LEGAL CYNICISM AND PROTECTIVE GUN OWNERSHIP AMONG ACTIVE OFFENDERS IN CHICAGO

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Michael Sierra-Arevalo, M.A.
Doctoral Student, Department of Sociology
Affiliate Fellow, ISPS

\(^1\) Please direct all inquiries and correspondence to the author at michael.sierra.arevalo@yale.edu
ABSTRACT

Most American gun owners have their firearms for a simple reason: protection. However, these estimates are based on nationally representative samples that are likely to undersample residents of marginalized urban communities where rates of violent victimization, and presumably the need for personal protection, are much higher than the country as a whole. Yet, we know very little about the motivations for gun acquisition within high-crime neighborhoods, especially among “hidden” sub-populations within these communities such as active criminal offenders. Drawing on past work linking neighborhood violence to legal cynicism, and using data gathered by the Chicago Gun Project (CGP), I employ measures of police legitimacy to explore the effect of distrust of legal agents on protective gun ownership among active offenders in Chicago. These data confirm that lower levels of police legitimacy are significantly related to a higher probability of acquiring a firearm for protection. I also consider the ways that gang membership, legal changes in Chicago, and gun behaviors are related to protective gun ownership.
I. INTRODUCTION

Current estimates suggest that between 120 and 300 million firearms are in private hands in the United States, and between 3 and 6 million more guns are added each year (Legault and Lizotte 2009). And while popular rhetoric of “one gun for every man, woman, and child” may be mathematically true, gun ownership is by no means evenly distributed across the population. The General Social Survey (GSS) reports that the percentage of those saying they personally owned a gun dropped from 29% in 1980 to 22% in 2012. There are also racial disparities in ownership – while 37% of white households report having a gun, only 16% of black households do. Estimates that include juvenile gun owners put the total U.S. gun-owning population at approximately 65 million, meaning the majority of weapons in the United States are owned by less than a quarter of Americans (Cook and Goss 2014).

Along with disparities in ownership, the reasons for gun ownership are also shifting. Of American gun owners in 2013, 48% reported owning their weapon(s) for protection, a 22 percentage point increase from 1999. Importantly, protective gun ownership varies significantly by race, with 45% of white Americans citing protection as the primary reason for owning a firearm, while 71% of blacks own a firearm for protection (Dimock, Doherty, and Christian 2013). Clearly, while protection is a common reason for gun ownership overall, it is a much more salient motivation for black gun owners.

This racial difference in the prevalence of protective gun ownership is potentially related to disparities in the risk of victimization faced by different communities. With racial minorities being differentially exposed to structural conditions strongly related to violence (e.g. poverty,
segregation) (Massey and Denton 1993; Sampson and Wilson 1995), it is unsurprising that blacks find themselves at a significantly higher risk of violent victimization than whites (Fox and Zawitz 2007). These disparities are even greater when looking at males, and at those aged between 18 and 24, with young black men being at 10 times the risk of being a victim of gun homicide as compared to white men of the same age (Harper et al. 2007; Heron 2012).

Who is involved in gun violence is also tied to where gun violence happens, pointing to long-standing interest in the confluence of race and place as they relate to crime and violence (see Sampson and Wilson, 1995; Peterson and Krivo, 2005). The unique context of poor, violent neighborhoods has profound implications for the processes that motivate gun ownership. In neighborhoods characterized by high violence rates, many residents exhibit a unique, culturally defined orientation known as legal cynicism, a frame in which the criminal justice system and its agents (e.g. police and the courts) are viewed as illegitimate, unresponsive, and ill equipped to ensure the safety of community residents (Kirk and Matsuda 2011; Kirk and Papachristos 2011). Where police responses do little to resolve crime and violence (provided the police respond to calls for assistance at all), residents are often left with no legal recourse. The lack of legal avenues for addressing criminal victimization presents a likely motivation for extralegal remedies such as acquiring a protective firearm. As a form of “self-help” to prevent victimization (Black 1983; Watkins, Huebner, and Decker 2008), residents of marginalized inner-city communities may own firearms to ensure the protection they feel police cannot or will not provide.

Unfortunately, the so called high-risk gun owners (Lizotte et al. 1994) of these marginalized neighborhoods that own their guns illegally make up the kind of “hidden

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2 For a review of the large body of work on structural determinants of violence, see Sampson and Lauritsen (1994).
population” that is unlikely to be captured in national-level surveys like the GSS (Pettit 2012; Watters and Biernacki 1989). This exclusion is all the more likely when considering the small number of active criminal offenders within these communities that use their weapons in the commission of criminal acts. While previous work has attempted to overcome this methodological hurdle by sampling from populations of felons (Sheley and Wright 1995; Wright and Rossi 1986), institutionalized youth (Watkins et al. 2008), and high-risk urban youth (Bjerregaard and Lizotte 1995; Curry, Decker, and Egle 2002; Lizotte et al. 1994, 2000), these studies do not shed much light on the motivations for gun ownership among active criminal offenders who are on the street, continuing to be exposed to the neighborhood conditions that contributed to their previous criminal acts.

