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Why Do Criminals Obey the Law? The Influence of Legitimacy and Social Networks on Active Gun Offenders

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WHY DO CRIMINALS OBEY THE LAW?
The Influence of Legitimacy and Social Networks on Active Gun Offenders
ABSTRACT

Research on procedural justice and legitimacy suggests that compliance with the law is best secured not by mere threat of force, but by fostering beliefs in the fairness of the legal systems and in the legitimacy of legal actors. To date, however, this research has been based on general population surveys and more banal types of law violating behavior (such as unpaid parking tickets, excessive noise, etc.). Thus, while we know why the average citizen obeys the law, we do not have similar knowledge as it pertains to the population most likely to commit serious violent crimes. This study fills this void by using a unique survey of active offenders called the Chicago Gun Project (CGP). The CGP was designed to understand how the perceptions of the law and social networks of offenders influence their understanding of the law and subsequent law violating behavior. The findings suggest that while criminals as a whole have negative opinions of the law and legal authority, the sample of offenders (just like non-criminals) are more likely to comply with the law when they believe in (a) the substance of the law, and (b) the legitimacy of legal actors, especially the police. Moreover, we find that opinions of compliance to the law are not uniformly distributed across the sample population. In other words, not all criminals are alike in their opinions of the law. Gang members - but especially gang members with social networks saturated with criminal associates - are significantly less likely to view the law and its agents as a legitimate form of authority. However, those individuals (including gang member) with less saturated criminal networks actually tend to have more positive opinions of the law.
INTRODUCTION

Why do criminals break the law? While answers to this question typically incorporate individual, contextual, and socio-psychological explanations, the dominant sociological explanations tend to rely heavily on neighborhood structural considerations. That is, most sociologists look to correlates between crime and delinquency on the one hand, and neighborhood social conditions, formal and informal social control, socialization processes, and properties of social networks on the other, to explain why offenders offend. A short hand way to summarize this rich research tradition is to say that individuals are more likely to break the law when they live in neighborhoods bereft of social, economic, and human capital, when their social networks are saturated with criminal peers and opportunities, and when they are socialized into dense delinquent networks that do not fully admonish deviant behaviors.

Why do people obey the law? This question is not merely the former question’s mirror image. An emergent group of social psychologists and legal scholars have undertaken this inquiry and have considered it to be fundamentally different from the question we asked at the outset. An impressive body of research has followed, remaining, for the most part, distinct from mainstream sociological theorizing. One of the most important findings from this vein of research is that sanctioning processes matter a great deal more to encouraging compliance than do formal punishments (Paternoster et al. 1997; Meares et al. 2004; Tyler 1990; Tyler 2003). These conclusions are generally based upon surveys of, or experiments with, people in the general population, where criminal offending is rare. Moreover, in contrast to sociological studies that tend to investigate serious, violent crimes, sociolegal scholars exploring compliance
tend to study banal violations such as failure to pay parking tickets, speeding, and so on (Klepper & Nagin 1989; Tyler 1990).

Both research traditions have produced valuable insights regarding law violating and law-abiding behaviors. However, both approaches also overlook a simple fact of criminality: most criminals—whether serial killers or professional robbers, drug dealers, or embezzlers—comply with the law most of the time. Crimes are episodic, rare events in the everyday lives of just about all offenders. But, with a few exceptions, the standard sociological approach to the study of crime and deviance focuses solely the illegal behaviors of offenders, with very little consideration of their law-abiding behaviors. Conversely, compliance research tends to focus on ordinary citizens who have very little desire or ability, or few opportunities, to engage in more serious forms of street crimes. In short, while we have many explanations about why criminals break the law and why ordinary citizens obey the law, we rarely ask why do criminals obey the law?

We attempt a study of compliance by surveying active offenders through the Chicago Gun Project. The Chicago Gun Project (CGP) posed a series of individual, neighborhood, legitimacy, and social network questions to a sample of 141 offenders in 52 Chicago neighborhoods. The survey, originally part of a larger evaluation project, was specifically designed to incorporate a sociological understanding of criminal offending with a focus on offenders’ perceptions of legitimacy of law and legal actors as a path to reduction or desistance from violent crime (see, XXXXXX). The CGP examined how the perceptions of the law and social networks of offenders influence their understanding of legal authority and subsequent law violating behavior. Unlike prior studies of criminal offending, this study examines how
perceptions of the law—and its agents—influence compliance. And, unlike prior research on compliance, this study surveys the subgroup most likely to be the perpetrators and victims of crime rather than a random sample of the general population. Thus, the CGP offers two considerable advancements over prior research on both criminal offending and compliance.

Our findings suggest that while criminals as a group have negative opinions of the law and legal authority, gun offenders (just like non-criminals) are more likely to comply with the law when they believe in (a) the legitimacy of legal actors, but especially the police, and (b) that the substance of the law is consistent with their own moral schedules. Moreover, we find variation in the opinions of and compliance with the law among respondents. Gang members—but especially gang members with social networks saturated with criminal associates—are significantly less likely to view the law and its agents as legitimate. But individuals (including gang members) with less saturated criminal networks actually tend to have more positive opinions of the law, albeit opinions that are still quite negative overall.

The paper proceeds as follows. We begin with a theoretical integration of the literatures on procedural justice and the social network variation of peer influence in order to make clear how individual perceptions of the law are influenced by peer social networks. This section explains why the question we pose is important. We next explain the unique nature, value, and limitations of the GGP as well as why, despite limitations, it is well suited to answer the central question of our study. We then turn to a discussion of our measurements of legitimacy and social networks, followed by the results of regressions predicting both offender perceptions and illegal behaviors. We conclude with a discussion of the theoretical significance of our findings.
WHY DO (“NORMAL”) PEOPLE OBEY THE LAW?

