance, US Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
Huff, C. Ron. 1996. The Criminal Behavior of Gang Members and Nongang At-Risk Youth. In *Gangs in America*. Edited by Huff C. Ronald. Thousand Oaks: Sage Publications, pp. 75–102.
Katz, Charles M., and Vincent J. Webb. 2006. *Policing Gangs in America*. Cambridge: Cambridge University Press.
Katz, Charles M., Vincent J. Webb, and David R. Schaefer. 2000. The validity of police gang intelligence lists: Examining differences in delinquency between documented gang members and nondocumented delinquent youth. *Police Quarterly* 3: 413–37. [CrossRef]
Klein, Malcolm W. 1971. *Street Gangs and Street Workers*. Englewood Cliffs: Prentice-Hall.
Klein, Malcolm W. 1995. Street Gang Cycles. In *Crime*. Edited by James Q. Wilson and Joan Petersilia. San Francisco: Institute for Contemporary Studies Press, 9 vols. pp. 217–36.
Klein, Malcolm W. 2004. *Gang Cop: The Words and Ways of Officer Paco Domingo*. Walnut Creek: AltaMira Press.
Klein, Malcolm W., and Cheryl L. Maxson. 1989. Street gang violence. In *Violent Crime, Violent Criminals*. Edited by Neil Alan Weiner and Marvin. E. Wolfgang. Newbury Park: Sage Publications, pp. 198–234.
Klein, Malcolm W., and Cheryl L. Maxson. 2006. *Street Gang Patterns and Policies*. Oxford: Oxford University Press.
Klein, Malcolm W., Cheryl L. Maxson, and Lea C. Cunningham. 1991. "Crack," street gangs, and violence. *Criminology* 29: 623–50. [CrossRef]
Kline, Rex B. 2015. *Principles and Practice of Structural Equation Modeling*, 4th ed. New York: Guilford Publications.
Kubrin, Charis E. 2003. Structural covariates of homicide rates: Does type of homicide matter? *Journal of Research in Crime and Delinquency* 40: 139–70. [CrossRef]
Kubrin, Charis E., and Tim Wadsworth. 2003. Identifying the structural correlates of African American killings: What can we learn from data disaggregation? *Homicide Studies* 7: 3–35. [CrossRef]
Land, Kenneth C., Patricia L. McCall, and Lawrence E. Cohen. 1990. Structural covariates of homicide rates: Are there any invariances across time and social space? *American Journal of Sociology* 95: 922–63. [CrossRef]
Lasley, James R. 1998. *"Designing Out" Gang Homicides and Street Assaults*; Washington: US Department of Justice, Office of Justice Programs, National Institute of Justice.
Leovy, Jill. 2015. *Ghettoside: A True Story of Murder in America*. New York: Spiegel & Grau.
Lewis, Kevin, and Andrew V. Papachristos. 2020. Rules of the Game: Exponential Random Graph Models of a Gang Homicide Network. *Social Forces* 98: 1829–58. [CrossRef]
Mares, Dennis. 2010. Social disorganization and gang homicides in Chicago: A neighborhood level comparison of disaggregated homicides. *Youth Violence and Juvenile Justice* 8: 38–57. [CrossRef]
Maxson, Cheryl L. 1999. Gang Homicide: A review and extension of the literature. In *Homicide: A Sourcebook of Social Research*. Edited by Smith M. Dwayne and Margaret A. Zahn. Newbury Park: Sage Publications, pp. 197–220.
Maxson, Cheryl L., and Malcolm W. Klein. 1990. Street gang Violence: Twice as Great, or Half as Great? In *Gangs in America*. Edited by Huff C. Ronald. Thousand Oaks: Sage Publications, pp. 71–100.
Maxson, Cheryl L., and Malcolm W. Klein. 1996. Defining Gang Homicide: An Updated Look at Member and Motive Approaches. In *Gangs in America*, 2nd ed. Edited by Huff C. Ronald. Thousand Oaks: Sage Publications, p. 320.
Maxson, Cheryl L., Margaret A. Gordon, and Malcolm W. Klein. 1985. Differences between Gang and Nongang Homicides. *Criminology* 23: 209–22. [CrossRef]
McCorkle, Richard C., and Terance D. Miethe. 1998. The political and organizational response to gangs: An examination of a "moral panic" in Nevada. *Justice Quarterly* 15: 41–64. [CrossRef]
Miethe, Terance D., and Richard C. McCorkle. 1997. Gang membership and criminal processing: A test of the "master status" concept. *Justice Quarterly* 14: 407–27. [CrossRef]
Minnesota Population Center. 2011. *National Historical Geographic Information System (Version 2.0)*. Minneapolis: University of Minnesota.

Mohler, George, Andrea L. Bertozzi, Jeremy Carter, Martin B. Short, Daniel Sledge, George E. Tita, Craig D. Uchida, and P. Jeffrey Brantingham. 2020. Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. *Journal of Criminal Justice* 68: 101692. [CrossRef] [PubMed]

Moore, Joan W. 1978. *Homeboys: Gangs, Drugs, and Prison in the Barrios of Los Angeles*. Philadelphia: Temple University Press.

Moore, Joan W. 1991. *Going Down to the Barrio: Homeboys and Homegirls in Change*. Philadelphia: Temple University Press.

Moore, Joan, Diego Vigil, and Robert Garcia. 1983. Residence and territoriality in Chicano gangs. *Social Problems* 31: 182–94. [CrossRef]

Muthén, Linda K., and Bengt O. Muthén. 2012. *Mplus: Statistical Analyses with Latent Variables. User's Guide*. Los Angeles: Muthén & Muthén.

Nakamura, Kiminori, George E. Tita, and David Krackhardt. 2020. Violence in the "balance": A structural analysis of how rivals, allies, and third-parties shape inter-gang violence. *Global Crime* 21: 3–27. [CrossRef]

NGC (National Gang Center). 2017. National Youth Gang Survey Analysis. March. Available online: http://www.nationalgangcenter.gov/Survey-Analysis (accessed on 3 February 2019).

Nylund, Karen L., Tihomir Asparouhov, and Bengt O. Muthén. 2007. Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal* 14: 535–69. [CrossRef]

Oberski, Daniel L. 2016. Mixture models: Latent profile and latent class analysis. In *Modern Statistical Methods for HCI*. Edited by Judy Robertson and Maurits Kaptein. Switzerland: Springer, pp. 275–87.

Papachristos, Andrew V. 2009. Murder by Structure: Dominance relations and the Social Structure of Gang Homicide. *American Journal of Sociology* 115: 74–128. [CrossRef]

Papachristos, Andrew V., and David S. Kirk. 2006. Neighborhood effects on street gang behavior. In *Studying Youth Gangs*. Edited by James F. Short and Lorine A. Hughes. Lanhma: AltaMira Press, pp. 63–84.

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. [CrossRef]

Pizarro, Jesenia M. 2008. Reassessing the situational covariates of homicides: Is there a need to disaggregate? *Homicide Studies* 12: 323–49. [CrossRef]

Pizarro, Jesenia M., and Jean Marie McGloin. 2006. Explaining gang homicides in Newark, New Jersey: Collective behavior or social disorganization? *Journal of Criminal Justice* 34: 195–207. [CrossRef]

Popkin, Susan J., Victoria E. Gwiasda, Lynn M. Olson, Dennis P. Rosenbaum, Larry Buron, and Rebecca M. Blank. 2000. *The Hidden War: Crime and the Tragedy of Public Housing in Chicago*. New Brunswick: Rutgers University Press.

Pyrooz, David C. 2012. Structural Covariates of Gang Homicide in Large U.S. Cities. *Journal of Research in Crime and Delinquency* 49: 489–518. [CrossRef]

Pyrooz, David C., Scott E. Wolfe, and Cassia Spohn. 2011. Gang-related homicide charging decisions: The implementation of a specialized prosecution unit in Los Angeles. *Criminal Justice Policy Review* 22: 3–26. [CrossRef]

Radil, Steven M., Colin Flint, and George E. Tita. 2010. Spatializing social networks: Using social network analysis to investigate geographies of gang rivalry, territoriality, and violence in Los Angeles. *Annals of the Association of American Geographers* 100: 307–26. [CrossRef]

Rios, Victor M. 2011. *Punished: Policing the Lives of Black and Latino Boys*. New York: NYU Press.

Rosenfeld, Richard, and Ernesto Lopez. 2020. *Pandemic, Social Unrest, and Crime in US Cities*. Washington: Council on Criminal Justice.

Rosenfeld, Richard, Timothy M. Bray, and Arlen Egley. 1999. Facilitating Violence: A Comparison of Gang-Motivated, Gang- Affiliated, and Nongang Youth Homicides. *Journal of Quantitative Criminology* 15: 495–516. [CrossRef]

Sampson, Robert J., and W. Byron Groves. 1989. Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology* 94: 774–802. [CrossRef]

Sanders, William B. 1994. *Gangbangs and Drive-Bys: Grounded Culture and Juvenile Gang Violence*. Piscataway: Transaction Publishers.

Shaw, Clifford R., and Henry D. McKay. 1942. *Juvenile Delinquency in Urban Areas*. Chicago: University of Chicago Press.

Short, James F., Jr., and Fred L. Strodbeck. 1965. *Group Process and Gang Delinquency*. Chicago: University of Chicago Press.

Skott, Sara. 2019. Disaggregating homicide: Changing trends in subtypes over time. *Criminal Justice and Behavior* 46: 1650–68. [CrossRef]

Smith, Chris M. 2014. The influence of gentrification on gang homicides in Chicago neighborhoods, 1994 to 2005. *Crime & Delinquency* 60: 569–91.

Tita, George E., and Elizabeth Griffiths. 2005. Traveling to violence: The case for a mobility-based spatial typology of homicide. *Journal of Research in Crime and Delinquency* 42: 275–308. [CrossRef]

Tita, George E., and Steven M. Radil. 2011. Spatializing the social networks of gangs to explore patterns of violence. *Journal of Quantitative Criminology* 27: 521–45. [CrossRef]

Tita, George E., K. Jack Riley, Greg Ridgeway, Clifford A. Grammich, Allan Abrahamse, and Peter Greenwood. 2003. *Reducing Gun Violence: Results from an Intervention in East Los Angeles*. Santa Monica: Rand Corporation.

Valasik, Matthew A. 2014. "Saving the World, One Neighborhood at a Time": The Role of Civil Gang Injunctions at Influencing Gang Behavior. Ph.D. dissertation, Department of Criminology, Law & Society, University of California, Irvine, CA, USA. Available online: https://escholarship.org/uc/item/2065d17s (accessed on 11 December 2020).

Valasik, Matthew A. 2018. Gang Violence Predictability: Using Risk Terrain Modeling to study Gang Homicides and Gang Assaults in East Los Angeles. *Journal of Criminal Justice.* 58: 10–21. [CrossRef]

Valasik, Matthew A., and Shannon E. Reid. 2020. Distinguishing between aggression in groups and in gangs: Are gangs always violent? In *The Handbook of Collective Violence: Current Developments and Understandings*. Edited by Carol A. Ireland, Michael Lewis, Anthony Lopez and Jane L. Ireland. New York: Routledge, pp. 273–90.

Valasik, Matthew A., and George E. Tita. 2018. Gangs and Space. In *The Oxford Handbook of Environmental Criminology*. Edited by Gerben J. N. Bruinsma, Gerben Bruinsma and Shane D. Johnson. Oxford: Oxford University Press, pp. 843–71.

Valasik, Matthew A., Shannon E. Reid, and Matthew D. Phillips. 2016. CRASH and burn: Abatement of a specialised gang unit. *Journal of Criminological Research, Policy and Practice* 2: 95–106. [CrossRef]

Valasik, Matthew A., Michael S. Barton, Shannon E. Reid, and George E. Tita. 2017. Barriocide: Investigating the temporal and spatial influence of neighborhood structural characteristics on gang and non-gang homicides in East Los Angeles. *Homicide Studies* 21: 287–311. [CrossRef]

Valdez, Avelardo, Alice Cepeda, and Charles Kaplan. 2009. Homicidal events among Mexican American street gangs: A situational analysis. *Homicide Studies* 13: 288–306. [CrossRef] [PubMed]

Vasquez, Eduardo A., Brian Lickel, and Karen Hennigan. 2010. Gangs, displaced, and group-based aggression. *Aggression and Violent Behavior* 15: 130–40. [CrossRef]

Vasquez, Eduardo A., Lisa Wenborne, Madeline Peers, Emma Alleyne, and Kirsty Ellis. 2015. Any of them will do: In-group identification, out-group entitativity, and gang membership as predictors of group-based retribution. *Aggressive Behavior* 41: 242–52. [CrossRef] [PubMed]

Vaughn, Michael G., Matt DeLisi, Kevin M. Beaver, and Matthew O. Howard. 2009. Multiple murder and criminal careers: A latent class analysis of multiple homicide offenders. *Forensic Science International* 183: 67–73. [CrossRef] [PubMed]

Venkatesh, Sudhir Alladi. 1997. The social organization of street gang activity in an urban ghetto. *American Journal of Sociology* 103: 82–111. [CrossRef]

Vigil, James Diego. 1988. *Barrio Gangs: Street Life and Identity in Southern California*. Austin: University of Texas Press.

Vigil, James Diego. 2007. *The Projects: Gang and Non-Gang Families in East Los Angeles*. Austin: University of Texas Press.

Weatherburn, Don, Bronwyn Lind, and Simon Ku. 1999. "Hotbeds of Crime": Crime and Public Housing in Sydney. *Crime & Delinquency* 45: 256–72.

Williams, Kirk R., and Robert L. Flewelling. 1988. The social production of criminal homicide: A comparative study of disaggregated rates in American cities. *American Sociological Review* 53: 421–31. [CrossRef]

Making Sense of Murder: The Reality versus the Realness of Gang Homicides in Two Contexts

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Abstract: Despite the proliferation of research examining gang violence, little is known about how gang members experience, make sense of, and respond to peer fatalities. Drawing from two ethnographies in the Netherlands and Canada, this paper interrogates how gang members experience their affiliates' murder in different street milieus. We describe how gang members in both studies made sense of and navigated their affiliates' murder(s) by conducting pseudo-homicide investigations, being hypervigilant, and attributing blameworthiness to the victim. We then demonstrate that while the Netherland's milder street culture amplifies the significance of homicide, signals the authenticity of gang life, and reaffirms or tests group commitment, frequent and normalized gun violence in Canada has desensitized gang-involved men to murder, created a communal and perpetual state of insecurity, and eroded group cohesion. Lastly, we compare the 'realness' of gang homicide in The Hague with the 'reality' of lethal violence in Toronto, drawing attention to the importance of the 'local' in making sense of murder and contrasting participants' narratives of interpretation.

Keywords: gang homicide; comparative research; ethnography; gang violence

1. Introduction

Scholars have argued that violence is fundamental to gang life (Klein and Maxson 1989), "so that membership may have a seductively glorious, rather than mundane, indifferent, significance" (Katz 1988, p. 128). The epitome of gang violence is gang homicide, which many academics, police officials, and policy markers consider a *unique* and *distinct* type of murder[1] (Maxson et al. 1985; Maxson and Klein 1996; Maxson 1999). Despite academic, political, and public preoccupation with gang homicides, questions remain about how to define, classify, measure, and study these murders. For example, while some classifications include homicides that are allegedly gang *related* (where the victim and/or offender are gang members), others necessitate the homicide be *motivated* by gang functions (for the explicit benefit of the group) (Maxson and Klein 1990, 1996). Scholars also disagree about the necessary motivations for gang homicides, which can be further delineated by expressive (signaling gang power), instrumental (i.e., protecting gang turf) motifs, or both (Decker 1996; Decker and Pyrooz 2013). Importantly, data on 'gangs' and, by extension, on 'gang homicides' are predominantly police generated, and can therefore be riddled with methodological limitations[2] (see Esbensen et al. 2001; Skogan 1974). These distinctions and data are consequential as they affect how we *quantify* gang homicides (and therefore fashion

[1] Gang homicides are more likely to include multiple offenders, to occur in public settings, to have different spatial characteristics, to involve younger persons, and to involve strangers than nongang incidents (Curry and Spergel 1988; Decker and Curry 2002; Howell 1999; Maxson et al. 1985; Pizarro and McGloin 2006; Pyrooz 2012).

[2] Criminologists disagree on this. For example, Decker and Pyrooz (2010, p. 370) argue "contrary to many claims, police reports of gang crime are not fraught with measurement error so as to be unsuitable for meaningful analysis".

policies/responses), how well our classifications resemble *the realities* of gang homicide (including motivations), and how we understand the *micro processes* of gang homicide.

Though no robust predictors of gang homicide exist, several factors can propel its occurrence. Locality can be central to inciting and shaping gang violence, given many gangs' commitments to specific blocks or territories (Aldridge et al. 2011; Brotherton and Barrios 2004; Spergel 1984). Often, gang turf and territory is located within the neighbourhoods in which gangs form and operate, with neighbourhoods providing the sole or primary space for income generation, particularly in relation to drug trafficking (Hagedorn 1994; Papachristos et al. 2013). Therefore, gang violence, including lethal violence, is often related to 'defending' a neighbourhood, showing 'love' for the community, and competition over territory, status, resources, and drug markets (Brotherton and Barrios 2004; Decker 1996; Densley 2012; Hagedorn and Macon 1988; Maxson 1999; Rodgers 2002; Vargas 2014). Given that drug trafficking is a central illegal enterprise for many gangs and drug trafficking escalates risks of victimization and violent offending, gang homicides are often connected to the drug trade (Adams and Pizarro 2014; Blumstein 1995; Curtis 2003; Densley 2014, p. 52). Moreover, the illegality of drug trafficking prevents traffickers from relying upon prosocial governance institutions to facilitate exchange and provide redress for disputes (see Skarbek 2011), necessitating that they take matters into their own hands, sometimes via lethal violence (Adams and Pizarro 2014).

Gang homicide—similar to gang violence more broadly—is not randomly distributed across physical space, but often ensues in gang "hot spots," frequently located in/near marginalized communities characterized by concentrated poverty and where formal social control actors are absent or inadequate (Bursik and Grasmick 1993; Curry and Spergel 1988; Kubrin and Wadsworth 2003; Mares 2010; Papachristos and Kirk 2006; Pizarro and McGloin 2006; Rosenfeld et al. 1999). In addition to ecological and neighbourhood conditions, other factors affect gang violence, including network processes such as a history of conflict and reciprocity of violence. It is therefore unsurprising that gang violence may be more pronounced in areas where competing gangs share an adjacent turf (Papachristos et al. 2013). Further, in such areas, victims/witnesses may be unwilling to cooperate with law enforcement due to distrust in police and strained police–community relationships, an adherence to "street codes" (Anderson 1999) which privilege street justice over police interventions, and/or due to intimidation and silencing (Miethe and McCorkle 2002). This can mask the prevalence and nature of gang violence from neighbourhood 'outsiders' (such as police) and can make preventing, investigating, and prosecuting gang homicides exceptionally difficult. Gang violence/homicide prosecutions can be further complicated by other elements, including multiple victims/offenders, challenges in establishing gang membership in court, and proving the violence was 'gang motivated'. In response, some jurisdictions in the United States have created dedicated gang units and specialized prosecutions to aid the capture and prosecution of those suspected to be involved in gang violence (see Pyrooz et al. 2011; Miethe and McCorkle 2002).

What is particularly notable about gang homicide is its often cyclical and reciprocal nature. Much gang conflict is therefore both a *consequence of* and *precursor to* gang violence (Decker 1996). Retaliatory homicides are often connected to and/or direct products of operative "street codes" which, in addition to discouraging cooperation with law enforcement mandate that 'disrespect' is met with violence or it may propel additional victimization[3] (Anderson 1999; Kubrin and Weitzer 2003, p. 158). As such, retaliatory violence can be a response to competition, an effort to incite social control, to seek "street justice", and to hamper future victimization (Jacobs and Wright 2006; Kubrin and Weitzer 2003; Maxson 1999). The extent to which gangs retaliate for affiliate homicides is unclear; one study found that 37% of homicides in Chicago amongst organized street gangs were reciprocated (Papachristos 2009). However, some scholars posit gang retaliations are not always

[3] See (Urbanik et al. 2017) for a discussion of how street codes can also limit violence.

targeted at the provoking group but may entail "generalized reciprocity," where the performative aspect of retaliation is directed against a different gang (Lewis and Papachristos 2020).

Recently, gang scholars have become particularly attuned to examining whether and how technology affects gang violence and/or homicide. Though Miller (1975) seminal work on gang violence examined how technological advances such as cars and handguns may have driven the popularity of drive-by shootings, contemporary research has shifted its gaze to the expansion of the Internet and social media. Scholars studying social media and criminally-involved groups have begun to examine the role that social may play in inciting or repelling gang violence and homicide (see Urbanik et al. 2020 for a review).

2. Current Study

The proliferation of studies on gang violence has illuminated many facets of this phenomena. However, the bulk of research on gang homicides has examined the *emergence* of gang violence and its consequences, including retaliation. Consequently, we know little about the *residual* effects of gang homicide, particularly how they affect surviving gang members and their respective groups. In this paper, we examine how gang murders affect affiliates, focusing on how they experience, make sense of, and to respond to peer fatality. By drawing from ethnographic research in two countries—the Netherlands and Canada—we unmask how street cultures and milieu's affect experiences of gang homicides and respond to calls for comparative and multisite gang research (Klein 2005). We first describe our field sites and the role of gang homicide in our respective studies.[4] Second, we highlight the *commonalities* in how gang members make sense of peer murder and discuss the *divergent* residual effects of these instances. We then center 'the local' (Fine 2010) in documenting how participants' varying local contexts and lived realities impacted how they perceived, experienced, and responded to peer fatality.

3. Study A: The Forgotten Village, The Hague (The Netherlands)

Between 2011 and 2013, Roks conducted fieldwork in a small neighbourhood—known as the Forgotten Village—in the city of The Hague, Netherlands, which served as the home base of the Dutch Crips since the late 1980s, who refer to it as their "h200d" (Roks 2017b). Whilst Roks conducted semi-structured interviews, informal conversations, and ethnographic observation with many local residents and stakeholders, he spent most of his time with current and former members of the Dutch Crips. At the onset of the research, the Dutch Rollin 200 Crips consisted of some 50 members (15–40 years old), predominantly of Surinamese and Antillean background. Local and national media have heavily documented the Dutch Crips, including with a 90 min documentary, titled 'Strapped 'N Strong' (Van der Valk 2009). In media interviews, Crips members have consistently referenced their familiarity and experiences with violence and murder and their propensity to use violence when necessary. For example, during one interview with the Dutch magazine *Panorama*, Raymond—the gang's leader—expressed: *"If I want you dead tomorrow, then you'll be dead tomorrow. If I want you to die in one year, you'll be dead in a year"* (Viering 1994, p. 41).

Although violence was central to the Dutch Crips' presentation of self in the media, actual levels of (gang) violence in the Netherlands are low, consistent with many other European nations. An analysis of gangs in different countries by Klein et al. (2006, p. 41) indicates that both the patterns of violent behaviour and the levels of violence of European gangs are less serious than in the United States. Klein et al. (2006) attribute these differences to the nature of gangs in Europe, the lower prevalence of firearms, and lesser levels of gang territoriality. In the Dutch context, Ganpat and Liem (2012, p. 329) show that between 1992 and 2009, 223 persons were murdered annually on average, usually precipitated by arguments and domestic disputes. 'Criminal' homicides comprised 12% of all cases, with incidents varying from "drug addicts killing one another, drug users who killed dealers, and dealers who killed one another during a bad deal" (Ganpat and Liem 2012, p. 333),

[4] For an extensive overview of both ethnographies, see (Urbanik and Roks 2020).

though none were classified as gang related. The Netherlands' homicide rate has been declining since 2009, with 119 murders in 2018 (CBS 2020), 34 of which were due to gun violence, and an addition 577 incidents involved firearms (RTL Nieuws 2020).

During Roks's fieldwork, one of his participants was murdered. In the late hours of Sunday, August 19th, 2012, Quincy "Sin" Soetosenojo[5] was shot several times at close range in his hometown of Amsterdam. He succumbed to his injuries and passed away in the hospital later that night. The murder remains unsolved, making it impossible to assess whether this incident could be classified as a gang homicide. Sin's murder was one of 157 murders in 2012, translating into a homicide rate of 0.94 per 100,000 inhabitants (CBS 2017).

4. Study B: Regent Park, Toronto (Canada)

Urbanik's research is situated in a neighbourhood just east of Toronto's downtown core, Regent Park. Until its ongoing revitalization, Regent Park was Canada's oldest and largest social housing project, and the neighbourhood amassed a notorious reputation as a space of concentrated, racialized poverty and violence. Between 2013 and 2018, Urbanik conducted ethnographic observation and interviews in the neighbourhood. She spent most of her time "deep hanging out" (Geertz 1998) with approximately 25 gang-involved men, who loosely belonged to two neighbourhood gangs, The Rich Riderz and The Young Soldiers (see Urbanik 2018).[6] Despite engaging in several aspects of "gang life" including repping, drug trafficking, turf wars, robberies, gun violence, and gang homicides, these groups were more fluid and loosely organized than larger and more traditional gangs, and had fewer expectations about group commitments. Gun and gang violence are an unfortunate lived reality for many Regent Parkers, and for Urbanik's participants in particular, all of whom reported losing friends, affiliates and family members to gun violence. During the study, many of Urbanik's participants were shot (at) and several were killed.

Similar to the Netherlands, Canada's homicide rate pales in comparison to that of the United States, in part due to stricter gun control. In 2018, Canada reported 651 homicides, and a homicide rate of 1.76 per 100,000 inhabitants. Approximately one-quarter of homicides were classified as "gang related," 83% of which involved a firearm (Statistics Canada 2019). Toronto—Canada's most populous census metropolitan area (CMA)—reported the most homicides of all CMAs, with 142 victims, a 53% increase[7] from the year prior, and a record number since data collection began (Statistics Canada 2019). Thirty-six of these homicides were classified as "gang related". Gun violence is also a growing concern, with many Torontonians—including the former Police Chief—blaming gangs for the shootings (Global News 2019) and news media characterizing the City's gun violence as "civil war" (Warmington 2020). Much of this violence is related to inter-neighbourhood 'beefs', which are particularly common amongst Toronto's social housing projects (see also Berardi 2018).

5. Making Sense of Murder

Despite notable differences in street and gang milieus and the frequency of gang homicide across our field sites, our findings unmask several commonalities in how gang members experienced and responded to peer fatality. We first describe how gang members in both studies tried to make sense of and navigate their affiliates' murder by conducting pseudo-investigations, being hypervigilant, and attributing blameworthiness to the victim.

"What happened, and who did it?": Pseudo-Investigations

Three days after Sin was shot and killed, Roks met with several Crips members who spent most of the evening discussing and debating the circumstances surrounding his murder. The men's occupation with discussing Sin's potential killers and their motives

[5] Except for Quincy "Sin" Soetosenojo, all names are pseudonyms. Some details have been altered to protect participants' identities.

[6] Upon comparing field experiences with Roks, Urbanik returned to the field and conducted "problem-centered interviews" (Witzel 2000), specifically focused on how participants experienced and navigated peer fatality.

[7] Though 2018 was an unusual year given high-causality events, there was still an increase.

superseded traditional mourning rituals. Roks was struck by how meticulously the men conducted their pseudo-investigation. Mirroring the methods used by law enforcement officials, they spoke to Sin's friends and acquaintances about whom he had spent time with recently and whether he had any ongoing beefs or problems that they may be unaware of. As both a member of the Crips' chapter in Amsterdam and The Hague, and because he recently joined a Dutch outlaw motorcycle gang, Sin moved in different circles. This prompted the Crips to amass a long list of possible suspects and motives, deploying even the slightest sliver of information to construct suspicions and allegations.

The Crips also collected and fastidiously reviewed eyewitness reports and crime scene photos published by local media to reconstruct Sin's murder and hopefully identify the culprit(s). For example, they drew upon the arrangement of parked cars and the proximity to Sin's home to the crime street to determine that Sin likely knew his killer. The blood stains in the crime scene photos suggested that Sin was walking away from his vehicle when he was ambushed, reaffirming their hypothesis that an acquaintance must have called him over. They also deliberated about eyewitness' media descriptions that the gunfire sounded like 'rattling' to deduce the murder weapon. Crips' founder Raymond was particularly fixated on this, asserting that identifying the gun and bullets could narrow the suspect list and allow them to gauge if other Crips were in danger.

In an environment such as Regent Park, news about homicides and information about suspected shooter(s) and potential motives travels with exceptional velocity. Similar to StudyA, the men dedicated the immediate aftermath after someone was shot (fatally or otherwise) to trying to determine what happened and most importantly, who was responsible. To illustrate, one summer afternoon in 2015, several of Urbanik's participants were playing cards on the boardwalk when they were ambushed by a drive-by shooter. Approximately 30 min later,[8] Urbanik arrived at the scene to find police had taped off the area, and some of her other participants[9] and other local residents were already recounting what happened, exchanging intel on the shooter and driver's physical description, analyzing the car's route, and listing recent neighbourhood 'beefs' to determine possible motives, to determine the shooter's identity.[10] Once they were 'certain' who the shooter was and his motive (less than an hour later)[11], they called and text others to warn them and to elicit information on his whereabouts.