To address the likely exclusion of this hidden population from samples used in previous work, I examine how active criminal offenders perceive the police, and how these perceptions influence the probability that the gun they most recently possessed was acquired for protection, I use survey data on 141 active offenders in two high-crime, high-violence neighborhoods in Chicago. Of those sampled, many were past or current gang members, a population that is involved in gun violence as both victims and offenders at much higher rates than the general public (Braga, Hureau, and Winship 2008; Kennedy 1997; Papachristos, Braga, and Hureau 2012; Papachristos, Braga, et al. 2012). Thus, this study represents an advancement over previous work because it concentrates on a subset of the population likely to be victims and perpetrators of gun violence and, presumably, to have all the more reason to own a firearm for protection.

My descriptive analysis yields two interesting results. First, the rate of protective gun ownership among active offenders in high-violence areas of Chicago is higher than in the general
population. Second, among those active offenders that report having ever possessed a firearm, protection is far and away the most common reason for having acquired their most recent firearm. Results from my logistic regression models show that criminal offenders who have more negative perceptions of police are significantly more likely to have ever possessed a firearm. Further, among criminal offenders who have ever possessed a firearm, those with more negative perceptions of police significantly more likely to have acquired their most recent firearm for protection. This supports that idea that those who view police as illegitimate own a firearm in order to compensate for the real or perceived shortcomings of the police in terms of their ability to provide for public safety.

This paper is structured as follows. I begin with an overview of gun ownership in the United States, the theoretical underpinnings of legal cynicism, as well as its real-world implications for the behavior of residents who view the law and police as illegitimate. I then describe the data collection process of the Chicago Gun Project in detail, and provide a broad, descriptive overview of the sample. I next describe the measures used in this study and the results of my analysis, both descriptively and using logistical regression techniques. I conclude with a summary of results, and discuss the implications of my findings, as well as offer compelling explanations for non-typical results related to race and gang membership.

A. DISPARITIES IN AMERICAN GUN OWNERSHIP

Firearms and firearm ownership are a part of life in the United States, perhaps more so than in any other country. Though accounting for less than 5% of the world’s population, it is estimated that between 35% and 50% of the world’s civilian-owned guns belong to Americans, and the U.S. leads all countries in the number of guns per capita (Karp 2007). Further, the supply
of firearms in the U.S. increases annually, with approximately 4.5 million new firearms sold domestically each year (ATF 2000). The proliferation of firearms and the uniquely American “gun culture” are the product of historical and social forces that can be traced to (and indeed before) the inception of the U.S. as a nation. And while it is true that the U.S. has historically had rates of gun ownership that far outpace that of other nations, Americans’ relationships with guns are far from static over time.

Despite the dominance of America’s gun culture, survey estimates find a general downward trend in ownership over the last 20 years. Between 1980 and 2012, for example, the GSS reports that the percentage of Americans who personally owned a firearm dropped from 29% to 22%. This decrease is more marked when considering household gun ownership, which declined from a high of 54% in 1977 to 34% in 2012. This decline in ownership notwithstanding, the fact remains that over a third of the U.S. reports having a gun in the home.

Gun ownership varies significantly across the population. For instance, men are approximately three times more likely (37% versus 12%) to personally own a firearm than women. There are also differences in gun ownership by age, with 16% of adults under 30 reporting personal gun ownership, compared 27% of those over 30 (Dimock et al. 2013). One of the more dramatic variations in gun ownership is by race: according to the 2012 GSS, 85% of those who personally own a firearm are white. A 2013 survey by the Pew Research Center also finds a racial difference in gun ownership, with 25% of whites versus 16% of blacks reporting personally owning a firearm.

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3 For examples of historical research on guns and gun ownership in the United States, see Winkler (2013); Bruce-Biggs (2001); Cottrol and Diamond (1991).
Just as gun ownership is differentially distributed across the population, so too are the reasons for gun ownership. Since 1999 there has been a marked increase in the percentage of gun owners who say they own their firearm(s) primarily for protection. Forty-eight percent of gun owners cite protection as the reason for owning a gun, a 22 percentage point increase from the late 90s (Dimock et al. 2013) This increase in protective gun ownership occurred in step with a marked decrease in ownership in what was the most commonly cited reason: hunting (see Table 1).

Table 1  Reason for Owning a Gun

<table>
<thead>
<tr>
<th>Reason</th>
<th>1999 (%)</th>
<th>2013 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection</td>
<td>26</td>
<td>48</td>
</tr>
<tr>
<td>Hunting</td>
<td>49</td>
<td>32</td>
</tr>
<tr>
<td>Target/sport shooting</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Constitutional right/2nd amendment</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Collect gun/Hobby</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Don't Know</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Table adapted from Dimock, Doherty, and Christian (2013).