Research on compliance with the law has flourished over the last two decades. Pioneered by Tom Tyler in *Why People Obey the Law* (1990), this research emphasizes at least two explanations for compliance with the law and obedience to authority—forced compliance and procedural justice—and then elucidates the difference between them.¹

The notion of forced compliance is perhaps the oldest and most basic explanation as to what holds a society together: people obey the law largely out of fear of reprisal meted out by those who hold control over the formal mechanisms of power and punishment. Milgrim’s (1974) classic experiments demonstrate that individuals often comply with authority out of desire to please, fear of reprisal, or because authority can easily be displaced. Although scholars have long rejected the simplistic idea that forced compliance alone can breed compliance to the law, these notions of forced compliance form the foundation of deterrence-based crime policies. Policymakers committed to this school of thought believe compliance to the law can be increased by manipulating the severity, certainty, and swiftness of formal legal sanctions (for a recent review, see Fagan and Meares 2008). In fact, our most commonly touted criminal justice policies involve increasing the threat and actual use of formal sanctions, such as three-strikes laws, mandatory minimum sentencing guidelines, and increased penalties for certain types of crimes.

In the Durkheimian tradition, compliance procured solely by the imposition or threat of formal sanctions is costly and, as such, the social order is best guaranteed by gaining support for the legitimacy of the ruling authority. That is, a society will experience greater compliance with

¹ Tyler (1990) also discusses a third normative basis for compliance, which he called morality-based to distinguish it from the legitimacy-based form that we emphasize here.
the law when a majority of the population share the belief that the decisions of the ruling powers are legitimate and that the laws are just and “ought” to be obeyed (Beetham 1991; Tyler 1990).

As David Smith (2007:30) summarizes:

>Social order depends on the widespread belief that the authorities and their political and legal framework are legitimate. As long as that belief is widespread, people will largely regulate their own behavior by reference to internalized values that correspond with the law and its underlying principles, and force need only occasionally be used when people get out of line.

Thus, from this perspective compliance with the law is best secured by fostering beliefs in the fairness of the legal systems and in the legitimacy of legal actors.

People encounter the “law” through their direct and indirect experiences with legal actors and the legal system and these encounters shape an individual’s perception of the law and her judgments about its fairness and legitimacy, whether mundane (getting a parking ticket) or potentially traumatic (facing an accuser in court). For example, in one particularly fascinating piece of research, Paternoster et al. (1997) demonstrate that individuals arrested in domestic assault cases are more likely to say that their detention or sentence was “fair” when they are treated with respect by police and prosecutors. Importantly experiencing a procedure of the law as legitimate is more influential on perceptions of authority and of the law than is the actual outcome of situation (Tyler & Fagan 2008). In other words, people will view a decision or law as legitimate even if the outcome of the situations (such as a court decision or a police action) works against their own self-interest, so long as they view the process by which said decision was made as being procedurally just (Lind & Tyler 1988).

When we refer to legitimacy here, we draw on the social psychological interpretation of that term. Tyler (1990) refers to compliance that flows from a belief that authorities have the
right to dictate to others proper behavior as legitimacy-based. Social psychologists have helpfully tied together an explanation of governmental legitimacy to thought processes that people undertake when evaluating official behavior and actions. For example, Lind and Tyler (1988) argue that processes that lead up to an outcome are important indicators to individuals about how the authority in question views the group to which the evaluator perceives herself belonging. Procedures that all parties regard as “fair” facilitate positive relations among group members and preserves the fabric of society even in the face conflicts of interest that exist in any group whose members have different preference structures and different beliefs concerning how the group should manage its affairs (Lind & Tyler 1988). While the particular outcome of a case may not be obvious, it is almost always clear how parties should proceed and be treated in that particular case. Procedural justice, then, is a subjective evaluation of a spectrum of behaviors and signals conveyed by the decision maker to the person upon whom she exercises authority or control.

Although this body of research on compliance with the law provides numerous insights into our understanding of the law and obedience to it, it is not without its limitations. Two limitations are particularly relevant to the present study. First, most procedural justice research to date has emphasized general opinions of the law and political culture as opposed to specific law violating or deviant behaviors. Further, most studies are conducted on general population samples or subsamples within particular cities, neighborhoods, or racial groups (Fagan & Meares 2008; Hagan et al. 2005; Tyler 1990; Tyler & Huo 2002). So, while we know quite a bit about why the vast majority of individuals obey the law, we know very little about the perceptions of the law of those few who are actively engaged in breaking more serious crimes. Addressing this
gap in the research is critical given that we have long known that most serious violent crime concentrates among a small proportion of active criminal offenders.²

A second limitation of current procedural justice research is its limited conception of the “social.” While empirical research demonstrates that an individual’s perceptions of the law and legal actors are influenced by their own interactions and experiences, the influence of other individuals in a person’s social network is not accounted for. Although Tyler (1990) has clearly hypothesized and demonstrated that people will alter their behavior because they fear the consequences of informal sanction imposed by friends and family (pgs. 1-10), we argue here that one’s social networks influence one’s perceptions of the procedural justice of specific encounters and of the law generally, which redounds to normative, as opposed to instrumental, bases of compliance. This conceptualization has not to our knowledge been operationalized in other procedural justice research.

