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Title

Surrounded by violence: How do individual perceptions and community context shape views about violence?

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Abstract

In this paper we examine the community- and individual-level characteristics associated with individuals' perceptions of violence. We use data collected in the Australian Community Capacity Study Wave 3 survey of over 4,000 individuals living in 148 local residential communities in Brisbane, and employ multilevel models to examine the association between community context, individual perceptions of police effectiveness and the belief that people in one's community support violence to resolve conflict. We find communities with histories of violent crime and more negative views about police effectiveness tend to be communities where residents perceive their neighbours will support the use of violence to resolve conflict.

Key words: social control, violence, policing, collective efficacy, community

Introduction

Informal social control is central to our understanding of variations in crime across place (Sampson, Raudenbush, & Earls, 1997). Informal social control is frequently defined as a ‘social good’ involving practices or responses that are generally law abiding. For example, residents can enact prosocial informal control by supervising community children or by pacifying an aggressive altercation. On the other hand, informal social control can also perpetuate community problems when violent acts (such as retaliatory homicides and assaults) are employed to regulate unwanted behaviour (e.g., Anderson, 1999; Kubrin & Weitzer, 2003a). Donald Black (1976, 1984) suggests antisocial informal social control actions are particularly prevalent when the police – one of the most common and recognisable forms of community formal control – are viewed as absent or ineffective (see also Kubrin & Weitzer, 2003a).

In the current study we examine *antisocial* informal control in local residential communities. Unlike *prosocial* informal control, *antisocial* mechanisms of control (like the use of violence to resolve conflicts), are not frequently considered in the empirical literature (although see de Haan & Nijboer, 2005; Gau, 2008; Kubrin & Weitzer 2003b; Peterson, 1999; Phillips, 2003; Topalli, Wright, & Fornango, 2002; Soller, Jackson, & Browning, 2014; Wilkinson, Beaty, & Lurry, 2009). We use data from over 4,000 residents living across 148 communities¹ in Brisbane, Australia to examine the community- and individual-level characteristics associated with the perceived use of violence as a mechanism of informal social control. We also explore the relationship between formal control (police effectiveness) and antisocial informal control (violence to resolve conflict), as well as the interplay between these relationships and the community context. Our findings point to a complex relationship between community characteristics, the ability of police to control crime, perceptions of

¹ Here the term community refers to a local residential community or suburb. In the US context, the term neighbourhood is used to describe a local residential community.

police effectiveness and the perceived use of violence to resolve conflict in communities. We conclude that the formal-informal control continuum is shaped by the way residents perceive their communities and their neighbours.

Background literature

Since the revitalisation of social disorganisation theory in the 1980s and 1990s, a great deal of research has examined the neighbourhood dynamics of social control. Research finds that communities characterised by high levels of a working trust and a shared belief that residents will intervene in community problems (referred to as collective efficacy in the literature) have lower rates of violent crime and protect against a wide range of social problems (e.g. Browning, 2002; Browning & Cagney, 2002; Franzini, Caughy, Spears, & Esquer, 2005; Maimon, Browning, & Brooks-Gunn, 2010; Mazerolle, Wickes & McBroom, 2010; Morenoff, Sampson, & Raudenbush, 2001; Odgers et al., 2009; Sampson, Morenoff, & Earls, 1999; Sampson & Wikstrom, 2008).

Scholarship has largely positioned informal social control as a ‘social good’ involving practices or responses that are, for the most part, law abiding. There are however many different types of social control that can operate in communities, and social control is not always pro-social in nature (see Black 1976, 1984; Kubrin & Weitzer, 2003a; Silver & Miller, 2004; Warner, 2007).

Black (1984, p. 7) defines social control more broadly, as modes of “conducting normative business” that can be carried out by both formal institutions and ordinary citizens (Black, 1984, p. 7; Black, 1976). Formal social control represents “the practices of the authorities to maintain order and enforce legal and regulatory codes”, whereas informal social control refers to the actions of ordinary citizens to regulate unwanted behaviour (Black, 1984, p. 7; see also Bursik & Grasmick, 1993). Under Black’s (1983) definition, violence to resolve

conflict is the most extreme mechanism of informal social control (see also de Haan & Nijboer, 2005; Peterson, 1999; Phillips, 2003; Topalli et al., 2002; Soller et al., 2014; Wilkinson et al., 2009).