The racial disparities seen in general gun ownership can also be seen when looking at protective gun ownership. As shown in Table 2, when looking at the reasons for gun ownership across races, 71% of black gun owners have their gun for protection, as compared to 45% of white gun owners.
### Table 2  
*Reason for Owning a Gun by Race*

<table>
<thead>
<tr>
<th>Reason for Owning a Gun</th>
<th>White (%)</th>
<th>Black (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection</td>
<td>45</td>
<td>71</td>
</tr>
<tr>
<td>Hunting</td>
<td>36</td>
<td>17</td>
</tr>
<tr>
<td>Target/sport shooting</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Constitutional right/2nd amendment</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Collect gun/Hobby</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Other⁴</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Table adapted from Dimock, Doherty, and Christian (2013).

Importantly, gun owners and their guns exist in particular places. While it is clear that whites and blacks differ in their rates of and motivations for gun ownership, the fact that gun-related violence is concentrated on city streets instead of suburban cul-de-sacs or rural towns (Braga, Papachristos, and Hureau 2009; Branas et al. 2004; Weisburd et al. 2004; Weisburd, Groff, and Yang 2012) suggests that attention might best be focused on protective gun ownership within *cities*. Refining the comparison shown in Table 2, Figure 1 compares the percentage of urban whites and blacks who are gun owners, as well as what percentage of those gun owners have their firearm for protection, specifically.

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⁴ For whites, almost half of the “Other” category is made up of “Gift/Inherited It”. By comparison, approximately 80% of the “Other” category for blacks is made up of “Work related/Current or ex-military/police”.
As shown in Figure 1, urban areas mirror national-level disparities in gun ownership, with 25% of urban whites and 16% of blacks reporting personal firearm ownership. Additionally, national trends in protective ownership are reflected in urban areas, with 49% of white gun owners versus 68% of black gun owners reporting they have their firearm for protection. While blacks are less likely to be gun owners than whites at both the national level and within urban contexts, protection is more often a concern that warrants acquiring a firearm among black gun owners than their white counterparts. Clues for what drives the disparity in the need for owning a
protective firearm can be found in the different social contexts that urban blacks and whites find themselves. More specifically, the perceived need for protection is undoubtedly influenced by differences in neighborhood structure, and the resulting cultural understandings of violence, the police, and what constitutes a viable option for addressing the often violent reality of the inner-city. One of these guiding cultural frameworks often observed among residents of marginalized urban communities is *legal cynicism*.

**B. Structural and Interactional Causes of Legal Cynicism**

Early conceptions of legal cynicism defined it as a component of anomie, or normlessness, in which the rules of the dominant society and its institutions (e.g. the courts, the police) no longer dictate proper behavior (Sampson and Bartusch 1998; Sampson, Morenoff, and Raudenbush 2005). More recent discussions of legal cynicism by Kirk and colleagues (Kirk and Matsuda 2011:447; Kirk and Papachristos 2011) use a more focused conception of legal cynicism, and instead concentrate on the causes and consequences of seeing the law and police as “illegitimate, unresponsive, and ill equipped to ensure public safety.”

Interestingly, Sampson and Bartusch (1998) demonstrate that residents of disadvantaged neighborhoods disapprove of crime and violence *more* than residents of more advantaged neighborhoods, and refute the simplistic notion of a racially-linked “subculture of violence”. Instead, violence and toleration of deviance is linked to normative orientations structured by neighborhood characteristics. As described by Hannerz (1969) and Anderson (1999), residents of disadvantaged neighborhoods do not necessarily value deviant or criminal activity, but instead engage in these behaviors in response to particular stimuli and situations in their neighborhoods. These residents may believe in dominant ideas about law and order, but because of the structural
realities of their environment and the associated cultural understandings of how to navigate that environment, behaviors such as putting one’s trust in police or calling on them for assistance are not viable solutions (Horowitz 1987; Sampson and Bartusch 1998; Suttles 1968).

Legal cynicism, then, is in part determined by the set of structural conditions of a neighborhood. Neighborhood characteristics such as poverty, unemployment, and racial segregation can inhibit social mobility through social isolation and restricted (or non-existent) opportunities. This inhibited mobility can engender cynicism towards institutions that community residents do not see as serving their interests, or as treating them unfairly (Kirk and Matsuda 2011). As described by Anderson (1999:34) in his ethnographic study of an inner-city Philadelphia neighborhood, the social context of unemployment, racial segregation, and drug use contributes to disenfranchised and cynical attitudes towards established social institutions:

“The hard reality of the world of the street can be traced to the profound sense of alienation from mainstream society and its institutions felt by many poor inner-city black people, particularly the young. The code of the street is actually a cultural adaptation to a profound lack of faith in the police and the judicial system – and in others who would champion one’s personal security.”

Thus, structural realities of the disadvantaged inner-city lead to feelings of isolation from and skepticism towards traditional social institutions like the legal system.

The deep distrust felt towards police and other agents of the law is also rooted in community interactions with law enforcement. In many cases, how police interact with residents is biased by simple geography: police act differently in different neighborhoods (Fagan and Davies 2000; Smith 1986; Weitzer 2000). The salience of the neighborhood as a categorization tool for police to demarcate their jurisdiction into “good” and “bad” neighborhoods can lead to “ecological contamination”, whereby all residents of a “bad” neighborhood are yoked with
“moral liability” (Terrill and Reisig 2003:295; Werthman and Piliavin 1967). When residents become inherently “bad” by merit of the block they live on, this can have considerable effect on interactions between police and community members.