We know from research within both criminology and sociology that peer influence is a powerful force for both law abiding and law violating behavior (e.g., Haynie 2001; Sutherland 1947; Warr 2002). In fact, one of the most resilient predictors of juvenile delinquency is the number of delinquent friends one has (for a review see Warr 2002). Furthermore, studies of social networks demonstrate that the nature and structure of an individual’s social relationships can have a profound effect on a wide range of social and individual behaviors, including suicide (Bearman & Moody 2004), obesity (Christakis & Fowler 2007), the adoption of a particular technology (Strang & Soule 1998), political behaviors (Heinz et al. 1990), and deviant behavior

² For example, Braga (2003) estimate that 3 percent of the population of young men under the age of 25 are responsible for nearly 70 percent of the lethal and non-lethal violence in Boston.
(McGloin and Piquero 2010; Papachristos forthcoming; Young forthcoming). But the literature on peer influences on crime and delinquency stops at the epidemiologic, as no study, to the best of our knowledge, examine the shared experiences of peers with respect to their interactions with the law. As a result, we know little about the intersection of social networks, procedural justice, and criminal behavior.

In this study, we address these gaps in theory and research in two ways. First, we examine the perceptions of the law held by active street criminals and, in turn, how these perceptions shape subsequent patterns of offending. Understanding what motivates criminals to obey the law advances our understanding of compliance more broadly. Second, we analyze the effect of the form and content of one’s social networks on (a) his perceptions of the law, and (b) his subsequent compliance with the law. Thus our research project presents a theoretically and methodologically integrated study from the field of social networks and the growing literature on procedural justice and compliance.

**WHY DO CRIMINALS BREAK THE LAW? A NETWORKED APPROACH**

The finding that there is a high degree of correlation between the number of delinquent/criminal associates an individual has and his level of offending is one of the most resilient findings in criminology (for a review, see Warr 2002). Several prominent criminological theories - but especially learning, social control, and opportunity theories - tap into this foundational criminological insight by suggesting that criminal motives, norms, techniques, and opportunities are influenced by the company one keeps. Criminologists typically test this idea by counting the number of delinquent peers one has through observational data
(arrest records) or self-reported surveys and correlating these counts with the outcome of interest (Ibid.). Economists approach this question somewhat differently, looking at population variation in the effects of being exposed to crime-involved persons of similar ages for varying periods of time (Bayer et al. 2009). These studies generate meaningful evidence on the effects on crime of exposure to other criminally active persons, but they under-theorize both the strength of these contacts and the types of information and experience that people in close proximity and in frequent interaction share.

Social network analysis provides a theoretical scaffold to unpack peer and network effects on crime and delinquency.³ Whereas traditional research usually counts the number of delinquent peers a person has, social network analysis uses theoretical and statistical models to conceptualize and measure the actual architecture of social relationships among individuals (Haynie 2001; Haynie 2002; McGloin & Shermer 2009). In this way, researchers can derive specific hypotheses regarding the size, content, and patterning of social relationships. This methodology provides evidence of “network effects” on deviant and criminal behavior (Papachristos forthcoming).

Network-oriented research has highlighted three dimensions of network effects on crime and deviance: (1) a social group’s level of cohesion, (2) a person’s position within this network, and (3) the levels of social interactions within these networks. The cohesion of a network broadly refers to the level of “connectedness” among a group, i.e., a cohesive group is one in which pockets of people “stick together” or feel a strong sense of belonging (Marsden 1990; McGloin and Kirk 2010 or Papachristos forthcoming for recent reviews on the state of network analysis in criminological research.

³ See McGloin and Kirk (2010) or Papachristos (forthcoming) for recent reviews on the state of network analysis in criminological research.
Wasserman & Faust 1994). In network terms, cohesion is most frequently measured as the overall density of network ties: the greater the volume of ties among network members, the more cohesive the group is considered to be. Cohesive groups often are efficient information markets that facilitate and speed the transmission of social norms, information, behavioral contingencies, and cognitive frameworks for internalizing social interactions outside the network (Coleman 1988). What is more, both learning and social control theories suggest that more densely connected groups are better able to monitor the behavior of its members and thereby constrain, control, or coerce certain levels of conformity of group members (Haynie 2001). Dense networks may also cut off opportunities for non-sanctioned opportunities, behaviors, or information (Burt 1987). Dense networks also provide ample learning opportunities for criminal skills as well as situations or opportunities to engage in criminal/deviant behavior (Agnew 1992; Haynie 2001).

Of course, not every network member is identical to every other member with regard to access to opportunities or information. Consequently, an individual’s position in a network influences their perceptions, behaviors, and access to opportunities and information (Burt 1992). Peripheral members, for instance, may lack the same degree of trust as more actively involved members or might be excluded from smaller cliques, such as leadership circles. Conversely, centrally located members may be so saturated with group ties that their worldview is constrained by the group itself. Research by Haynie (2001) and McGloin and Shermer (2009) support this hypothesis by showing that youth who are more centrally located in deviant social networks actually have fewer ties to more conventional individuals and opportunities which, in turn, leads to heightened levels of delinquency. Likewise, qualitative and quantitative research
on gang membership suggests that “core” gang members tend to be more actively involved in the deviant aspects of gang life than are their non-core counterparts (Decker & Curry 2000; Thornberry et al. 2003).

Finally, the quality of interactions within a group is related to the deviant behavior of its members. Learning and opportunity theories posit that the more time spent with deviant peers, the greater the level of reported delinquency of an individual (Haynie 2002; Matsueda 1982; Sutherland 1947). Stronger relationships—ties that are multiplex or based on overlapping social roles and expectations—exert a greater influence on deviant behaviors than do weak or transient relationships (see also Krohn 1986; Krohn et al. 1988). This means that close friends, family members, and other network members with whom an individual interacts with on a regular basis are more likely to exert a stronger influence on an individual’s actual behavior than a mere acquaintance or passing contact.4

Although interest in the intersection of network analysis and criminological research continues to grow (Papachristos forthcoming), this body of research currently faces two important limitations. First, the majority of network-oriented studies on crime have been conducted using school-aged and in-school youth.5 Thus, like most studies on legitimacy, these surveys fail to capture the population groups that have the highest risk of sustained criminal involvement: school dropouts, institutionalized youths and young adults ages 18-24, active gang

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4 Though “weak ties”—such as causal acquaintances, old classmates, and friends-of-friends—are important in other types of behaviors, such as getting a job, finding a romantic partner, and certain business relationships (Granovetter 1973).