The speed with which the men in Regent Park conduct pseudo-investigations post-shootings and homicides and try to determine the possible culprit(s) even surprised them, as Rehan highlighted: "*Pretty quick! So quick, it's crazy- though. Like, even I thought about it a couple times. Like, how did you get this information-that's going down? . . . Like, the same day. Like, sometimes before it hits the news, you know*?" One afternoon in 2018, a few weeks after a prominent neighbourhood rapper and his affiliate were shot and killed, Matteo—who has lost 12 close friends to gun violence—shared his internal monologue upon learning another loved one was murdered: "*Makes you think like, what the fuck? What happened? What did he do? And where the fuck was he going and where did he end up?*" Overhearing this, Ezekiel chimed in: "*And if it's somebody close, the thought that comes through your head is "Fuck, I could have been with that nigga. That could have been me*!" When an affiliate was killed, Urbanik's participants' proximity to the deceased (re)sensitized them to the fact that they may be next. Consequently, meticulously gathering homicide details and any related knowledge is "*not for them to solve the crime or anything*"—as Asad asserted, but is motivated by a need to uncover what happened which can shape their response (and specifically, retaliation), and can aid in deflecting subsequent victimization. Determining a peer's last moments and more importantly "*who you was running with?*" is an important survival tactic that can

[8] Urbanik was in a local community center when the shooting occurred.

[9] Those targeted immediately left the area to stay safe and avoid police interaction.

[10] In instances where no eye-witnesses were available, Urbanik's participants had to gather information through other sources, including: social media posts, news media accounts, and details provided by friends and family.

[11] While this strategy can result in fatal misunderstandings and errors, it is nevertheless a critical component of neighbourhood life post-shooting.

help protect members. However, since Urbanik's participants, similar to the Dutch Crips, associated with different groups, identifying the culprit could be challenging.

"Before you know it, you are shaking hands with his killer": Hypervigilance

In the days following Sin's murder, suspicion and distrust–signs of fear according to van de Port (2001, pp. 109–19)–dominated Crips' conversations. Concerns about whether the killer walks among them even made it to the media; Raymond remarked to a journalist who attended Sin's wake: "*Everyone is offering their condolences. Before you know it, you are shaking hands with his killer*" (Van Stapele 2012). When Roks spoke to Dre, a younger Crips member, Dre was upset with his comrades for drinking alcohol and criticized their alleged lack of vigilance during such a critical time. Though Dre noted that several officers attended the wake in hopes of gathering intelligence, he nevertheless affirmed his own commitment to protection: "*But I had the heat on my balls!*", indicating he carried a gun to the wake.

During this time, Roks's participants were in a "*hidden state of emergency*" (Green 1994, p. 228). Although many members prided themselves on being 'strapped 24/7', they appeared to increase their armament following the murder. Every night that following week, they hid a weapon (e.g., baseball bat, firearm) nearby, something they never did during the previous 20 months of fieldwork. It also seemed like the younger members of the Crips were more vigilant in the h200d, paying extra attention to unknown others. They watched passers-by closely, followed them for several blocks, and sometimes even demanded they remove their hands from their pockets when walking through the neighbourhood.

One week after Sin's death, Raymond summoned almost all the Crips to meet him in the h200d before they travelled together to a nearby forest. Prior to leaving, Raymond demanded they all turn off their cellphones and remove the battery to prevent police monitoring. Once in the forest, the men gathered in a semi-circle with Raymond at the center. He started the meeting with "*a moment of silence for the dead homie*" and following the reflection, asked the others how they felt. When no one responded, he reiterated the question, which implored the others to respond with: "*Angry*", "*Fucked up*", and "*It's dark over here, cuzz*". Quincy, a younger member and Sin's close friend, expressed his rage and desire to retaliate. Raymond sympathized and admitted he also wanted revenge, though he cautioned that they had to keep their emotions in check until they were certain of the killer's identity. Raymond then recounted the information he gathered during that week and shared his suspicions about who may have more knowledge and who may have been responsible.

A few days after the gathering, Sin was to be buried in Amsterdam. Before the funeral, Raymond asked: "*Roks, do you want to come*? *Just so you know, it is in the middle of enemy territory*". The day of the funeral, temperatures were projected to reach over 30 °C. When Roks arrived in the h200d, he met with Marvin, a Crip member since the mid-1990s. After exchanging a quick hug, Marvin asked Roks whether it was obvious he was carrying a gun under his clothes. He pondered whether he should wear his coat, worried that donning a jacket on such a hot day might betray to police or others at the funeral that he was armed. Roks assured him that his oversized T-shirt concealed the gun well, which pleased Marvin. This exchange made him more cognizant of how other Crips dressed for the funeral, and he noted that most wore baggy and oversized clothing, including jackets.

In StudyB, murders initiated an almost identical series of events; news/information travelled quickly, police saturated the neighbourhood, and Urbanik's participants usually retreated indoors to determine what happened, their own risk levels, and whether/how they should respond. See how Leon described the group's reactions upon finding out an affiliate was killed:

> *"Anger! 'Let's go right now! like where's he [killer] at, who did it?' . . . Everything is going through your head, you know? How you lost someone that's really close to you, right? . . . There's too much anger, you want to do anything just, you know? So they [killers] can know how you feel the pain, right? And you ain't gonna heal nothing, it's just—you get at them [retaliate]".*

A few days after a young affiliate was shot and killed one summer, Urbanik and another researcher[12] pulled up to the apartment which served as her participants' home base. The area was eerily quiet which was unusual given its vivacious drug trade. Urbanik text Booker—one of her key participants—that they arrived and he came downstairs with Matteo shortly thereafter. Both men appeared uneasy, looking around frequently, studying passing cars carefully, and staying close to the building entryway—atypical behaviours since they were usually relaxed in that area. When Urbanik asked why it was so deserted, Booker responded: "*We're all laying low at Ricky's house. I told em you guys are here, they said they might come down later. Things are hot right now*" Urbanik then probed whether it was related to the shooting, he responded: "*Yea. This shit got us fucked up. Just trying to figure out whose who and the next play* [response], *you know*? *I'd invite ya'll up but trust me- you don't wanna be part of this right now*".

Following a peer's murder, Urbanik's participants operated in a state of hypervigilance until they could identify the killer(s) and motive, wary of being outdoors and which group members they spent time with. Matteo described their trepidation upon learning another peer was killed:

> *"You think you're next. Just cause it's your community that they're dropping close by, right? . . . This shit is happening in your backyard. And to find out you don't know who the fuck the killer is? What if I'm chillin' amongst the killer, and he's just planning on the next one? Like, that's what gets me triggered!"*

Concerns that the killer may be a close affiliate with intimate knowledge about the men's routines and potentially "*planning on the next one*" pushed them to withdraw from neighbourhood life and some group members until things settled. Frankie explained why they rarely ventured outdoors until they had had more information: "*I'm out numbered, I'm out numbered, I can't come outside . . . you don't know who's after who*". Once the men narrowed down or identified possible culprits (usually within a week) and eliminated their affiliates from the suspect list, they re-established their neighbourhood presence. However, the possibility of future ambushes meant they usually only ventured outdoors in large groups and only if at least one person was armed in the weeks following a homicide.

Whilst Urbanik's participants considered strength in numbers a safety measure, they acknowledged that they had to remain hyperaware of their surroundings. Booker described the need to be exceptionally cautious following a peer's murder: "*You just gotta be on your P's and Q's more. It makes you paranoid a little bit . . . got you looking around more often, over your shoulders. You never know. Anything can be expected, right*?" Being on your "Ps and Qs" refers to being "on point", a concept whereby streetwise residents must be hypervigilant, recognizing and mitigating the dangers of their surroundings to thwart violent victimization (Berardi 2018, pp. 120–23). Though Urbanik's participants always had to be circumspect within and beyond Regent Park, peer fatalities amplified their attentiveness in the short term. For example, when discussing one of Urbanik's key participants'—Nathaniel's—murder in 2016, Asther insisted that although he is "*always aware*" given where he lives and his lifestyle, Nathaniel's murder intensified his wariness: "*I'm saying that made me extra cautious, what happened to Nathanial, right?*"

When a group member was killed (and especially after the men retaliated), Urbanik's participants were intensely committed to surveilling the neighbourhood to protect residents and themselves from subsequent violence. To illustrate, consider Marcel's response when Urbanik asked how the group's behaviours change when the "*hood is hot*":

> *"People would see fishy vehicles, or, fishy people, you know what I mean, and from there, you'd get that sense- like you'd know. We all know everyone from Regent Park. I know everyone who has braids in Regent Park. Someone walks around with braids I don't know? I'll be like 'Look at this guy!' And they would do the same thing . . . Altima, tinted, moving funny, driving funny. And we'll just stand on our toes."*

[12] The researcher was a co-investigator on a separate ongoing study.

Urbanik's participants deployed other safety protocols during times of heightened risk. For example, they sometimes hung out in full-view of building security cameras in hopes of deterring assailants, rarely veered far from building doors and ensured doors were always open (sometimes breaking locks to ensure a speedy exit), and occasionally avoided funerals/viewings. They also paid residents in easy-access apartments/townhomes to keep their doors unlocked so they could run inside if necessary, increased group communication, and had Urbanik check around adjacent buildings/corners, run neighbourhood errands (e.g., trips to the convenience store), and drive them places.[13] Similar to Roks's study, peer fatalities in Urbanik's field site sparked a *"hidden state of emergency"* (Green 1994, p. 228), despite their troubling frequency.

"They trusted someone they shouldn't": Attributing Blame to the Victim

In comparing StudyA's and StudyB's findings, a third common response to peer murder emerges: how gang members 'make sense of' what occurred. Once the men in the Forgotten Village and in Regent Park identified the probable killer(s), they shifted their attention to the deceased's actions preceding their murder.[14]

While the men in Roks's study mourned Sin, Raymond drew upon the killing to reiterate the informal rules of Dutch gang life:

> *"That's why I always say: let me know your whereabouts. That shit can keep you alive. Let me know where you are and let me know when you've made it home. I know it sounds childish, but that shit can keep you alive. It's fucked up, but this has to be a lesson for the young homies. This is not a joke, this shit is serious. Fucked up that a homie like Sin has to be the example." (23 August 2012, excerpt from fieldnotes)*

This comment offers a window into the daily practices of the Dutch Crips and how they navigate street life. For their own safety, the men were expected to share their whereabouts with other gang members. Raymond maintained that Sin may have prevented his murder if he had adhered to this "code". The ambiguities surrounding Sin's death were obfuscated by depicting Dutch gang life as guided by clear-cut conduct rules. However, instead of seeing this specific 'code' as a concrete determinant of behaviour, the central argument put forth by Copes et al. (2013) is that "telling the code" (Wieder 1974) illustrates how Dutch gang members give meaning to the world around them, explaining their behaviour both to themselves and to others.

Similarly, while the men in Regent Park had mutual concern for each other, they ultimately regarded survival as an individual responsibility:

> *"It's like, you already know these guys are all talking what they're living . . . So, every time I tell them, "Please keep your head up, please. I want to see you tomorrow, stay safe." Everybody. Ask them. They say 'Yeah', but they're not always keeping an eye on their head. "Be safe, be safe." They don't know. Tomorrow's never promised. They be walkin home, getting smoked. It's crazy"* (Asad)

> *"They slipped up, they trusted someone they shouldn't, and guess what? Lights out!"* (Jefferson)

In this context, "keeping an eye on their head" refers to "staying on your Ps and Qs," the opposite of being "caught slipping" (see Berardi 2018, pp. 123–37). The men's careful dissection of the deceased's alleged role in their own demise betrays that they perceive and convey gang homicides are preventable, if potential victims operate accordingly. The upshot here is that by being "caught slipping" and not successfully evading victimization (including unprovoked, unanticipated violence), Urbanik's participants regarded being murdered as a choice: "*They picked their own poison. They choose to go out* [die] *when the fuck*

[13] As a white woman, Urbanik was unlikely to be targeted in the neighbourhood.

[14] Though this emphasis was often on the moments immediately before the killing (e.g., who they were with), this could also include earlier actions (e.g., behaviors 'inviting' victimization, like filming a rap video on a rival block).

they chose to went out. If I told you to do something, and you went and did opposite and you end up dying, I'll feel like, 'fucking dumb mofucker. You should have listened to me'".

Though Booker's reflection appears insensitive, it is rooted in his familiarity with death and victimization as chronic exposure to neighbourhood violence can result in suppression of sadness (see Fowler et al. 2009). When Urbanik asked whether the circumstances surrounding a murder (e.g., wrong place at the wrong time, or provoked retaliation) affected the extent to which the victim was considered responsible for their untimely death, Booker insisted: "*You still have to be on the P's and Q's about your own actions, right? So, it doesn't really matter on what they*[rivals] *did. It's how they*[victim] *went about it and how they got caught slipping . . . you were supposed to be more alert . . .* " The men also used these expectations to disparage and police others' behaviour, scolding those they believed were too content. Frankie did this often, and he was firm in his position when he described a peer being murdered because of their alleged slip in vigilance: "*I'm gonna miss you, yea. You're my boy. But everybody has to use their head. You gotta get up and look, it's like crossing the street . . . I don't mind you smoking and taking a nap but get up once in a while and check* [for rivals]". Through monitoring and condemning each other's actions, Roks's and Urbanik's participants simultaneously expressed concern for their comrades and propelled expectations that their affiliates were responsible for their own safety.[15]

6. Residual Effects: The "Realness" and "Reality" of Gang Homicide

In the previous section, we described commonalities in how gang members reacted to and 'made sense of' peer fatalities. Although the men in both studies adopted similar strategies, our data also reveal notable differences in responses to peer murder. We outline these differences below and document how their varying street milieus produced these differential effects.

"The homie is dead man, please keep it real!": The Transformative Realness of Sin's murder

One evening about two weeks after Sin's homicide, a couple of Crips members were assigned to conduct "h200d patrol"—where members position themselves around neighbourhood entry points to 'guard' and 'protect' the h200d and senior gang members—from potential enemies (Roks 2017a). Though Sin's death initially heightened caution (sometimes bordering on paranoia), members' hypervigilance and increased safety concerns within the h200d quickly dissipated. For example, when none of the members assigned to h200d patrol reacted when a stranger on a scooter passed a pedestrian-only area, the gang leader, annoyed by h200d patrol's disregard, scoffed: "*The homie is dead man, please keep it real!*" In this case, "keeping it real" referred to representing and defending Crips' 'turf.' This 'strip of reality' (Appadurai 1996, p. 35)—since many gangs engage in defensive localism (Adamson 2000)—forms a base 'out of which scripts can be formed of imagined lives'. However, the transformative realness of Sin's murder produced different interpretative schemes. From the perspective of the gang leader and more established members—including long-term associates since the late 1980s—claiming a hood and defending their territory is something 'real gangstas' do (Lauger 2012), particularly in the aftermath of peer fatality. However, this was incongruent with how younger and new Crips perceived Sin's murder and 'the need for' h200d patrol. Since nothing 'went down' in the weeks after Sin's death, this signaled that the h200d was losing its 'hood' status and had become an unexciting place. For these members, Sin's murder did not reaffirm the 'realness' of Dutch gang life but planted doubts about the function and necessity of defending a hood.

In his pioneering work on gangs, Thrasher [1927] (Thrasher [1927] 1964, p. 46) posits conflicts with invisible or imagined adversaries can aid in gang integration: an "integration through conflict". After Sin's death, a similar process occurred as the event amplified several intra-group conflicts, mostly relating to a growing disillusion with Dutch gang

[15] This was particularly true given broad distrust in police and perceptions of their ineffectiveness, with many participants attempting to protect themselves in a milieu of police racism, brutality, and corruption.

life. Starting some months before Sin's murder, the gang's composition changed drastically; several previously-dedicated Crips lost interest in the group and left and younger members were increasingly frustrated about their inadequate compensation for their work for the Crips, which they saw as outweighing benefits of gang membership (Roks 2017b). Dwindling membership dominated conversations, almost always against the backdrop of Sin's murder. Rick, one of the OGs, spoke for many of the older members when he made sense of the Crips' waning:

> *"After Sin was killed, the shit became too real for them. Then they couldn't bang anymore, because they suddenly had a job or something. But you know, the police also knows this. That's why they see us as the core members. But many have left, man." (20 December 2012, conversation with Rick)*

Sin's murder was a defining moment that impacted all Crips, albeit in different ways. For example, while older members claimed that they had lost close friends to violence before and a few even asserted they *"were used to it"*, others openly shared that they cried frequently and had trouble sleeping since the homicide. For some members, Sin's murder revealed *who* and *what* was "real". In this sense, Sin's death had a "transformative magic" that brought "comic-book symbolism" to life (Katz 1988, pp. 129–31; Van Hellemont 2015, pp. 191–224), (re)affirming the "realness" of the Rollin 200 Crips. For others however, the murder ignited or cemented growing doubts about the reality—or *realness*—of belonging to a Dutch gang. Members who left reported being drawn to the gang because of their violent representations and street reputation; they had certain ideas about the *realness* of Dutch gang life, in part inspired by media accounts of the Dutch Crips and influenced by stereotypical representation of American gang life in movies, documentaries, and YouTube (rap) videos. For them, beliefs about the *realness* of Dutch gang life were shattered by the day-to-day realities, which usually consisted of spending long hours in the h200d doing nothing.

Sin's murder also had a transcendental significance for the Rollin 200 Crips. Annually, multiple social media accounts dedicate posts to commemorating Sin. For example, on the website of a recently established outlaw motorcycle gang that features prominent Dutch Crips members (Roks and Densley 2020), a page is devoted to all the *"cuzzos that we lost over the years"*, which maintains *"They will never be forgotten"*. The caption beneath Sin's picture reads "Triad in Peace Sin Locc". These digital artifacts transmute Sin's well-respected status within the gang and simultaneously, as Conquergood (1994, pp. 51–52) analysis of physical death murals for gang members attests, are "a generative source of strengthening cohesion and commitment" and activate the group's "cultural memory". In addition to these memorials, several Crip members have named their children (boys and girls) after Sin. Through these communicative and mythmaking practices, the Dutch Crips have woven Sin's murder into their gang mythology.

"Out here everyone thinks they're next": The Reality of Gang Homicide in Regent Park

Similar to others living in impoverished communities characterized by stigmatization, limited services, and neighbourhood violence (see Aspholm 2020, p. 217), peer murder was an unfortunate lived reality for Urbanik's participants and all considered it unavoidable. However, while the men were heavily traumatized by losing their first peer to gun violence (usually at 10–12 years old) they all reported becoming accustomed to affiliate murder, referring to it as "*normal*", "*an everyday thing*" and "*just a part of life*". The normalcy and near predictability of peer murder meant that even when Urbanik's participants sat around 'doing nothing' like the men in The Forgotten Village, they needed to remain vigilant and always be prepared to defend themselves, their crews, and their turf. Unlike Roks's participants who experienced peer fatality as signifying or demystifying the 'realness' of gang life, the materiality and 'realness' of gang life in Regent Park was never in question. Instead, Urbanik's participants conveyed that the troubling routineness of peer fatality both accustomed and benumbed them to losing loved ones. Booker succinctly described

this desensitization: "*You just get over it* [the murder] *much faster now than before . . . You lost people, after people, after people. It becomes like, you know, a common thing. When you get used to something, it's not as bad as the first time, right?*" As Asther reflected upon his best friend's murder one afternoon, Urbanik asked whether subsequent losses affected him similarly. He responded: "*No, they don't. Cause like, since that happened, it's like* [snaps fingers to denote frequency] *you get used to it . . . it's easier for me this time*". Claims about becoming habituated to murder are consistent with literature which has found youth exposed to community violence may become emotionally desensitized to it as a form of pathological adaptation and/or a coping mechanism (See Fowler et al. 2009 for a review).

This desensitization also meant that the 'effects' of peer homicide on group behaviours often abated quickly:

> *"Like [when] someone dies, like yesterday, yeah-we all mourning them. Just give it like a week later, people probably forget and people be all happy, laughing and doing their own thing. But when it happens again, we're back mourning them, then back to our normal life. We lose so much people that it just, it's like an everyday thing."* (Leon)

Similarly, Stefano described that while the group is "Edgy for a couple of days" after a member's homicide they "Have to get back to life . . . This is not the 1st time- this is not gonna be the last time. It's not the 3rd time, it's the 100th time". These descriptions align with Urbanik's field observations. While the men spent the initial weeks post-murder openly mourning their loved ones and being hypervigilant, these behaviours largely dwindled thereafter. This was not because Urbanik's participants were unaffected by their peer's passing or questioned the 'realness' of gang life (like Roks's participants). They continued to commemorate them, engaging in several memorial processes including "pouring some out for the dead homies,"[16] producing commemoratory rap videos, and honouring them on social media (Urbanik Forthcoming). However, they believed they had to "get back to life" and "cool off" for survival; they needed to decompress quickly in anticipation of and preparation for subsequent murders and/or their own potential victimization.

Though the frequency of peer homicides necessitated that Urbanik's participants "get over" peer fatality quickly, their tragic regularity shaped group dynamics, creating a communal and perpetual state of insecurity. This insecurity manifest itself via pervasive beliefs members could be killed at any moment, eroding group cohesion, and (re)inciting distrust among members. Unlike Roks's participants who questioned the need to defend their turf after Sin's murder, Urbanik's participants maintained that letting their guard down even momentarily could be fatal and resigned themselves to the possibility they could be murdered next. See Leon's proclamation, for example: "*It could happen anytime. It could happen to us, you know? Me, just personally like, I just take it-it could happen to me at any time, it could happen to anybody, right?*" Marcel held a similar opinion, adding nuance based on the neighbourhood's ongoing revitalization which rendered violence less predictable and avoidable (see also Urbanik et al. 2017: "*At the end of the day, out here everyone thinks they're next, that's what it is. It's like, the fucking way they breaking the shit down, bodies are dropping. The more buildings go down, the more bodies*".

Since neighbourhood violence was always imminent, Urbanik's participants insisted that even when the neighbourhood is "quiet" and *hyper*awareness is unnecessary they must remain cautious and behave accordingly. As Ezekiel stressed: "*You gotta play your cards right. Life is a gamble, and they say it for a reason. You gotta roll the dice the right way*". Yet, Ezekiel contradicted himself immediately: *"You could just walk the street, look at someone wrong, and they just shoot you. What part of the game is that? That's not—that's crazy*". Here, a tension exists between the alleged safety provided by "playing your cards right"—not being "caught slipping"—where one's decisions can allegedly dictate survival or death, and life as a "gamble", where playing by street rules does not always shield against victimization. These perspectives are incongruent; on the one hand victimization is ascribed to individual

[16] A ritual of pouring alcohol out of freshly opened bottles on to the ground whilst reciting the names of murdered friends in a show of respect.

failures and on the other, it is credited to fatalism. This paradox likely reflects the men's attempts at feigning control in an environment where they have little (and sometimes zero) control over safety.

The nature and frequency of peer fatality in Regent Park also bred distrust between group members. While recounting his best friend's murder several years earlier, Matteo elucidated how this loss shattered his trust and reliance in his peers: *"Don't trust nobody. Cause it was his own people that he trust that killed him. And no one knows that I know* [culprit's identity]. *I don't trust a soul, I don't bring no one to where I live. I rest my head* [relax] *nowhere. I learned to distance . . . from the bullshit. I ain't trying to go*[die] *like that*". Despite Matteo's recognition of these dangers and proclamation of pervasive distrust, he—like Urbanik's other participants—saw few possibilities of distancing "from the bullshit" and disengaging from 'the life.' He remains a staple of Regent Park's underground economy, spends his days with other members, features in rap music videos, and engages in "hood politics". Unlike Roks's participants who could and did disengage from gang life, Urbanik's participants' different street milieus and positionalities limited their ability to do the same. As such, they continued to navigate their increasingly distrustful and tumultuous relationships with group members, spending time together and operating as a cohesive unit all whilst remaining suspicious of each other:

> *"He was on a block– that was supposed to be allies . . . He thought he was ok, you know? The same allies hit him up [killed him]. So, you know . . . As much as people might be your allies, you still can't trust them, right?"* (Leon)

Having lost many peers to gun violence and having been set up and shot, Leon was chronically wary of his "allies," explaining how this eroded his trust in other group members: *"I know how to move now. I watch my surroundings. I don't chill with no one, I only chill with who you see I'm here with every day. That's it. I don't need no new friends. Friends will get you killed, they say . . . "* In Toronto's street milieu, "the violent threat and militaristic response exist in the same social circle" (Katz 1988, p. 218).

Many of Urbanik's participants adhered to the "friends will get you killed" mantra, echoing similar sentiments: "The streets talk. So, when you hear what happened, learn how not to move, basically, you know? Usually the best way to stay is by yourself, to yourself. Don't have anyone watching your moves and stuff" (Booker). The men went to great lengths to prevent even trusted peers from studying their habits. They kept unpredictable schedules, seldom shared their whereabouts, and rarely committed to being at a specific place at a specific time in fear that other members may set them up (see also Goffman 2015). In this sense, 'everyday' community violence coupled with less common but still too frequent gang homicides produced and exacerbated chronic suspicion of group members, undermined reliance on group protection, and propelled additional violence (see also Winton 2005). However, this disassociation did not push the men to become disillusioned with "the life" like Roks's participants, though they certainly questioned their peers' loyalty, by and large, they did not consider 'leaving the life', in part because they believed they had few alternatives.

7. Discussion

In this paper, we explored how gang members make sense of peer murder(s) and the residual effects of these violent events for gang members and their respective groups. Despite the nuances in our respective studies, our data reveal notable commonalities in how gang-involved men in two distinct contexts experience and respond to peer fatalities. In both The Forgotten Village and Regent Park, gang-involved men initiate pseudo-murder investigations, become hypervigilant in the immediate aftermath, and attribute blame to the victim in attempts to 'make sense' of the violence. Below, we describe additional commonalities in the how gang homicides affected our participants and their communities.

First, our data reveal that gang-involved men experience loss in complex, multidimensional ways. For the men in our respective studies, grief was a personal *and* communal

experience which produced individualized *and* collective effects, including trauma.[17] Drawing attention to gang members' lived experiences—particularly in relation to their exposure to traumatic events, such as peer fatalities—is critical given societal and media narratives which often pathologize gang members, portraying them as callous criminals. Whilst our participants were offenders, they were also victims with extensive histories of violent victimization by family members, friends, strangers, and rivals, usually commencing long before they were old enough to join "the life". Apart from their own victimization, the men also experienced *vicarious* victimization and trauma. The common unilateral focus on gang members as offenders obfuscates their experiences as simultaneously victims, dehumanizes them, masks their structural oppression, and de-contextualizes their decisions and behaviours. As Pyrooz et al. (2014, p. 321) highlight: "This disjuncture has done a disservice to criminology in general and gang research in particular for understanding the linkages between these concepts".

Second, gang homicides in both studies had immense collateral consequences that extended beyond victims, perpetrators, and other gang members, deeply impacting families, loved ones, and communities. As evidenced, peer homicides had the *potential to* (e.g., in The Forgotten Village) or *did* (e.g., in Regent Park) drive the cycle of victimization, affecting inter-gang relations, retaliatory violence, and community safety. As such, gang murders continue *past* the homicide; they can propel and are propelled by social contagion, organizational memory, networks of competing groups jockeying for power, status, and resources, which shape future gang behaviours, including homicide (Papachristos 2009, p. 76). Future research should examine these collateral consequences in greater depth.

Third, how gang members made sense of, experienced, and responded to peer fatality was intimately shaped by the specific street, social, economic, and political contexts in which they were situated. Both of our studies involved marginalized and predominantly racialized men socially excluded and 'othered' in their respective societies (albeit to varying degrees), including in the education system and labor market, because of race and socioeconomic status. They were also—again, to varying degrees—harmed by and had to navigate state violence most notably in the form of criminalization, overpolicing, and police racism. For our participants, gang membership and its related activities (e.g., violence, drugs and weapons trafficking, other criminal endeavors) was a form of "resistant identity" (Castells 1997), a situated response and adaptation to their marginalization. Similar to other marginalized, gang-involved men, our participants reported that gang membership afforded them with opportunities that they felt were *less* or *un*available elsewhere, including economic benefits, independence, a sense of belonging, a (group) identity, and masculinity.

Fourth, in both studies, social media was central to how participants processed and responded to peer fatality. Though a thorough examination of how the "digital street" (Lane 2015, 2018) affects gang homicides is beyond the scope of this paper, our participants relied upon social media to learn about others' victimization, anticipate and hopefully evade future violence, collect information on potential motives/suspects, determine rivals' locations/movements, commemorate and grieve their murdered affiliates, try to save face when disrespected, and threaten to avenge their loved ones' homicide(s). Though much of their online presentations were performative and sometimes departed from real life (see Roks 2017b; Stuart 2020; Van Hellemont 2012), Urbanik's participants engaged in digital bravado, sometimes provoking suspected murderers and starting beefs with rivals and had to simultaneously navigate the risks and dangers of doing so (Urbanik and Haggerty 2018; Urbanik Forthcoming), which Roks's participants did not. Though social media can incite and propel gang violence in the real world, it is unclear which digital interactions can produce offline violence (Stuart 2020) and how the street and online milieus in which gangs' operate can affect this. Future research should examine the extent to which social media affects on-the-ground processes, including inter- and intra-gang dynamics.

[17] Whilst our participants spoke of how traumatic peer homicide is, they likely understated these effects given normative expectations about masculinity and gang narratives emphasizing toughness.

Despite these commonalities, the men in The Forgotten Village and in Regent Park had vastly different lived realities. While both our studies were based upon studying marginalized and street-involved men, the types and extent of our participants' marginalization differed, in part, due to their varying street contexts and positionality within their respective societies. We posit that these differences shaped how the men perceived, experienced, and responded to peer homicide. As our data reveal, Dutch Crips members *opted into* gang life because of glamorized ideals about what gang life entailed and *opted out* and pursued alternate avenues (e.g., collecting unemployment benefits, finding regular, low-paying jobs, or resorting back to street offending) when they became disillusioned (Roks 2017b). Notably, *feasible* alternatives *existed* and could be pursued. Gang joining and gang exit were distinct processes with few consequences, as violent victimization was rare even for the most senior members and whilst they claimed membership provided them protection, the broader social milieu rendered this alleged protection was largely unnecessary. By leaving the gang, they could essentially escape risk.