Different “types” of social control are theorised to interact; in other words, when one type of control is lacking, another type of control will likely flourish and fill the gap (Black, 1976, 1984). For example, when prosocial informal social control is lacking, antisocial informal social control may emerge to address this vacuum (Kubrin & Weitzer, 2003a). Black (1983) specifically argues that violence to resolve conflict is likely to occur in the absence of adequate formal social control, that is, where formal control agencies such as the police are unavailable or inadequate. When police are ineffective, people are more likely to respond to unwanted behaviour with violence as a form of “self-help” (Black, 1983, p. 41). Drawing on the classical works of Hobbes, Black (1983, p. 41) argues that we can expect more “violence and other crimes of self-help in those contemporary settings where law – governmental social control – is least developed”. From this perspective, violence is employed to replace the formal mechanisms of control (e.g. the law), when legal institutions are absent; here, retaliatory homicide and assault are viewed as justified resolutions to conflicts.

Prior research supports the relationship between negative views of the police and the prevalence of violence. Take for example, Elijah Anderson’s well known monograph: *The Code of the Streets*. In this ethnography of a poor, inner-city, black community in Philadelphia, Anderson (1999) finds that violence and aggression emerge as defensive, coping mechanisms in the absence of legal recourse to conflict resolution. Along similar lines, Sampson and Jeglum Bartusch (1998) found a relationship between satisfaction with police and the community violent crime rate in Chicago. Also in Chicago, Kirk and Papachristos (2011, p. 1190) find legal cynicism – the “cultural frame in which people

perceive the law and the agents of its enforcement as illegitimate, unresponsive, and ill equipped to ensure public safety” – creates a context conducive to violence and that this is particularly likely to occur in disadvantaged communities with a history of high crime (Kirk & Papachristos, 2011). These US studies suggest low levels of perceived police effectiveness may limit the potential to reach lawful conflict resolution, leading to violence.

Conversely, a relationship between police effectiveness and *prosocial* informal control is also supported in the extant literature. For example, Silver and Miller (2004) test a range of community factors expected to precipitate informal social control in communities, including satisfaction with police. They find residents in Chicago are perceived as more likely to engage in prosocial informal control when satisfaction with police is higher. Warner and Burchfield (2011) find a similar relationship between faith in police and prosocial informal social control in a southern US state, as do Drakulich and Crutchfield (2013) in Seattle (although see Warner, 2007 for a different pattern of findings). Collective efficacy research also supports this correlation. In Trinidad and Tobago, Kochel (2012) finds low levels of police misconduct are associated with more positive perceptions of community collective efficacy, while Kirk and Matsuda (2011) find lower levels of legal cynicism are related to higher levels of perceived collective efficacy in Chicago. Recent research in Australia also supports this relationship. Sargeant, Wickes and Mazerolle (2013) and Sargeant (2015) find that perceptions of police effectiveness are related to perceptions of collective efficacy in local residential communities in Brisbane.

The flipside of the police effectiveness-informal social control relationship is the willingness of citizens to take the law into their own hands, using antisocial tactics. Limited research tests this thesis. For example, Kubrin and Weitzer (2003b) find that people living in disadvantaged communities in St Louis are more likely to complain about police being unresponsive, biased, racist and abusive and that these communities experience more

retaliatory homicides compared to different categories of homicide. Most recently Soller et al. (2014) find community legal cynicism impacts upon parents' appraisals of whether or not adolescents' violent behaviour is a reasonable response to conflict in Chicago. Also in a study of young people (specifically young males), Gau and Brunson (2015) find that poor perceptions of police legitimacy lead to self-protective behaviours in St Louis.

Similar findings emerge in studies of vigilantism. In Ghana, Tankebe (2009) finds that police trustworthiness is associated with support for vigilantism; those who trust the police more, are less likely to support vigilante behaviour. A recent experimental study in the Netherlands similarly examined police responsiveness to a "precipitating crime" and vigilantism in hypothetical vignettes (Haas, de Keijser, & Bruinsma, 2014, p. 224). This latter study suggests that when police appear to be less responsive, people will be more likely to support vigilantism.