5 In particular, the majority of such studies have relied on a single data source—the National Longitudinal Study of Adolescent Health (Haynie 2001; Haynie & Osgood 2005; Haynie & Payne 2006; McGloin & Shermer 2009).
members or persons involved in other types of criminal organizations, and heavy drug or alcohol users.\textsuperscript{6} The under sampling of these groups in the existing network studies censors our knowledge of network properties of adult active street criminals engaged in serious crime. Second, to the best of our knowledge, no network-oriented studies have looked at the influence a network exerts on perceptions of legitimacy. Even though Tyler (and others) posits a tangible effect of one’s social network on legitimacy, this aspect of the procedural justice theory has yet to be operationalized using formal network methodology.

\textbf{Why Do Criminals Obey the Law? Working Hypotheses}

This study examines compliance and legitimacy among a sample of active offenders, many of whom have committed one or more offenses using a firearm. Therefore, this study expands the current empirical and theoretical understanding of the role of social networks in producing legitimacy and compliance by directly testing the influence of respondents’ social networks. The study is grounded theoretically in research traditions – social networks and peer influences, legitimacy and procedural justice – that rarely intersect, and our empirical starting point is a unique population that has not yet been considered in compliance research or network studies of crime and violence.

Several working hypotheses emerge from this intersection between research on legitimacy and research on social networks and crime. First, is the extent to which processes of legitimacy and procedural justice might operate in a sample of offenders. Given that crime and

\textsuperscript{6} Important exceptions to this include McGloin & Piquero (2010); Morselli (2003); Morselli et al. (2006); and Papachristos (2009).
violence are rare events, even among active street criminals, we hypothesize that legitimacy and procedural justice will operate in much the same way for criminal offenders as it does for non-criminal offenders. Namely, *offenders who have more favorable opinions of law enforcement are also more likely to view the law as legitimate.*

Second, and related to the first hypothesis, we expect perceptions of legitimacy and procedural justice to effect actual compliance with the law. That is, *offenders who have more favorable perceptions of the law will be more likely to comply with the law.* This is a direct test of the question of why offenders obey the law. Support for this hypothesis would suggest that offenders are more likely to comply with the law when they believe in its legitimacy, whereas evidence against this hypothesis would suggest that offenders comply with the law for reasons different than those identified in prior procedural justice research.

Network research offers a framework for explaining potential differences in compliance between offenders and non-offenders: the form and function of offenders’ social networks may be different than the networks of non-offenders. Although we sample only an offending population, we can test a hypothesis concerning variation in the form and content among a diverse sample of offenders with varying levels of involvement in crime. While specific measures for network effects are discussed in the next section, some overarching hypotheses pertaining to the effects of an offender’s social network can be derived. Specifically, we maintain that the *more saturated an offender’s network with criminal, delinquent, or deviant persons, the (a) more negative will be that offender’s perceptions of the law and (b) the greater the*
probability that offender will engage in law violating behavior. Such hypotheses are consistent with the idea an individual’s attitudes, beliefs, and actions can be influenced by those in their immediate social network, and that the influences of peers grow stronger as networks become denser and network ties thicker. Put another way, such a hypothesis asserts that a respondent’s views of the law will be influenced not only by his own experiences, but also the experiences of his peers, associates, friends, family, etc. with whom she is in frequent and meaningful contact.

Taken together, these hypotheses help to unpack the question at the heart of this paper: why do criminals obey the law? Invoking research on procedural justice and legitimacy, Hypothesis 1 argues that active criminals' views of the law will parallel those of average non-criminal citizens. Meanwhile, Hypothesis 2 asserts that such perceptions of the law will influence subsequent compliance. Hypothesis 3 contends that the structure of one’s social network will also influence both perceptions of the law and subsequent compliant behavior. We now turn to a discussion of the data and methods used to test these claims—the Chicago Gun Project.

DATA AND METHODOLOGY

The data in this study were obtained from the Chicago Gun Project (CGP). CGP is a cross-sectional survey of 141 known gun offenders from the target and control areas of a field experiment on reducing gun violence (XXXXXX). Survey questions focus on several key areas, including: (1) perceptions of law, legal authority, and legal actors; (2) experiences with gun

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7 Both of these hypotheses are consistent with recent network studies of social influence, learning, and differential association theories (Haynie 2001; McGloin & Shermer 2009; Payne & Cornwell 2007).
crime and gun use; (3) experiences with gangs and various deviant/criminal behaviors; and (4) various dimensions of the respondent’s social networks. CGP survey questions were derived from prior survey research, especially the work of Tom Tyler (1990), the Project of Human Development in Chicago Neighborhoods (e.g., Sampson et al. 1997), Wright and Rossi’s (1985) survey of gun offenders, and the General Social Survey’s network generating questions (e.g., Marsden 1987). Thus, the novelty of the CGP comes not from the specific questions asked, but from the population under investigation.