It is precisely in the most structurally disadvantaged neighborhoods where police are most likely to engage in occupational misconduct (Kane 2002, 2005) or abuse their authority (Fagan and Davies 2000). Smith (1986), for example, finds that suspects are three times as likely to be arrested in disadvantaged areas as compared to more advantaged ones, and recent work on New York City’s controversial Stop-and-Frisk policy shows that stops concentrate in disadvantaged neighborhoods (Fagan and Davies 2000). The use of physical force with suspects is also inequitably distributed between neighborhoods (Terrill and Reisig 2003). Terrill and Reisig stipulate that this effect is net of situational factors (e.g. suspect resisting or being combative), officer characteristics (e.g. age, training), and the suspect’s race; it is neighborhood-level characteristics, not individual ones, that most strongly predict use of police force.

These inequitable police behaviors have implications for how residents of disadvantaged communities perceive of the police and the law more generally. Carr, Napolitano, and Keating (2007) found that police harassment and victimization led juveniles to view police as ineffective, crooked, and in a generally negative way. Juveniles need not directly experience predatory police to espouse these views: youth have negative perceptions of the police even if their experience with police brutality, harassment, or misconduct is vicarious (Brunson 2007). Scholarship on procedural justice and its effects on perceived legitimacy holds that fair procedures have three components: 1) neutrality and consistency; 2) being treated with dignity and respect; and 3) the belief that the law and its agents are acting benevolently and with a sincere desire to be fair (Tyler 2000; Tyler and Huo 2002; Tyler and Wakslak 2004). When police interactions with
community residents lack one or more of these components, these interactions are more likely to be judged as unfair, and the legitimacy of the law and the police is called into question. When legitimacy is called into question, not only are police less likely to be cooperated with or deferred to, but residents (law-abiding and criminal, alike) are less likely to obey the law in general (Papachristos, Meares, and Fagan 2012; Sunshine and Tyler 2003; Tyler 1990, 2000, 2006; Tyler and Huo 2002; Tyler and Wakslak 2004). 5

C. SOCIAL ADAPTATIONS TO LEGAL CYNICISM

In neighborhoods where police are seen as ineffective, unfair, and as potential victimizers, and where the law in general holds less sway, it makes sense that some residents would come to distrust police and the legal system they represent. What does one have to gain by calling the police if they may be hassled, or if they face retribution from other neighborhood residents who take exception to the police being called? In light of the potential ramifications for contacting police, individuals must look to other avenues to address interpersonal conflicts. Kirk and Papachristos (2011) argue that one alternative conflict resolution strategy is the use of violence. This use of violence as “self-help” occurs in social contexts where 1) formal institutions (e.g. the legal system) are weak or absent, and 2) violence is informally sanctioned as an acceptable way to solve problems and control social behavior (Black 1983).

Interpersonal violence is but one type of self-help that community residents can engage in. Similar to the how legal cynicism can create a context where violence is a reasonable option, Reiss and Bordua (1967) argue that when citizens perceive the police to be ineffective, they may

5 With few exceptions (e.g. Papachristos et al., 2012), research on procedural justice and perceptions of general and police legitimacy do not concentrate on particular criminal acts, but instead on general perceptions and opinions of the law.
take measures to provide for their own protection. One such measure is the acquisition of firearms (Lavrakas 1985; Smith and Uchida 1988). Just as Black’s (1980, 1983) model of self-help is premised on weakened institutional controls, McDowall and Loftin (1983) found that handgun purchases increased when police strength declined and violence rates increased, and theorized that handgun acquisition was a product of self-interested desire for self-protection. One way or another, people will take steps to protect themselves. In legally cynical neighborhoods with weak, illegitimate law enforcement and high rates of violent crime, one way to do so is to acquire a firearm.

However, McDowall and Loftin’s (1983) study examined legal gun ownership as a reaction to the perceived inability of police to protect citizens. Whether residents of disadvantaged neighborhoods who own their guns illegally (such as criminal offenders) acquire firearms for protection, and how the perceived legitimacy of police affects the choice to own firearms, remains largely unexplored. Given this gap in our knowledge, the current study aims to explore how legal cynicism is related to firearm ownership among active criminal offenders. I hypothesize that active offenders with more negative perceptions of police are significantly more likely to have acquired their most recent firearm for protection. My analysis proceeds in two stages. In the first stage, I use descriptive statistics to give a broad overview of patterns of protective gun ownership among active offenders in Chicago. In the second stage, I employ logistical regression techniques to explore the relationship between legal cynicism (as measured by perceptions of the police), and protective gun ownership.

II. DATA AND METHODS

A. SAMPLE
The data used in this study were collected in 2006-07 by the Chicago Gun Project (CGP) using a cross-sectional survey of active offenders that were part of a violence-reduction field experiment. The survey used by the CGP derived its questions from prior research projects, including work by Tom Tyler (1990), Sampson, Raudenbush, and Earls (1997), and Wright and Rossi (1986). Survey items included items related to 1) perceptions of the law, various legal agents (including police, prosecutors), and legal authority, 2) guns, gun crime, and gun use, and 3) experience with gangs and associated criminal behavior.