The current study

Our study builds on prior research to explicate the relationship between individuals' perceptions of police effectiveness and beliefs about the use of violence to resolve conflict in their communities. As scholars such as Kubrin and Weitzer (2003a), and Warner (2007) suggest, better understanding the types of social control in communities, and the relationship between them, is an important advance for social disorganisation theory. Drawing on theory and research findings thus far, we present four hypotheses about how people will form beliefs about others' use of violence to resolve conflict in their community.

Our first hypothesis concerns the relationship between collective efficacy and violence to resolve conflict. As Black (1976, 1983) suggests, different types of social control should operate in an equilibrium. In communities where residents are able and willing to pro-socially respond to community problems, the need to resort to more serious and anti-social

forms of informal social control should be minimal. As such we anticipate that where collective efficacy is high, residents' perceptions that community residents will support the use of violence to resolve conflict will be low. Hypothesis 1 states: *there is an inverse relationship between collective efficacy and the belief that community residents will support the use of violence to resolve conflict.*

Our second hypothesis draws on the relationship between formal and informal mechanisms of social control put forward by Black (1976, 1983) and others (see Anderson, 1999; Black & Baumgartner, 1987; Kubrin & Weitzer, 2003a, 2003b; Wilkinson et al., 2009). The expectation is that when police are perceived to be ineffective, residents will be more likely to think people living in their community will use antisocial means to resolve conflicts. Hypothesis 2 states: *people who report higher levels of police effectiveness are less likely to believe that community residents will support the use of violence to resolve conflict.*

Our third hypothesis considers how prior rates of violent crime in one's community influence perceptions of police effectiveness. We expect that a relationship exists between the rate of crime and perceived police effectiveness. This relationship is demonstrated in prior US research. For example community homicide rates predict dissatisfaction with police in Florida (Reisig & Parks, 2000) and legal cynicism is positively associated with homicide and other violent crimes in communities in Cincinnati (Corsaro, Franks & Ozer, 2015). In a national US study, both violent victimisation and vicarious victimisation are predictive of engagement in violent self-help (Apel & Burrow, 2011). Hence, we expect that more frequent incidents of violent crime will lead community residents to believe that a) people living in their community are likely to engage in criminal acts of violence and b) that police are not doing enough to prevent and control violent crime in the community. Hypothesis 3 states: *prior rates of violent crime in communities are positively associated with the belief that community residents will support the use of violence to resolve conflict.* Following on from

this, Hypothesis 4 states: prior rates of violent crime *will moderate the relationship between perceptions of police effectiveness and the belief that community residents will support the use of violence to resolve conflict.*

Method

Data sources

To test our four hypotheses we use data collected in a large-scale community survey: the Australian Community Capacity Study (ACCS) Wave 3 Survey. The ACCS Wave 3 Survey was conducted in 2010 and was funded by the Australian Research Council. The survey site was the Brisbane Statistical Division (BSD). Brisbane is the capital city of the state of Queensland and the BSD includes the city of Brisbane and its surrounds. In 2011 the Brisbane Statistical Division had a population of around 2 million people (Australian Bureau of Statistics, 2011).

The ACCS Wave 3 sample includes 148 randomly drawn state communities (or state suburbs)² from the Brisbane Statistical Division. In 2011, the average residential population of these communities was 5,321 people with a range of 245 to 20,999 residents³. The 148 communities were randomly selected from a total sampling pool of 429 communities, with participants randomly selected from households within these communities. Sample size per suburb was calculated as per a quota system where each community had a quota of 20-45 participants (see Mazerolle et al., 2012 for more information). The Wave 3 ACCS sample includes both existing longitudinal participants (i.e. people who had participated in previous

² In Australia, the term “suburb” is similar to a “neighbourhood” in the U.S. Suburbs are similar to census tracts in the U.S. context, though in some cases Brisbane suburbs may be larger than census tracts as they are not determined by population. Throughout, we use the more familiar term “community” to refer to these. The suburbs in Brisbane include those that are adjacent to the main city centre and those located in peri-urban areas which have experienced large increases in population growth. For more information about state suburbs see the Australian Bureau of Statistics (2012).