Sample

The study sample includes offenders living in high-crime neighborhoods in Chicago who have experience with gun use and/or have committed violent street crimes. While some prior research has surveyed incarcerated offenders with histories of serious violence including gun violence (Fagan & Wilkinson 1998; Wright & Rossi 1985), our sample includes individuals who were active “on the street” at the time they were interviewed. These were current or former offenders who were living in their communities and, potentially, continue to be exposed to many of the same social-structural conditions that impacted their prior offending. Every individual in the sample had at least one arrest for a gun offense, and, since the time the surveys were collected, approximately 50 percent of the respondents returned to prison. This activity pattern suggests that at least half of the sample can be considered “active” offenders in the sense that they continued to commit serious violent and gun-related crimes. In other words, at least half of the sample continued to disobey the law.

The sample was drawn randomly from all adults (> 17 years old) who were on either probation or parole within the city during the survey year (2006-2007). Individuals were
selected from both probation and parole in order to increase the potential variation in experiences with the criminal justice system. Probation is a less invasive form of punishment that is operated by the court system, whereas parole is operated by the Illinois Department of Corrections and therefore entails some period of incarceration. Thus, the probation versus parole distinction is used as proxy for exposure to the criminal justice system: those on parole are more likely to have had greater exposure to additional elements of the criminal justice system, as well as deeper involvement in criminal activities.

Three additional criteria were also used to determine sample eligibility. First, the sample was confined to individuals with at least one prior gun-related or violent crime in their criminal record. This decision was driven by the design of the field experiment as well as overrepresentation of non-violent drug-offenders in the probation and parole population. For example, completely random samples of probation rosters yielded large number of individuals charged with only a single drug offense—indeed, nearly 2/3 of all adults are on probation solely for drug charges. Drug offenders are a heterogeneous group of criminal offenders. Some of them are involved in a variety of criminal activities, while others are simply buyers or sellers in local drug markets (Chaiken & Chaiken 1990; Reuter 2000).

The second criterion for inclusion was geographic. The sample was drawn mainly from target and control areas of an on-going field experiment conducted in predominantly African American communities. To avoid potential conflation with the concurrent experimental conditions, we sampled an additional 41 respondents from randomly selected neighborhoods throughout the entire city. FIGURE 1 shows the geographic distribution of the sample. This map

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8 We were financially constrained from gathering a larger, stratified sample.
shows that majority of the sample (71%) were drawn approximately equally from the intervention and control areas. The additional 41 cases, though drawn randomly from across the rest of the city, were nevertheless geographically clustered in neighborhoods surrounding the target and control areas. This proximity reflects the spatial distributions of violent crime in Chicago (see, for example, Bernasco & Block 2009).  

---Figure 1 about here---

The final inclusion criterion was the length of time since the individual had been sentenced to either probation or parole. Offenders were eligible for the field experiment—and by extension, the survey—within the first six months of their release to parole or sentencing to probation. We drew additional random samples of individuals each month as new cohorts became eligible.

Sampled respondents were recruited to participate in the study in three ways. First, we mailed respondents a letter asking for their participation, explaining that their participation was in no way a condition of their release, and providing all the necessary human subjects materials. Second, we supplemented the letter with a follow-up phone request explaining the survey, its purposes, etc. We enlisted the assistance of probation and parole officers in securing the most recent address and phone number of the potential respondent for direct recruitment on our part in order to help track down respondents. Finally, we sought volunteer respondents from a program operated by the field experiment. No statistically significant differences were detected between respondents or item specific responses based on method of recruitment.

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9 Such geographic concentration of gun crime is common in other cities as well (Braga et al. 2010).
Near-peer interviewers administered the surveys in neutral locations, such as local community organizations, libraries, and schools. Interviewers collected data using laptop assisted CAPI systems, recording respondent information as the interview progressed. Written informed consent was obtained at the start of the interview, and all respondents were informed of human subjects protections. Importantly, interviewers stressed the survey’s voluntary nature. Given the survey population, it was critical that we make sure insofar as we possibly could that participation in the survey was in no way tied to release conditions. The interview took approximately one hour, and respondents received twenty dollars and a bus pass for their time.

The final sample includes 141 respondents. The overall response rate once a subject was contacted was approximately 62 percent. Basic sample characteristics are presented in Table 1. More than half (58%) were on parole at the time of the survey. Reflecting the social characteristics of the study areas, the vast majority of respondents are African American (85%); most were male (92%) with less than a high school education (70%). Since the sample was drawn from adult probation and parole, all respondents were over the age of eighteen, with an average age of 30 years old and a modal age of 26 (SD = 10 years). There was variation in respondents’ experience with gang participation and crime. Approximately 30 percent of the sample reported “having ever joined an organization that some people might call a gang.” Respondents also report an average of 10 arrests, but the standard deviation (7.6) suggests considerable variation and heterogeneity in the persistence of their criminal activity.

---Table 1 about here---

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10 Five interviews were conducted in respondent’s homes due to mobility restrictions of respondent’s release—i.e., curfew restrictions, electronic monitoring, etc.
Measures

The analysis proceeds in a two-step fashion: the first stage predicts an offender’s perceived legitimacy of the law while the second stage tests the predictive effect (if any) of legitimacy on two types of criminal/deviant behavior, carrying a gun and getting in a fight. This section reviews the construction of the key variables before proceeding into the analysis itself. Descriptive statistics of these variables are presented in TABLE 2.

---Table 2 About here---

Legitimacy

We define perceived legitimacy as the extent to which an individual states that he or she believes that the law (or legal agents) represents a just, fair, and valid basis of legal authority. Consistent with prior research, but especially Tyler (1990), we measure legitimacy as an index using four items (scaled 1 to 4, with 4 as “strongly agree”) (Cronbach’s alpha = 0.667):

1. I feel that I should accept the decisions made by legal authorities
2. People should obey the law even if it goes against what they think is right
3. The law represents the values of people in power rather than the values of people like me (reverse coded)
4. People in power use the law to try and control people like me (reverse coded).