Conversely, gang life was not something the men in Regent Park *consciously* opted into or *could* essentially opt out of. Almost of all Urbanik's participants were born or fell into 'the life' because of their upbringing and neighbourhood context. The men reported Old Heads—often brothers, cousins, fathers, uncles, neighbours—grooming them into gang-related activities (e.g., drug running, stashing weapons, monitoring for police) during their pre-teen years, and merely "going along with it" as they aged. As poor and racialized men living in "the ghetto," they saw few if any opportunities to support themselves and their families outside of the informal economy, especially as they accrued lengthier criminal records. Since most were unable to relocate, gang exit seemed both implausible and futile as they could not easily sever their social ties and they considered violent victimization largely inescapable.[18]

Our findings also uncover that variances in our participants' respective positionalities and street cultures produced differences in how they experienced peer murder. In accordance with Mares (2010, p. 41) observation that "the circumstances and settings of gang violence are highly variable", our findings indicate that the street milieus in which gang violence and homicide occur can have a notable influence on how gang member's experience and respond to peer fatality. In Roks's field site, gang violence and especially murder, was rare and momentous. One peer homicide prompted members' to contemplate the *realness* of Dutch gang life. Contrary to StudyA, the tragic frequency of peer fatalities in Regent Park diluted their impacts as murders did not have a "transformative magic" (Katz 1988, p.129). Homicides did not signal the *realness* of gang life in Regent Park; the frequency of peer murder and the incessant risks posed by merely living in Regent Park meant these risks were largely imparted, inescapable, and had to be carefully mitigated. Though additional deaths were unquestioningly tragic, their effects were relatively short-lived as the men recognized the need to "move on" quickly in preparation for the next loss.

While peer homicide disintegrated group trust and amplified conflict in both field sites, this occurred to varying degrees and in different contexts and therefore had different consequences for gang dynamics. In Roks's study, Sin's murder played a notable role in creating and exacerbating existing intra-gang disagreements and temporarily brewed distrust between group members. These mounting tensions pushed some members to leave the gang. Peer fatalities in Regent Park had similar effects, though they were amplified, particularly in terms of mounting distrust in and fear of trusted affiliates. Unlike in StudyA, this chronic wariness did not push the men to consider leaving gang life, as they were already navigating an environment where gang violence and broad distrust was the

[18] For many Black men/youth in Regent Park, "staying out of the life" does not necessarily protect them from violent victimization.

norm.[19] Whilst peer fatalities *amplified* distrust in the short-term, homicides did not notably change the gang's fabric, as they did in StudyA.

Like other social realities and motivations for action, gang violence is often influenced by an intersecting multiplicity of factors, and should be examined as a cultural, psychosocial, behavioural, and transactional manifestation occurring in a particular social setting (Brotherton 2015, p. 163) with locally-specific consequences. As our data show, while similarly disadvantaged gang-involved men in different gang, street, local, and national contexts make sense of, experience, and respond to peer fatality similarly, their experiences differ in notable ways due to their divergent social, economic, and political milieus. As such, examinations of how affiliate murders affect gang members and gang dynamics should be carefully situated within the broader milieus in which gang members operate. Going forward, gang scholars should remain cognizant of the complexity and messiness of gang violence and how its local context affects experiences of gang homicides.

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References

Adams, Jennifer J., and Jesenia M. Pizarro. 2014. Patterns of specialization and escalation in the criminal careers of gang and non-gang homicide offenders. *Criminal Justice and Behavior* 41: 237–55. [CrossRef]

Adamson, Christopher. 2000. 'Defensive localism in white and black: A comparative history of European-American and African-American youth gangs'. *Ethnic and Racial Studies* 23: 272–98. [CrossRef]

Aldridge, Judith, Robert Ralphs, and Juanjo Medina. 2011. Collateral damage: Territory and policing in an English gang city. In *Youth in Crisis*. Edited by Barry Goldson. New York: Routledge, pp. 72–88.

Anderson, Elijah. 1999. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: W.W. Norton and Co.

Appadurai, Arjun. 1996. *Modernity at Large: Cultural dimensions of Globalization*. Minneapolis: University of Minnesota Press.

Aspholm, Roberto. 2020. *Views from the Streets: The Transformation of Gangs and Violence on Chicago's South Side*. New York: Columbia University Press.

Berardi, Luca. 2018. 'Shots Fired: Experiences of Gun Violence and Victimization in Toronto Social Housing'. Ph.D. dissertation, University of Alberta, Edmonton, AB, Canada.

Blumstein, Alfred. 1995. Youth violence, guns, and the illicit-drug industry. *The Journal of Criminal law and Criminology* 86: 10–36. [CrossRef]

Brotherton, David C. 2015. *Youth Street Gangs: A Critical Appraisal*. New York: Routledge.

Brotherton, David C., and Luis Barrios. 2004. *The Almighty Latin King and Queen Nation*. New York: Columbia University Press.

Bursik, Robert, and Harold G. Grasmick. 1993. Economic deprivation and neighborhood crime rates, 1960–1980. *Law & Society Review* 27: 263–84.

Castells, Manuel. 1997. *The Power of Identity*. Oxford: Black-Well.

CBS. 2017. More Murder and Manslaughter Victims in 2017. Available online: https://www.cbs.nl/en-gb/news/2018/36/more-murder-and-manslaughter-victims-in-2017, (accessed on 9 January 2021).

CBS. 2020. Number of Homicides Halved over Two Decades. Available online: https://www.cbs.nl/en-gb/news/2020/42/number-of-homicides-halved-over-two-decades, (accessed on 9 January 2021).

[19] Their distrust must also be understood in relation to their broader distrust across their lives, and particularly, in broader social institutions which have often served as a source of institutional violence (see also Goffman 2015).

Conquergood, Dwight. 1994. Homeboys and Hoods: Gang Communication and Cultural Space. In *Groups Communication in Context: Studies of Natural Groups*. Edited by Larry R. Frey. Hillsdale: Lawrence Erlbaum Associates, pp. 23–55.
Copes, Heith, Brookman Fiona, and Anastasia Brown. 2013. Accounting for violations of the convict code. *Deviant Behavior* 34: 841–58. [CrossRef]
Curry, G. David, and Irving A. Spergel. 1988. Gang Homicide, Delinquency, and Community. *Criminology* 26: 381–407. [CrossRef]
Curtis, Ric. 2003. Crack, cocaine and heroin: Drug eras in Williamsburg, Brooklyn, 1960–2000. *Addiction Research & Theory* 11: 47–63.
Decker, Scott H. 1996. Collective and Normative Features of Gang Violence. *Justice Quarterly* 13: 243–64. [CrossRef]
Decker, Scott H., and G. David Curry. 2002. Gangs, Gang Homicide, and Gang Loyalty. *Journal of Criminal Justice* 30: 343–52. [CrossRef]
Decker, Scott H., and David C. Pyrooz. 2010. On the validity and reliability of gang homicide. *Homicide Studies* 14: 359–76. [CrossRef]
Decker, Scott H., and David C. Pyrooz. 2013. "Gangs: Another Form of Organized Crime?". In *Oxford Handbook of Organized Crime*. Edited by Letizia Paoli. New York: Oxford University Press, pp. 270–87.
Densley, James A. 2012. Street gang recruitment: Signaling, screening, and selection. *Social Problems* 59: 301–21.
Densley, James A. 2014. It's gang life, but not as we know it: The evolution of gang business. *Crime & Delinquency* 60: 517–46.
Esbensen, Finn Aage, Thomas Winfree Jr., Ni He, and Terrance J. Taylor. 2001. Youth gangs and definitional issues. *Crime and Delinquency* 47: 105–30. [CrossRef]
Fine, Gary. A. 2010. The sociology of the local: Action and its publics. *Sociological Theory* 28: 356–76. [CrossRef]
Fowler, Patrick J., Carolyn J. Tompsett, Jordan M. Braciszewski, Angela J. Jacques-Tiura, and Boris B. Baltes. 2009. Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology* 21: 227–59. [CrossRef] [PubMed]
Ganpat, Soenita M., and Marieke C. A. Liem. 2012. Homicide in the Netherlands. In *Handbook of European Homicide Research*. Edited by Marieke C. A. Liem and William Alex Pridemore. New York: Springer, pp. 329–41.
Geertz, Clifford. 1998. Deep hanging out. *New York Review of Books* 45: 69–72.
Global News. 2019. Toronto Police Chief Says Recent String of Gun Violence in City Related to Street Gangs. August 9. Available online: https://globalnews.ca/news/5746070/toronto-police-chief-mark-saunders-gun-violence/ (accessed on 9 October 2020).
Goffman, Alice. 2015. *On the Run: Fugitive Life in an American City*. Chicago: University of Chicago Press.
Green, Linda. 1994. Fear as a Way of Life. *Cultural Anthropology* 9: 227–56. [CrossRef]
Hagedorn, John M. 1994. Neighborhoods, markets, and gang drug organization. *Journal of Research in Crime and Delinquency* 31: 264–94. [CrossRef]
Hagedorn, John M., and Perry Macon. 1988. *People and Folks: Gangs, Crime and the Underclass in a Rustbelt city*. Chicago: Lake View Press.
Howell, James C. 1999. Youth gang homicides: A literature review. *Crime and Delinquency* 45: 208–41. [CrossRef]
Jacobs, Bruce A., and Richard Wright. 2006. *Street Justice: Retaliation in the Criminal Underworld*. New York: Cambridge University Press.
Katz, Jack. 1988. *The Seductions of Crime*. New York: Basic Books.
Klein, Malcolm W. 2005. The Value of Comparisons in Street Gang Research. *Journal of Contemporary Criminal Justice* 21: 135–52. [CrossRef]
Klein, Malcolm. W., and Cheryl L. Maxson. 1989. Street Gang Violence. In *Violent Crime, Violent Criminals*. Edited by Neil Alan Weiner and Marvin E. Wolfgang. Newbury Park: Sage.
Klein, Malcolm, Frank Weerman, and Terrance Thornberry. 2006. "Street gang violence in Europe". *European Journal of Criminology* 3: 413–437. [CrossRef]
Kubrin, Charis E., and Tim Wadsworth. 2003. Identifying the Structural Correlates of African-American Killings. *Homicide Studies* 7: 3–35. [CrossRef]
Kubrin, Charis E., and Ronald Weitzer. 2003. Retaliatory homicide: Concentrated Disadvantage and Neighborhood Culture. *Social Problems* 50: 157–80. [CrossRef]
Lane, Jeffrey. 2015. The digital street. *American Behavioral Scientist* 60: 43–58. [CrossRef]
Lane, Jeffrey. 2018. *The Digital Street*. New York: Oxford University.
Lauger, Timothy R. 2012. *Real Gangstas: Legitimacy, Reputation, and Violence in the Intergang Environment*. New Brunswick: Rutgers University Press.
Lewis, Kevin, and Andrew V. Papachristos. 2020. Rules of the game: Exponential random graph models of a gang homicide network. *Social Forces* 98: 1829–58. [CrossRef]
Mares, Dennis. 2010. Social Disorganization and Gang Homicides in Chicago. *Youth Violence and Juvenile Justice* 8: 38–57. [CrossRef]
Maxson, Cheryl L. 1999. Gang Homicide: A Review and Extension of the Literature. In *Homicide: A Sourcebook of Social Research*. Edited by M. Dwayne Smith and Margaret A. Zahn. Thousand Oaks: Sage, pp. 239–56.
Maxson, Cheryl L., and Malcolm. W. Klein. 1990. Street gang violence: Twice as great, or half as great? In *Gangs in America*. Edited by C. Ronald Huff. Thousand Oaks: SAGE, pp. 71–100.
Maxson, Cheryl L., and Malcolm. W. Klein. 1996. Defining gang homicide. In *Gangs in America*, 2nd ed. Edited by C. Ronald Huff. Thousand Oaks: SAGE, pp. 3–20.
Maxson, Cheryl L., Margaret A. Gordon, and Malcolm W. Klein. 1985. Differences between Gang and Nongang Homicides. *Criminology* 23: 209–12. [CrossRef]

Miethe, Terance D., and Richard C. McCorkle. 2002. Evaluating Nevada's antigang legislation and gang prosecution units. In *Responding to Gangs: Evaluation and Research*; Edited by Winifred L. Reed and Scott H. Decker. Washington, DC: National Institute of Justice, pp. 169–85.

Miller, Walter B. 1975. *Violence by Youth Gangs and Youth Gangs as Crime Problem in Major American Cities*; Washington, DC: SGPO, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice.

Papachristos, Andrew V. 2009. Murder by Structure: Dominance Relations and the Social Structure of Gang Homicide. *American Journal of Sociology* 115: 74–128. [CrossRef]

Papachristos, Andrew V., and David S. Kirk. 2006. Neighborhood Effects on Street Gang Behavior. In *Studying Youth Gangs*. Edited by James F. Short and Lorine Hughes. Lanham: Altamira, pp. 63–85.

Papachristos, Andrew V., David Hureau, and Anthony Braga. 2013. The corner and the crew. *American Sociological Review* 78: 417–47. [CrossRef]

Pizarro, Jesenia M., and Jean Marie McGloin. 2006. Explaining gang homicides in Newark, New Jersey. *Journal of Criminal Justice* 34: 195–207. [CrossRef]

Pyrooz, David C. 2012. Structural covariates of gang homicide in large U.S. cities. *Journal of Research in Crime and Delinquency* 49: 489–518. [CrossRef]

Pyrooz, David C., Scott E. Wolfe, and Cassia Spohn. 2011. Gang-related homicide charging decisions: The implementation of specialized prosecution unit in Los Angeles. *Criminal Justice Policy Review* 22: 3–26. [CrossRef]

Pyrooz, David C., Richard K. Moule, and Scott H. Decker. 2014. The contribution of gang membership to the victim–offender overlap. *Journal of Research in Crime and Delinquency* 51: 315–48. [CrossRef]

Rodgers, D. 2002. *We Live in a State of Siege: Violence, Crime, and Gangs in Post-Conflict Urban Nicaragua*. DESTIN Working Paper No. 36. London: Development Studies Institute (DESTIN), London School of Economics.

Roks, Robert A. 2017a. "Crip or die? Gang disengagement in the Netherlands". *Journal of Contemporary Ethnography*. [CrossRef] [PubMed]

Roks, Robert A. 2017b. "In the 'h200d': Crips and the intersection between space and identity in the Netherlands". *Crime, Media, Culture*. [CrossRef]

Roks, Robert A., and James A. Densley. 2020. From Breakers to Bikers: The Evolution of the Dutch Crips 'Gang'. *Deviant Behavior* 41: 525–42. [CrossRef]

Rosenfeld, Richard, Timothy M. Bray, and Arlen Egley. 1999. Facilitating Violence: A Comparison of Gang-Motivated, Gang-Affiliated, and Non-Gang Youth Homicides. *Journal of Quantitative Criminology* 15: 495–516. [CrossRef]

RTL Nieuws. 2020. *Toename vuurwapengeweld in Nederland: vorig jaar 646 incidenten*. Available online: https://www.rtlnieuws.nl/nieuws/nederland/artikel/5095871/vuurwapen-wapens-illegaal-criminelen-toename-politie-2019-2018 (accessed on 9 January 2021).

Skarbek, David. 2011. Governance and prison gangs. *American Political Science Review* 105: 702–16. [CrossRef]

Skogan, Wesley. 1974. The Validity of Official Crime Statistics. *Social Science Quarterly* 55: 25–38.

Spergel, Irving A. 1984. Violent Gangs in Chicago. *Social Service Review* 5: 199–226. [CrossRef]

Statistics Canada. 2019. Homicide in Canada. 2018. Available online: https://www150.statcan.gc.ca/n1/pub/85-002-x/2019001/article/00016-eng.htm (accessed on 4 October 2020).

Stuart, Forrest. 2020. *Ballad of the Bullet: Gangs, Drill Music, and the Power of Online Infamy*. Princeton: Princeton University Press.

Thrasher, Frederic M. 1964. *The Gang*. Chicago: University of Chicago Press. First published 1927.

Urbanik, Marta-Marika. 2018. Drawing Boundaries or Drawing Weapons? Neighborhood Master Status as Suppressor of Gang Violence. *Qualitative Sociology* 41: 497–519. [CrossRef]

Urbanik, Marta-Marika, and Kevin D. Haggerty. 2018. '#It's Dangerous': The Online World of Drug Dealers, Rappers and the Street Code. *The British Journal of Criminology* 58: 1343–60.

Urbanik, Marta-Marika, and Robert A. Roks. 2020. GangstaLife: Fusing Urban Ethnography with Netnography in Gang Studies. *Qualitative Sociology* 43: 213–33. [CrossRef]

Urbanik, Marta-Marika, Sara K. Thompson, and Sandra M. Bucerius. 2017. 'Before There Was Danger but There Was Rules and Safety in Those Rules': Effects of Neighbourhood Redevelopment on Criminal Structures. *The British Journal of Criminology* 57: 422–40. [CrossRef]

Urbanik, Marta-Marika, Roks Robert A, Storrod Michelle, and Densley James. 2020. "Emerging Issues in Gang Ethnography: The Challenges and Opportunities of Eurogang Research in a Digital Age". In *Gangs in the Era of Internet and Social Media*. Edited by Chris Melde and Frank Weerman. New York: Springer.

Urbanik, Marta-Marika. "Gangbangers are Gangbangers, Hustlers are Hustlers": The Rap Game, Social Media, and Gang Violence in Toronto. In *International Handbook of Critical Gang Studies*. Edited by David Brotherton and Rafael Gude. London: Routledge, Forthcoming.

van de Port, Mattijs. 2001. *Geliquideerd: Criminele Afrekeningen in Nederland*. Amsterdam: Meulenhoff.

Van der Valk, Joost. 2009. *Strapped 'n Strong*. Available online: https://revolver.nl/film-tv/2120/crips-strapped-n-strong (accessed on 9 January 2021).

Van Hellemont, Elke. 2012. Gangland Online: Performing the Real Imaginary World of Gangstas and Ghettos in Brussels. *European Journal of Crime, Criminal Law and Criminal Justice* 20: 159–73. [CrossRef]

Van Hellemont, Elke. 2015. The Gang Game: The Myth and Seduction of Gangs. Ph.D. dissertation, Koninklijke Universiteit van Leuven, Leuven, Belgium.
Van Stapele, Saul. 2012. 'Deze Crip sliep al jaren "heel lichtjes"'. *NRC Handelsblad*, August 21.
Vargas, Robert. 2014. Criminal group embeddedness and the adverse effects of arresting a gang's leader. *Criminology* 52: 143–68. [CrossRef]
Viering, Peter. 1994. Straatroof, inbraak, doodslag [Street Robbery, Burglary, and Manslaughter]. *Panorama* 3: 37–42.
Warmington, Joe. 2020. Wild Weekend of Shootings Like a Civil War. Toronto Sun. September 28. Available online: https://torontosun.com/news/local-news/warmington-wild-weekend-of-shootings-like-a-civil-war (accessed on 3 October 2020).
Wieder, D. Lawrence. 1974. *Language and Social Reality: The Case of Telling the Convict Code*. Den Haag: Mouton.
Winton, Ailsa. 2005. Youth, gangs and violence: Analysing the social and spatial mobility of young people in Guate mala City. *Children's Geographies* 3: 167–84. [CrossRef]
Witzel, Andreas. 2000. The Problem-centered Interview. *Forum: Qualitative Social Research* 1: 1–7.

Comparing Violent and Non-Violent Gang Incidents: An Exploration of Gang-Related Police Incident Reports

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Abstract: Prior research has established a strong link between gangs and violence. Additionally, this connection is demonstrated across multiple methodologies such as self-report surveys, qualitative interviews, as well as official records. Officially recorded gang data can be increasingly hard to obtain because data collection approaches differ by agency, county, city, state, and country. One method for obtaining official gang data is through the analysis of police incident reports, which often rely on police officers' subjective classification of an incident as "gang-related." In this study we examine 741 gang-related incident reports collected over four years from the Indianapolis Metropolitan Police Department. This study will explore reasons why incidents were attributed to gangs as well as compare the characteristics of violent, drug, and non-violent gang-related incidents. This work has implications for understanding the complexities associated with gang incident reports as well as for the commonality of violent gang crimes.

Keywords: gang; violence; incident reports; police data

1. Introduction

The link between gangs and violence is well-established in prior literature, which has resulted in gang researchers naming violent behavior as one of the key features of gang life (Carson et al. 2017; Decker 1996; Irwin-Rogers et al. 2019; Pyrooz et al. 2016). This strong relationship between gangs and violence persists across time, geographic location, and appears regardless of the research methodology (e.g., ethnographies, survey data, official records). Early ethnographic gang researchers identified themes surrounding violent behavior (Thrasher [1927] 1963; Yablonsky 1962) and more recent ethnographic research discusses gang-related violence in the United States (U.S.) and other countries (Andell 2019; Brenneman 2012; Decker and Winkle 1996; Densley 2013; Deuchar 2018; Garot 2010; Ward 2013; Weaver 2016). Individual-level survey data that compare violence among gang and non-gang youth find that violent offenses are overwhelmingly committed by gang youth (Esbensen et al. 2010; Melde and Esbensen 2013; Pyrooz et al. 2016; Thornberry et al. 2003). The link between gangs and violence is also echoed in the analysis of police homicide data from several cities across the United States (U.S.) (Adams and Pizarro 2014; Huebner et al. 2016; Papachristos et al. 2015; Papachristos et al. 2013; Pizarro and McGloin 2006; Pyrooz et al. 2010; Pyrooz et al. 2011; Rosenfeld et al. 1999).

While it is important to understand the violent nature of gangs, researchers often find that gangs and gang members are involved in other types of non-violent offending. The "cafeteria-style" nature of offending among gang members is largely supported in both qualitative (Decker and Winkle 1996; Fleisher 1998; Lauger 2012; Miller 2001) and survey research (Esbensen and Carson 2012; Thornberry

1998; Thornberry et al. 2003; Weerman and Esbensen 2005). However, due to the emphasis on using police data to understand gang-involved homicides, we know less about other gang-related crimes that come to the attention of the police. This gap in the literature is partially due to law enforcement practices that may limit the range of offenses that are labeled gang-related. Research by Decker and Kempf-Leonard (1991) as well as Klein and Maxson (2006) suggest that law enforcement agencies are restrictive in their definitions of gang activity and may fail to attribute non-violent crime to gangs.. While the research shows that gang members may specialize in violence (Melde and Esbensen 2013; Pyrooz and Decker 2013) and that there is a benefit to understanding gang-motived homicides, see (Rosenfeld et al. 1999), a narrow focus on violent gang incidents can reinforce the stereotype that gangs are *only* involved in violence (Klein and Maxson 2006).

In addition to a heavy focus on violent gang acts, there is a high degree of variation across cities and agencies in the identification of an incident as gang-related (Kennedy et al. 1997; Maxson and Klein 1990; Pyrooz et al. 2011). Research on gang homicides demonstrates that some law enforcement agencies label incidents as gang-motivated (i.e., those that result from gang operations such as turf wars or gang rivalries), while other agencies use a much less restrictive definition of gang-related crimes (i.e., those that involve a gang member) (Curry et al. 1996; Maxson et al. 2002; Maxson et al. 1985). Other agencies may not have clear standards on what crimes should be or are labeled as gang-related. These definitional discrepancies result in very different representations of gang crime (Maxson and Klein 1990) and make it extremely difficult to generalize research findings or policy implications to different cities and contexts.

A lack of definitional consistency and a failure to recognize the broad range of offenses that gang members are involved in has major implications for criminal justice responses as well as the social construction of gangs (Decker and Kempf-Leonard 1991; McCorkle and Miethe 1998). Additionally, attributing a crime, especially a violent crime, to a gang or gang member has implications for the prosecuting of these offenses (Pyrooz et al. 2011) and can activate gang enhancements in charging and sentencing. These enhancements can drastically change the length of a prison sentence (Hall 2019). Despite these serious implications, we have little empirical knowledge—especially for non-violent crimes—about why crime incidents are attributed to gangs.

In an attempt to build knowledge in the area, we draw data from 741 police incident reports that the reporting officer labeled as a gang-related incident. These incidents occurred in the American city of Indianapolis, Indiana from 2015 to 2019. Indianapolis is a Midwestern city located in the "Crossroads of America." The city spans roughly 400 square miles. In 2019, the U.S. Census Bureau estimated the city population to be roughly 886,000 making it the 17th most populous city in the U.S. In 2018, driven by gun violence, Indianapolis experienced 1278 violent crimes per 100,000 people compared to the national average of 369 per 100,000 people (Federal Bureau of Investigation 2018). The Indianapolis Metropolitan Police Department (IMPD) is the largest law enforcement agency in Indiana employing roughly 1700 sworn officers. IMPD is ranked consistently as one of the 30 largest police departments in the U.S.[1] Given these numbers, we believe that Indianapolis provides a suitable setting for our research goals. Our first goal is to explore the reasons why reporting officers labeled an incident as gang-related. Our second goal is to compare characteristics of violent, drug, and other non-violent gang-related incidents.

2. The Validity of Police Perceptions of Crime

The empirical use of official police data and incident reports is common practice in criminology and criminal justice literature. While use of these data are essential for improving our understanding of crime, they were not intended for research purposes and scholars using these data have pointed to a number of methodological limitations (Alison et al. 2001; Katz et al. 2012; Levitt 1998). These include

[1] http://www.bjs.gov/index.cfm?ty=pbdetail&iid=6706.

variation in the amount of detail provided based on the reporting officer (Alison et al. 2001) as well as a certain amount of reporting bias (Fisher 1993; Levitt 1998). Due in part to these limitations, police records are viewed as having a certain amount of bias (Braga et al. 1994; Goldstein 1990). While these flaws are troubling, other research suggests that police perceptions of crime and gangs in their community are valid generally, as well as for gang research (Decker and Pyrooz 2010; Katz et al. 2000). Braga et al. (1994), for instance, argue that the experiences of law enforcement cause them to develop a detailed sense of crime in certain neighborhoods and the city.

Of relevance to the current study is conceptions about who/what constitutes a gang as well as a gang crime. Difficulties surrounding defining a gang and a gang member plague both academics and practitioners alike (Curry and Decker 1997; Decker et al. 2014; Esbensen et al. 2001; Morash 1983; see, also, Andell (2019) for a broad discussion in the context of the United Kingdom). Police knowledge about gangs is often learned on the job (Decker and Kempf-Leonard 1991) and, therefore, likely to improve with time and experience (Kennedy et al. 1997). Research exploring police perceptions of gangs in their community find that law enforcement is quite knowledgeable about their local gang situation (Kennedy et al. 1997). While law enforcement in some cities have a clear definition of what constitutes gang crime (Maxson and Klein 1990), law enforcement agencies without clear definitional standards may rely on an officer's subjective classification of an incident as gang-related or not. These perceptions, especially among newer officers, may be based on stereotypical, and often inaccurate, depictions of gang-related crime presented by the media (Esbensen and Tusinski 2007; Horowitz 1990). In Kennedy et al.'s (1997) analysis of gang violence in Boston, the authors reported that police officers were quite knowledgeable about gang activity, but tended to believe that almost all homicides committed by youth were perpetrated by gang members and that all youth homicide victims were gang members. This finding indicates that law enforcement might attribute violent acts to gang activity more easily.

Overall, the limitations of data provided by law enforcement underscore the importance of the current work. The news media and policy makers lean heavily upon law enforcement perceptions of gangs and gang crime; therefore, it is exceedingly important to understand the reasons behind the classification of a crime as gang-related as well as variation across crime types. As Decker and Kempf-Leonard (1991, p. 272) note, "the formulation of effective policy responses to gangs depends on reliable and valid foundation of knowledge of the 'gang problem.'"

3. Methodology and Data

Data for this study were initially collected as part of the Southern District of Indiana Project Safe Neighborhoods[2] project. The data come from the Indianapolis Metropolitan Police Department (IMPD) incident records management system (RMS). The RMS is official police record and includes all incidents where a police officer documents an illegal or potentially illegal event (i.e., a police report). This system does not include incidents where the police were called to a scene and determined a crime had not occurred (i.e., calls for police service). When initiating a police report, the authoring officer can use a series of "check-boxes" to indicate if the report is gang-related, domestic violence-related, and/or narcotics-related. The check boxes default to 'no' therefore the reporting officer must initiate a change from 'no' to 'yes.' The sample includes all incident reports where the gang-related box was checked (i.e., indicated yes) from 1 January 2015 through 31 May 2019.[3] Indiana law (IC 35-45-9-1)[4] defines a "criminal gang" as a formal or informal group with at least three members that specifically:

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2 https://www.justice.gov/psn.
3 IMPD changed their RMS in June 2019. The new RMS did not have a similar check-box system.
4 http://iga.in.gov/legislative/laws/2020/ic/titles/035#35-45-9.

(1) Either:

(A) Promotes, sponsors, or assists in;
(B) Participates in; or
(C) Has as one of its goals; or

(2) Requires as a condition of membership or continued membership;

The commission of a felony, an act that would be a felony if committed by an adult, or the offense of battery as included in IC 35-42-2.[5]

All law enforcement agencies in Indiana are bound by this gang definition for arrest and charging purposes, however, we have no way of knowing if officers were guided by this definition when checking the gang-related box. Similarly, there was no known formal training on the use of any of the check-boxes.