³ In the U.S., the average size of the census tract is approximately 4,000 inhabitants with a minimum of around 1,200 residents and a maximum of 8,000 residents. In the PHDCN the average size of the community cluster was 8,000.

waves of the survey), an additional ‘top-up’ sample (i.e. to bring community samples up to quota), as well as an ethnic booster sample of people from Arabic-speaking, Vietnamese and Indian cultural backgrounds. The ethnic booster sample participants were recruited to ensure the ACCS Wave 3 was representative of key ethnic groups in Brisbane. The longitudinal and top-up sample participants were surveyed using Computer Assisted Telephone Interviewing with a consent rate of 68.53%. The ethnic booster sample participants were surveyed using a face-to-face interview method with a consent rate of 43.94%.⁴ Survey responses from participants in these samples were combined for analysis, along with census and crime data from the Australian Bureau of Statistics and the Queensland Police Service for each suburb. Following geo-coding to local residential communities (suburbs), the final in-scope sample included 4,166 participants from the main sample and 237 participants from the ethnic booster sample (for more information on the sampling method see Mazerolle et al., 2012).

Dependent variable

To capture perceptions of community support for *violence to resolve conflict*, survey participants were asked to report on their level of agreement with three statements: “Some people in this community⁵ believe their culture justifies the use of violence to fix problems”; “Some people in this community believe the only way many disadvantaged people can change their conditions is to use violence”; “Some people in this community believe the use of violence is justified depending on the context in which it is used”. Responses were measured on a 5-point Likert scale ranging from 1=Strongly Disagree to 5=Strongly Agree.

⁴ The discrepancy between the consent rate in the primary sample and the ethnic booster sample can be explained by the sampling methodology. The primary sample included a sampling frame of participants who had completed a survey some years earlier. Participants in the primary sample were therefore more likely to agree to participate in a follow-up survey compared to participants who received ‘first time calls’ in the ethnic booster sample. Those contacted in the Wave 3 survey for the first time had a similar consent rate as the ethnic booster sample.

⁵ In a pilot survey we found that the word “community” is associated with the local area, or suburb in which a participant resides (Mazerolle et al., 2007). Respondents were prompted to think of community as their local area during the Wave 3 survey (Mazerolle et al. 2012).

These questions are derived from the literature and were adapted to reflect an individual's perception of their local area (Agnew, 1994; Anderson, 1999; Kubrin & Weitzer, 2003b; Markowitz & Felson, 1998). These items were pilot tested prior to employment in the ACCS Wave 3 survey (see Mazerolle et al., 2012). If participants answered at least two of the three items, items were combined to form a mean-scale of violence to resolve conflict. This scale was reliable with a Cronbach's Alpha=.857.

Independent variables

Collective efficacy is defined as "the willingness of local residents to intervene for the common good" and "mutual trust and solidarity among neighbors" (Sampson et al. 1997, p. 919). In our analyses we used similar items to those employed by Sampson and his colleagues (1997). Participants were invited to respond to nine items measuring prosocial informal social control (e.g. "If some children were spray painting graffiti on a local building, how likely is it that people in your community would do something about it?") and social cohesion and trust (e.g. "People in this community are willing to help their neighbours"). If participants answered at least five out of the nine items, items were combined to form a mean-scale of collective efficacy. The scale was reliable with Cronbach's Alpha=.750.

Police effectiveness was also measured according to prior research (e.g. Murphy et al. 2008). Participants were asked to indicate how good a job police are doing in their community at: "Dealing with problems that concern you"; "Preventing crime"; "Keeping order"; and "Solving crime". Responses were measured on a 5-point Likert scale ranging from 1=Very Poor Job to 5=Very Good Job. If participants answered at least two out of the four items, items were combined to form a mean-scale of police effectiveness. The scale was reliable with Cronbach's Alpha=.884.

To measure the *prior violent crime rate* in communities, crime data were provided by the Queensland Police Service (QPS). The prior violent crime rate (which included homicide, assault and robbery) in each of our 148 communities for the years 2005-2009 was calculated per 100,000 people living in the community (see Mazerolle et al., 2012 for more information). Due to skewness this variable was log transformed.

Individual-level Control Variables

We expect a range of demographic variables will inform residents' expectations that the community will support the use of violence to resolve conflict, as well as to influence the types of communities that people live in. It was therefore important to measure age, gender, marital status, employment, home ownership, residential stability, education and language. Age and education are continuous variables, with age measured as age in years and education ranging from 1=No Schooling to 7=Postgraduate Qualifications. Gender (0=Male, 1=Female), marital status (Married or Defacto=1, Other=0), employment (Full-time Employed=1, Other=0), home-ownership (Owns Home=1, Other=0), residential stability (Lived at Address 5 Years or More=1, Other=0) and language (Speaks English at Home=1, Speaks Another Language at Home=0) were coded as dichotomous variables. Language is a useful proxy to measure ethnicity in the Australian context (see Wickes, Zahnow, White, & Mazerolle, 2014).