We then created a legitimacy index that measures an individual’s overall view of legitimacy of the law: the higher the index score, the more favorable that person’s responses on these items and, therefore, the more favorable his/her perceptions of the law. We use this index as both a dependent variable when trying to understand the overall construction of offenders’ perceptions of the law, and we use this index as an independent variable when examining subsequent offending behavior.
To create the index, we predicted each respondent’s responses on these items using a latent variable model that assumes that each of these items taps into a single latent construct we call *legitimacy*. Following Raudenbush et al. (2003), we used a multivariate Rasch model with random effects in which the log odds of a given response depends on the personal propensity towards the view of the law as captured in the range of responses to the survey items. The assumptions of this approach are: (1) that responses to the severity of each item, as well as person propensity, are additive in their effects and (2) that item responses are conditionally independent. If these assumptions hold, then the outcome implies that the item set measures a unidimensional trait—perceptions of legitimacy—which yield a readily interpretable ordering of items and persons on an interval scale (Rasch 1980; Raudenbush et al. 2003). In this case, we use the Empirical Bayes residual from the model as our measure of legitimacy. The resulting variable, as see in Figure 2, is normally distributed, therefore lending standard OLS regression techniques as well as more easily interpretable parameter estimates.

---Figure 2 About Here---

**Deterrence and Perceptions of Law Enforcement**

Using the same Rasch modeling approach, we also create three other indices of theoretical importance in the present study: a deterrence index, a perception of police index, and a perception of prosecutors index.

The deterrence index taps into the basic notion that increased enforcement and punishment (or threat thereof) would influence perceptions of the law and subsequent offending. The index is created using the following four binary (yes/no) items (Cronbach’s alpha = 0.793):

1. Do you think if the police spent more time walking the beat, people would be less likely to carry a gun?
2. Do you think if the police spent more time walking the beat, people would be less likely to commit a violent crime?

3. If the police stopped and searched people, do you think people would be less likely to carry a gun?

4. If gun users were receiving more attention from prosecutors and getting longer sentences, do you think people would stop using guns?

The resulting scale is roughly normally distributed, with a mean of approximately zero. The higher the respondent’s score on the scale, the more likely they are to believe that such enforcement efforts would have a deterrent effect.

We also created separate scales to capture respondents’ opinions pertaining to two important criminal justice actors that may greatly impact perceptions of the law and legitimacy: the police and prosecutors. The perception of police index is created from the following four items (Cronbach’s alpha = 0.61):

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

The perception of prosecutors index is created using the following three items (Cronbach’s alpha = 0.461):

1. Most State’s Attorneys in the city are dishonest. (reverse coded)
2. Most State’s Attorneys in the city treat some people better than others. (reverse coded)
3. Most State’s Attorneys in the city do their job well.
Responses on all of these questions were coded on a four-point scale (1= strongly agree to 4= strongly disagree). The resulting indices are normally distributed, where a higher score on the index is associated with a more favorable opinion of police or prosecutors.

Social Networks

We measure the influence of a respondent’s social networks using standard ego-centric social network survey techniques. More specifically, each respondent was asked a series of 10 network “name generators,” questions which the respondent is asked to list by name, nickname, or pseudonym individuals with whom they have some connection as identified in the question. All ten name generators are listed in Appendix A. The basic idea behind name generators is to prompt the respondent’s memory with questions that tap into different types of relationships he may have and thereby produce a list of individuals in his social network. For example, respondents were asked to name individuals with whom they have “gone out with socially” (e.g., to dinner, a movie, sporting event) in the past six months, individuals from whom they could borrow a “large sum of money,” or individuals with whom they discuss “important matters.”

Of the ten name generating questions, three questions asked the respondent specifically about illegal or deviant relationships, including from whom the respondent could ask to help find a gun, whom (if anyone) the respondent was arrested with over past two years, and whom the respondent could rely upon if he found himself in a fight. The respondent was allowed to name

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11 For a review of network data and measurement issues, see Marsden (1990) or Wasserman and Faust (1994).
as many names as he could think of, without any upper limit. In this way, the series of name generators were designed to measure both pro-social and illegal social networks. The outcome of these name-generating questions is a list of individuals—called “alters”—whom the respondent has identified as having a social connection.

After completing the name generating questions, the interviewer then asks the respondent a series of sixteen questions about each alter and about the relationship of each of the alters with each other. A complete list of alter questions is given in Appendix B. This section of the survey is intended to get at the nature of the relationship between respondent and the specific alter. For the present analysis, we were interested in the extent to which the named alter had some criminal propensity which, according to the survey questions, might be captured if: (a) the alter is reported to be a gang member, (b) the alter is reported to having been arrested, or (c) the alter was named in one of the illegal name generators. The final set of alter questions asked the respondent to describe the relationship between each of the alters he named, even if he named them in different sections of the name generating questions. The point of these questions is to determine the extent to which the respondent’s alters are also connected to each other.

The end result of these name generating questions and alter specific questions is a recall contingent description of the respondent’s “ego-centric” social network—the people in the respondent’s close social support network and the ties among them. Analysis of egocentric social networks is appropriate for the present analysis because prior research suggests that normative processes and social influence, such as those under investigation here, generally exert

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12 The CAPI system did impose an upper limit of 30 names, but no respondent used all 30 names. Interviewers were prepared to capture additional names using a paper system should the respondent list more than thirty alters.
themselves *locally* (Marsden 1987). Thus, the types of network effects that might be produced from ego-centric network analysis parallel the research questions here, namely, the extent to which criminal alters in the respondent’s social networks may or may not influence his perceptions of the law and subsequent offending.