Overall, incident reports designated as gang-related comprised a minute proportion of police reports for IMPD over the project period (see Table 1). The proportion of cases that were designated gang-related steadily decreases every year from 2015 to 2019. IMPD operated under two different Indianapolis mayors and three different Chiefs of Police during the study period. Differing administrative priorities leads to organizational changes which may be reflected by the decrease of gang-related incident reports (Feeley 1973; Hagan 1999; Lipsky 1980).

Table 1. Annual police incident reports.

Year	Incident Reports		Gang-Related Reports		Percent (of Total)
	n	%	n	%	
2015	127,397	23.3	266	35.9	0.05
2016	128,770	23.6	175	23.6	0.03
2017	124,725	22.8	152	20.5	0.03
2018	119,728	21.9	89	12.0	0.02
2019 *	45,961	8.4	59	8.0	0.01
Total	546,581	100.0	741	100.0	0.14

* Only includes incident reports through 31 May 2019. Source: IMPD Oversight, Audit, and Performance Division.

The majority of data collected from the reports was officer-coded at the time the report was created, for example, incident location, age, race, and gender of any individuals involved, crime type, and/or criminal charges. There is also a free text section called the "Incident Narrative." In this section, the officer provides a summary of the incident. There is no set format for this section and narratives can vary greatly in length and detail. Police incident reports are not created for research (Alison et al. 2001) therefore we recoded fields in an attempt to address our research questions. The following sections discuss the variables used in the analyses as well as information on the coding techniques used for the gang-related reasons variables. See Table 2 for the descriptive statistics for all variables.

[5] IC 35-42-2: Battery and Related Offenses.

Table 2. Descriptive statistics for full sample and by dependent variable outcome.

	Total		Violent Crime		Drug Crime		Other Non-Violent Crime		
Variable (1 = Yes)	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	χ^2
Crime Type	741	100	131	17.7	153	20.6	457	61.7	
Named Gang	201	27.1	40	30.5	13	8.5	148	32.4	34.026 ***
Self-Initiated	296	39.9	15	11.5	138	90.2	143	31.3	219.658 ***
Reason									
Gang Signs and Symbols	100	13.5	5	3.8	2	1.3	93	20.4	48.375 ***
Self-identify	61	8.2	17	13.0	1	0.7	43	9.4	16.375 ***
Associates with Gangs	161	21.7	38	29.0	4	2.6	119	26.0	41.944 ***
Law Enforcement Intelligence	227	30.6	11	8.4	109	71.2	107	23.4	160.426 ***
Unknown or Unclear	261	35.2	68	51.9	39	25.5	154	33.7	22.802 ***
Firearm	327	44.4	58	44.3	82	53.6	187	40.9	6.919 *
	M (SD)		**M (SD)**		**M (SD)**		**M (SD)**		**F-Statistic**
Number of Victims	0.70 (0.86)		1.4 (1.1) [b,c]		0.14 (0.40) [a,c]		0.68 (0.76) [a,b]		94.432 ***
Number of Suspects	1.2 (1.3)		2.1 (1.7) [b,c]		1.0 (1.2) [a]		0.94 (1.2) [a]		38.855 ***

* $p < 0.05$, *** $p < 0.001$; [a] = significant difference from violent crime ($p < 0.05$); [b] = significant difference between drug crime ($p < 0.05$); [c] = significant difference from non-violent crime ($p < 0.05$).

3.1. Dependent Variable

The dependent variable is a categorical measure of crime type (1= violent crime; 2 = drug crime; 3 = other non-violent crime). For each incident report, the reporting officer designates one or more "incident offenses" that specify which state laws have been violated.[6] Each offense designation includes the corresponding Indiana Code.[7] We grouped these into one of three Crime Types (1 = violent crime; 2 = drug crime; 3 = other non-violent crime). In cases where the officer indicated more than one crime type, we coded one crime type in order of severity (violent, drug, other non-violent). 'Violent crimes' included homicide, rape, robbery, aggravated assault, and sex crimes. 'Drug crimes' included possession of paraphernalia, possession, dealing, and cultivation of marijuana, possession or dealing of cocaine, methamphetamine, or other controlled substance, and visiting or maintaining a common nuisance. Any crime that did not fit into one of the first two categories was classified as 'other non-violent crime.' Of the incidents that were labeled as gang-related, the majority were other non-violent crimes followed by drug crimes and violent crimes.

3.2. Explanatory Variables

We used the narrative portion of the incident report to try and determine the reason the reporting officer indicated the incident was gang-related. Gang-related reasons were not determined a priori; we instead used a iterative modified grounded theory approach (Glaser and Strauss 2009) looking for themes to emerge and also with the understanding that each incident report could have more than one reason for being considered gang-related. We finalized on four possible reasons that the incident was gang-related. Each of the following reasons is a binary variable (0 = no; 1 = yes) and gang-related reasons are not mutually exclusive. Incident reports could have more than one reason for being labeled gang-related. Gang Signs and Symbols: The report writer indicted the presence of gang signs and/or symbols which could include gang tattoos, graffiti, and the display of colors and/or signs. Self Identifies: At least one individual listed in the police report self-identifies as a gang member. Associates with Known Gang Members: At least one individual listed in the report associates with or is related to a known gang member. Law Enforcement Intelligence: Law enforcement intelligence would indicate the incident is gang-related. While we may not know the exact intelligence, the nature of the incident including the units or outside agencies involved would indicates the incident is gang-related.

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[6] Incident offenses do not represent prosecutorial charging decisions.
[7] See http://iga.in.gov/legislative/laws/2020/ic/titles/001.

We coded the reason as Unknown or Unclear if we were unable to determine the reason the incident was gang-related. Law enforcement intelligence was the most common reason a report was labeled gang-related—coded in 30% of incident reports (see Table 2). That said, there were a fair number of reports, just more than one-third, for which we were not able to determine why the officer labeled the incident gang-related. At least one reason was identified in 56% of reports. The remaining 10% of reports had two or more reasons identified.

We read each report narrative to determine if the reporting officer recorded a specific gang name (0 = no named gang; 1 = named gang). Just greater than 25% of incident reports included a Named Gang. Report Initiation is the activity that prompted the police report. Report Initiation was categorized according to whether the activity was self-initiated or not (0 = not self-initiated, 1 = self-initiated). Reports that are the result of a 'call for service' (CFS) or reactive police activity can be inherently different than a report that results from self-initiated police activity or proactive activity (Cordner 1979) in that an officer can choose what self-initiated activity to document. Reports that result from a CFS are influenced by the wants or needs of another individual (e.g., a community member) and therefore the officer has less discretion about what is documented in the incident report. Incident reports resulting from a community member's call for assistance (call for service) or from the request of another agency were classified as 'not self-initiated.' In these cases, a police officer in the field was responding to a request for service and therefore has less control over documentation. Responding field officers may not have the same level of working intelligence about the incident as an investigative officer who is working an incident as part of an investigation or self-initiated activity. Self-initiated activity included undercover operations or investigations, search warrant service, person warrant service, and activities where the officer was not dispatched or requested to the location. The majority of police reports (60%) were result of calls for service/not self-initiated.

The number of individual victims and suspects listed in the report were coded as continuous variables. If the only victim listed was an organization and not a specific person, we coded that as zero (i.e., no victim). Fifty-three percent of incidents included at least one victim however the average number of victims per incident was less than one (mean = 0.70, SD = 0.86). More than one-half of incident reports included at least one suspect (65%). The average number of suspects per incident report was just greater than one (mean = 1.2, SD = 1.3). Firearms drive violence in Indianapolis as well as in most urban cities across the United States. We coded 'yes' if the officer listed a firearm in the property section of the report meaning at least one firearm was confiscated or taken into protective custody at the incident scene. About 44% of incidents involved a firearm.

4. Results

The focus of this analysis is two-fold. We are interested in incident characteristics that (1) influence the reporting officer's categorization of that incident as gang-related and (2) differentiate between violent, drug, and other non-violent crimes. Bivariate analyses revealed several differences in crime type across the explanatory variables (see Table 2). In terms of the reasons why these crimes were labeled as gang-related, violent crime incidents were significantly more likely to be labeled as gang-related due to self-identification as a gang member, but it was also more likely that the reason for the gang-related label was unclear. Non-violent crimes were more likely to include the presence of signs and symbols for gang membership. Drug crimes were less likely to involve a named gang and be classified as gang-related because of gang associations. However, drug crimes were significantly more likely to be labeled as gang-related due to law enforcement intelligence. When looking at other characteristics the data show that incidents involving violent crimes were the least likely to result from self-initiated activity, violent crimes were significantly more likely to include multiple victims and offenders, and officers were least likely to confiscate a weapon during other non-violent crime incidents.

Given the established difference in reactive versus proactive self-initiated police activity, it is important to examine these results more closely. Within the non-violent crime incident reports, more than two-thirds of these reports resulted from a call for service (i.e., self-initiated = no). The majority

of incidents categorized as violent crimes resulted from non-self-initiated officer activity, meaning the officer was responding to a call for service from a community member or other law enforcement unit or agency. Only a small proportion of violent crime incident reports resulted from officer-initiated activity. In contrast, the majority (90%) of drug crime incidents were the result of self-initiated officer activity. These differences are significant ($\chi^2 = 219.657$; $p < 0.000$). These findings may suggest several things. First, when gang activity is violent, law enforcement is summoned; it is rare that law enforcement will find violent gang-related activity on their own. Despite this finding, the majority of incidents where officers are responding to a call for service are still non-violent, non-drug related incidents. These data also demonstrate it is uncommon for an incident that was self-initiated by an officer to be a violent incident, that is, gang-related violent incidents almost came to the attention of law enforcement via a third party call for service.

Multivariate Analysis

Given our interest in crime type, we next performed a multinomial logistic regression to determine if we could predict crime type using the explanatory variables. Multinomial regression is appropriate due to the categorical nature of the dependent variable. Table 3 presents the comparison of violent crimes and drug crimes with other non-violent crimes (reference category). The reference category was changed to violent crime (see Table 4) in order to make comparisons between drug and violent crimes.

Table 3. Multinomial logistic regression for violent crime and drug crimes compared with other non-violent crimes.

(n = 741)					[Exp(b)]	95% Confidence Interval	
Variable		β	SE	Sig	Odds Ratio	Lower	Upper
Dependent	Independent (0 = No)						
Violent Crime	Named Gang	−0.039	0.306	0.898	0.962	0.528	1.752
	Self-Initiated	0.909	0.345	0.008 *	2.483	1.263	4.883
	Firearm	0.496	0.246	0.044	1.642	1.013	2.662
	Number of Victims	0.737	0.147	0.000 ***	2.089	1.565	2.788
	Number of Suspects	0.468	0.078	0.000 ***	1.597	1.37	1.863
	Reason						
	Gang Signs and Symbols	1.372	0.547	0.012 *	3.944	1.351	11.513
	Self-identify	−0.411	0.526	0.434	0.663	0.237	1.857
	Associates with Gangs	−0.332	0.496	0.504	0.718	0.271	1.898
	Law Enforcement Intelligence	0.087	0.599	0.885	1.091	0.337	3.532
	Unknown or Unclear	−0.915	0.569	0.108	0.400	0.131	1.223
Drug Crime	Named Gang	−0.159	0.419	0.704	0.853	0.375	1.937
	Self-Initiated	−1.951	0.331	0.000 ***	0.142	0.074	0.272
	Firearm	0.07	0.235	0.765	1.073	0.677	1.701
	Number of Victims	−0.639	0.258	0.013 *	0.528	0.319	0.875
	Number of Suspects	0.197	0.102	0.054 *	1.218	0.997	1.489
	Reason						
	Gang Signs and Symbols	1.058	0.871	0.225	2.88	0.522	15.889
	Self-identify	1.417	1.192	0.234	4.126	0.399	42.655
	Associates with Gangs	0.875	0.667	0.190	2.399	0.649	8.874
	Law Enforcement Intelligence	−1.445	0.662	0.029	0.236	0.064	0.863
	Unknown or Unclear	−0.627	0.682	0.358	0.534	0.140	2.035

The reference category is Other Non-violent Crime. * $p < 0.05$, *** $p < 0.001$.

The full model fit was significantly improved with the addition of the predictors (χ^2 (20) = 417.606, $p < 0.000$) when compared to the intercept only model. Because we conducted a multinomial regression, we use the odds ratios (ExpB) to examine the effect of the explanatory variables on the dependent variable. We first examine the reasons the report was labeled gang-related. The presence of gang signs and symbols increases the odds of the incident being a violent crime rather than a non-violent crime by 3.9. No other gang-related reasons varied across crime type when controlling for other crime characteristics. The number of victims and suspects documented in the incident report is also important for crime type categorization. As the number of victims in the report increases by one, the odds of the incident being a violent crime versus a non-violent crime increases by 2.1. Conversely, as the number

of victims in the report increases by one, the odds of the report being a drug crime versus a non-violent crime decreases by 0.5. For suspects, as the number of suspects increases by one, the odds that the incident report includes a violent crime versus a non-violent crime increases by 1.6. An increase in the number of suspects increases the odds that the incident report includes a drug crime by 1.2.

Table 4. Multinomial logistic regression for drug crimes compared with violent crimes.

(*n* = 741)					[Exp(b)]	95% Confidence Interval	
Variable		**β**	**SE**	**Sig**	**Odds Ratio**	**Lower**	**Upper**
Dependent	Independent (0 = No)						
Drug Crime	Named Gang	−0.12	0.498	0.809	0.887	0.334	2.353
	Self-Initiated	−2.861	0.443	0.000 ***	0.057	0.024	0.136
	Firearm	−0.426	0.325	0.190	0.653	0.346	1.235
	Number of Victims	−1.375	0.283	0.000 ***	0.253	0.145	0.440
	Number of Suspects	−0.271	0.116	0.020 *	0.763	0.607	0.958
	Reason						
	Gang Signs and Symbols	−0.314	1.016	0.757	0.730	0.100	5.353
	Self-identify	1.829	1.285	0.155	6.226	0.502	77.197
	Associates with Gangs	1.207	0.815	0.139	3.342	0.677	16.513
	Law Enforcement Intelligence	−1.532	0.868	0.078	0.216	0.039	1.184
	Unknown or Unclear	0.289	0.866	0.739	1.334	0.244	7.290

The reference category is Violent Crime. * $p < 0.05$, *** $p < 0.001$.

Next, we explore differences in crime characteristics across violent and drug crimes when compared with non-violent crimes. An officer responding to a call for service (i.e., not self-initiated) decreases the odds of the incident involving a drug crime versus a violent crime by only a small margin (OR = 0.06). Here again, the number of victims and suspects listed in the incident report is important to crime type categorization. As the number of victims in the report increases by one, the odds of the report being a drug crime versus a violent crime decreases by 0.2. For suspects, as the number of suspects increases by one, the odds that the incident report includes a drug crime versus a violent crime decreases by 0.8.

5. Discussion

Gang members participate in more than their fair share of violent offending but are also involved in other less serious criminal activities. This statement is supported by both qualitative and quantitative research but has not been adequately explored through official records such as police incident reports. Rather, prior work drawing on law enforcement data sources focuses heavily upon violent crime, in particularly gang homicide. This gap in the literature may be due to law enforcement definitions of gangs, gang members, and crimes that limit the range of offenses that are labeled gang-related. Given that news media and policy makers rely upon law enforcement perceptions of these activities, a focus on violence can lead to the misperception that gangs and gang members are *only* involved in violent criminal behavior. This misperception can result in moral panic and the creation of highly punitive policies targeted at gang members (e.g., gang enhancements and injunctions) Moreover, the belief, whether accurate or not, that gangs drive urban violence can influence whether or not a law enforcement agency maintains a gang unit despite the actual existence of documented gang violence (Katz 2001). In this manuscript, we examined four years and five months worth, of violent, drug, and non-violent gang related incidents from IMPD to determine why they were labeled as gang-related as well as what characteristics differentiate incident types.

During these years, very few incident reports were labeled as gang-related and even fewer were considered violent incidents. In fact, non-violent crimes made up the bulk of the gang-related incidents, followed by drug and then violent crimes. These findings indicate that IMPD officers are not simply choosing violent incidents to label as gang-related. Similarly, less than 50% of the incidents labeled gang-related involved an officer confiscating a gun and the majority of those incidents were categorized as non-violent. Only 60% of gang-related incident reports were the result of reactive police activity; the remaining incident reports were the result of proactive police activity and were overwhelmingly non-violent in nature.

Our work revealed that law enforcement intelligence is the primary reason incident reports were labeled gang-related but beyond that, it was common for the reporting officer to not articulate a reason, especially if the incident involved a violent crime. However, after controlling for other characteristics of the incident, officers were more likely to document the presence of gang signs or symbols for violent crime incidents than for non-violent crimes. This finding is consistent with prior literature that indicates that officers rely upon the presence of gang signs and symbols when identifying gang members (Densley and Pyrooz 2020; Scott 2020). Violent crimes were also distinguishable from drug and non-violent crimes by the presence of multiple co-offenders/suspects as well as the presence of multiple victims—a finding which is also consistent with prior research (Pyrooz et al. 2011). Our results also indicate that violent crime incidents were more likely to be brought to attention of the police through a call for service. This finding suggests that when gang activity is violent, law enforcement is called; it is rare that law enforcement will find violent gang-related activity during routine patrol or other unit specific activity.

Our findings indicate that drug crimes were likely to be labeled as gang-related due to law enforcement intelligence and that they were likely to be self-initiated by officer. This finding is most likely indicative of the routine activity of specialty units whose missions are highly focused and driven by unit assignment. That is, we can make the assumption, for example, that the activity of the gang unit is associated with gang-related crime without knowing the exact reason for the relationship.

While these findings contribute to the criminological literature on gangs and policing, there are several limitations. First, police incident reports are not created for research which, therefore, limited what variables we were able to code, how they were coded, as well as the analyses we were able to conduct. For example, the reporting officer knows why he or she considered the incident gang-related and our interpretation may or may not align with the reporting officer's creating threats to internal validity. We were also unable to determine a reason the incident was labeled gang-related for 35% of the sample. Police incident reports are public record and law enforcement agencies must provide access to these reports upon request (see Indiana Code 5-14-3). Investigatory records are excluded from disclosure rules and, therefore, this type of information—which would provide more detail as to why an incident is gang-related—is usually not found in police incident reports. We encourage future researchers to engage with reporting officers to gather their perceptions on why incidents were labeled as gang-related.

Second, we focus on one Midwestern, American law enforcement agency. Police incident reports and how they are written are influenced by myriad factors that vary across time and space. The reports used in this work are limited to information gathered by the reporting officer at the time of the incident. While informative, these findings are only generalizable to Indianapolis during the study period. We encourage similar work in other jurisdictions, states, and countries in order to build the knowledge-base and allow for comparisons. Third, incidents were identified as gang-related through the reporting officer's use of "check-boxes" while filling out the incident report. We were not able to determine what, if any, training officers received regarding when to check and when not to check the box. There also may be error associated with officers who checked the boxes in error or unintentionally. Moreover, the identification and labeling of the gang-related reasons was based on a thematic analysis of the incident reports, not the officer's perception of why he or she labeled an incident gang-related. Future research would benefit from a more in-depth analysis of officers' perceptions of these incidents. Finally, we were unable to differentiate between violent acts that serve a functional or expressive role in gang crime, (see Andell 2020 as well as Decker and Pyrooz 2015). Other research should compare police incidents for different forms of violence.

Despite these limitations, our findings provide insight into gang incident reports and have implications for gang research using official police records. While it is difficult to know exactly why officers consider some incidents gang-related and others not, our findings indicate that the majority (62%) of gang-related incident reports involve non-violent crimes. This finding is important for policy

makers and local agencies working with gang members in that it demonstrates programming should address more than just violence.

6. Conclusions

While modest, these results are novel and have implications for research as well as policy. Our research supports the idea that official records of gang-related crimes or gangs may not be generalizable across cities, see (Maxson and Klein 1990) and, as our data indicate, may be dependent on the type of law enforcement activity. The presence of a gang unit at the local level and/or other state and federal units that focus on gang violence (e.g., Violent Gang Safe Streets Task Force)[8] influences related law enforcement activity. More specifically, it influences self-initiated officer activity. Documenting gang-related crimes is important for prevention, intervention, and suppression; therefore, it is imperative that there are "best practices" for documenting these types of crime. Consistent measurement of gang crimes across jurisdictions can only result in improved knowledge and better policy.

The results show that despite an urban setting and frequent violent crime, very few incidents are labeled as gang-related by law enforcement and that the prevalence is decreasing yearly. This fact could be as a result of a movement away from a specialized gang unit as well as a deprioritization of gang crime in Indianapolis. IMPD's new records management system and coinciding removal of the gang-related check box from incident reports may also indicate less emphasis on gang violence and more emphasis on violence in general. The elimination of the gang-related label means that it may be difficult for prosecutors to identify opportunities to use and apply Indiana gang enhancement code as well as charge individuals with participating in criminal gang activity. In fact, these statutes are invoked very infrequently in Indianapolis. We found only two instances of this charge (see Indiana Code 35-45-9-3) in our entire multi-year sample of gang-related police incident reports and other research indicates that gang enhancements are used infrequently in Indiana, especially in Marion County where Indianapolis is located (Hall 2019). Additionally, a movement away from a focus on gangs can result in a lack of guidance on how to work with and address gangs (Andell 2019) for a discussion of this issue in the context of the United Kingdom).

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References

Adams, Jennifer J., and Jesenia M. Pizarro. 2014. Patterns of specialization and escalation in the criminal careers of gang and non-gang homicide offenders. *Criminal Justice and Behavior* 41: 237–55. [CrossRef]

Alison, Laurence J., Brent Snook, and Kristin L. Stein. 2001. Unobtrusive measurement: Using police information for forensic research. *Qualitative Research* 1: 241–54. [CrossRef]

Andell, Paul. 2019. *Thinking Seriously About Gangs: Towards a Critical Realist Approach*. Cham: Palgrave Macmillan.

Andell, Paul. 2020. Gangs, violence, and county lines. In *The Handbook of Collective Violence: Current Developments and Understanding*. Edited by Carol A. Ireland, Michael Lewis, Anthony Lopez and Jane L. Ireland. New York: Routledge, pp. 198–208.

Braga, Anthony A., Lorraine A. Green, David Weisburd, and Frank Gajewski. 1994. Police perceptions of street-level narcotics activity: Evaluating drug buys as a research tool. *American Journal of Police* 13: 37–58.

Brenneman, Robert. 2012. *Homies and Hermanos: Gods and Gangs in Central America*. Oxford: Oxford University Press.

[8] https://www.fbi.gov/investigate/violent-crime/gangs/violent-gang-task-forces.

Carson, Dena C., Stephanie A. Wiley, and Finn-Aage Esbensen. 2017. Differentiating between delinquent groups and gangs: Moving beyond offending consequences. *Journal of Crime and Justice* 40: 297–315. [CrossRef]

Cordner, Gary W. 1979. Police patrol work load studies: A review and critique. *Police Studies: The International Review of Police Development* 2: 50–60.

Curry, G. David, and Scott H. Decker. 1997. What's in a name? A gang by any other name isn't quite the same. *Valparaiso University Law Review* 31: 501–14.

Curry, G. David, Richard A. Ball, and Scott H. Decker. 1996. Estimating the national scope of gang crime from law enforcement data. In *Gangs in America*, 2nd ed. Edited by C. Ronald Huff. Thousand Oaks: Sage, pp. 21–36.

Decker, Scott H. 1996. Collective and normative features of gang violence. *Justice Quarterly* 13: 245–64. [CrossRef]

Decker, Scott, and Kimberly Kempf-Leonard. 1991. Constructing gangs: The social definition of youth activities. *Criminal Justice Policy Review* 5: 271–91. [CrossRef]

Decker, Scott H., and David C. Pyrooz. 2010. On the validity and reliability of gang homicide: A comparison of disparate sources. *Homicide Studies* 14: 359–76. [CrossRef]

Decker, Scott H., and David C. Pyrooz, eds. 2015. Street gangs, terrorists, drug smugglers, and organized crime: What's the difference? In *The Handbook of Gangs*. Hoboken: Wiley, pp. 294–308.

Decker, Scott H., and Barrick Van Winkle. 1996. *Life in the Gang: Family, Friends, and Violence*. Cambridge: Cambridge University Press.

Decker, Scott H., David C. Pyrooz, Gary Sweeten, and Richard K. Moule Jr. 2014. Validating self-nomination in gang research: Assessing differences in gang embeddedness across non-, current, and former gang members. *Journal of Quantitative Criminology* 30: 577–98. [CrossRef]

Densley, James A. 2013. *How Gangs Work: An Ethnography of Youth Violence*. New York: Palgrave Macmillan.

Densley, James A., and David C. Pyrooz. 2020. The matrix in context: Taking stock of police gang databases in London and beyond. *Youth Justice* 30: 577–98. [CrossRef]

Deuchar, Ross. 2018. *Gangs and Spirituality: Global Perspectives*. Cham: Palgrave Macmillan.

Esbensen, Finn-Aage, and Dena C. Carson. 2012. Who are the gangsters? An examination of the age, race/ethnicity, sex, and immigration status of self-reported gang members in a seven-city study of American youth. *Journal of Contemporary Criminal Justice* 28: 462–78. [CrossRef]

Esbensen, Finn-Aage, and Karin Tusinski. 2007. Youth gangs in the print media. *Criminal Justice and Popular Culture* 14: 21–38.

Esbensen, Finn-Aage, L. Thomas Winfree Jr., Ni He Thomas, and Terrance J. Taylor. 2001. Youth gangs and definitional issues: When is a gang a gang and why does it matter? *Crime and Delinquency* 47: 105–30. [CrossRef]

Esbensen, Finn-Aage, Dana Peterson, Terrance J. Taylor, and Adrienne Freng. 2010. *Youth Violence: Sex and Race Differences in Offending, Victimization, and Gang Membership*. Philadelphia: Temple University Press.

Federal Bureau of Investigation. 2018. Crime in the United States. United States Department of Justice. Available online: https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/violent-crime (accessed on 28 March 2020).

Feeley, Malcolm M. 1973. Two models of the criminal justice system: An organizational perspective. *Law and Society Review* 7: 407–25. [CrossRef]

Fisher, Stanley Z. 1993. Just the facts, ma'am: Lying and the omission of exculpatory evidence in police reports. *New England Law Review* 28: 1–62.

Fleisher, Mark. 1998. *Dead End Kids: Gang Girls and the Boys They Know*. Madison: University of Wisconsin Press.

Garot, Robert. 2010. *Who You Claim: Performing Gang Identity in Schools and on the Streets*. New York: New York University Press.

Glaser, Barney G., and Anselm L. Strauss. 2009. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Transaction Publishers.

Goldstein, Herman. 1990. *Problem-Oriented Policing*. New York: McGraw-Hill, Inc.

Hagan, John. 1999. Why is there so little criminal justice theory? Neglected macro- and micro-level links between organization and power. *Journal of Research in Crime and Delinquency* 26: 116–35. [CrossRef]

Hall, Hannah. 2019. Analysis of Criminal Gang Enhancements. Working paper. Indianapolis, IN, USA: Indiana University Purdue University.

Horowitz, Ruth. 1990. Sociological perspectives on gangs: Conflicting definitions and concepts. In *Gangs in America: Diffusion, Diversity, and Public Policy*. Edited by C. Ronald Huff. Thousand Oaks: Sage.

Huebner, Beth M., Kimberly Martin, Richard K. Moule Jr., David Pyrooz, and Scott H. Decker. 2016. Dangerous places: Gang members and neighborhood levels of gun assault. *Justice Quarterly* 33: 836–62. [CrossRef]

Irwin-Rogers, Kei, Scott H. Decker, Amir Rostami, Svetlana Stephenson, and Elke Van Hellemont. 2019. European street gangs and urban violence. In *Handbook of Global Urban Health*. Edited by Igot Vojnovic, Amber L. Pearson, Gershim Asiki, Geoffry DeVerteuil and Adriana Allen. New York: Routlege.

Katz, Charles M. 2001. The establishment of a police gang unit: An examination of organizational and environmental factors. *Criminology* 39: 37–74. [CrossRef]

Katz, Charles M., Vincent J. Webb, and David R. Schaefer. 2000. The validity of police gang intelligence lists: Examining differences in delinquency between documented gang members and nondocumented delinquent youth. *Police Quarterly* 3: 413–37. [CrossRef]

Katz, Charles M., Andrew M. Fox, Chester L. Britt, and Phillip Stevenson. 2012. Understanding police gang data at the aggregate level: An examination of relability of National Youth Gang Survey data (Research Note). *Justice Research and Policy* 14: 103–28. [CrossRef]

Kennedy, David M., Anthony A. Braga, and Anne M. Piehl. 1997. The (un)known universe: Mapping gangs and gang violence in Boston. In *Crime Mapping and Crime Prevention*. Edited by David Weisburd and J. Tom McEwen. Monsey: Criminal Justice Press, pp. 219–62.

Klein, Malcolm, and Cheryl L. Maxson. 2006. *Street Gang Patterns and Policies*. Oxford, UK: Oxford University Press.

Lauger, Timothy R. 2012. *Real Gangstas: Legitimacy, Reputation, and Violence in the Intergang Environment*. New Brunswick: Rutgers University Press.

Levitt, Steven D. 1998. The Relationship between Crime Reporting and Police: Implications for the Use of Uniform Crime Reports. *Journal of Quantitative Criminology* 14: 61–81. [CrossRef]

Lipsky, Michael. 1980. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*. New York: Russell Sage.

Maxson, Cheryl L., and Malcolm W. Klein. 1990. Street gang violence: Twice as great or half as great. In *Gangs in America*. Edited by C. Ronald Huff. Thousand Oaks: Sage, pp. 71–100.