While the past work from which the CGP survey instrument is derived has addressed matters concerning legal legitimacy, guns, and criminal behavior, almost all of this work addresses the effect of legitimacy on behavior among “normal” (read non-criminal) citizens. As noted by Papachristos, Meares, and Fagan (2012), the real strength of the CGP is the particular population sampled: active gun offenders in some of Chicago’s highest crime communities. The CGP provides unique insight into how legitimacy influences behaviors among the high-risk population of active criminal offenders, who are disproportionately likely to be perpetrators and victims of violent crime (e.g. Braga et al. 2008). Simply put, in light of the high risk of victimization faced by active criminal offenders, the CGP is a particularly appropriate sample for exploring behavior designed to minimize victimization such as procuring a gun for protection.

The CGP sampled 141 active offenders in and around high-violence neighborhoods in Chicago. The sample is drawn randomly from individuals aged 17 years or older, who had at least one prior arrest for a violent crime (e.g. robbery, assault, battery, etc.), and were within the first six months of release to either probation or parole at the time of data collection. Since the time of data collection, approximately half of the sample has recidivated and returned to prison;

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6 See Papachristos, Meares, and Fagan (2007) for a thorough analysis of Project Safe Neighborhood (PSN) and the field experiment methodology.
this is suggestive of the “active” nature of these individuals’ offending. Seventy-one percent of the sample was drawn from high-violence neighborhoods on the south and west sides of the city, with an additional 41 cases drawn randomly from other neighborhoods in the city.\footnote{Though the selected randomly, the additional 41 cases did cluster around the high-crime, high-violence neighborhoods where the bulk of the sample was draw from.}

Sample participants were recruited in three ways. First, respondents were mailed a letter soliciting their participation in the study. The letter also made it clear that participation was not an additional condition of their probation or parole. Second, the letter was followed up with phone call to explain the survey and its goals. The addresses and phone numbers for these two recruitment steps were acquired with the help of probation and parole officers. Lastly, participants were recruited from local service programs that provided services to the target population. There was an overall response rate of approximately 60% once respondents were contacted, and interviews took about an hour to complete. Respondents were compensated with twenty dollars and a bus pass upon completion of the interview.
Basic sample descriptive statistics are reported in Table 3. Almost 93% of the sample was male, and nearly 86% was African American. The average age of the sample was near 33 years of age, and less than half the sample (42%) was currently employed at the time of data collection. Finally, almost 30 percent of the respondents reported having ever joined a “gang” or “street organization.” As shown in Table 3, there is little difference in these demographic characteristics between the total sample and the subsample of those who had ever owned a firearm.

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8 This is a term for gang frequently used in Chicago.
The analysis proceeds in several parts. First, I use OLS regression to see how control variables are related to perceptions of police. The objective of this stage is to explore which traditional individual-level “risk factors” predict perceptions of police. The second stage of analysis includes these individual-level characteristics in two logistic regressions to predict how legal cynicism, as measured by perceptions of police, affects both gun ownership in general (i.e. for any reason) and protective gun ownership, specifically. Before jumping into the analysis, the following section describes the construction of the index used to measure legal cynicism, as well as the measure of protective gun acquisition used in subsequent analysis.

**Legal Cynicism**

Following recent work by Kirk and colleagues (Kirk and Matsuda 2011; Kirk and Papachristos 2011), I define legal cynicism as the sentiment that the law and police are illegitimate, unresponsive, or ill-equipped to ensure public safety. To operationalize legal cynicism, I use items in the CGP survey that queried respondents about their feelings towards...
police to create an index. This index, hereafter referred to simply as the *perceptions of police index*, is constructed using four items, coded from 1 to 4 for “strongly disagree” to “strongly agree”. These survey items ask survey participants to indicate their level of agreement or disagreement with statements specifically about the police, such as “Most police treat people with respect.”

The perceptions of police index is generated by predicting individual responses on survey items using a latent variable model. Following the application of the method used by Papachristos et al. (2012) and originally proposed by Raudenbush et al. (2003), I employ a multivariate Rasch model with random effects to model the latent construct of legal cynicism. The log odds of a given response on each survey item depends on the respondent’s propensity towards particular answers on other survey items related to perceptions of police. In other words, the log odds of a particular response to a survey item are dependent on the propensity for a respondent to have particular views of the police as captured in their response to other survey items included in each index.

This method has two key assumptions: 1) the responses to severity of each item, as well as individual propensity, are *additive* in their effects; and 2) item responses are conditionally independent. In the case of both of these assumptions holding, the resulting index is easily interpretable: those with higher perceptions of police index scores have more favorable views of the police and, by extension, are less legally cynical.