The respondent’s ego-centric social network is used to construct four separate network measures consistent with the literature reviewed above: network size, network density, the percentage of multiplex ties, and the percentage of alters who are criminal. The first two measures represent aspects of a network’s *form*, the actual shape and structure of the network, where as the later two measures speak to a network’s *content* – the types of ties that are present. All of these measures suggest that social influence operates directly through socialization, interaction, and opportunities afforded through one’s immediate circle of associates and friends (Haynie & Payne 2006; McGloin & Shermer 2009; Payne & Cornwell 2007).

*Network size* is measured as simply the total number of alters listed by the respondent. Network size may indicate a sense of network reach in that a respondent with a larger network may have a deeper pool from which to choose associates (Marsden 1987). *Network density* is measured as proportion of all network ties that are present as a proportion of all possible network ties. So, for example, a network density of 0.75 means that 75 percent of all possible ties that could be present are in fact present.\(^\text{13}\)

Measures of *multiplicity of ties* and the percentage of ties that contain criminal elements are used to assess the impact of the content of the respondent’s network on legitimacy and

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\(^{13}\) In the case of ego-centric networks, network density is measured on as the proportion of ties among the set of alters *excluding* ego (Marsden 1987).
deviant behavior. *Multiplex relationships* are those network ties that operate in more than one dimension and are measured as the percentage of the respondent’s alters who were named in more than one category of name-generating questions (Krohn et al. 1988). In a sense, such ties represent “strong ties” whereas those less frequent or single-dimension ties better represent “weak ties” (Granovetter 1973). The last network measure of interest is the *percentage of ties in the respondent’s network which are reported as being criminal or deviant.* As stated in our hypotheses, the basic idea here is that the more saturated the respondent’s network is with criminal alters, the less likely he is to perceive the law as legitimate and the more likely he is to offend. Or, more to the point, the extent to which criminal alters saturate a network effects the respondent’s opinions of the law and subsequent offending. Preliminary analyses (not shown here, available from authors) suggested that this measure be broken into to two binary threshold measures: (1) those networks in which less than half of the network consists of criminal associates (1 = yes), and (2) those networks in which more than half consist of criminal associates (1 = yes).\(^{14}\)

**Dependent Variables**

We use two separate dependent variables to test the effect of legitimacy and social networks on individual offending. The first is a binary variable indicating whether or not the respondent reported having “ever carried a gun outside of your home.” At the time of the survey, Chicago had extremely strict gun laws which made the possession, sale, carrying, or owning of a handgun illegal.\(^ {15}\) As such, crimes such as carrying a weapon on your person are by

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\(^{14}\) This is due, in part, to the interaction of these variables with gang members, as discussed below.

\(^{15}\) Chicago’s gun law referred to here was struck down by the Supreme Court in MacDonald v. Chicago (2010).
definition illegal and carry with them hefty penalties, especially for felons. We anticipate that legitimacy is negatively associated with carrying a weapon on your person, in part because carrying a gun outside of your home requires some forethought as to the actual act (where will you carry it? In your backpack? In your waistband?) and potentially the consequences of getting caught. A recent network related study (Dukstra et al. 2010) suggests that gun carrying among adolescents is associated with popularity within delinquents and, as such, we anticipate that networks more saturated with criminal ties might also have a positive effect on gun carrying.

The second outcome of interest is the respondent reporting having been in a “physical fight or confrontation” in the past year. While not necessarily illegal, getting in a fight represents a potential act of aggression and a rather simple deviant act that respondents are not likely to shy away from reporting. Often times, physical confrontations happen in the “spur of the moment” without much forethought. Yet, many of the simple assaults and aggravated assaults reported by the respondents often start as simple arguments or fights. As such, we consider fighting to be a qualitatively different crime than carrying a gun. Consistent with our hypothesis, we expect legitimacy to be negatively associated with fighting. Moreover, individuals whose networks are more saturated with criminal ties will be less likely to view the law as legitimate and more likely to partake in deviant behaviors.

Control Variables

In addition to the variables listed above, we include controls for age (measured in years), the race of respondent (1 = Black, 0 = non-Black), whether or not the respondent had at least a high school diploma (1 = yes, 0 = no), whether the respondent is currently working (1 = yes, 0 =
no), whether the respondent was on probation vs. parole (1 = parole, 0 = probation), and whether or not the respondent has “ever belong[ed] to an organization that someone might call a ‘gang’.”

**RESULTS**

Table 2 presents descriptive statistics of the key variables. As expected, all of the indices produce a mean that is close to zero, with standard deviations around a third, suggesting that the assumptions of the latent variable model provide an outcome that is roughly normally distributed around zero. While these indices simplify interpretation of the statistical models, they tend to mask the extent to which the overall views of respondents are positive or negative. That is, while the indices allow associations between increases or decreases in the scales and the predicted outcomes, they do not provide a metric to assess the general views of offenders as to the legitimacy of the law or perceptions of law enforcement.

Overall, offenders have a positive perception of the law, although their views tend to be slightly more negative when compared with individuals found in non-offender samples. To illustrate this point, Figure 3 displays the dichotomized distribution (agree/disagree) responses for the question, “People should obey the law even if it goes against what they think is right.”

