



# Article 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



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# 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<sup>1</sup> 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 vary from each other. The broader study objective, however, is to highlight that a more nuanced

<sup>&</sup>lt;sup>1</sup> 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 gangmotivated, gang-affiliated, and non-gang homicides<sup>2</sup> (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

<sup>&</sup>lt;sup>2</sup> 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 gangrelated 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 examinations 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<sup>3</sup>. 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 memberor 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

<sup>&</sup>lt;sup>3</sup> 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 gangrelated 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.

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		_0.00 /0
Overnight	369	43.72%
Work Hours	180	21.33%
Early Evening	295	34.95%
	295	34.73 /0

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

## 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<sup>4</sup>. 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

<sup>4</sup> 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 gangrelated 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 and0 = 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 gangrelated 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 nonstranger 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 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 (25year-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-yearold, 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 gangrelated 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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