We also include measures of prior violent victimisation and contact with police. Self-reported household violent victimisation in the last 12 months (Victim of Violent Crime in the Past 12 Months=1, No=0), and contact with police (Has Had Contact with Police in the Past 12 Months=1, No contact=0), were measured as dichotomous variables.

Community-level control variables

Prior research demonstrates that structural factors such as community advantage, ethnic homogeneity and residential stability predict prosocial informal control in communities (e.g. Armstrong, Katz, & Schnebly, 2013; Morenoff et al., 2001; Sampson et al., 1997; Sampson et al., 1999; Silver & Miller, 2004). Community disadvantage, ethnic heterogeneity and residential instability are also predictors of violence (Armstrong et al., 2015; Lowenkamp, Cullen, & Cullen, 2003; Sampson & Groves, 1989; Sampson et al., 1997; Veysey & Messner 1999). Considering the polarity of prosocial and antisocial informal control we therefore expect that the community characteristics associated with prosocial informal control will be inversely associated with antisocial informal control.

The three social structural measures used in this paper were provided by the Australian Bureau of Statistics 2006 Census. To measure the level of disadvantage/advantage in communities we include the median annual household income of each community. To measure residential stability we created a combined standardised measure of the percentage of people who had a different address five years ago and the percentage of renters in the community. Ethnic heterogeneity was measured as the proportion of people who speak a language other than English in the community. Due to skewness, this variable was log transformed.

Method of Analysis

We computed multilevel models in STATA with variables entered in blocks. Multilevel models allow us to examine perceptions of individuals, taking into account the clustering of individuals within communities. We entered individual-level variables in Model 1, followed by community-level variables in Model 2 and the interaction term in Model 3. Before

computing the interaction term the police effectiveness and crime rate variables were mean centered.⁶ Descriptive statistics of the variables used in the models appear in Table 1 below.

[Insert Table 1]

Results

In Model 1 we examine the individual-level variables associated with the belief that community residents support the use of violence to resolve conflict. The addition of these variables reduces the ICC from 10% in the null model to 5% in Model 1 (see Table 2), suggesting individual characteristics explain 50% of the variation in the belief that neighbours will support the use of violence to resolve conflict.

[Insert Table 2]

[Insert Table 3]

We begin our interpretation of the coefficients with the control variables. As can be seen in Table 3 we find age, education and home ownership are all negatively and significantly associated with the belief that some people in the community will support the use of violence to resolve conflict. In contrast, speaking English-only at home has a positive and significant effect on the belief that community residents will support the use of violence to resolve conflict. This finding highlights a noteworthy link between ethnicity and perceptions of *others* in one's community, suggesting that people who are not members of a minority ethnic group are more likely to believe those living nearby are violent. Unsurprisingly, we find that previous violent victimisation in the household is also a positive and significant predictor of the belief that community residents will support the use of violence to resolve conflict (and is the strongest predictor in the model thus far). As violent crimes are often perpetrated by

⁶ One community was dropped due to the absence of QPS crime data for that community. Two outlier communities were also dropped from the analysis as these communities had reported violent crime rates of zero; and this had a strong effect on the analyses.

offenders who live in close proximity to their victims (see for example Block, Galary, & Brice, 2007), we would expect that people who have experienced violent victimisation (or people who live in a household where a household-member has been victimised) would be more likely to believe that people living in close proximity to them (i.e. in the community) support the use of violence to resolve conflict. Prior to examining the effect of perceived police effectiveness in the model we also entered a measure of prior contact with the police to ensure that the effect we observe for perceived police effectiveness is not simply explained by prior contacts. The coefficient for prior contact with police is not, however, significantly associated⁷ with the belief that community residents will support the use of violence to resolve conflict.