Maxson, Cheryl L., Margaret A. Gordon, and Malcolm W. Klein. 1985. Differences between gang and nongang homicides. *Criminology* 23: 209–22. [CrossRef]

Maxson, Cheryl L., G. David Curry, and James C. Howell. 2002. Youth gang homicides in the United States in the 1990s. In *Responding to Gangs: Evaluation and Research*. Edited by Winifred L. Reed and Scott H. Decker. Washington: National Institute of Justice, pp. 107–37.

McCorkle, Richard C., and Terance D. Miethe. 1998. The political and organizational response to gangs: An examination of a "moral panic" in Nevada. *Justice Quarterly* 15: 41–64. [CrossRef]

Melde, Chris, and Finn-Aage Esbensen. 2013. Gangs and violence: Disentangling the impact of gang membership on the level and nature of offending. *Journal of Quantitative Criminology* 29: 143–66. [CrossRef]

Miller, Jody. 2001. *One of the Guys: Girls, Gangs, and Gender*. Oxford: Oxford University Press.

Morash, Merry. 1983. Gangs, groups, and delinquency. *British Journal of Criminology* 23: 309–35. [CrossRef]

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. [CrossRef]

Papachristos, Andrew V., Anthony A. Braga, Eric Piza, and Leigh S. Grossman. 2015. The Company You Keep? The Spillover Effects of Gang Membership on Individual Gunshot Victimization in a Co-Offending Network. *Criminology* 53: 624–49. [CrossRef]

Pizarro, Jesenia M., and Jean Marie McGloin. 2006. Explaining gang homicides in Newark, New Jersey: Collective behavior or social disorganization. *Journal of Criminal Justice* 31: 195–207. [CrossRef]

Pyrooz, David C., and Scott H. Decker. 2013. Delinquent behavior, violence, and gang involvement in China. *Journal of Quantitative Criminology* 29: 251–72. [CrossRef]

Pyrooz, David C., Andrew M. Fox, and Scott H. Decker. 2010. Racial and ethnic heterogeneity, economic disadvantage, and gangs: A macro-level study of gang membership in urban America. *Justice Quarterly* 27: 867–92. [CrossRef]

Pyrooz, David C., Scott E. Wolfe, and Cassia Spohn. 2011. Gang-related homicide charging decisions: The implementation of a specialized prosecution unit in Los Angeles. *Criminal Justice Policy Review* 22: 3–26. [CrossRef]

Pyrooz, David C., Jillian J. Turanovic, Scott H. Decker, and Jun Wu. 2016. Taking stock of the relationship between gang membership and offending: A meta-analysis. *Criminal Justice and Behavior* 43: 365–97. [CrossRef]

Rosenfeld, Richard, Timothy M. Bray, and Arlen Egley. 1999. Facilitating violence: A comparison of gang-motivated, gang-affiliated, and nongang youth homicides. *Journal of Quantitative Criminology* 15: 495–516. [CrossRef]

Scott, Daniel. 2020. Regional differences in gang member identification methods among law enforcement jurisdictions in the United States. *Policing: An International Journal*. [CrossRef]

Thornberry, Terence P. 1998. Membership in youth gangs and involvement in serious and violent offending. In *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions*. Edited by Rolf Loeber and David P. Farrington. Thousand Oaks: Sage Publications, Inc., pp. 147–66.

Thornberry, Terence P., Marvin D. Krohn, Alan J. Lizotte, Carolyn A. Smith, and Kimberly Tobin. 2003. *Gangs and Delinquency in Developmental Perspective*. Cambridge: Cambridge University Press.

Thrasher, Frederic M. 1963. *The Gang: A Study of One Thousand Three Hundred Thirteen Groups in Chicago*. Chicago: University of Chicago Press. First Published 1927.

Ward, Thomas W. 2013. *Gangsters without Borders: An Ethnography of a Salvadorn Street Gang*. Oxford: Oxford University Press.

Weaver, Beth. 2016. *Offending and Desistance: The Importance of Social Relations*. New York: Routledge.

Weerman, Frank M., and Fine-Aage Esbensen. 2005. A cross-national comparison of gangs: The Netherlands and the United States. In *European Street Gangs and Troublesome Youth Groups*. Edited by Scott H. Decker and Frank M. Weerman. Lanham: Altamira Press, pp. 219–57.

Yablonsky, Lewis. 1962. *The Violent Gang*. New York: NY Macmillan.

The Social Network Consequences of a Gang Murder Blowout

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Abstract: An unexpected crisis in a criminal organization offers a rare opportunity to analyze whether and how the configuration of business and trust relationships changes in response to external shocks. The current study recreates the social network of the Red Scorpion gang members involved in the Surrey Six Murder, one of the deadliest gang-related homicides to occur in Canada. The event, which involved two bystanders and six victims in total, was the result of a poorly executed retaliation. Our analyses focus on two phases of the network, the conspiracy phase and the post-murder phase. In each phase, we examine the balance of business, trust, and conflictual ties. Results show that the relative importance of key participants changed from the conspiracy to the post-murder phases, whereby strong, trusted ties gained prominence over the mostly business-oriented network of the conspiracy phase.

Keywords: gangs; social networks; crisis; organized crime; homicide; violence; retaliation

1. Introduction

Crime network scholars have sought to describe the inner workings of gangs and criminal organizations for long enough, now, that we have a general understanding of their structure, especially as it relates to specific activities such as drug trafficking (e.g., Bichler et al. 2017; Bright and Delaney 2013; Calderoni 2012; Malm et al. 2017; Malm and Bichler 2011; Morselli 2009; Natarajan 2006) and human smuggling (Bruinsma and Bernasco 2004; Campana 2020). More recently, an increasing number of scholars have turned to network data to study conflicts among gangs (Bichler et al. 2019; Descormiers and Morselli 2011; Lewis and Papachristos 2020; McCuish et al. 2015; Papachristos 2009; Papachristos et al. 2013). Rarely, however, can we dive inside a specific gang to examine how they manage relationships in trying times, such as when gang leaders are arrested, when a new gang challenges one's turf, or when the gang is under fire for having killed one or multiple bystanders.

The current study proposes to take an inside look into a specific murder conspiracy gone wrong. The conspiracy involves one of the most famous criminal organizations based in British Columbia (BC), Canada, the Red Scorpions. In summer 2007, two criminal groups merged forces under the label of the Red Scorpions (RS). The alliance expanded the organization, which now had two sides, the "Asian" and the "White" side, labeled as such by the members themselves. The so-called Asian side was led by Michael Le, the original founder of the Red Scorpions, while the White side was led by James Bacon, the leader of another criminal group involved in drug trafficking in the same area. The purpose of the merger was to improve the two groups' power within the drug trade via cooperation, including an improved ability to defend their turf against rivals when required.

With its loose hierarchy and emphasis on loyalty and symbolism, the Red Scorpions shared some organizational features with some of the mature, business-oriented gangs found in the American (e.g., Bichler et al. 2019; Papachristos 2009) or Canadian (e.g., Descormiers and Morselli 2011) literature.

Gang members could be identified by "RS" tattoos on their arms and necks, and the new members had to pass a sort of probatory period before being accepted as part of the Red Scorpion family. The main business of the Red Scorpions was running drug lines in the Lower Mainland, what locals labeled as "dial-a-dope" operations—a text messaging drug delivery service. At the time of the merger, approximately 30 to 40 members had the tattoos and were considered official members. Among them, approximately 20 to 30 individuals regularly attended the Red Scorpions meetings.

Court documents revealed that a few months after the merger, "bad blood" developed between James Bacon and a rival drug dealer, Corey Lal. Bacon threatened his rival's life and decided to tax him $100,000 as a way of resolving the dispute. But Lal never paid, so a conspiracy for his murder took shape. Otherwise, the RS group would look weak and powerless. Three members of the Asian Side, leader Michael Le, Matthew Johnston, and Cody Haevischer, along with four members of the White side, leader James Bacon, Person X, Person Y, and Kevin Leclair, participated in the conspiracy. The Surrey Six Murder took place on 19 October 2007, when Johnston, Haevischer, and a third unnamed accomplice ("Person X") broke into an apartment located in Surrey, BC, where Lal was used to carrying out his activities related to the drug business. That day, Lal was not alone; another four people were with him in the apartment, including one individual who was not involved in the drug trade. Another person, not involved in the drug trade, was dragged into the apartment from the hallway. All six people were shot to death in an attempt at eliminating any possible witnesses.

The Surrey Six Murder was the result of a series of unexpected external contingencies that thrust the organization into a crisis. The concept of crisis here refers to the chaotic group response that followed the gang homicide. The execution of six people was neither planned nor wanted by the group; the organization was not ready to deal with such a major event a few months after the merger and did not have a precise strategy to follow in case of unexpected contingencies. The aim of this study is to examine the social network consequences of this event on a major criminal organization like the Red Scorpions. Several studies have examined the effects of a crisis on legal organizations, but few studied crises in criminal organizations. Does the network become more cohesive—a sort of retrenchment phase—or does it instead break and fragment itself? We use social network analysis (SNA) as an integrative framework to describe both the network consequences for the organization, and the individuals within it.

2. Group Structure and Individual Centrality in Times of Crises

Organizational crises have been operationalized in different ways, including organizational death, decline, retrenchment, and failure (Mellahi and Wilkinson 2004). All definitions share a common feature: they underline that group crises have consequences on organizational structures and dynamics.

Sociologists have primarily focused on group dynamics and changes during crises in legitimate organizations (i.e., Hamblin 1958; Fink et al. 1971; Mulder et al. 1971; Tutzauer 1985; Uddin et al. 2010; Hossain et al. 2013). A number of studies have explored group dynamics during crises through the lens of SNA (e.g., Tutzauer 1985; Uddin et al. 2010; Hossain et al. 2013). These studies highlighted how a crisis within an organization impacts its internal structure or cohesion. Cohesion refers to the degree of connectedness of nodes within a network: The more people who are connected to each other, the more a network can be defined as cohesive. The inverse of cohesion is fragmentation, which refers to the proportion of nodes within a network that cannot reach each other by any path (Borgatti 2006).

Network scholars have discussed two effects of crises: (1) network fragmentation increases, creating multiple cliques (small, highly connected groups) (i.e., Uddin et al. 2010; Hossain et al. 2013); (2) homophily increases (i.e., see Lanzetta 1955). Homophily and network fragmentation are related concepts. The term "homophily" refers to the tendency of people to interact more with individuals they perceive as similar (McPherson et al. 2001). Fragmentation may increase homophilic individuals' tendencies to interact with similar others—and vice versa: a person's tendency toward homophily may itself lead to more fragmentation in times of crises, when the benefits of homophilous connections may also increase. For instance, Hossain et al. (2013) examined the crisis that afflicted the Enron Corporation

in 2001. Enron was one of the most important American energy, commodities, and services companies between 1985 and 2000. The authors analyzed Enron's e-mail networks, deriving from the large set of messages released by the US Federal Energy Regulatory Commission (FERC), to assess the changes that occurred in the communication network structures during the year of the crisis in 2001. The results showed a sharp increase in the number of cliques as the organization moved toward the peak of the crisis. Network members faced the crisis by increasing communication within small groups of people who felt closer to each other. Tutzauer (1985) claimed that, when two communication networks with the same number of ties and nodes are compared, the network characterized by the higher number of cliques is likely to be closer to dissolution. Yet, the presence of the cliques does not necessarily imply fragmentation of the whole organization. Stogdill (1959) suggested that group integration is higher when the subgroups are well coordinated and support the structure and the objectives of the larger group. In this context, subgroups or cliques can represent an escape from the organizational pressure and contribute to reinforcing the values and the identification of clique members with the larger group structure (Stogdill 1959). However, too much independence may hinder survival in the long run.

It is unclear whether illegal organizations behave similarly when crises occur. Some indirect results from studies examining the consequences of fragmentation have shown that an increase in fragmentation within illegal organizations has often led to increased competition and violence among newly born small groups (i.e., Massari and Martone 2019; Atuesta and Pérez-Dávila 2018; Falcone and Padovani 1991; Vargas 2014). Massari and Martone (2019) argued that the high level of fragmentation characterizing the Camorra is one of the explanatory factors used to understand the extremely violent nature of this criminal organization. Atuesta and Pérez-Dávila (2018) showed that the fragmentation within Mexican cartels led to a significant increase in intra-gang violence. Falcone and Padovani (1991) explained how inter-clan conflicts made the Italian organized groups more visible to the law enforcement, thus allowing the implementation of repressive actions that weakened the power of the Sicilian Mafia. The impact of crises may depend on the structure of the group. For example, Vargas (2014) showed that the arrest of two street gangs' leaders in Chicago led to increased inter-gang violence, but only within the group that lacked a solid organizational structure.

Few scholars have explored the effects of crises on criminal organizations from a network perspective. Some studies have examined the changes in criminal networks through different periods and have highlighted the flexibility that characterizes criminal networks when facing hard or unstable times (e.g., Bright and Delaney 2013; Ouellet et al. 2017; Ouellet and Bouchard 2018). Bright and Delaney (2013) examined the change and the evolution of a drug trafficking network across time and found that networks are flexible and adaptive structures following a process of adaptation similar to living organisms. Much on network adaptation can also be learned from crises occurring in terrorist groups. After all, these groups also manage their social networks, in part, to avoid law enforcement detection. Ouellet et al. (2017) studied the processes that drove collaboration between offenders in the Al-Qaeda (AQ) network before and after 9/11 (war on terror period). They found that although AQ leaders were still involved in planning activities after 9/11, they did so from an increased social distance, in sparser networks. Crises may also be driven by internal forces. Dissension between leader may, for instance, fragment the network, forcing the dissolution of many intragroup ties as leaders pull away from each other (Ouellet and Bouchard 2018).

A few organized crime scholars have described retrenchment processes that are helpful in framing our expectations toward the effects of crises on criminal organizations. Paoli (2007) described the reaction of Cosa Nostra to a massive law enforcement activity that threatened the organization. From a structural point of view, the solution of one of the most famous (and infamous) Italian Mafia bosses in modern history, Bernardo Provenzano, to ensure the cohesion and avoid potential defectors, was reducing the number of "men of honor" and creating a criminal elite to protect himself and the most important criminal members from police actions (Paoli 2007). The same strategy was adopted by Outlaw Motorcycle Clubs in the US in similar circumstances. According to Quinn (2001), during a

crisis, many of these clubs implemented a sort of "retrenchment" phase consisting of reducing the group size and creating an elite group based on core members.

From a network perspective, the "retrenchment strategy" suggests that, when facing crises, criminal organizations may adapt by decreasing the size of the organization, thus creating a smaller cohesive group of core members. The retrenchment strategy mentioned by Paoli (2007) and Quinn (2001) differs from the network fragmentation described by network communication scholars because of the way in which it impacts network structure and size. For example, the Enron group did not face the crisis by reducing network size, or by creating a single highly connected group of individuals (Hossain et al. 2013). The retrenchment strategy implies a significant decrease in network size, and the formation of one cohesive small group to protect the core members of the organization.

The effect of crises can also be analyzed from the point of view of individual group members. A few actors may benefit from the crises, improving their position in the network as a direct consequence of the events (Uddin et al. 2010). For instance, organizations may look to leaders for direction (Lanzetta 1955), which may increase their influence during periods of crises (Hamblin 1958), especially if they are counted on to control communications (Argote et al. 1989). The limited evidence for changes in criminal leaders' network positions is mixed (McCuish et al. 2015; Morselli and Petit 2007; Ouellet et al. 2017). Ultimately, whether leaders emerge as stronger or weaker from a crisis may well depend on the attribution of blame—was the crisis caused by the leaders in the first place? For instance, Morselli and Petit (2007) examined a criminal organization that faced a crisis of confidence as the police started seizing each of their drug shipments while refraining from arresting anyone over the course of the 18-month investigation. This allowed them to monitor how the network reacted and adapted to the crisis. Network members showed increased dissatisfaction and distrust with the initial leaders, who eventually lost their central role in the network after new leaders emerged.

3. Shared Goals, Trust, and Control as Elements of Cohesion and Individual Centrality

The quality of the ties connecting people, and the level of control exercised by some group members over others, may impact the way in which a criminal organization faces a crisis. In this study, we differentiated between three types of ties: trust ties (i.e., strong), business ties (i.e., weak), and conflict ties (negative). Different types of ties are linked to different kinds of social needs. Weak ties allow for efficient information flow (Granovetter 1973), but strong ties that provide social support may be most needed in times of uncertainty and crisis (Krackhardt 1992). We will examine this possibility directly by comparing the balance of strong, weak, and negative ties, and after the murder.

Relational aspects such as shared goals and trust among group members may play a key role in building strong group cohesion. Shared goals and trust are two key elements of criminal cooperation (Morselli 2009; von Lampe and Johansen 2004). Criminal relationships based merely on business interests, without the trust element, can be too weak to resist during times of crisis. According to Paoli (2008b), the weakening of solidarity and trust bonds in the Sicilian Mafia in the mid-2000s has caused a growth in the number of cooperating witnesses and a decrease in the criminal group's cohesion. Being surrounded by trustworthy offenders is even more important for those offenses that imply a higher degree of risk because they face the most serious consequences (Tremblay 1993; McCuish et al. 2015).

In this study, the level of control was articulated around (1) strategic network positioning of individuals; (2) the presence within the network of triadic groups based on strong ties. First, some individuals are more likely to exercise control over others by virtue of the strategic positions they occupy within their networks, a concept that can be measured via betweenness centrality (Morselli 2009). Betweenness centrality captures an individual's capacity to connect others who would not be connected otherwise. Higher betweenness values are associated with the ability to control the flow of information and resources in a network (Freeman 1977). Second, Simmel (1989) argued that triadic relationships based on strong ties have the power to reduce individualities, moderating conflicts and preserving group survival by imposing a certain level of control on individuals (Krackhardt 1999). In other words,

triads based on strong ties are a source of both control and social support for their members. In our study we identified as "strong ties" the relationships between individuals who share the same criminal goals but who also trust each other.

4. The Current Study

The Surrey Six Murder represents an ideal case study to observe the impact of a crisis on network structure. The available data allowed us to distinguish the conspiracy network connections that existed before the murder, from those that emerged after the event. Our study is articulated in different levels of analysis, focused on the effect of the crisis on individual centrality, but also on the network as a whole.

We focused on three main research objectives:

(1) To explore the impact of the crisis on network cohesion;
(2) To investigate the impact of the crisis on leaders' and other core members' centrality within the network;
(3) To understand the effects of the crisis on the quality of the ties and the level of control.

5. Materials and Methods

5.1. Data Source

The study data were extracted from court documents associated with the Surrey Six Murder Judgment. The transcript of the judgment was released in October 2014, and is available on the Supreme Court of British Columbia website at https://www.bccourts.ca/supreme_court/. The judgment referred to the trial of two members of the Red Scorpions group, two of the actual killers, Matthew Johnston and Cody Haevischer. The judgment described the reasons behind the court's decision to charge Matthew Johnston and Cody Haevischer with first-degree murder. The court documents provided us with detailed information about the relational connections between individuals involved in the case, the Red Scorpions group, its story and the status of its members, and particulars about the quality and the strength of the relationships connecting certain central members. The judgment also contained personal information about the individuals involved in the conspiracy and in the murder (e.g., name and surname, gender, nationality, and affiliation to a criminal organization). Only the first names and family names of people directly involved in the murder were mentioned in the judgment, while witnesses or individuals not directly involved in the trial were anonymized, as they are in our study. A total of 18 individuals were identified as part of the Surrey Six Murder case from the information presented in court documents.

The mixed-method approach that we applied included extracting cohesion measures and individual centrality indices from the Surrey Six network and doing a content analysis to define the quality of ties and the level of control within the network. The content analysis started with a read-through of the 175-page long Surrey Six Judgment and other Surrey Six materials, seeking to uncover the different types of relationships that connected the nodes, and situating the relationships as occurring before or after the murder. We identified three main categories of relationships: business ties, trust ties, and conflict ties. We then coded each social interaction as one of the three relationship types. When the information about the relationships among the individuals involved in the Surrey Six case was unclear, we searched for further details in the numerous newspaper articles related to the case. Searches were conducted using the names (or surnames) of the most important Red Scorpion affiliates involved in the murder (i.e., Michael Le, Matthew Johnston, Cody Haevischer, James Bacon). The names or surnames were followed by the keywords "Surrey Six" (i.e., Michael Le Surrey Six; James Bacon Surrey Six). We examined a body of 40 newspaper articles that provided us with further information on the relationships linking the individuals involved in the murder, as well as a book on the Bacon brothers written by an investigative journalist (Langton 2013).

5.2. Measures and Procedures

Our measures of the before and after Surrey Six network focused on six elements: group size, cohesion, fragmentation, individual centrality indices, tie quality, and control. Most will be used to describe the network and meso levels, while centrality indices will be used at the individual level.

5.2.1. Network and Meso-Level Measures

Group size: Group size refers to the number of nodes and the number of ties in the network.

Cohesion: At the network level, cohesion was measured employing three network metrics called "density," "average degree," and "degree centralization." Network density is the proportion of ties existing among nodes in relation to the maximum number of potential connections that can exist in the network if all nodes are reciprocally connected. Average degree refers to the average number of connections per node, which has the advantage of being less impacted by network size (a drawback of density). Finally, degree centralization assesses the extent to which the group's cohesion is organized around a particular node (Hanneman and Riddle 2005). Note that, because cohesion is normally associated with a set of positive relationships, we removed any negative ties before calculating the cohesion measures.

Level of fragmentation: Fragmentation was calculated through the total number of cliques, or the maximum number of actors who have all possible ties among themselves. If the number of cliques increases post-murder, it implies a higher level of fragmentation within the network.

Quality of ties: Tie quality has often been expressed by the concept "strength of ties" and has been measured in different ways in prior studies. Some studies have based it on the frequency of the interactions (Granovetter 1973), the recency of the contacts (Lin et al. 1978), the nature of the relationships (i.e., Ericksen and Yancey 1980), or the presence of at least one mutual friend (Shi et al. 2007). von Lampe and Johansen (2004) highlighted the importance of at least two relational elements, trust and shared criminal goals, to consider a criminal tie strong and exploitable. We classified the network ties in three categories: (1) trust ties, (2) business ties, and (3) conflict ties. The "trust ties" (friendships, positive family and romantic connections) were the strongest ties in the network. The term "business ties" refers to those relationships that were based only on shared business goals of an illegal nature. We classified the "business ties" as "weak connections" because of the absence of trust. Finally, the term "conflict ties" refers to the relationships that were based on shared business goals, but that also involved some level of conflict (e.g., Red Scorpion affiliates who clearly stated that they mistrusted other affiliates or had a conflictual relationship with them). The "conflict ties" captured the negative relationships in the network. At the network level, the overall percentage of trust, business, and conflict ties expressed the quality of the relationships the two networks were based on.

Level of control: At the meso-level, group control was calculated by integrating two theoretical approaches: the Simmelian theory of social control (Simmel 1989) and Heider (1946) theory of cognitive balance. Drawing from Simmel (1989) theory on triadic relationships, we identified positive triadic groups as cliques that provide both social support and social control. By "positive cliques," we referred to groups of three people connected through ties based on both shared business goals and trust.

However, triadic relationships can be composed of different types of ties, such as trust, business, and conflict ties. To establish the extent to which "mixed triads" could potentially become positive triads, we used Heider (1946) theory of cognitive balance. Cognitive balance theory proposes that when strong ties between A and B, and A and C exist, B and C are very likely develop a positive tie as well. The search for cognitive balance would encourage B and C to align their feelings with those of their common strong tie A.

Heider's theory was subsequently translated into graphic–theoretic language by Cartwright and Harary (1956). Signed graphs assigned positive or negative values to each tie composing the triad: an odd number of negative signs made the graph unbalanced. We translated trust, shared business goals, and conflict ties into signs: trust ties were positive (+), business ties were neutral, and conflict ties were negative (−). Only those cliques composed of at least two signed ties (+ and −) were taken into account.

If the multiplication of the signed ties gave a positive result (i.e., +*+ = +; − * − = +), it meant that the clique was balanced; thus, the group could potentially be, or become, a strong positive clique that provided support and control. On the other hand, if the multiplication of signed ties gave a negative result (i.e., +*− = −), the clique was unbalanced; thus, the triadic group was not likely to become a strong positive clique. The unbalanced clique could be considered as a potential source of conflict.

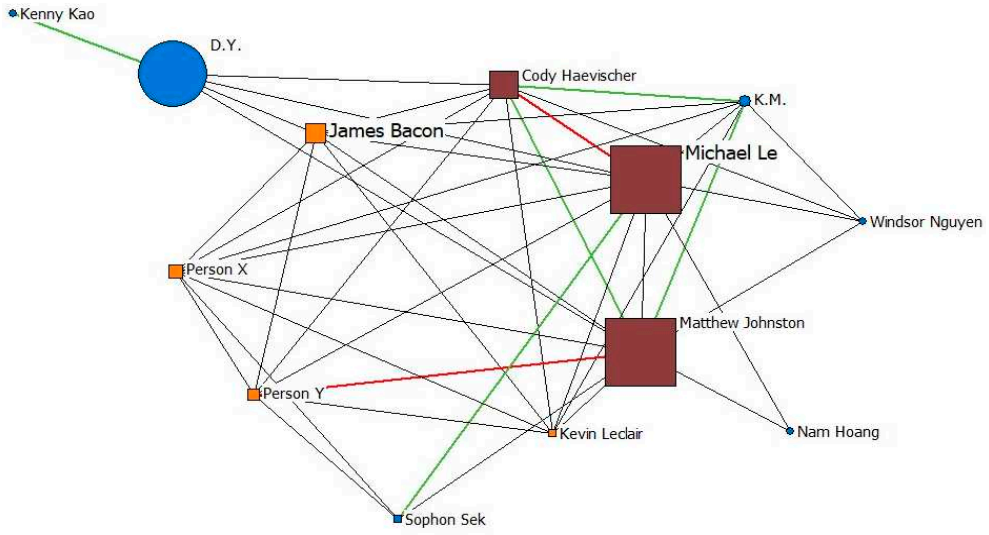
5.2.2. Individual Level of Analysis

Betweeness centrality: We measured the extent to which a node occupied a strategic position in the network using betweenness centrality = the extent to which a node connect nodes that would not be connected otherwise. Occupying a strategic position within the network also means being able to control the flow of information and resources within it (Freeman 1977).

Quality of ties: At the individual level, tie quality can influence the impact of individual positions within the network. The quality of node relationships was examined descriptively by counting the number of trust ties and conflict ties surrounding each node.

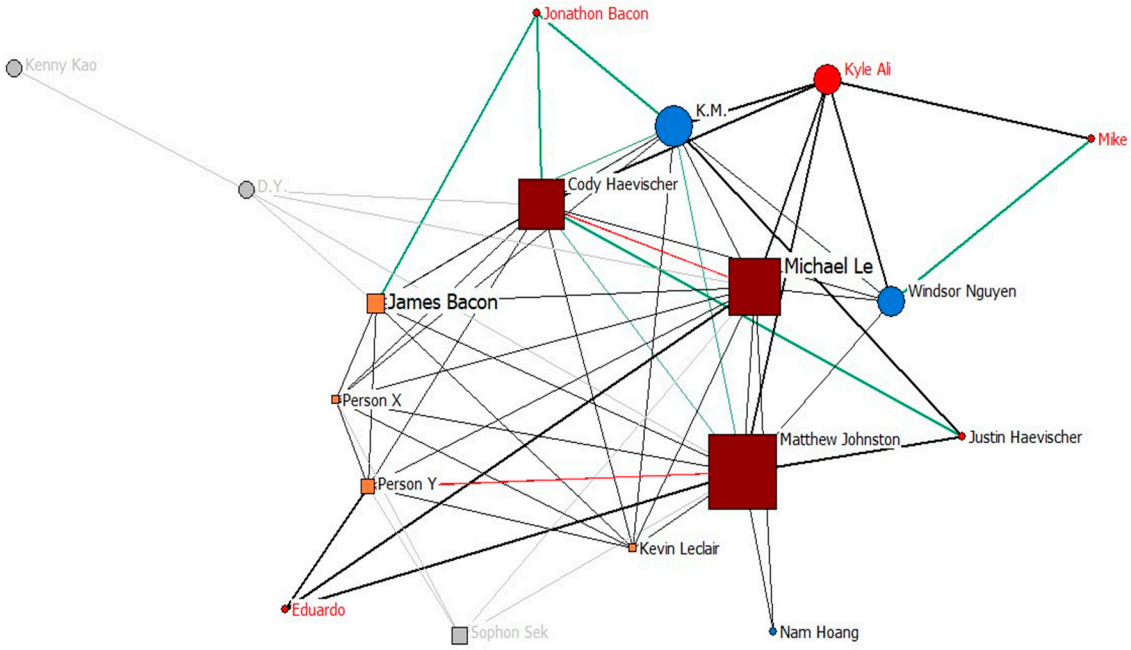
6. Results

Figure 1 represents the Surrey Six Murder network before and after the murder, respectively. The squared nodes represent the individuals who took part in the conspiracy; in brown are the Asian side's members, while in orange, the White side's members. The blue square in Figure 1a indicates that Sophon Sek was present during the conspiracy but was not part of the Red Scorpions group. The round nodes represent the individuals who were not directly involved in the conspiracy but who, for some reason, played a role in the Surrey Six Murder story. The red round nodes and the gray nodes in Figure 1b represent, respectively, the newcomers (nodes who were not present in the pre-murder network) and the nodes who disappeared after the murder.