**Protective Gun Ownership**

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9 For the complete set of items used in the construction of the index, please see Appendix. It should be noted that the questions used to construct this index are the same questions employed in prior research on legal cynicism (e.g. Papachristos, Meares, Fagan, 2012; Tyler, 1990).
The main dependent variable of interest in this paper is a binary variable indicating if the respondent reported having acquired their most recent firearm “for protection”. Of the 141 total respondents in the survey, 74.47% (N=105) reported having ever possessed a firearm. Those reporting having ever possessed a firearm were then asked, in regards to their most recent firearm, “What was the primary reason you got the gun?” A dummy variable was constructed where responses of “for protection”=1, and all other responses =0.10 Table 4 presents simple descriptive statistics for both the protective gun ownership measure and the perceptions of police index, for the total CGP sample and just gun owners, respectively.

Table 4
Summary and Descriptive Statistics of Independent and Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Total Sample (N=141)</th>
<th>Gun Owners (N=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Perceptions of Police Index</td>
<td>-0.0004</td>
<td>0.339</td>
</tr>
<tr>
<td>Protective Gun Ownership</td>
<td>0.617</td>
<td>0.489</td>
</tr>
</tbody>
</table>

Control Variables

All regression models also include controls for the basic individual level variables commonly associated with crime and violence: continuous age (in years), the race of the respondent (1=black, 0=non-black), employment status (1=currently employed, 0=unemployed), and gang membership (1=ever in a gang, 0=never in a gang).

10 Option included: “for committing crimes”, “as a gift”, “for a job (military/law enforcement/security)”, “for protection”, and “other”.

III. RESULTS

A. PERCEPTIONS OF POLICE

The results of the OLS regression of perceptions of police on selected control variables is displayed in Table 5. Age is the only control variable significantly related to perceptions of police, with older individuals being more likely to have more positive perceptions of police ($\beta = 0.008; p < 0.01$). This relationship is in line with previous work showing that positive perceptions of police increase with age (Preiss and Howard J. Ehrlich 1958; Worrall 1999). The lack of significance of the other controls points to the homogeneity of the sample. With the sample being composed largely of black males, it is likely this lack of variation across controls responsible for said controls not reaching significance when regressing on perceptions of police. Interestingly, while one might expect gang members to have highly negative perceptions of police, gang membership has no effect on perceptions of police. Plausible reasons for this result as are described in the discussion and conclusion.
Table 5

*OLS Regression of Perceptions of Police on Control Variables (N=141)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>SE (Standard Error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0.051</td>
<td>(0.114)</td>
</tr>
<tr>
<td>Black</td>
<td>0.069</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Age</td>
<td>0.008**</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Employed</td>
<td>0.042</td>
<td>(0.058)</td>
</tr>
<tr>
<td>Ever in a Gang</td>
<td>0.017</td>
<td>(0.063)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.390*</td>
<td>(0.152)</td>
</tr>
</tbody>
</table>

SE in parentheses

* = p<0.05, ** = p<.01, *** = p<.001

**B. PROTECTIVE GUN OWNERSHIP**

As shown earlier in Table 4, having ever possessed a firearm is a common among active offenders, with over 74% (N=105) of the sample reporting they have possessed a firearm at some point. This percentage is markedly higher than the percentage of the overall population that personally owns a weapon (22%), as well as the percentage of urban whites (25%) and urban blacks (16%) as reported in the GSS. Thus, even when compared to other urban residents, gun ownership, is much more common for active offenders.

Most striking is the percentage of gun owners in the CGP sample that report protection as their reason for acquiring a firearm. *Eighty-three percent of active criminal offenders who had ever possessed a firearm acquired their most recent gun for protection.* As shown in Figure 3,
protection is far and away the most common reason for active offenders in the CGP to have a firearm. Furthermore, like gun ownership more generally, protective gun ownership among active offenders is more common than it is among the average white (49%) or black (68%) urbanite. Not only do active offenders own guns more often than the average American or the average city dweller, but if they have a gun it is even more likely to be for protection.

**Figure 3**

*Reasons for Acquiring Most Recent Firearm*
Table 6 presents the unstandardized coefficients and odds ratios of a logistic regression to more deeply explore what the determinants of general and protective gun ownership. The unstandardized coefficients and odds ratios of the model predicting gun ownership among the entire CGP sample are shown in Table 6. Table 6 shows that the only control that is significantly related to the probability of having ever possessed a firearm is being employed, with those who are employed being significantly more likely to have ever possessed a firearm. The main predictor variable, perceptions of police, is a moderately significant predictor of active offenders having
ever possessed a firearm. These results indicate that *active offenders with less positive perceptions of police are significantly more likely to have ever possessed a firearm.*

This initial result, however, does not elucidate the particular *reasons* for obtaining those firearms in the first place, only that general ownership of firearm (for *whatever* reason) is more likely as perceptions of police decrease. To ascertain whether the chances of offenders owning a firearm for *protection* is significantly related to police legitimacy, I use another logistic regression model, this time restricting the sample to those who reported having ever possessed a weapon. Restricting the sample in this way allows me predict the probability of protective gun ownership in comparison to all other reasons for acquiring a firearm. Table 7 presents the unstandardized regression coefficients and odds ratios for the logistic regression model predicting protective gun ownership among active offenders who have ever possessed a firearm.