We then turn to our key independent variables of interest: collective efficacy and police effectiveness. We find support for Hypotheses 1 and 2. Collective efficacy is the strongest predictor in Model 1 and is negatively and significantly associated with the belief that community residents will use violence to resolve conflict. This finding supports the thesis that types of informal social control work in a dynamic equilibrium: when one type of control is low another is high. As such when collective efficacy is high, perceptions that people in one's community will support the use of violence to resolve conflict is low. Police effectiveness is also negatively and significantly associated with the belief that community residents will use violence to resolve conflict. This suggests that when people think the police are effective in dealing with crime in their community they are less likely to believe that people in their community support the use of violence to resolve conflict.

In Model 2 community-level characteristics are entered into the model. Entry of the community-level variables reduces the ICC further from 5% to 2.6%. Interestingly, community violent crime rate is not a significant predictor of the violence to resolve conflict

⁷ We also entered this variable separately and the effect remains non-significant.

variable⁸, nor is residential stability. Thus we fail to find support for Hypothesis 3. We do however find lower median household income measured at the community-level is associated with the belief that community residents support the use of violence to resolve conflict. In communities with higher proportions of residents speaking a language other than English at home, residents are also more likely to believe people in their community support the use of violence to resolve conflict. Combined with the finding at the individual-level (that English-only speaking participants are also more likely to believe that people in their community support the use of violence to resolve conflict) this finding is revealing. Taken together these results suggest that English-only speaking respondents who live in predominantly non-English speaking communities may suspect higher rates of violence in their communities. This finding is consistent with prior research examining how ethnic concentration in a community can lead people to make assumptions about community problems. For example, Chiricos, McEntire and Gertz (2001) and Wickes, Hipp, Zahnow and Mazerolle (2013) find residents' perceive higher levels of disorder when they perceive higher concentrations of ethnic minorities living in their communities.

In Model 3 (see Table 3) we include the interaction term of perceived police effectiveness and prior community violent crime. Here we find support for Hypothesis 4. The interaction term coefficient is negative and significant. As shown in Figure 1, perceptions of police ineffectiveness impact less on the belief that community residents support the use of violence to resolve conflict when participants live in communities with low rates of violent crime. By contrast, in communities with high rates of violent crime, police ineffectiveness matters much more for predicting the belief that community residents support the use of violence to resolve conflict.

[Insert Figure 1]

⁸ Post-hoc analyses reveal that the effect of the prior violent crime rate in the community is mediated by collective efficacy.

Discussion and conclusion

The idea that violence can be understood as a form of conflict resolution or a problem-solving mechanism is not new. The anthropological examples provided in Black's (1983) essay on the subject, highlight the way that violence has been used to solve problems in less "developed" communities. Drawing on a study by Nash (1967), Black (1983) explains how one community of Maya Indians in southern Mexico viewed homicide. In this community, members placed the blame of a homicide upon the victim because "Homicide is considered a *reaction* to crime, not a crime itself" (Nash, 1967, p. 456). Black (1983, p. 35) explains that these understandings of violent acts (i.e. as solutions to problems) are most common in "traditional societies which have little or no law (in the sense of governmental social control)" (see also Black, 1972; for a more recent study see Adrinkrah, 2005).

Drawing on these ideas, the study of antisocial informal control may help us to better understand the use of violence to resolve conflict in a contemporary, democratic society, particularly in places that lack other forms of control. Of note we consider how the community contexts can shape the relationship between perceptions of police and beliefs about violence. Our paper drew on data collected in the Australian Community Capacity Study (ACCS) survey to examine the community- and individual-level factors that we propose will influence resident support of violence to resolve conflict. Our analyses reveal three key findings about social control in communities. First, when collective efficacy is high, the belief that people in one's community will support the use of violence to resolve conflict is low. Second, as faith in police effectiveness decreases, the belief that community residents will support the use of violence to resolve conflict increases. Third, the relationship between perceived police ineffectiveness and the belief that community residents support violence to resolve conflict is particularly pronounced in communities with high rates of recorded prior violent crime.

Our findings support the idea that different types of informal social control work in a dynamic equilibrium – when one is low, the other steps in to take its place. As Black (1976, 1983, 1987) and others argue (e.g. Anderson, 1999; Kubrin & Weitzer, 2003a, 2003b; Wilkinson et al., 2009), we find that the belief in police effectiveness is connected to the belief that antisocial informal social control takes place in one's community. We know that resolving grievances or disputes in a community can be facilitated *lawfully* by citizens and by the police. However, when citizens lack faith in fellow community residents and the police to resolve those issues, and when a history of violent crime indicates the law is less available and/or effective in a community, residents are likely to find their own ways of resolving disputes and may rationalise violent behaviour as necessary. If a citizen, for example, applies for a restraining order due to a threat of violence, and the restraining order is then not enforced by police (or if the resident does not apply for a restraining order because they do not believe the police will effectively enforce it), the failure of the law could lead to defensive, retributive or retaliatory behaviour (or at least the belief that others in the community will step in to resolve the issue). In such cases, a violent response may be viewed as the only option available.