(**a**) Conspiracy network before the murder

Figure 1. *Cont.*



(**b**) Conspiracy network after the murder

Figure 1. The Surrey Six Murder network before (**a**) and after (**b**) the murder. Notes. The squared nodes took part in the conspiracy, rounded nodes did not. The brown nodes represent the Asian side, while the orange nodes represent the White side. The black lines represent business ties, the green lines trust ties, and the red lines conflict ties. Leader names in bold. Node size by betweenness centrality. (**a**) The blue squared node was involved in the conspiracy but was not part of the Red Scorpions. (**b**) The gray nodes and lines stand for the nodes and ties that disappeared after the murder. The lines in bold and the red rounded nodes represent the ties and the nodes that appeared after the murder.

Node size was determined by betweenness centrality values; the larger the node, the higher its betweenness centrality score within the network. At first glance, we notice that the leader Michael Le and the other members of the Asian side occupied a central position in both the pre- and the post-murder network, while the members of the White side, led by James Bacon (in bold), seemed to play a more marginal role, especially after the murder. The colors of the ties stand for the quality of the relationships that bonded the nodes together. The black lines indicate that nodes were connected through a business relationship, the green lines represent relationships based on both trust and shared business goals, while the red lines represent the relationships characterized by shared business goals and some level of conflict. In Figure 1b the gray lines represent the relationships that disappeared after the murder, while the bold lines represent the new relationships that were not present before the murder.

Looking at the green ties, it is possible to identify the strong positive cliques composed of three trust ties. The clique that included Cody Haevischer, K.M., and Matthew Johnston, present in both the pre- and post-murder networks, is an example of a strong positive triad. On the other hand, the cliques with red, green, and black lines, such as the clique comprising Le, Haevischer, and Johnston in both networks, represent an unbalanced triad. Finally, the balanced triads are characterized by two green lines and one black line, such as the one including Jonathon Bacon, James Bacon and Haevischer in the post-murder network.

6.1. Network Structures before and afetr the Murder

To start, we examine the structures, the quality of ties, and the level of control in the network before and after the murder. The post-murder network represented the group during a period of crisis. The study focused on a period of about one year. The pre-murder phase referred to the period

from the merger, which occurred in summer 2007, to the murder in October 2007. The post-murder phase referred to the events that followed the murder until Spring 2008. Given that we were analyzing the same group under a short time frame, we did not expect the network to show dramatic changes. Yet we did expect the group to have made adjustments as they managed the aftermath of the event.

Table 1 presents a number of characteristics of the network before and after the murder. Overall, the results show that the network evolved toward increased fragmentation, as would be predicted by the literature on the impact of crises on social networks.

Table 1. Comparison of network structures before and after the Surrey Six Murder.

	Before the Murder		After the Murder
Number of nodes	13	↑	15
Number of ties	42	↑	49
Density	0.269	↓	0.233
Average degree	3.231	=	3.267
Degree centralization	0.765	↓	0.637
Number of cliques	6	↑	8
Percentage of business ties	100%	=	100%
Percentage of trust ties	11.8%	↑	16.3%
Percentage of conflict ties	4.8%	=	4.1%

Note. Arrow up and down indicates increase/decrease after the murder, respectively; equal sign means no change.

First, the network changed only slightly in size, with two more individuals and seven additional ties after the murder. Second, cohesion, which included both the density and the degree of centralization of the network, declined after the murder, with the former decreasing from 0.269 to 0.233 and the latter decreasing from 0.765 to 0.637. The decrease in centralization indicated that ties were spreading out across the network, potentially making pre-murder hubs less central than before. This was also consistent with the increased number of cliques (from six to eight) that we noticed post-murder. Average degree remained stable, showing that people did not change the number of connections they had; it was how these connections were spread out that differed.

Some changes to the post-murder network involved the quality of the ties. We observed that the proportion of trust ties increased post-murder, from 11.8% to 16.3%. The proportion of business and conflict ties remained similar.

The quantity of unbalanced triads did not vary after the murder. Both the pre- and post-murder networks were characterized by three unbalanced triads. The unbalanced cliques mostly involved core conspiracy members, such as Michael Le, Matthew Johnston, Cody Haevischer, and Person Y. The only individual involved in the unbalanced cliques who was not directly involved in the murder and who was not officially part of the Red Scorpions group was K.M—Haevischer's girlfriend and the only woman in the network.

Where things changed, post-murder, was with the balanced triads. Indeed, no balanced triad was identifiable in the pre-murder network. Yet, three balanced triads formed after the murder. The post-murder balanced cliques included two core conspiracy members, James Bacon and Cody Haevischer, as well as three non-conspiracy members: K.M, Jonathon Bacon, and Justin Haevischer. The addition of three family/romantic ties (two brothers and a girlfriend) increased balance in the network.

The analysis of the dyadic connections characterizing the pre- and the post-murder networks further clarified what is stated above. On the one hand, the individuals who were part of the RS group and took part in the conspiracy were mostly linked to each other through business or conflict ties.

On the other hand, all the trust connections in the network linked core conspiracy members to nodes who were external to the group.

6.2. Individual Level of Analysis

Table 2 shows the individual centrality measures and the individual tie quality both before and after the murder. We assessed the nodes' betweenness centrality by comparing the values related to the pre- and post-murder networks; thus, only those individuals who were present both before and after the murder are included in the table.

Table 2. Individual centrality measures and individual quality of ties before and after the murder.

	Before Betweenness		After Betweenness	Before Trust and Distrust		After Trust and Distrust
"Asian Side"						
Matthew Johnston	0.174	↑	0.192	2 T + 1 D	= T = D	2 T + 1 D
Michael Le	0.174	↓	0.139	1 T + 1 D	↓ T = D	0 T + 1 D
Cody Haevischer	0.059	↑	0.119	2 T + 1 D	↑ T = D	4 T + 1 D
"White Side"						
James Bacon	0.033	=	0.030	0 T + 0 D	↑ T = D	1 T + 0 D
Person X	0.019	↓	0.002	00	= T = D	00
Person Y	0.011	↑	0.017	0 T + 1 D	= T = D	0 T + 1 D
Kevin Leclair	0.003	=	0.002	00	= T = D	00
Others						
K.M.	0.011	↑	0.093	2 T + 0 D	↑ T = D	3 T + 0 D
Windsor Nguyen	0.000	↑	0.066	00	↑ T = D	1 T + 0 D
Nam Hoang	0.000	=	0.000	00	= T = D	00

In green: the nodes who experienced a significant decrease in betweenness centrality and who decreased the number of trust connections, as well. In red: the nodes who represented a significant increase in betweenness centrality and who increased the number of trust connections, as well. **In bold**: the leaders. Arrow up and down indicates increase/decrease after the murder, respectively; equal sign means no change.

Before the murder, individuals from the so-called Asian side of the Red Scorpions were the most prominent in terms of brokerage. All three of Johnston, Le, and Haevischer had the highest betweenness centrality scores—both before and after the murder. We could have expected James Bacon, the leader who gave rise to the dispute, to play a more important role in the Surrey Six Murder. Johnston, Le, and Haevischer were also central in terms of trust relationships. Each of them had at least one trust connection in the network. However, all three were also surrounded by a conflict tie that weakened the overall quality of their relationships. As for the outsiders to the RS or to the conspiracy, its worth noting that K.M occupied a unique position in the pre-murder network in terms of tie quality (two trust ties), a position that she consolidated after the murder when she added a third trusted tie.

After the murder, some changes occurred. First, only some of the leaders improved their network position. While Le experienced a slight decrease in betweenness, Johnston and Haevisher both improved their pre-murder positions. None of the RS from the White side noticeably improved their positions. Second, when focusing on tie quality, the node who experienced the greatest increase in betweenness, Haevischer, was also the one who had the largest increase in trust connections, from two to four. Leader Michael Le lost his sole trust tie post-murder—the only individual to lose a trust connection. Third, two nodes who substantially increased their betweenness centrality after the murder, K.M. and Windsor Nguyen, were not core conspiracy members. The increase in betweenness centrality was particularly evident in the case of K.M., who became one of the most central individuals in the network after the murder.

Finally, five new individuals appeared after the murder, three of whom were Red Scorpion members' relatives: Jonathon Bacon (James' brother); Justin Haevischer (Cody's brother); Mike Nguyen (Windsor's brother). The newcomers were not involved in the conspiracy and played marginal roles in the network. However, they were rather central in terms of trust connections. Justin Haevischer, for instance, was surrounded by three trust connections, two of which linked him to core conspiracy members.

7. Discussion

The Surrey Six gang murder blowout case gave us a unique opportunity to explore the effects of a period of crisis on a criminal organization. The comparison between the pre-murder and the post-murder network helped us assess different hypotheses testing the cohesion of organizations and the centrality of individuals during crises.

Our study results showed that the Surrey Six Murder network followed many of the patterns found in legal organizations (see Tutzauer 1985; Uddin et al. 2010; Hossain et al. 2013). The level of fragmentation and network size increased post-murder, while the network's density and centralization decreased. These results suggested that individuals sought to increase their connections, but these new connections were not to the core conspiracy members.

We did observe network changes after the Surrey Six Murder, but the adjustments were different from the retrenchment phases that occurred in major organizations like the Italian Mafia (Paoli 2007), American biker gangs (Quinn 2001), or Al-Qaeda (Ouellet et al. 2017). Similar to what Ouellet and colleagues observed for terrorist groups like the Toronto 18 (Ouellet and Bouchard 2018), the network showed signs of fragmentation after the crisis. In addition, the role of the leaders (Le and Bacon) was diminished after the murder, something that was also observed in prior studies (Morselli and Petit 2007). This was also true of most other core conspiracy members who experienced slight decreases in betweenness centrality. Cody Haevischer was the only core conspiracy member whose centrality increased after the murder.

Analyses of tie quality and control provided insights on potential reasons for why the Surrey Six Murder network did not experience a sort of retrenchment phase around core members. The pre-murder network comprised a high percentage of business ties, but a low level of trust and control, especially within the core conspiracy members group. After the murder, the proportion of trust ties increased along with the number of positive and balanced cliques. These results supported prior research that suggested that strong ties are particularly effective when a group faces uncertainty and crisis (Krackhardt 1992), thus needing to reinforce obligations and social norms (Coleman 1988). In the same way, intensifying the level of control over individuals and information flow is essential when the group is threatened (Argote et al. 1989; Hossain et al. 2013), which is especially relevant in the case of organized crime (Paoli 2002).

The increase in trust and control that characterized the post-murder network could be linked to the increase in the network's fragmentation and size. Paoli (2008a, 2008b) argued that criminal organizations that implemented the retrenchment strategy were built on a high level of trust and solidarity shared by all members. The meso-level analysis of dyadic relationships showed that the

Red Scorpion core conspiracy group was built mainly on business and conflict ties, while the trust relationships in the pre-murder network linked mostly core members to nodes who were external to the group. The positive cliques that did exist involved mostly nodes who were external to the conspiracy. This network configuration was even clearer in the post-murder network, where we observed the addition of new trust relationships that connected the core members to nodes who were not present before the murder.

The most lasting and stable organized crime groups are typically founded on pre-existing trust ties and collective shared identity (Paoli 2002, 2007). It could be that the low levels of trust found in the Red Scorpions made room for family members and other trusted ties to join in, post-murder, as a currency that was scarce yet needed in times of crisis. Criminal organizations need to balance efficiency and security (Calderoni 2012; Morselli 2009), but they may not always search for that balance unless circumstances force them to.

The study has some limitations that are necessary to discuss. One of the main problems is missing data, as the study only includes those who were mentioned in the Surrey Six Judgment. Some individuals who were either not involved in the law enforcement investigation or included in the judicial decision may be missing. The missing data can impact all the network indices. For instance, trust ties may be more present than the court documents show. A concern related to node centrality is that the judgment is centered on the trial of two individuals, Cody Haevischer and Matthew Johnston. Thus, Haevischer and Johnston's high centrality scores may be due to the fact that they were central in the judgment. Indeed, we examined the Surrey Six conspiracy network from the point of view of two of its most central players, not the Red Scorpion network as a whole. The scientific literature on crises within criminal organizations has often analyzed changes that occurred within the organization at large, which could explain why our results sometimes diverged. As with all court data, the information included in the judgment could lack objectivity because it was mostly based on witnesses' declarations and law enforcement's recollection of the events. Thus, only the declarations that have been considered reliable by the court were included in the analysis. A further factor that might have influenced the RS network changes is the non-typical merger between the two gangs that occurred a few months before the murder. Because of the merger, the organization was potentially more exposed to fragmentation than longstanding, ethnically homogenous, and well-structured criminal organizations.

When dealing with court records and police investigations, Campana and Varese (2012) suggested performing external validity checks by means, for instance, of interviews with key informants and other open source records. Rostami and Mondani (2015) study showed that different data sources related to the same study object have a fundamental impact on the network results. Although we were able to find numerous written materials on the case, interviews with key participants would have helped provide further context on specific relationships included in the network, including potentially missing ones. Finally, the study of the Red Scorpions, as an organization, was limited to a very specific time frame. We did not have access to specific data on the evolution of the group post-crisis, nor was it the aim of the study. That said, there is some evidence to suggest that the organization suffered after many of their leaders were arrested and charged in major police operations in the years following the Surrey Six Murder. Yet more than 10 years after the post-murder phase we analyzed in this study, the Red Scorpions was still an active gang in BC (e.g., Bolan 2019).

Despite these limitations, the Surrey Six Murder represented a unique opportunity to study organized crime groups during crises from a network perspective. Rather than a retrenchment phase taking place after the murder, the network expanded in size, leading to decreased cohesion. Leaders became less central as trusted connections integrated the network. This sort of adjustment—reduced importance of leaders—is not in and of itself a negative outcome for the group. When trust is not in short supply, criminal leaders can afford to position themselves on the periphery of conspiracy networks, as heavy involvement is simply not required –trust among participants removes much of the need for control (Calderoni 2012). Trust was lacking prior to the Surrey Six murder, making it the most pressing need to address post-crisis. To our knowledge, no studies have measured the impact

that a lack of trust and control can have on a criminal organization and its survival. The survival of criminal organizations depends on a variety of factors that are not necessarily linear; small groups survive longer when they forge alliances with outsiders, but larger groups benefit more when they strive to keep alliances within (Ouellet et al. 2019). Achieving proper balance between efficiency (and profit-making) and security, between waging wars over turf or sharing turf, are some of the most consequential—yet understudied—decisions made by gang leaders.

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References

Argote, Linda, Marlen E. Turner, and Mark Fichman. 1989. To centralize or not to centralize: The effects of uncertainty and threat on group structure and performance. *Organizational Behavior and Human Decision Processes* 43: 58–74. [CrossRef]

Atuesta, Laura H., and Yocelyn Samantha Pérez-Dávila. 2018. Fragmentation and cooperation: The evolution of organized crime in Mexico. *Trends in Organized Crime* 21: 235–61. [CrossRef]

Bichler, Gisela, Aili Malm, and Tristen Cooper. 2017. Drug supply networks: A systematic review of the organizational structure of illicit drug trade. *Crime Science* 6: 1–23. [CrossRef]

Bichler, Gisela, Alexis Norris, Jared R. Dmello, and Jasmin Randle. 2019. The impact of civil gang injunctions on networked violence between the bloods and the crips. *Crime & Delinquency* 65: 875–915.

Bolan, Kim. 2019. Red Scorpion Gangster Gets More Than 7 Years in Jail on Drug, Gun Charges. *Vancouver Sun*. July 2. Available online: https://vancouversun.com/news/staff-blogs/real-scoop-red-scorpion-sentenced-in-drug-and-firearms-case (accessed on 28 October 2020).

Borgatti, Stephen P. 2006. Identifying sets of key players in a social network. *Computational and Mathematical Organization Theory* 12: 21–34. [CrossRef]

Bright, David A., and Jordan J. Delaney. 2013. Evolution of a drug trafficking network: Mapping changes in network structure and function across time. *Global Crime* 14: 238–60. [CrossRef]

Bruinsma, Gerben, and Wim Bernasco. 2004. Criminal groups and transnational illegal markets. *Crime, Law and Social Change* 41: 79–94. [CrossRef]

Calderoni, Francesco. 2012. The structure of drug trafficking mafias: The 'Ndrangheta and cocaine. *Crime, Law and Social Change* 58: 321–49. [CrossRef]

Campana, Paolo. 2020. Human smuggling: Structure and mechanisms. In *Organizing Crime: Mafias, Markets, and Networks*. Edited by Michael Tonry and Peter Reuter. Chicago: Chicago University Press.

Campana, Paolo, and Federico Varese. 2012. Listening to the wire: Criteria and techniques for the quantitative analysis of phone intercepts. *Trends in Organized Crime* 15: 13–30. [CrossRef]

Cartwright, Dorwin, and Frank Harary. 1956. Structural balance: A generalization of Heider's theory. *The Psychological Review* 63: 277–93. [CrossRef]

Coleman, James S. 1988. Social capital in the creation of human capital. *The American Journal of Sociology* 94: S95–S120. [CrossRef]

Descormiers, Karine, and Carlo Morselli. 2011. Alliances, conflicts, and contradictions in Montreal's street gang landscape. *International Criminal Justice Review* 21: 297–314. [CrossRef]

Ericksen, Eugene P., and William L. Yancey. 1980. *Class, Sector and Income Determination*, Temple University: unpublished paper.

Falcone, Giovanni, and Marcelle Padovani. 1991. *Cose di Cosa Nostra*. Milano: Rizzoli.

Fink, Stephen L., Joel Beak, and Kenneth Taddeo. 1971. Organizational crisis and change. *The Journal of Applied Behavioral Science* 7: 15–37. [CrossRef]

Freeman, Linton C. 1977. A set of measures of centrality based on betweenness. *Sociometry* 40: 35–41. [CrossRef]

Granovetter, Mark S. 1973. The strength of weak ties. *American Journal of Sociology* 78: 1360–80. [CrossRef]

Hamblin, Robert L. 1958. Group integration during a crisis. *Human Relations* 11: 67–76. [CrossRef]

Hanneman, Robert A., and Mark Riddle. 2005. *Introduction to Social Network Methods*. Riverside: University of California, Available online: http://faculty.ucr.edu/~{}hanneman/ (accessed on 28 October 2020).

Heider, Fritz. 1946. Attitudes and cognitive organization. *The Journal of Psychology Interdisciplinary and Applied* 21: 107–12. [CrossRef]

Hossain, Liaquat, Shahriar T. Murshed, and Shahadat Uddin. 2013. Communication network dynamics during organizational crisis. *Journal of Informetrics* 7: 16–35. [CrossRef]

Krackhardt, David. 1992. The strength of strong ties: The importance of philos in organizations. *Networks and Organizations: Structure, Form and Action* 5: 216–39. [CrossRef]

Krackhardt, David. 1999. The ties that torture: Simmelian tie analysis in organizations. *Research in the Sociolology of Organizations* 16: 183–210. [CrossRef]

Langton, Jerry. 2013. *The Notorious Bacon Brothers: Inside Gang Warfare on Vancouver Streets*. Mississauga: Wiley.

Lanzetta, John T. 1955. Group behavior under stress. *Human Relations* 8: 29–52. [CrossRef]

Lewis, Kevin, and Andrea V. Papachristos. 2020. Rules of the game: Exponential random graph models of a gang homicide network. *Social Forces* 98: 1829–58. [CrossRef]

Lin, Nan, Paul W. Dayton, and Peter Greenwald. 1978. Analyzing the instrumental use of relations in the context of social structure. *SociologicalMethods & Research* 7: 149–66. [CrossRef]

Malm, Aili, and Gisela Bichler. 2011. Networks of collaborating criminals: Assessing the structural vulnerability of drug markets. *Journal of Research in Crime and Delinquency* 4: 271–97. [CrossRef]

Malm, Aili, Martin Bouchard, Tom Decorte, Marieke Vlaemynck, and Marije Wouters. 2017. More structural holes, more risks? Network structure and risk perceptions among marijuana growers. *Social Networks* 51: 127–34. [CrossRef]

Massari, Monica, and Vittorio Martone. 2019. *Mafia violence: Political, Symbolic, and Economic Forms of Violence in Camorra Clans*. New York: Routledge. [CrossRef]

McCuish, Evan C., Martin Bouchard, and Raymond R. Corrado. 2015. The search for suitable homicide co-Offenders among gang members. *Journal of Contemporary Criminal Justice* 31: 319–36. [CrossRef]

McPherson, Miller, Linn Smith-Lovin, and James M. Cook. 2001. Birds of a feather: Homophily in social networks. *Annual Review of Sociology* 27: 415–44. [CrossRef]

Mellahi, Kamel, and Adrian Wilkinson. 2004. Organizational failure: A critique of recent research and a proposed integrative framework. *International Journal of Management Reviews* 5–6: 21–41. [CrossRef]

Morselli, Carlo. 2009. *Inside Criminal Networks*. New York: Springer.

Morselli, Carlo, and Katia Petit. 2007. Law-enforcement disruption of a drug importation network. *Global Crime* 8: 109–30. [CrossRef]

Mulder, Mauk, Jan R. Ritsema Van Eck, and Rendel D. de Jong. 1971. An organization in crisis and non-crisis situations. *Human Relations* 24: 19–41. [CrossRef]

Natarajan, Mangai. 2006. Understanding the structure of a large heroin distribution network: A quantitative analysis of qualitative data. *Journal of Quantitative Criminology* 22: 171–92. [CrossRef]

Ouellet, Marie, and Martin Bouchard. 2018. The 40 members of the Toronto 18: Group boundaries and the analysis of illicit networks. *Deviant Behavior* 39: 1467–82. [CrossRef]

Ouellet, Marie, Martin Bouchard, and Mackenzie Hart. 2017. Criminal collaboration and risk: The drivers of Al Qaeda's network structure before and after 9/11. *Social Networks* 51: 171–77. [CrossRef]

Ouellet, Marie, Martin Bouchard, and Yanic Charette. 2019. One gang dies, another gains? The network dynamics of criminal group persistence. *Criminology* 57: 5–33. [CrossRef]

Paoli, Letizia. 2002. The paradoxes of organized crime. *Crime, Law and Social Change* 37: 51–97. [CrossRef]

Paoli, Letizia. 2007. Mafia and organised crime in Italy: The unacknowledged successes of law enforcement. *West European Politics* 30: 854–80. [CrossRef]

Paoli, Letizia. 2008a. *Mafia Brotherhoods: Organized Crime, Italian Style*. Oxford: Oxford University Press. [CrossRef]

Paoli, Letizia. 2008b. The decline of the Italian mafia. In *Organized Crime: Culture, Markets and Policies*. Edited by Siegel Dina and Nelen Hans. Studies in Organized Crime vol. 7. New York: Springer. [CrossRef]

Papachristos, Andrew V. 2009. Murder by structure: Dominance relations and the social structure of gang homicide. *American Journal of Sociolology* 115: 74–128. [CrossRef]

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. [CrossRef]

Quinn, James F. 2001. Angels, bandidos, outlaws, and pagans: The evolution of organized crime among the big four 1% motorcycle clubs. *Deviant Behavior* 22: 379–99. [CrossRef]

Rostami, Amir, and Hernan Mondani. 2015. The complexity of crime network data: A case study of its consequences for crime control and the study of networks. *PLoS ONE* 10: e0119309. [CrossRef]

Shi, Xiaolin, Lada A Adamic, and Martin J. Strauss. 2007. Networks of strong ties. *Physica A: Statistical Mechanics and its Applications* 378: 33–47. [CrossRef]

Simmel, Georg. 1989. *Sociologia*. Milano: Edizioni di Comunità.

Stogdill, Ralph M. 1959. *Individual Behavior and Group Achievement: A Theory: The Experimental Evidence*. Oxford: Univer. Press.

Tremblay, Pierre. 1993. Searching for suitable co-offenders. In *Routine Activity and Rational Choice: Advances in Criminological Theory*. Edited by Ronald V. Clarke and Marcus Felson. New Brunswick: Transaction, pp. 17–36.

Tutzauer, Frank. 1985. Toward a theory of disintegration in communication networks. *Social Networks* 7: 263–85. [CrossRef]

Uddin, Shahadat, Shahriar T. H. Murshed, and Liaquat Hossain. 2010. Towards a scale free network approach to study organizational communication network. Paper presented at PACIS 2010—14th Pacific Asia Conference on Information Systems, Taipei, Taiwan, July 9–12.

Vargas, Robert. 2014. Criminal group embeddedness and the adverse effects of arresting a gang's leader: A comparative case study. *Criminology* 52: 143–68. [CrossRef]

von Lampe, Klaus, and Per Ole Johansen. 2004. Organized crime and trust: On the conceptualization and empirical relevance of trust in the context of criminal networks. *Global Crime* 6: 159–84. [CrossRef]

Evolving Patterns of Aggression: Investigating the Structure of Gang Violence during the Era of Civil Gang Injunctions

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Abstract: Mapping the structural characteristics of attack behavior, this study explores how violent conflict evolved with the implementation of civil gang injunctions (CGIs). Networks were generated by linking defendants and victims named in 963 prosecutions involving street gangs active in the City of Los Angeles (1998–2013). Aggregating directed ties to 318 groups associated with the combatants, we compare four observations that correspond with distinct phases of CGI implementation—development (1998–2001), assent (2002–2005), maturity (2006–2009), and saturation (2010–2013). Using a triad census to calculate a ratio of simple patterns (retaliation, directed lines, and out-stars) to complex three-way interactions, we observed that CGIs were associated with a substantive thickening of conflict—greater complexity was found in conflict relations over time. Dissecting the nature of change, stochastic actor-oriented models (SAOMs) show that enjoined gangs are more likely to initiate transitive closure. The findings suggest that crime control efforts must make regular adjustments in response to the evolving structure of gang interactions.

Keywords: street gang violence; civil gang injunctions; conflict network; social network analysis

1. Introduction

The harm generated by gang violence extends beyond members and their rivals, threatening entire communities. The murder of Michael (20) and Timothy Bosch (21) illustrates this point. The brothers were hanging out in Culver West Alexander Park on 27 September 2003 (Noonan 2008). A Culver City Boys (CCB) gang member approached, and pointing a gun to Timothy's head, declared his affiliation and asked whether the victims belonged to a rival gang. Not believing the victims' denials, the brothers were shot. Bystanders are also caught in the crossfire. Melody Ross (16), a cheerleader at Wilson High School in Long Beach had just left her homecoming football game in 2009 and was sitting with a friend on a curb outside her school. Nearby stood two Rollin 20's Crips gang members, both of whom were not students. Melody did not know them. Two Insane Crips rival gang members approached, exchanging gang slurs with the Rollin' 20's Crips. One of the Insane Crips shot in the Rollin 20's Crips direction. Both Rollin 20's Crips were wounded: Melody Ross died (Vives and Bolch 2009). As these cases show, gang violence puts all members of the community, gang and non-gang involved, at great risk.

To stop the spread of violence, the City of Los Angeles adopted several crime control strategies, one of which was to enact civil gang injunctions (CGIs) targeting the most violent groups. Across successive administrations, three City Attorneys enacted a total of 46 civil gang injunctions targeting 72 gangs.

One of the aims behind the use of injunctions was to suppress the kinds of social interactions thought to facilitate gang violence. A critical feature of most CGIs is a clause designed to restrict a gang's ability to exert a visible public presence in specific neighborhoods.

While research shows that focused crime-reduction interventions can reduce crime (Braga and Weisburd 2012), there is still a need to understand how targeting the most problematic actors, such as the most violent gangs by implementing a CGI, impacts the larger community. Why? Because gang violence is an inherently social phenomenon (Lewis and Papachristos 2020)—embedded in a community of combatants, targeting one gang is likely to generate ripple effects throughout the social landscape that includes other groups with whom the target gang interacts. Targeting one, or a set of highly aggressive gangs, stands to reshape the structure of violence across the conflict network.

By understanding how crime control efforts shape networked violence, we are in a better position to develop interventions that minimize displaced aggression, reduce gang conflict, and improve public safety. While the structure of gang violence has been investigated within a single gang (e.g., McCuish et al. 2015), within identifiable neighborhoods and large regions (e.g., Randle and Bichler 2017; Tita and Radil 2011; Radil et al. 2010), and across cities, i.e., Boston (Papachristos et al. 2013), Chicago (Lewis and Papachristos 2020; Papachristos 2009), Montreal (Descormiers and Morselli 2011), and Newark (McGloin 2007), to the best of our knowledge, this study is among the first to investigate shifting patterns in the structure of street gang violence associated with a protracted crime control strategy such as CGIs. The present study extends network investigations of gang conflict by comparing four violence networks generated from incidents occurring within a 16-year study period (1 January 1998–31 December 2013). Our primary aim is to document whether there were substantive shifts in the structure of violence that correspond with phases of CGI adoption in the City of Los Angeles.

This paper unfolds as such. Before we outline how we investigated gang violence networks, we briefly describe CGIs as implemented in California and explore current thinking about violence networks and the implications for gang control strategies. After describing the methodology used, we report on two sets of analyses—triadic censuses and stochastic actor-oriented models—before discussing the most salient implications of this investigation of gang-involved violence.

2. Background

2.1. CGIs and Focused Deterrence

CGIs are a crime control strategy designed to impose behavioral restrictions on gangs and/or gang members within designated areas. The City of Los Angeles defines a gang as a group of allied individuals working toward a common purpose who engage in violent, unlawful, or criminal activity to achieve their aims. The group brands itself with symbols (e.g., tattoos and colors), often has common demographic characteristics and may exert control over specific areas within neighborhoods (Los Angeles Police Department 2020). CGIs fall under California Civil Code, sections 3479 and 3480, which permit civil restrictions on activity found to be a public nuisance. Of interest to the present study, CGIs impose restrictions on public behaviors within designated areas, known as "safety zones". Gang members can be subjected to enhanced penalties for engaging in illegal behavior in the safe zone (e.g., selling drugs, vandalism, and threatening/intimidation). Other specifications may require individuals to adhere to a curfew or avoid hanging out with other gang members in public (this includes driving, walking, standing, or appearing together in the public's view). Restrictions are also imposed on the gang itself such as; no gathering in public areas, no lookouts or loitering, and no recruiting children.