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11 While only significant at the <.1 level, it bears keeping in mind that the sample used in the CGP is relatively small. The magnitude of the coefficient suggests that the statistical power lent by a larger sample size would likely produce results showing a higher level of statistical significance for the perceptions of police index’s effect on the probability of gun ownership.
Table 7
Logistic Regression Gun Ownership on Perceptions of Police and Control Variables (N=131)

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>O.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of Police</td>
<td>-3.018*</td>
<td>0.049*</td>
</tr>
<tr>
<td></td>
<td>(1.182)</td>
<td>(0.058)</td>
</tr>
<tr>
<td>Black</td>
<td>0.405</td>
<td>1.499</td>
</tr>
<tr>
<td></td>
<td>(0.996)</td>
<td>(1.492)</td>
</tr>
<tr>
<td>Age</td>
<td>0.039</td>
<td>1.040</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Male</td>
<td>4.045**</td>
<td>57.110**</td>
</tr>
<tr>
<td></td>
<td>(1.473)</td>
<td>(84.105)</td>
</tr>
<tr>
<td>Employed</td>
<td>1.043**</td>
<td>2.837**</td>
</tr>
<tr>
<td></td>
<td>(0.742)</td>
<td>(2.104)</td>
</tr>
<tr>
<td>Ever in Gang</td>
<td>-2.603***</td>
<td>0.074***</td>
</tr>
<tr>
<td></td>
<td>(0.749)</td>
<td>(0.055)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.865+</td>
<td>0.057+</td>
</tr>
<tr>
<td></td>
<td>(1.664)</td>
<td>(0.095)</td>
</tr>
</tbody>
</table>

SE in parentheses
+ p<0.1,* p<0.05, ** p<0.01, *** p<0.001

The results of the logistic regression model indicate that perceptions of police is a negative and significant predictor of the log odds of having acquired one’s most recent gun for protection ($\beta = -3.018; p < 0.05$). Respondents who have more negative perceptions of the police are significantly more likely to report having acquired their most recent firearm for protection. As indicated by their distrust of police, those who are more legally cynical are significantly more likely to have their firearm for protection, likely because they do not trust the police to ensure their safety.

Of the variables in Table 7 predicting protective gun ownership, gender ($\beta = 4.045; p < 0.01$), employment status ($\beta = 1.043; p < 0.01$), and having been in a gang ($\beta = -2.603; p < 0.001$).
0.001) were significant predictors of protective gun ownership. Males and those who are currently employed are more likely to have their firearm for protection relative to other reasons, while those who have ever been in a gang are significantly less likely to have their gun for protection. The direction of gang membership coefficient is interesting since gang members’ are frequently involved with the drug trade and inter-gang violence, which presumably increases their need for self-protection.

IV. Conclusion and Discussion

This study represents several advances in research on trends in gun ownership, as well as the effects of legal cynicism on protective firearm ownership. First, my findings highlight the fact that nationally-representative estimates of the motivations for gun ownership are unlikely to capture the motivations and gun ownership behavior of high-risk gun owners, especially hidden populations such as ex-felons and active criminal offenders. Using a sample of active offenders from two high-violence, high-crime neighborhoods in Chicago, I descriptively demonstrate that there are higher levels of general gun ownership and protective gun ownership among a criminally-active subset of the inner-city than in the general population. To be sure, differences in sample composition between highly-selective samples (like the CGP) and nationally-representative samples make it prudent to use caution in making direct comparisons between these samples. Future research would do well to consider methods of conducting surveys on gun ownership as to allow direct comparison between criminal and non-criminal populations.

Second, when considering the perceptions of police as indicators of legal cynicism, my analysis provides evidence that negative perceptions of police are a significant predictor of
protective gun ownership among active offenders in Chicago. In neighborhoods characterized by high rates of crime and violence, interactions between community residents and the law are often strained. These strained relations can give rise to a widely held belief that agents of the law (e.g. the police) are ill-equipped, unable, or unwilling to provide for the safety of the neighborhood. This cultural frame of legal cynicism makes calling the authorities an untenable, even dangerous, strategy, and thus individuals engage in “self-help” to provide for their protection. This study shows that one way to provide oneself protection in contexts where the police are distrusted is to own a firearm.

Some of my findings run counter to what might otherwise be expected, particularly the results pertaining to gang membership’s relationship with perceptions of police and protective gun ownership. While one might expect gang members to have highly negative perceptions of police, gang membership has no effect on perceptions of police. One hypothesis is that gang membership is superseded by membership in a marginalized community. In other words, perceptions of the police as illegitimate may be products of neighborhood-level phenomena that do not discriminate between – to use Anderson’s (1999) terminology – “decent” community residents and “street”-oriented individuals like gang members.