Understanding the way that the neighborhood or community can shape residents' perceptions is useful for law enforcement agencies. We find that a history of violence in a community shapes the extent to which residents can rely on police, and the subsequent concerns about violent conflict resolution. Knowing that some communities are more likely to support the use of violence as a way to resolve conflicts can help police to focus their attention on making themselves more available to the residents who live in those communities. Increased availability could include, for example, increased foot patrols, or community police beats. Police can also focus their attention on improving their *perceived* effectiveness – particularly in high-crime communities. While “being effective” is an obvious

priority for the police, improving public *perceptions* of police effectiveness can be more challenging. Police may be relatively effective in their role, but public perceptions of their effectiveness may differ from reality. This requires police to be responsive to how their actions in the community are perceived. For example, intensive and targeted enforcement strategies may “backfire” by reducing trust in the police and increasing legal cynicism, particularly among certain communities who may already feel estranged from police (Weisburd et al., 2011). Communication with residents living in high-crime communities may prove more successful. Communicating successes in solving crime or dealing with antisocial behaviour may go some way to building more positive perceptions of police effectiveness in high-crime communities (Sargeant, Wickes and Mazerolle, 2013). Equally important is the way in which police engage face-to-face with local community residents. Poor citizen-police interactions can tarnish the reputation of the police organisation as a whole. As prior research shows, both personal and vicarious experiences with police can precipitate widespread distrust of the police in communities (Murphy, Mazerolle and Bennett, 2014; Rosenbaum, Schuck, Costello, Hawkins, & Ring, 2005).

Our study also highlights to the importance of community norms and values to understanding perceptions of violence. We found that low collective efficacy was the strongest predictor of the belief that neighborhood residents will use violence to resolve conflict. This suggests that when community residents trust their neighbours and believe they are likely to intervene pro-socially to address community problems, they are less likely to be concerned about the likelihood of violent conflict resolution. These findings support prior research in Australia and elsewhere, that collective efficacy is a protective community process (Sampson et al., 1997; Mazerolle, Wickes and McBroom, 2010).

While our study provides some interesting insights into how antisocial forms of control may occur, there are some limitations that should be considered when interpreting our

findings. First, we use cross-sectional data, and as such we cannot conclude that our findings are not spurious. Future longitudinal analyses could investigate the causal ordering of the relationships under investigation. Second, we examine resident's *perceptions* that community members are likely to support the use of violence to resolve conflict. Examining the context surrounding *incidences* of violence by individuals or other community members (both through official records as well as observational research), would offer the capacity to link perceptions with reality (see for example Jacinta Gau's 2008 work on hand-gun permits). Our focus on perceptions does however contribute a unique perspective. Our findings build a better understanding of how residents come to *perceive* their communities as violent. We asked survey respondents to report on the degree to which they believed residents in their community would support the use of violence to resolve conflict. While this question may speak to their knowledge of their community, it also speaks to their use of stereotypes to enable them to develop an understanding of violence and crime in their community. This point is particularly salient when we consider our findings around ethnicity. More broadly it seems that observed structural characteristics impact upon residents' beliefs that people in their community will support the use of violence to resolve conflict.

Our findings advance our current knowledge of the relationship between different types of social control in communities by considering anti-social control mechanisms and their relationship to pro-social informal social control and formal control. Cumulatively, the results of our research demonstrate that both the individual- and community-level context can shape perceptions of others. Residents draw on their personal and vicarious knowledge to form perceptions about people in their community. By considering both an individual- and a community-framework in this study we have been able to provide a more nuanced understanding of when and why people might rely on formal versus informal, and prosocial versus antisocial, mechanisms of control. We conclude that the relationship between the

effectiveness of formal social control and informal mechanisms of control can differ between communities and that the way residents perceive their communities and those around them impacts upon their views about violent conflict resolution.

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