CGIs can be framed as a focused-deterrent strategy directed at reducing gang-involved violence. Focused deterrence is a problem-focused policing approach, which calls for targeting individuals or groups that are driving crime in specific areas (Braga and Weisburd 2012). Those who violate CGIs may face civil sanctions, such as financial penalties (up to $1000) or they may receive gang enhancements on their sentences (up to 25 years). These sanctions are meant to send a clear message to targeted individuals that the cost of engaging in the prohibited behaviors is high. By imposing behavioral

restrictions and increasing penalties for engaging in those behaviors, CGIs are intended to deter gang violence in the community.

Implicit in the use of CGIs is the notion that social interactions trigger violence. For example, violence may occur when gang members congregate in public space, particularly if the location is known to be linked to a specific gang member (i.e., someone's home) or controlled by the gang (e.g., established turf or set space). Here, social interactions expose individuals to risk when rivals pass by looking for conflict. Thus, some of the stipulations included within CGI conditions aim to remove opportunities to become involved in social interactions that may lead to violent altercations, i.e., do not drive, stand, sit, walk, gather or appear with other gang members in public view or anyplace accessible within designated areas of the city (usually areas claimed as gang turf).

Most studies examining the effectiveness of civil gang injunctions explore the reduction in crime within designated areas. Studies find that CGIs are associated with a decline in serious and violent crime in areas with safe zones (e.g., Carr et al. 2017; Grogger 2002; Los Angeles County Civil Grand Jury 2004; Ridgeway et al. 2019). While previous research has found most crime control effects to be short lived (e.g., Maxson et al. 2005; O'Deane and Morreale 2011), a more recent study by Ridgeway et al. (2019) examining quarterly crime reports from the Los Angeles Police Department (LAPD) between 1988 and 2014 found a 5% short-term decline in crime, as well as a 18% long-term decline in crime in targeted areas. Even though research examining the impact of CGIs on levels of crime in focal neighborhoods have typically found positive effects, studies focusing on individuals targeted by the CGIs have been less encouraging. For example, interviewing gang members subjected to CGI restrictions, Swan and Kirstin A. (2017) discovered that individuals continued their gang activities after CGIs were imposed on them; their activities shifted to neighborhoods without gangs or to rival gang territory, which intensified existing conflict. Exploring the structure of post-CGI conflict among 23 Bloods and Crips gangs, (Bichler et al. [2017] 2019) discovered the most aggressive gangs became more enmeshed in a web of violence and more centrally located in chains of violence post-injunction—CGIs were associated with increased violence (Bichler et al. [2017] 2019).

Why would violence increase post-CGI? Because, as much as CGIs may help to remove opportunities for conflict, they also contribute to reshaping the local social landscape, which may displace, alter the nature of, or generate more violent conflict. Each gang is embedded in a local social system wherein groups vary on their perceived social standing within the community (e.g., dominance and street respect), control of resources (such as drug sales), and physical proximity to other groups (Lewis and Papachristos 2020). The imposition of a CGI is a public announcement that the group is under increased scrutiny and that their public behavior is restricted. As such, CGIs alter the local social system, and may push gangs to other areas to remain competitive (e.g., expanding drug markets by invading rival territories), leading to more aggression. It is also plausible that as enjoined gangs refrain from public displays of dominance, their territorial control may faulter leading other groups to attack. Thus, investigating how the social landscape of gang-related violence changes in response to coordinated crime control interventions enriches our understanding of conflict dynamics in a way that may support the development of more effective prevention measures.

2.2. Networked Violence

The dynamics of gang violence are complex and constantly shifting. Research in this area has regularly focused on the behaviors of the gangs and/or individual gang members; often using ethnographic and survey-based research, to understand changes in gang-on-gang violence. Studies examined gang cohesion (Decker 1996; Hennigan and Sloane 2013; Klein and Maxson 2010; Papachristos 2013), motivating factors for gang behavior such as turf disputes (Braga et al. 2006; Papachristos et al. 2010), social influences (Hennigan and Spanovic 2012; Stafford and Warr 1993), and interpersonal disputes (Papachristos and Kirk 2006); as well as, the amorphous nature of gang membership (e.g., Decker 1996; Melde and Esbensen 2013) to understand shifts in violence. Contributing to this body of work, we concur with recent arguments suggesting that there is a need to use structural

metrics to understand how violent social interactions among pairs of gangs shape gang violence at the community level (e.g., Lewis and Papachristos 2020).

Violent encounters involving gang members do not occur in isolation. Rather, gang members are embedded within an intricate web of social relations that aggregates to form a complex network of interlinkages binding gangs within a larger community of violence. At the individual level, individuals respond to what they learn or experience, and in turn, this reaction facilitates additional ripple effects, often spreading in a hyperdyadic process toward new people (*See*: Christakis and Fowler 2009). For instance, when a gang member suffers an injury or perceived harm to reputation or status, the individual (or group acting on their behalf) will react in some fashion, often in an effort to reciprocate harm (e.g., Papachristos et al. 2013, 2015). Notably, the individuals involved in the initial act of violence may not be the actors who retaliate. Instead, other members of the group may initiate violence, toward the original aggressor or someone else associated with the aggressor's gang. Thus, there are advantages to aggregating violent conflict to the group level when examining the pattern of conflict—gang-on-gang attacking behavior may better capture the web of conflict.

While an initial act of violence can set a sequence of interactions into motion, fueling continued conflict, transference or retaliation is not necessarily the most likely outcome (e.g., Randle and Bichler 2017). Investigating the likelihood of direct retaliation (reciprocated violence) relative to other reactions, Lewis and Papachristos (2020) also find evidence of generalized retaliation wherein gangs unable to reciprocate directly against the group that murdered one of their own, launch attacks directed at other gangs. Of critical importance in understanding how violent conflict ripples through communities is the structure and topography of the local social neighborhood. Structural hierarchies are likely to exist that reflect local patterns of social dominance. In network terms, the local social neighborhood includes everyone a focal individual is directly connected to, referred to as alters, as well as all the links among those alters. Local social neighborhoods are important because they influence what information groups receive and how they react to events, providing a glimpse into the social context within which a focal gang is embedded. These patterns may be indicative of competitive dominance (Brantingham et al. 2019).

Figure 1 illustrates two sets of interaction patterns that may result from an initial violent event. Circles represent gangs and the directed arrows originate at the aggressor and terminate at the victim. The dashed arrows depict the reaction from an initial aggression (solid line). Looking at the transmission of aggression, three simple structures are profiled. Direct retaliation by the aggrieved group may occur when groups have equivalent stature within the community. Imbalanced patterns of violence may indicate the groups have unequal social status. For instance, a knock on or domino effect representing a directed line suggests that the victimized gang is unable to respond directly, instead they attack another group of lesser status. When direct retaliation does not occur, the group can become emboldened, reacting to their "success" by launching several attacks aimed at different groups (referred within network analytic approaches as out-star structures) to improve their position of dominance.

Prior research using network analytics observe different hierarchical structures that may reflect differential positions of competitive dominance. For instance, mapping conflict among 158 primarily Blood and Crip gangs active in Los Angeles, Randle and Bichler (2017) discovered a high level of internal conflict (within group violence), in-star and out-star structures (wherein a group was attacked by multiple gangs, or a gang attacked many others), and directed lines (one gang attacks another who then attacks a third group). More in tune with the present study, (Bichler et al. [2017] 2019) investigate the structure of violence for 23 Bloods and Crips gangs under civil gang injunctions, in the City of Los Angeles. While there is a tendency for the most violent groups to be victimized the most, local hierarchies exist (e.g., directed lines); and attack networks change significantly over time. Investigating murder in Chicago, Lewis and Papachristos (2020) significantly extend this line of inquiry by testing the likelihood that different local structures shape the larger network of violence, discovering that direct reciprocity differs by group attributes (e.g., race) and that other more complex structural features, associated with generalized reciprocity, vary significantly over time when short observation

windows are used (e.g., two years). Of note, these authors also found that a few particularly aggressive groups are central to spreading violence through the network (in network terms this is *activity spread*) and that when two gangs are attacked by the same aggressor, they attack each other (reflecting the network structure called *popularity closure*).

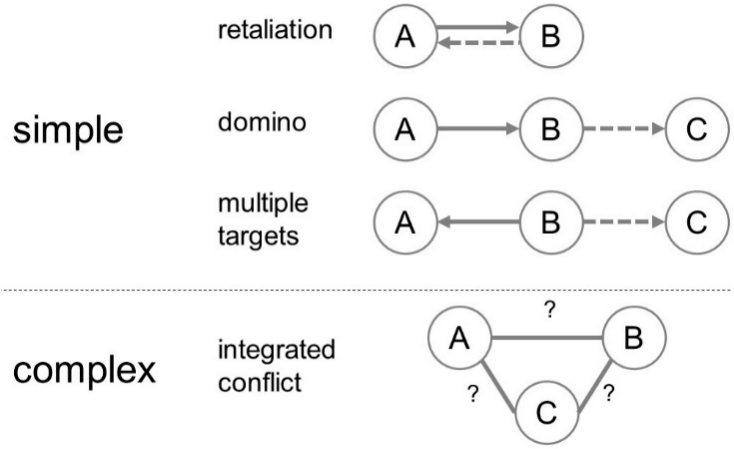

Figure 1. Structure of Violent Conflict.

Complex structures, like popularity closure, involve three-way relations of integrated conflict among a set of actors A, B, and C: these structures may reflect a social hierarchy of dominance among gangs (Papachristos 2009; Papachristos et al. 2013). When someone from gang A kills a member of gang B, and a member of gang B responds by attacking a third party from gang C, a triadic structure emerges that closes the loop: the loop closes when the third party to the violence, gang C, shoots a member from gang A. To illustrate that there are many different complex structures in addition to the scenario just described, the lines labeled with question marks in Figure 1 can be replaced with directed arrows. Specifically, there are seven different configurations of interest: A→B←C, A→C; A←B←C, A→C; A←B→C, A←→C; A→B←C, A←→C; A→B→C, A←→C; A→B←→C, A←→C; and A←→B←→C, A←→C.

Mapping the network of violence that emerges from local conflict, provides insight into the larger community dynamics that may facilitate aggression. It is possible to support interdiction efforts by observing change in these patterns. Where gang violence is characterized by simple structures, and prolific aggressors dominate, crime control strategies may best target the main instigators of violence, particularly when there is a small set of aggressors generating pockets of violence. Where the ratio of simple to complex structures favors integrated patterns of conflict, a multi-faceted approach targeting inter-related sets of gangs may yield greater violence reduction. Crime control strategies would stand to be more effective if a set of combatants were targeted, rather than a single aggressor.

2.3. Current Study

The imposition of a civil gang injunction is, without doubt, a clear public admonition of a group's behavior. As such, it should trigger a shift in violent behavior, in either the frequency of aggression, direction of attack, or selection of targets (Randle and Bichler 2017; Bichler et al. [2017] 2019). While individual level changes in behavior are expected as police officers interact with specific gang members, the sanction is directed toward the entire group. By aggregating individual-level interactions to the gangs each combatant affiliates with, we can map out emergent gang-on-gang conflict patterns (Lewis and Papachristos 2020). Joining the local social conflict neighborhoods of individual gangs will reveal the emergent community structure of violent relations.

By examining an entire community of conflict, we extend prior research that investigated a single gang (e.g., McCuish et al. 2015), a single neighborhood (e.g., Brantingham et al. 2019), or drew from a subset of gangs sharing a characteristic, i.e., predominantly African American gangs, such as

Bloods and Crips (Randle and Bichler 2017; Bichler et al. [2017] 2019). In addition, comparing across successive waves of observations offers a way to explore the cumulative effect of multiple CGIs on the structure of violence. As more gangs are enjoined, the effect of this crime control strategy may evolve. To date, only one study has documented the long-term effect of the CGI experience in Los Angeles (see Ridgeway et al. 2019): while this spatial investigation revealed neighborhood trends, it was unable to expose changes in the social interactions among gang members. For instance, violence may decline in affected neighborhoods if CGIs drive gang members away. However, as Swan and Kirstin A. (2017) discovered through an ethnographic study involving interviews with gang members, criminal behavior and interactions may shift to communities in other cities (not proximate displacement)—a network approach is needed to investigate this possibility.

Our general expectation is that aggression levels change following the imposition of CGIs, with targeted gangs becoming more deeply embroiled in complex patterns of violence (Bichler et al. [2017] 2019; Lewis and Papachristos 2020). Gang associations are dynamic (Ouellet et al. 2019), and as individuals respond to perceived harms to address challenges to social status (Papachristos 2009), conflict may erupt that involves unexpected combatants (Descormiers and Morselli 2011), particularly given that the structure of violent relations is unstable, shifting substantially between observations (Lewis and Papachristos 2020). The imposition of a CGI is a gang-specific attack, and successive attacks on groups operating within a street gang community could generate a cumulative effect that substantively alters the structural indicators of competitive dominance. With little prior work documenting the nature of structural change to expect, we posit that while the embeddedness of conflict is likely to be unstable, the overall tendency should be that complexity will increase given that gangs may shift activities to new areas (Swan and Kirstin A. 2017). At the community level, as more gangs are enjoined there may be a saturation effect, thus, when the CGI adoption curve reaches the assent and maturity phases this should correspond to shifting ratios of simple to complex patterns across successive observation periods, i.e., more popularity closure. At the gang level, the most aggressive groups may exhibit a significant growth in dominance, meaning they attack more following the imposition of a CGI.

3. Methods

3.1. Case Identification and Network Generation

A 2-step sampling method was used to identify cases of street gang violence (*See:* Figure 2). The first step involved identifying cases associated with seed gangs. Seeds are the starting actors used when sampling with a link-tracing method. In this study, seed gangs include all LA-based gangs (and cliques) named in civil gang injunctions filed in the City of Los Angeles between 1 February 2000 and 24 September 2013. We used the advanced search parameters of Westlaw and LexisNexis to restrict the hits returned to California court cases occurring within the designated observation period. Next, all other gangs associated with named victims or co-offenders were searched. Formal names and variations of gang names were used in this second step to ensure comprehensive case capture. The 2-step sampling procedure generates complete egocentric networks for 76 seed gangs and 122 alters (groups involved in conflict with the seed gangs). In general terms, this sample constitutes 198 case studies. Egocentric networks include the focal actor (e.g., each seed gang) and all connections among those actors directly connected to focal actors (alter gangs). Representing the local social world in which actors are embedded, egocentric networks provide a glimpse into the social network as seen from the actor's perspective. The 120 additional groups identified in the second step (see the secondary alters illustrated with white symbols in Figure 2) constitute the boundary of the network, as we do not have complete information about the conflict patterns involving their local social neighborhoods.

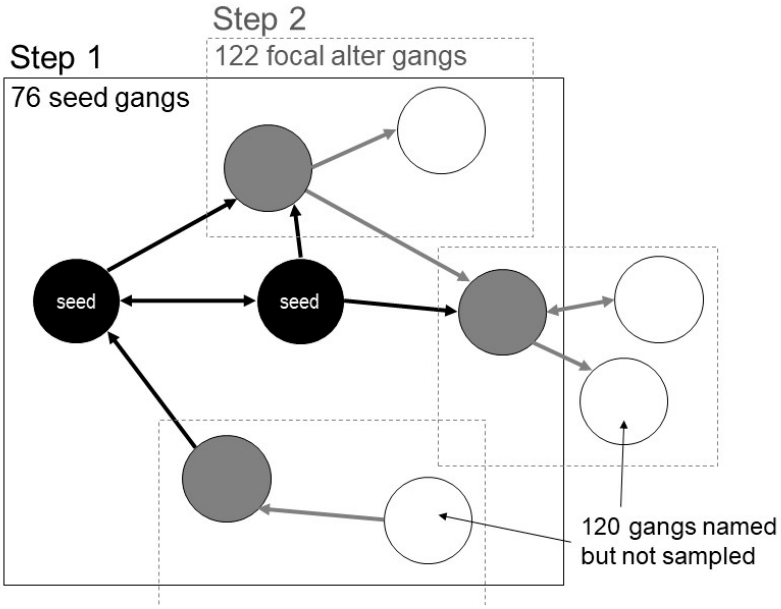

Figure 2. The 2-Step Sampling Process.

The sampling procedure generated 4610 cases. Four inclusion criteria were applied to focus the investigation on gang violence originating from the City of Los Angeles:

1. The case involved at least one gang known to be based in the City of Los Angeles;
2. There was at least one charge/conviction for a violent crime (e.g., assault with a deadly weapon, attempted homicide, or homicide);
3. At least one defendant was tried as an adult;
4. The crime occurred between 1 January 1997 and 31 December 2016 somewhere within the five-county study region—Los Angeles, Orange, Ventura, Riverside and San Bernardino.

As illustrated in Figure 3, this screening protocol reduced the sample to 993 cases—35 additional Mexican Mafia cases were identified but not included here as they did not involve a direct act of violence perpetrated by this group.

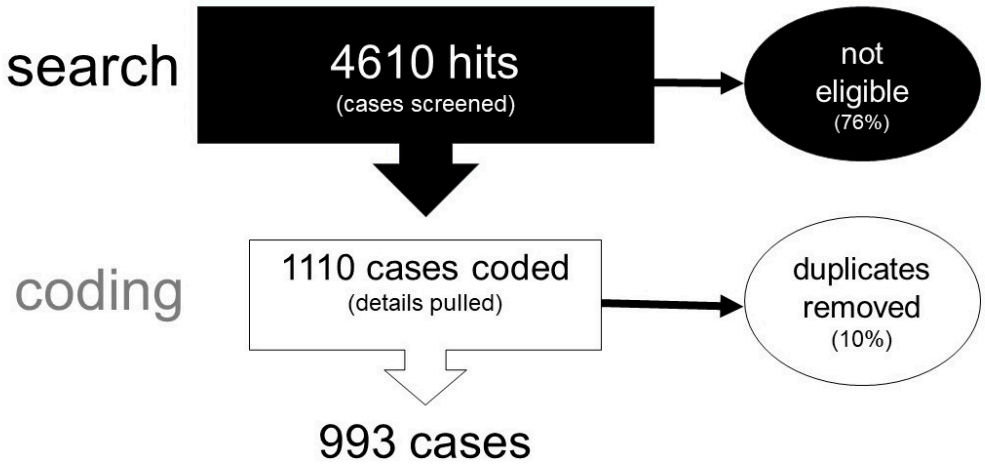

Figure 3. Case Identification Protocol.

Extracting information from the 993 cases found to satisfy all inclusion criteria, we identified 1771 defendants and 1944 victims[1]. Exploring combatants' age was challenging given a large amount of missing information (27% of subjects); however, incidents regularly involved interactions among adults and young people (only 35 cases were known to involve only juveniles or minors). Exploring age further, approximately 20% of individuals (n = 3004 individuals with age reported) involved in these violent conflicts were known to be under 21 years of age (16.6% were juveniles; 3.1% were minors). From a case perspective, 34% of cases (n = 993) involved at least one minor or juvenile, and from a group perspective, 55% of 307 street gangs observed in this sample were involved in at least one conflict involving someone reported to be under 21.

Approximately 77% of cases (n = 993) involved murder or attempted murder, with the remainder distributed across robberies (12%, including carjacking), assaults (9%) and other types of violence (2%). Most incidents involved gun crime (91%). Investigating incident location, we discovered that 70% occurred in the City of Los Angeles, and while the remaining 30% of cases transpired in 84 different cities spanning from Oakland to San Diego, most occurred in cities within a one-hour drive (no traffic) from Los Angeles. Within the City of Los Angeles, violent incidents occurred in 97 identifiable neighborhoods or areas.[2] Most cases involved a social context wherein offenders did not act alone, such as parties or other social gatherings, however, 64.9% of cases list co-offenders and approximately half of these incidents (31% of cases) describe 2 or more co-offenders. In approximately 51% of cases, a single victim was named.

Valued, directed conflict networks were generated by linking each defendant and accomplice named in the case to each identified victim. As such, directed ties (referred to as arcs) represent acts of aggression. This means that if there were two co-offenders and one victim, two arcs were generated; two co-offenders and two victims resulted in four directed acts of aggression; and one offender attacking three victims resulted in three aggressions. Amplifying the amount of violence in this way permits us to weight the network to reflect the dominance of gangs. When multiple gang members attack, or a lone offender victimizes a group of people, community impacts are magnified as this level of aggression stands to inflict greater street terrorism.

Associated gangs and cliques were recorded for each offender and victim. Due to the extensive amount of missing clique information, we aggregated ties by the gang in order to investigate gang-on-gang violence. Since some victims were not known to be affiliated with a gang, 11 additional group categories were used—7 law enforcement and criminal justice agencies, and 4 community groups (community, drug dealer, drug involved, and pimps).

Investigating the number of cases identified per year, we discovered censuring: few cases occurred before 1998 or after 2013.[3] As a result, we reduced the 20-year observation period to a 16 year period.

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[1] Inter-rater agreement was assessed on case inclusion criteria and identification of variables capturing defendant characteristics, victim characteristics, witness characteristics, characteristics of other individuals involved in the case (e.g., gang experts and responding officers), and situational elements of the case. Coders were assessed on a training sample of cases raging in difficulty level (the most difficult cases involving multiple incidents spanning across different periods of time, each period consisting of different incident elements). We observed a Cohen's Kappa of 0.84, indicating substantial agreement between the ten coders (Landis and Koch 1997). However, when just looking across defendant and victim characteristic the agreement increased (k = 0.96). This indicates that in capturing the defendants and victims' names, aliases, demographics, and which gangs they belong to, there was almost perfect agreement. Subsequent random spot checks of coding confirmed reliable retrieval of offenders, victims, and their gang affiliation.

[2] The inclusion criterion specified that at least one individual associated with a case was known to be an active member of a gang based in the City of Los Angeles, but the incident did not have to occur within the city boundaries. For instance, a gang member from Los Angeles could travel to San Diego and become involved in a violent altercation with a gang local to the San Diego region. Moreover, only one person involved in the incident had to have a Los Angeles affiliation, other participants (accomplices and victims) were not required to be, and as such, the gang violence represented by this sample was observed to spill out from the City of Los Angeles into proximate and distal locations. In addition, due to economic and social conditions affecting housing availability and regional migration patterns associated with the 2008 economic crisis, many LA-based gang members relocated from the city to suburban locations, such as Lancaster. Thus, regional migration patterns may also contribute to the observed spread of incident locations.

[3] Censuring resulted from two factors: (1) left-censoring corresponds with the origin of the development of digital case retrieval systems, i.e., LexisNexis; and right-censoring corresponds to court processing timeframes.

As discussed shortly, this distribution better mirrors the trend in CGI enactments, and only results in a 3% loss of cases.

Applying final data cleaning protocol, we arrive at the sample used in this analysis. The final sample is drawn from 963 cases and includes 318 groups with 3710 arcs (representing 625 unique conflict dyads). The loss of 4.6% of arcs (179 offender/victim dyads) is the byproduct of missing case details—23 ties were lost due to missing information about the year when the crime occurred and the rest were lost due to missing gang affiliation (e.g., a victim or offender was described as a gang member but the gang was not named). Despite finding a high level of connectivity—96.6% of groups are linked in one large connected structure—the conflict network exhibits low cohesion. Of all the possible conflict combinations, 3.4% of the groups were connected by at least one act of violence.

3.2. Analytic Framework

To investigate the cumulative impact of CGIs across 16 years, we used four observation periods—development (15% of CGIs filed from 1998–2001), assent (40% filed 2002–2005), maturity (35% filed 2006–2009), and saturation (10% filed 2010–2013). CGIs are inherently a prosecutorial crime control mechanism aimed at addressing chronic community crime problems, thus, exploring the change in cases generated is an appropriate analytic framework. We considered the social-legal context of the adoption curve of what was at the time, an innovative crime control strategy, when developing observation periods. The development period constitutes a baseline under the leadership of Los Angeles City Attorney James K Hahn, during which this wave of CGIs began. This period includes two years prior to the filing of the first CGI in order to capture the violent events that generated the political and community impetus leading to the use of this gang control strategy. The next two periods encapsulate growing use of this innovation, split between assent and maturity periods, both of which span City Attorney Rockard J. Delgadillo's term in office. The final observation captures the saturation phase in the adoption curve of CGI implementation in Los Angeles; during this period, Carmen A. Trutanich was the City Attorney of Los Angeles.

Since network structures are based on relational data, our analytic approach includes two procedures, each designed to account for interdependence between observed relationships (Krackhardt and Stern 1988). First, we use a triad census to catalogue the different classes of simple and complex structures found in each phase of CGI adoption. Triad counts have long served as a foundation upon which to generate theories about relational patterns, when studying associations among sets of three people (*See*: Wasserman and Faust 1994). With few prior studies investigating in detail, there is little evidence upon which to select specific local patterns of street gang violence that may give rise to the overall network structure observed during each phase of CGI adoption (*See for example*: Lewis and Papachristos 2020). If the overall complexity of conflict changes, as identified by the triad counts, we can dissect the nature of change with stochastic actor-oriented models (SOAMs).

SOAMs are part of a class of longitudinal statistical modeling techniques (part of the exponential family of random graph models, or ERGMs) used to test hypotheses about factors thought to be conducive to change or evolution in the network. Several theoretical assumptions underly these kinds of models, e.g., patterns reflect structural processes, and networks are dynamic and react to multiple, simultaneous processes (Robins and Dean 2013, p. 10). Focused on the decisions of actors, SOAMs assume that actors control their outgoing ties, making changes to meet their needs and circumstances. These changes advance actor objectives. For instance, with regard to competitive dominance, efforts to restore a gang's reputation may lead a gang to attack the group who previously victimized them (reciprocity) or to attack a group already victimized by other gangs (indegree popularity). SOAMs differ from other ERGMs in that they do not seek to explain the emergent network resulting from local connectivity, instead, the intent is to identify which factors explain changing network structure across successive periods. Thus, if our triad census uncovers a shift in structural complexity, these models can help dissect how the network evolved across successive phases of CGI implementation.

Using a method of moments maximum likelihood estimation process, these models run a multi-variate logistic regression to explain change in ties (formation or dissolution). Applied to gang violence, a tie forms when a new conflict occurs among pairs of gangs at T + 1, or T_2, and dissolves when a prior attack (occurring in T_1) is not repeated in T_2. In essence, this means that we can look at the relative impact of different change elements and interaction effects (e.g., the imposition of an injunction while controlling for the tendency of highly violent gangs to attack more over time), and we can do this while modeling cumulative effects of multiple CGIs. We generated parameter estimates with an initial value of gain set at 0.2, with deviation values calculated from 1000 iterations. Estimates are stable if convergence occurs and t-ratios are near a value of 0.1: our final models achieved this threshold. For an explanation of this application, see (Snijders 2011; Snijders et al. 2010; Ripley et al. 2020).

3.3. Network Descriptions

The conflict network observed for each period of CGI implementation varied in size and cohesion (see Table 1) and there was a substantial drop in the percent of groups embroiled in internal conflict during the maturity phase. Networks were characterized as having a low level of interconnectivity (measured with density), meaning that the webs of conflict were sparse, and over time, there was a slight decrease.[4] Groups were also generally characterized as being situated in star-like networks: this means that a gang may attack two other gangs, but those victimized gangs were not observed to fight each other. Clustering coefficients confirm this attack pattern. Theoretically, the average clustering coefficient ranges from 0, suggesting that the pattern of conflict ties linked to each gang looks more like a star centered on the focal gang, to a 1, where there would be a thickly connected mass of fighting.[5] As reported in Table 1, the average clustering coefficients ranged between a 0.08 and 0.14. This means that on average, gangs were not embroiled in tight dense clusters of fighting. [Note: following established protocol, the statistics reported that describe overall network structure were calculated on dichotomized networks. Ties in a dichotomized network are binary, meaning they are scored a value of "1" if any conflict occurred between the pair and "0" if there was no observed conflict.]

Networked violence evolved with each phase of CGI use. Looking at the network structure over time, the Jaccard Coefficient of similarity finds that between development and the assent phase only 12% of the conflict relations involve the same pattern of violence, meaning that for 12% of conflicts, the same aggressor and victim links exist.[6] Between assent and maturity, we found the most similarity in overall network connectivity, 16% of unique ties involved the same pair of groups in a consistent role (aggressor or victim). The least similarity was found between the maturity and saturation phases. Said another way, we can interpret these values to suggest that conflict patterns changed over time. The Pearson correlation coefficient tells us that while the tie structure changed, the value associated with ties (as used here this score reflects the number of aggressions) was somewhat consistent (the Pearson

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[4] Density is a measure of cohesion that calibrates how interconnected actors are within a network (Wasserman and Faust 1994, p. 101). As used here, this metric tabulates the number conflicts observed among gangs in the network, relative to the number of potential conflict relations that could exist if every gang was in combat with every other gang. High scores indicate that gangs are well connected.

[5] The average clustering coefficient is a measure of cohesion that is based on how many triplets (grouping of three actors) are present in a network (Watts 1999, p. 498). As used here, this measure calculates the number of threesomes (triplets) that are observed (sets of three gangs that are all in conflict with each other), relative to the all triplets that are possible (all permutations of sets of three nodes) that could exist within the network. Lower scores highlight that potentially important sub-groups exist within the network.

[6] The Jaccard coefficient of similarity is a measure of association, based on how many shared ties are present between actors when different observations of the network are compared. Networks must be binary and include the same actors (Hanneman and Riddle 2005). As used here, this statistic measures the number of conflicts among gangs that are present when observed at time 1 compared to a subsequent observation at time 2. The resulting score is the percentage of ties that are the same in two observations of the network.

was moderately strong).[7] Conflict relations with a lot of aggressions in one time period tend to also exhibit a lot of aggressions in the subsequent time period.