Finally, knowing that gang members regularly own firearms (Decker and Van Winkle 1996; Hagedorn and Macon 1988; Miller 1982) at rates higher than non-members (Sheley and Wright 1995), and that many gang members choose to arm themselves out of fear of being outgunned in exchanges of reciprocal gang violence (Block and Block 1993; Horowitz 1983; Papachristos 2009), it is surprising that gang member are not more likely than non-members to have acquired a protective firearm. One potential reason for this seeming incongruity can be traced to recent legal-political changes in the city of Chicago.
Chicago first enacted its handgun ban in 1982, which operated in large part by prohibiting the registration of most handguns.\textsuperscript{12} However, in addition to this ban, a 2005 decision by the state legislature created a new ordinance whereby those charged with gun offenses could be tried as \textit{armed habitual criminals} if they had two prior felony convictions.\textsuperscript{13} The additional penalty ranges from an additional 6 to 30 years of imprisonment with no possibility of probation, to a potential extended term of 30 to 60 years.\textsuperscript{14} Since gang members are often serial offenders with extensive criminal records (Kennedy 1997), getting caught with a firearm (even if it is one that they have for their personal protection) could potentially cost them the rest of their life in prison. In light of these severe penalties, gang members may have found that the cost of going unarmed was outweighed by the specter of a life behind bars, and chosen not to acquire a handgun for protection.\textsuperscript{15}

An alternative explanation lies in the perception of what it means to “possess” a firearm. Recent ethnographic work in the South Side of Chicago has found that gangs frequently harness their social ties within the gang to borrow and lend guns, and that gang membership is often preserved by individuals who want to maintain the ability to access a weapon should they need it. In a thin, illegal gun market, gang leaders dictate which members are allowed to carry a firearm, and under what circumstances. In essence, the gang controls the supply of firearms, often to prevent wanton violence by younger members that inevitably draws police attention (Cook et al. 2007).

\textsuperscript{13} http://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=072000050K24-1.7
\textsuperscript{14} http://www.ilga.gov/commission/lru/2010PFC.pdf
\textsuperscript{15} 50\% of gang members who had ever possessed a gun reported that their most recent firearm was acquired for protection. However, the next most common category was a non-response (N=9, 21\%), making more in-depth analysis difficult.
This street-level gang dynamic could explain why gang members do not report having protective firearms—they may view their gang, not themselves, as the possessors of firearms. Even more simply, gang members may not actually have protective firearms because 1) they can access one if need be, or 2) being in a firearm-owning gang is protection enough. Combined with new punitive measures like enhanced prison time for armed habitual offenders, current results are indicative of changing gun-related behaviors among gangs, as well as adaptive strategies in the face of increased penalties for gun use and possession.

While this study advances the study of legal cynicism and gun ownership, it does have its weaknesses. Chief among these weaknesses is one also one of the study’s strengths: the specificity of the sample. With the purpose of the Chicago Gun Project being to explore the perceptions of the law and police held by active offenders, the very design of the study excludes non-offenders, and non-violent offenders such as drug users. More broadly, this study is unable to generalize to active offenders outside of the high-crime, predominantly African American neighborhoods that the sample was drawn from. Future research will hopefully extend the methods used in this study to other cities, neighborhoods, and types of offenders.

Despite these limitations, the findings of this research have implications for thinking about how law enforcement interacts with the communities they police. Knowing that having negative perceptions of police increases the probability of protective gun ownership, it follows that policing strategies that engender trust in police and ameliorate legal cynicism can reduce the probability of protective gun ownership. If community residents, instead of distrusting or even fearing police, were to view them as a viable option for seeking redress to interpersonal conflicts or for the provision of personal safety, they may no longer feel the need to acquire a firearm.
One policing strategy with the potential to encourage more positive, trusting relationships between police and the community is *community-oriented policing*. A key tenet of community policing is the emphasis on partnerships, specifically those between police and the individuals and organization they serve. In this policing paradigm, community-members are seen as valuable resources for identifying and helping police solve problems in the community, and police actively seek to include the community in their efforts to reduce crime and disorder.

As a part of community policing, walking-beats are frequently employed to provide non-confrontational interactions between officers and community members. These walking beats serve to not only enhance feelings of security among residents (Kappeler and Gaines 2012), but to also show the community that police exist for reasons other than to arrest their friends and family. Because of their daily on-foot presence on neighborhood streets, police become a fixture within the community, and this familiarity (coupled with positive interactions with officers) can beget trust.

When police are trusted, citizens will be more likely to see them as viable options for seeking help, as well as be more likely to cooperate with police in their investigations. With community-oriented policing having been shown to enhance community/police relationships (Cordner 1998), there is the very real possibility of creating a less legally cynical environment in which calling the police becomes a legitimate option for community residents – where they can call 911 instead of carrying a 9mm.

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16 See Buffa (2013) for a journalistic account of instances of this dynamic arising in New Haven, CT.
Appendix

A. Perceptions of Police Index Survey Items

1. Most police in my neighborhood are dishonest. [reverse coded]

2. Most police treat some people better than others. [reverse coded]

3. Most police do their job well.

4. Most police treat people with respect.
References


Preiss, Jack Joseph, and Howard J. Ehrlich. 1958. *An Examination of Role Theory; the Case of the State Police*. University of Nebraska Press.