Table 1. Network Description by Phase.

Variables	Development (1998–2001)	Assent (2002–2005)	Maturity (2006–2009)	Saturation (2010–2013)
Network Size				
Groups	113	173	197	124
Aggression (unique attack arcs/total aggressions)	152/599	247/1315	264/1242	145/554
Internal conflicts (percent of unique conflicts)	16 (10.5%)	28 (11.3%)	22 (8.0%)	15 (10.3%)
Cohesion				
Number of components (connected structures)	10	8	15	9
Percent of groups in the largest component	78.8%	90.2%	82.7%	83.9%
Density	4.4%	4.0%	3.0%	3.4%
Average clustering coefficient	0.11	0.12	0.14	0.08
Structural Similarity				
Jaccard coefficient of similarity (with prior period)	–	12.0%	16.1%	10.1%
Pearson correlation coefficient (with prior period)	–	0.400	0.393	0.427

4. Results

4.1. General Structure of Violence—Simple vs. Complex

Exploring the structure of conflict through a triad census, we investigated the level of complexity interweaving groups that were involved in violence. Selecting specific patterns of conflict and tallying the number observed for each configuration provides an opportunity to calculate a ratio; where simple structures dominate, violence suppression efforts could independently target select aggressors, and where complex patterns emerge, actions require a coordinated approach focused on a set of interlinked combatants. While it is conventional to count many lower order simple structures, a shift in the ratio between types of structures over time can reveal important changes in the topography of conflict.

Across periods, we found a substantial amount of simple structures reflecting a domino pattern of aggression where one group attacked another, who in turn attacked a third group (see the percentages reported in Table 2). This pattern has been interpreted to suggest that groups are not of equal status or resources, and thus, groups are unable to retaliate for attacks. Instead they prey upon groups perceived as weaker than themselves (e.g., Papachristos (2009)). Of course, without detailed information about the specific groups involved, this interpretation is subjective. We also observed a relatively high level of multi-target attack behavior where one gang victimizes two other groups.

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[7] The Pearson correlation coefficient is a measure of association, like Jaccard; however, networks must be valued (Hanneman and Riddle 2005). This statistic calibrates the level of similarity of tie values, in this case, number of conflicts among pairs of gangs across two observations.

Table 2. Triad Census by Observation Period.

STRUCTURE		DEVELOPMENT (1998–2001)	ASSENT (2002–2005)	MATURITY (2006–2009)	SATURATION (2010–2013)
SIMPLE [1]	Retaliation [2]	661 (14 ties; 9.6%)	1262 (16 ties; 5.8%)	1271 (16 ties; 5.5%)	142 (4 ties; 4.3%)
	Domino	79 (54.5%)	121 (43.8%)	162 (55.9%)	47 (50.5%)
	Multiple targets	52 (35.8%)	139 (50.3%)	112 (38.6%)	42 (45.2%)
COMPLEX [3]	3-way integrated conflict	16	33	44	12
RATIO OF SIMPLE TO COMPLEX		50:1	46:1	35:1	19:1

[1] Percentage distributions for simple structures are based on patterns of retaliatory conflict rather than permutations. For instance, the denominator in the development phase was 145 (14 reciprocal arcs, 79 domino patterns, and 52 multi-target attacks). [2] Retaliation sets counted in a triad census include situations where actors A and B have a mutual conflict, but no one attacks C. Internal conflict is ignored in this calculation. Since every permutation is counted, the reciprocity scores do not reflect the true count of reciprocated violence. Investigating actual situations where violence is reciprocated and is not linked to internal conflict, we count the following: 14 reciprocated ties during the start-up period), 16 reciprocal ties in the building period, 16 reciprocal ties in the peak period, and 4 reciprocal ties in the decline period. [3] Complex ties include seven configurations: triad sets 9–10 and 12–16 as listed by UCInet. Specifically, this includes A->B<-C, A->C; A<-B<-C, A->C; A<-B->C, A<->C; A->B<-C, A<->C; A->B->C, A<->C; A->B<->C, A<->C; and A<->B<->C, A<->C.

A prominent result of this inquiry was the dramatic change in the ratio between simple and complex structures. While the developmental period, when civil gang injunctions were first introduced, exhibited many simple structures (50:1), the violence network observed during the assent period exhibited a major structural change. As more gangs faced injunctions, the complexity of conflict patterns changed as indicated by the ratio. In the final two observation periods we found ratios decline precipitously. This suggests that gang violence in general became more integrated. The direct implication is that as the CGI strategy took effect, new or additional coordinated actions were needed to quell the conflict among *sets* of gangs.

A community level analysis offers insight into macro-level changes, but does not reveal if there were differential effects on enjoined gangs compared to non-enjoined gangs? Table 3 reports on the patterns of conflict observed for enjoined gangs compared to focal alters with no injunction. All groups with egocentric networks containing at least two alters were selected for this analysis. Then, a triad census was conducted for each phase. Since some gangs did not have sufficiently large egonets for each phase, the sample size varies. Overall, simple structures were more prevalent irrespective of injunction status. We found low levels of direct retaliation and a higher proportion of domino patterns (directed chains), with one notable exception. During the assent phase (2002–2005), when CGIs were being used more frequently, enjoined gangs were observed to shift to attacking multiple targets (out-star patterns). Of note, the ratio of simple to complex structures declined a little for enjoined gangs until the final observation, suggesting that there was a small increase in complex interactions as more groups were sanctioned. The pattern was different for non-enjoined groups, although, by the final phase there was no appreciable difference in ratios.

Table 3. Triad Census Comparing Egonet Structure of Enjoined Gangs to Focal Alter Gangs [1].

SAMPLE	STRUCTURE	DEVELOPMENT (1998–2001)	ASSENT (2002–2005)	MATURITY (2006–2009)	SATURATION (2010–2013)
74 ENJOINED GANGS [2]	***SIMPLE***	***99***	***218***	***183***	***56***
	Retaliation [4]	9 (9%)	12 (5%)	12 (7%)	3 (5%)
	Domino	57 (58%)	97 (45%)	101 (55%)	28 (50%)
	Multiple targets	33 (33%)	109 (50%)	70 (38%)	25 (45%)
	COMPLEX (3-way integrated conflict)	***23***	***51***	***61***	***16***
	RATIO	**4:1**	**4:1**	**3:1**	**4:1**
	AVG. RATIO [5]	**5:1** (n = 43)	**4:1** (n = 60)	**3:1** (n = 56)	**4:1** (n = 41)

Table 3. *Cont.*

SAMPLE	STRUCTURE	DEVELOPMENT (1998–2001)	ASSENT (2002–2005)	MATURITY (2006–2009)	SATURATION (2010–2013)
74 FOCAL ALTERS [3]	***SIMPLE***	***44***	***52***	***95***	***32***
	Retaliation [4]	2 (5%)	3 (6%)	7 (7%)	1 (3%)
	Domino	21 (48%)	25 (48%)	54 (57%)	19 (59%)
	Multiple targets	21 (48%)	24 (46%)	34 (36%)	12 (38%)
	COMPLEX (3-way integrated conflict)	***9***	***18***	***26***	***9***
	RATIO	**5:1**	**3:1**	**4:1**	**4:1**
	AVG. RATIO [5]	**6:1** (n = 41)	**3:1** (n = 55)	**4:1** (n = 52)	4:1 (n = 43)

[1] Values reported sum the number of structures observed for all egos. [2] Cliques named in injunctions are omitted from this analysis. [3] To be included in this analysis, we selected all alters from the main file (consolidating cases from 1998 to 2013) with egonetworks with a size of 2 or greater. [4] Egocentric networks will only be observed to exhibit retaliations as counted in a triad census as A<->B, C if reciprocal ties exist among alters. For this reason, we counted among alters and reciprocal conflict involving the ego manually. [5] The n varies because some groups did not have sufficiently large egonetworks in each phase. To account for this variation, an average ratio was calculated—the average ratio looks at the average number of simple patterns per group compared to the average number of complex patterns.

4.2. Shifting Patterns of Violence

Table 4 reports several SOAMs disentangling how patterns of violence changed across phases of CGI implementation. Several notable patterns are found. First, gangs may have a long memory as new attacks are more likely to involve reciprocated violence. (Recall that each observation captures 4 years of conflict: this means that a gang member's murder in T_1 could be reciprocated with a murderous attack on the aggressor more than four years later). The baseline model also shows that tie changes are not likely to form transitive triplets (significant negative effect for transitive triplets), except among gangs with CGIs. This means that we observe a tendency among gangs with CGIs to attack in a manner that generates a transitive triplet with another CGI restricted gang (the effect remains significant across subsequent models). In other words, gangs with CGIs exhibit a tendency to form three-way conflicts with other enjoined gangs. Further, although initially important, the probability that a new attack generates balance (where gangs exhibit a tendency to attack others that they are structurally similar to, meaning they also attack the same alters) weakens with the introduction of gang attributes. Meaning, when we control for group characteristics differential social status emerges—some groups have more competitive advantage. Interestingly, whether a focal gang or its combatant has a CGI does not account for tie formation or dissolution, instead, popularity is the most significant factor. Gangs suffering a lot of attacks in an initial observation will suffer more in subsequent observation. Gangs who attack a lot, are less likely to be attacked in a subsequent observation (outdegree popularity), suggesting that overt aggression may ward off attack. Notably, while change is significant across all models, the rate of change from assent (T_2) to maturity (T_3) is the greatest.

Table 4. SAOM Investigation of Structural Complexity (* $p < 0.05$).

Factors	Baseline		Transitivity Dissection		Actor Attributes		Full Model		Parsimony	
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Structural										
Reciprocity	−1.849 *	0.761	−0.355	0.445	5.997 *	1.182	3.827 *	0.369	5.540 *	1.836
Trans. triplets	−2.917 *	0.819								
CGI Trans. triplets	2.212 *	0.872	0.737	0.361	4.491 *	0.836	2.478 *	0.664	4.079 *	0.997
Trans. mediated triplets			−0.94	1.086			1.032	0.618		
Trans. reciprocated triplets			1.682	2.684			−0.798	2.492		
3-cycles			1.120	1.222			2.346	1.621		
Balance			0.488 *	0.065			0.214 *	0.099	0.118	0.168
Betweenness (control)			−2.488 *	0.310			−0.187	0.334		

Table 4. *Cont.*

Factors	Baseline		Transitivity Dissection		Actor Attributes		Full Model		Parsimony	
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Actor Attributes										
Indegree-popularity					0.045 *	0.017	0.025 *	0.009	0.045 *	0.019
Outdegree-popularity					−4.734 *	1.078	−2.839 *	0.328	−4.328 *	1.506
CGI alter					−0.229	0.480				
CGI ego					−0.5036	0.664				
CGI similarity					−0.7984	0.488				
Rate of Change										
Period 1, T_1 to T_2	0.881 *	0.054	1.128 *	0.075	0.952 *	0.0605	0.945 *	0.058	0.955 *	0.061
Period 2, T_2 to T_3	1.056 *	0.059	1.534 *	0.105	1.168 *	0.0718	1.183 *	0.071	1.176 *	0.077
Period 3, T_3 to T_4	0.961 *	0.054	1.291 *	0.089	1.036 *	0.0628	1.036 *	0.066	1.043 *	0.064
Estimate Performance										
T Ratio (model convergence)	2 under 0.1		all under 0.1		all under 0.1		all under 0.1		all under 0.1	

5. Discussion

5.1. Implications

Our results suggest that the structure of gang violence changed across successive observations. While the implementation of CGIs covaried with the evolving structure of violence overall (global effect), the impact was smaller when comparing enjoined gangs to alters. Dissecting how patterns of violence changed we found that CGI gangs were more apt to attack other groups under an injunction, and that excessively aggressive groups (measured with outdegree popularity) were less likely to be victimized at a subsequent observation. These findings provide some support for the idea that targeted enforcement strategies can facilitate change in gang violence—we found that over time, as more injunctions were filed, the nature of gang conflict became more complex.

Integrating social network theory with crime opportunity theory, (Bichler 2019) argues that crime opportunity flows through a network. It is an individual's contacts and interactions with others that exposes them to crime. If we consider Papachristos' (Papachristos 2009, p. 75) conclusion to be valid, that gang members "kill because they live in a structured set of social relations in which violence works its way through a series of connected individuals", then it can be argued that variable criminal behavior, such as the use of violence, can be explained by differential positioning within the network. Aggregating to the group level, this means that the topography of social relations may explain intergroup violence, with some groups being "better" positioned to become embroiled in conflict with other groups. Taken further, changing the social landscape should alter the opportunities to fight, which should affect the level of violence observed. Applying this argument to the present study, CGIs were intended to change how gang members interact in public settings. More specifically, the stipulations included in most CGIs have the potential to reduce the visibility of enjoined gangs (prohibitions against congregating in public) which should decrease their exposure to gang-on-gang and gang-on-community interactions. As a result, violence should decline. However, this was not found.

What the architects of the original CGIs failed to appreciate was just how important inter-gang conflict is in shaping conflict networks. If opportunity has a network component, then changing the behavior, and thus, social position of one group, will trigger a ripple effect through the network, affecting other actors. To implement opportunity reducing strategies, the social network must be considered as actors do not function in isolation. For instance, exploring the social processes associated with risk of victimization, Green et al. (2017) show that gun violence spreads through a process of social contagion (63% of 11,123 episodes occurring in Chicago, 2006 to 2014), transmitted through social interactions, with alters being victimized on average 125 days after the victimization of their infector. Investigating how local patterns shape violence at the network level, Lewis and Papachristos (2020) show that complex transitive local patterns, actor characteristics, and group attributes (dominant actors) shape violence networks. Contributing to this line of inquiry, our results suggest that continued

investigations of emerging and changing structure are needed, particularly those drawing from different information sources. Comparing self-report and community observations with police records, arrests, cases prosecuted, and convictions (and appeals), helps to uncover how criminal justice filtration processes and social interactions (intimidation of witnesses) influence the nature of networks generated.

5.2. Reducing Gang Violence

Apart from (Bichler et al. [2017] 2019), the structure of conflict pre- and post-injunction has not previously been investigated for a community of actors. The limitation of (Bichler et al. [2017] 2019) is their focus on only Bloods and Crips. In the present study we sought to add to the literature by extending the boundaries of the community. Though principally limited to capturing Hispanic and African American street gangs operating in the City of Los Angeles, this study enriches our understanding of the structure of intergroup conflict. Moving forward, subsequent research should consider how gang attributes contribute to shaping the social landscape of gang relations. To bolster the effect of focused deterrent strategies like CGIs, we need to incorporate control variables and other rival causal factors to better account for shifting structure and the imbalance between groups that may reflect positions of competitive dominance. Reviewing recent findings, three explanatory variables are beginning to emerge: (1) *group dynamics* as reflected in membership or size of territory controlled (Brantingham et al. 2019), internal cohesion (Ouellet et al. 2019), and race/ethnic homophily (e.g., Gravel et al. 2018; Papachristos et al. 2013); (2) *intersecting aspects of geographic and social connectivity* as evident in the spatial distribution of gang violence (Tita and Radil 2011); and (3) *internet banging* that generates links between web-based provocations (posts that advance gang objectives, promote reputation, and disrespect other gangs) and physical violence (e.g., Décary-Hétu and Morselli 2011; Dmello and Bichler 2020; Moule et al. 2014). By understanding the explanatory power of these factors, future research can continue to improve targeted crime control strategies.

5.3. Limitations

We acknowledge several potential limitations to this study. First, we must consider the data source—this study drew from prosecuted cases generating appeals. Appeal cases typically involve the most serious and violent incidents, which does not capture the full range of gang violence—recall that 77% of the cases investigated in this study involve murder or attempted murder. The LAPD reported that 3390 gang-related homicides occurred during the study period, and that approximately 51% were cleared with arrest, and not all cases went to trial (Los Angeles Police Department 2017, 2020; Snibbe 2018). Comparing study cases to reported clearance rates, we estimate that the sample includes at least 34% of cleared gang homicides. Though limited in scope, the types of incidents captured in these cases are the forms of violence CGIs are meant to deter. Understanding the structure emerging from these cases provides a glimpse into how CGIs are impacting behaviors stemming from the most serious forms of gang violence. As CGIs are rooted in problem-based prosecutorial strategies, compiling information from 198 case studies is a reasonable effort to generate direction for continued exploration and development of court-based crime control strategies.

In addition, this study offers a point of comparison to Lewis and Papachristos (2020) who used violence known to police—incidents known to police constitute a measure of crime situated at the opposite end of the criminal justice information continuum to what we investigated. Comparing our results to their study raises questions about which kinds of incidents filter out as cases move through the system. For instance, are direct acts of retaliation less likely to result in a successful prosecution? Further, to what extent does victim or witness cooperation impact case movement through the system? To date, network science has yet to explore how criminal procedures and case characteristics filter cases, affecting the nature of relations identified at the dyadic level, as well as the network structures that emerge when conflict is mapped as a social network. The insight gained from such investigation could inform prosecutorial efforts to enhance social justice.

Second, gang identities were not always well documented in the data, thereby generating a coding issue. For example, individuals may have been listed as gang members without identifying the specific gang they belonged to. Further, naming conventions were not consistent across cases. For instance, within the cases being coded as involving members of the 83 Gangster Crips, gang affiliations were identified at trial by different names—Eight Tray Crips, Westside Eight Tray, and 8 Tray Gangsters. This inconstancy in naming made it harder to identify which gang defendants and victims belonged to. In addition, while individual association with the larger parent gang may have been recorded, clique or subset information was missing. Large gangs are known to have identifiable subgroups. These subgroups include people who co-offend together. Since some gangs are reported to have upwards of a thousand members, understanding violent interactions involving subgroups may result in more effective counter measures. The extensive, labor-intensive cleaning protocol developed to deal with these issues lead us to strongly suggest that a greater effort should be made to be consistent when describing gangs and gang associations during investigations and trials. Meanwhile, these issues with naming conventions afflict all gang research, and thus, our results are comparable to the current literature.

Finally, the directionality of conflict may be arbitrary in some cases. In cases where the victim is an innocent bystander, directionality is clear (there is a clear victim and aggressor). However, when gangs are being equally aggressive, directionality is not as straightforward. For example, in cases where you cannot determine who the aggressor in the situation is, the survivor of a conflict is often associated with being the defendant while and individual who is fatally wounded is associated with being the victim. Yet, this designation does not necessarily capture the true nature of the conflict. Subsequent analysis should consider non-directed intergang violence. By reconfiguring how relational information is used to generate the conflict networks, we can conduct sensitivity analysis to test the robustness of findings given described data limitations.

6. Conclusions

The fatal consequences of street gang violence extend beyond the identified combatants, spreading into the fabric of a community by involving individuals with no known gang association. Adopting a social network approach to this investigation, we describe the long-term effects that a dedicated CGI program has on the structure of gang conflict originating from the City of Los Angeles. While the prolonged use of CGIs by different city attorneys is associated with some pronounced, albeit potentially short-term, reductions in crime, our findings suggest that while crime at the community level may decline, the structure of conflict thickens, becoming more complex and embedded, though more so for some gangs than others. Moreover, CGI implementation patterns have cumulative effects. Continued effort is needed to develop strategies that will disentangle the web of violence that continues to plague communities.

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References

Bichler, Gisela. 2019. *Understanding Criminal Networks: A Research Guide*. Berkeley: University of California Press.

Bichler, Gisela, Alexis Norris, Jared R. Dmello, and Jasmin Randle. 2019. The Impact of Civil Gang Injunctions on Networked Violence between the Bloods and the Crips. *Crime and Delinquency* 65: 875–915. First published 2017. [CrossRef]

Braga, Anthony A., and David L. Weisburd. 2012. The Effects of Focused Deterrence Strategies on Crime: A Systematic Review and Meta-Analysis of the Empirical Evidence. *Journal of Research in Crime and Delinquency* 49: 323–58. [CrossRef]

Braga, Anthony A., Jack McDevitt, and Glenn L. Pierce. 2006. Understanding and preventing gang violence: Problem analysis and response development in Lowell, Massachusetts. *Police Quarterly* 9: 20–46. [CrossRef]

Brantingham, P. Jeffrey, Matthew Valasik, and George E. Tita. 2019. Competitive dominance, gang size and the directionality of gang violence. *Crime Science* 8: 1–20. [CrossRef]

Carr, Richard, Molly Slothower, and John Parkinson. 2017. Do gang injunctions reduce violent crime? Four tests in Merseyside, UK. *Cambridge Journal of Evidence-Based Policing* 1: 195–210. [CrossRef]

Christakis, Nicholas A., and James H. Fowler. 2009. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. New York: Little, Brown and Company.

Décary-Hétu, David, and Carlo Morselli. 2011. Gang presence in social network sites. *International Journal of Cyber Criminology* 5: 876–90.

Decker, Scott H. 1996. Collective and normative features of gang violence. *Justice Quarterly* 13: 243–64. [CrossRef]

Descormiers, Karine, and Carlo Morselli. 2011. Alliances, Conflicts, and Contradictions in Montreal's Street Gang Landscape. *International Criminal Justice Review* 21: 297–314. [CrossRef]

Dmello, Jared R., and Gisela Bichler. 2020. Assessing the Impact of Civil Gang Injunctions on the Use of Online Media by Criminal Street Gangs. *International Journal of Cyber Criminology* 14: 16–34.

Gravel, Jason, Blake Allison, Jenny West-Fagan, Michael McBride, and George E. Tita. 2018. Birds of a feather fight together: Status-enhancing violence, social distance and the emergence of homogenous gangs. *Journal of Quantitative Criminology* 34: 189–219. [CrossRef]

Green, Ben, Thibaut Horel, and Andrew V. Papachristos. 2017. Modeling Contagion Through Social Networks to Explain and Predict Gunshot Violence in Chicago, 2006 to 2014. *JAMA Internal Medicine* 177: 326–33. [CrossRef]

Grogger, Jeffrey. 2002. The effects of civil gang injunctions on reported violent crime: Evidence from Los Angeles county. *Journal of Law and Economics* 45: 69–90. [CrossRef]

Hanneman, Robert A., and Mark Riddle. 2005. *Introduction to Social Network Methods*. Riverside: University of California. Available online: http://faculty.ucr.edu/~{}hanneman/ (accessed on 13 April 2020).

Hennigan, Karen M., and David Sloane. 2013. How implementation can affect gang dynamics, crime, and violence. *Criminology and Public Policy* 12: 7–41. [CrossRef]

Hennigan, Karen, and Marija Spanovic. 2012. Gang dynamics through the lens of social identity theory. In *Youth Gangs in International Perspective*. New York: Springer, pp. 127–49.

Klein, Malcolm W., and Cheryl L. Maxson. 2010. *Street Gang Patterns and Policies*. New York: Oxford University Press.

Krackhardt, David, and Robert N. Stern. 1988. Informal networks and organizational crises: An experimental simulation. *Social Psychology Quarterly* 51: 123–40. [CrossRef]

Los Angeles County Civil Grand Jury. 2004. A management review of civil gang injunctions. In *Los Angeles County Civil Grand Jury*. Final Report 2003–2004. pp. 177–389. Available online: http://www.grandjury.co.la.ca.us/gjury03-04/LACGJFR_03-04.pdf (accessed on 13 April 2020).

Landis, J. Richard, and Gary G. Koch. 1997. The measurement of observer agreement for categorical data. *Biometrics* 33: 159–74. [CrossRef]

Los Angeles Police Department. 2017. Homicide Report 2017. Available online: http://assets.lapdonline.org/assets/pdf/2017-homi-report-final.pdf (accessed on 13 April 2020).

Los Angeles Police Department. 2020. Gangs. Available online: http://www.lapdonline.org/get_informed/content_basic_view/1396 (accessed on 13 April 2020).

Lewis, Kevin, and Andrew V. Papachristos. 2020. Rules of the Game: Exponential Random Graph Models of a Gang Homicide Network. *Social Forces* 98: 1829–58. [CrossRef]

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 and Public Policy* 4: 577–606. [CrossRef]

McCuish, Evan C., Martin Bouchard, and Raymond R. Corrado. 2015. The Search for Suitable Homicide Co-Offenders among Gang Members. *Journal of Contemporary Criminal Justice* 31: 319–36. [CrossRef]

McGloin, Jean Marie. 2007. The Continued Relevance of Gang Membership. *Criminology and Public Policy* 6: 231–40. [CrossRef]

Melde, Chris, and Finn-Aage Esbensen. 2013. Gangs and violence: Disentangling the impact of gang membership on the level and nature of offending. *Journal of Quantitative Criminology* 29: 143–66. [CrossRef]

Moule, Richard K., Jr., David C. Pyrooz, and Scott H. Decker. 2014. Internet adoption and online behaviour among American street gangs: Integrating gangs and organizational theory. *British Journal of Criminology* 54: 1186–206. [CrossRef]

Noonan, Ari L. 2008. Gang-Tied Killer of Bosch Brothers Convicted 4 1/2 Years Later. *The Front Page*. January 31. Available online: https://www.thefrontpageonline.com/news/gang-tied-killer-of-bosch-brothers-convicted-4-12-years-later (accessed on 23 December 2019).

O'Deane, Matthew D., and Stephen A. Morreale. 2011. Evaluating the effectiveness of gang injunctions in California. *Journal of Criminal Justice Research* 2: 1–32.

Ouellet, Marie, Martin Bouchard, and Yanick Charette. 2019. One gang dies, another gains? The network dynamics of criminal group persistence. *Criminology* 57: 5–33. [CrossRef]

Papachristos, Andrew V. 2009. Murder by Structure: Dominance Relations and the Social Structure of Gang Homicide. *American Journal of Sociology* 115: 74–128. [CrossRef]

Papachristos, Andrew V. 2013. The Importance of Cohesion for Gang Research, Policy, and Practice. *Criminology and Public Policy* 12: 49–58. [CrossRef]

Papachristos, Andrew V., and David S. Kirk. 2006. Neighborhood effects on street gang behavior. *Studying Youth Gangs* 12: 63–84.

Papachristos, Andrew V., David Hureau, and Anthony A. Braga. 2010. Conflict and the Corner: The Impact of Intergroup Conflict and Geographic Turf on Gang Violence. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1722329 (accessed on 10 April 2020).

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: 1–31. [CrossRef]

Papachristos, Andrew V., Anthony A. Braga, Eric Piza, and Leigh S. Grossman. 2015. The Company You Keep? The Spillover Effects of Gang Membership on Individual Gunshot Victimization in a Co-Offending Network. *Criminology* 53: 624–49. [CrossRef]

Radil, Steven M., Colin Flint, and George E. Tita. 2010. Spatializing social networks: Using social network analysis to investigate geographies of gang rivalry, territoriality, and violence in Los Angeles. *Annals of the Association of American Geographers* 100: 307–26. [CrossRef]

Randle, Jasmin, and Gisela Bichler. 2017. Uncovering the Social Pecking Order in Gang Violence. In *Crime Prevention in the 21st Century*. Edited by Benoit Leclerc and Ernesto Savona. New York: Springer, pp. 165–86.

Ridgeway, Greg, Jeffrey Grogger, Ruth A. Moyer, and John M. Macdonald. 2019. Effect of gang injunctions on crime: A study of Los Angeles from 1988–2014. *Journal of Quantitative Criminology* 35: 517–41. [CrossRef]

Ripley, Ruth M., Tom A. B. Snijders, Zsófia Boda, András Vörös, and Paulina Preciado. 2020. *Manual for RSiena*. Oxford: Department of Statistics and Nuffield College, University of Oxford.

Robins, Garry, and Lusher Dean. 2013. What are exponential random graph models? In *Exponential Random Graph Models for Social Networks*. Edited by Dean Lusher, Koskinen Johan and Robins Garry. Cambridge: Cambridge University Press, pp. 9–15.

Snibbe, Kurt. 2018. How many homicides go unsolved in California and the nation? *Orange County Register*. April 29. Available online: https://www.ocregister.com/2018/04/29/how-many-homicides-go-unsolved-in-california-and-the-nation/ (accessed on 13 April 2020).

Snijders, Tom A. B. 2011. Network dynamics. In *The SAGE Handbook of Social Network Analysis*. Edited by John Scott and Peter J. Carrington. Thousand Oaks: Sage, pp. 501–13.

Snijders, Tom A. B., Gerhard G. Van de Bunt, and Christian E. G. Steglich. 2010. Introduction to stochastic actor-based models for network dynamics. *Social Networks* 32: 44–60. [CrossRef]

Stafford, Mark C., and Mark Warr. 1993. A reconceptualization of general and specific deterrence. *Journal of Research in Crime and Delinquency* 30: 123–35. [CrossRef]

Swan, Richelle S., and Bates Kirstin A. 2017. Loosening the ties that bind: The hidden alarms of civil gang injunctions in San Diego county. *Contemporary Justice Review* 20: 132–53. [CrossRef]

Tita, George E., and Steven M. Radil. 2011. Spatializing the social networks of gangs to explore patterns of violence. *Journal of Quantitative Criminology* 27: 521–45. [CrossRef]

Vives, Ruben, and Ben Bolch. 2009. Student at Long Beach's Wilson High Fatally Shot after Homecoming Game. *Los Angeles Times*, November 1. Available online: https://www.latimes.com/local/la-me-wilson-shooting1-2009nov01-story.html (accessed on 23 December 2019).

Wasserman, Stanley, and Katherine Faust. 1994. *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.

Watts, Duncan J. 1999. Networks, dynamics, and the small world phenomenon. *American Journal of Sociology* 105: 493–592. [CrossRef]