For comparison purposes, the distribution of responses on this question in this sample is compared with the dichotomized distribution on the same exact question Tyler and Huo (2002) asked in their general population (read, non-criminal) survey of 1,656 residents in Oakland and Los Angeles, California. As seen in Figure 3, approximately 64 percent of our respondents (or just less than 2/3 of the sample) believe that people should obey the law even if it goes against

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16 Other items in this scale yield roughly the same results.
what they think is right, whereas 73 percent of non-criminals in Tyler and Huo’s study agree with the same statement. This difference is just modestly statistically significant at the 0.05 level (Chi-Squared test), suggesting a small but perhaps meaningful difference between offenders and non-offenders on impact of legitimacy on compliance. However, given the differences in the sample, one might have reasonably expected the differences in Figure 3 to have been considerably greater.

---Figure 3 About here---

While both offenders and non-offenders have positive views of the law more generally, differences in perceptions of law enforcement between offender and non-offender populations are more dramatic. Figure 4 depicts differences in the dichotomized (agree/disagree) responses to the question “Most police treat people with respect” in the study sample and the exact same question in Tyler and Huo (2002). In our sample, only 32 percent of the respondents agreed that police treat people with respect, whereas 76 percent of the Tyler and Huo sample agreed (Chi-Squared = 1113.32 p = .000). This difference in distribution suggests that offenders, as a whole, have considerably more negative opinions of the police than do respondents in general population surveys. This point bears repeating: Just like the general population, offenders believe in the overall legitimacy of the law, yet on average they tend to have overwhelmingly negative views of the police.

The descriptive statistics in Table 2 also inform us about the form and content of offenders’ social networks. On average, respondents’ have an average network size of 5
individuals with a network density of nearly 80 percent. This means that offenders have rather large and extremely dense local social networks. While no comparable statistical analysis exists of adult offenders’ social networks, these descriptive statistics are consistent with qualitative research descriptions of dense social networks in disadvantaged African American neighborhoods in Chicago (Pattillo-McCoy 1999; Venkatesh 2000; Wilson 1987). In addition, nearly 41 percent of the ties in these networks are multiplex, suggesting that these dense networks are comprised of “strong ties” that cross over many of the social realms. Finally, on average, approximately 24 percent of a respondent’s network contains what we consider to be criminal ties.

**Predicting Legitimacy**

The first set of regression results in Table 3 present the findings of a series of models in which the legitimacy index is regressed on the control, procedural justice, and network variables. Model (1) presents the results from a model regressing the control and procedural variables on the legitimacy index. Consistent with prior research, older respondents ($\beta = 0.007$, $p = 0.001$) and those with higher levels of education ($\beta = 0.212$, $p = 0.05$) are more likely to believe in the legitimacy of the law. In addition, parolees ($\beta = -0.115$, $p = 0.10$), those with more contact with the criminal justice system, tend to have more negative views of the law, although only at the most lax significance levels (Hagen et al. 2005). To some surprise, the gang member variable ($\beta = 0.096$, $p = 0.10$) is positive and significant, suggesting that gang members, in fact, have more favorable opinions of the law than non-gang members do.

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17 In contrast, population surveys such as the General Social Survey suggest that, on average, people have less social support network of size 2 (e.g., Marsden 1988).
Model (1) also considers the key variables assessing the effect of opinions of police, prosecutors, and deterrence on the legitimacy index. The parameter estimate for the police index confirms prior research and provides considerable support for our hypothesis. The police index ($\beta = 0.377$, $p = 0.001$) is positive and highly significant, suggesting that respondents’ with more favorable opinions of the police are considerably more likely to have positive perceptions of the law. In other words, just like non-offenders, it appears that an offender’s perception of police is significantly related to his belief in the legitimacy of the law. The deterrence index ($\beta = 0.095$) also has a null effect on perceptions of legitimacy in all models. It thus seems that the perceptions offenders have of police is one of the strongest predictors of their perceptions of the law.\footnote{Recent neighborhood level research finds a similar effect of interaction with the police and levels of “legal cynicism” (Kirk and Papachristos 2011)} Moreover, this variable has the largest effect of all the variables in Model (1). The effect of the prosecutor variable is positive, but not statistically significant.\footnote{Although not included in the survey itself, fieldwork conducted by one of the authors during survey period suggests that offenders believe that prosecutors are generally “smarter” and “more professional” than police. One forum participant explained to one of the authors in this way: “The cops, man, they just like us. You know what I mean? They got a job, they out there, doing their thing…but, those lawyers, man, they had to go to school. They got a degree. Had to take tests...they don’t have as much discretion. They got to follow the law too. Sure, they can bend it a bit, but they have rules they play by...cops, bend it a whole hell of a lot more.”}

Model (2) adds the network variables to the equation. Three network variables in the model are statistically significant: network density ($\beta = -0.155$, $p = 0.10$), percent multiplex ties ($\beta = 0.206$, $p = 0.05$), and less than 50 percent of ties that have been arrested ($\beta = 0.176$, $p = 0.01$). The network density parameter suggests that individuals whose social worlds are more “closed”—i.e., isolated networks that often exist within a small number of social spheres—have
a negative effect on perceptions of legitimacy. Conversely, this suggests that individuals in less dense networks that cross into multiple social spheres have more favorable opinions of the law. The percentage of multiplex ties has a positive and statistically significant effect on perceptions of legitimacy thus suggesting that strong ties exert a greater effect on one’s perceptions of legitimacy of law. Finally, there is a positive and statistically significant association between individuals whose networks are comprised of less than 50 percent of criminal alters: individuals in networks less saturated with criminal alters tend to have more favorable opinions of the law. In other words, having some but not a majority saturation of criminal ties in one’s network actually increases one’s perception of the law as legitimate. In contrast, the association for those individuals with greater than 50 percent of their ties as criminal is negative, but not statistically significant (β = -0.03). Of particular importance, the perceptions of police authority variable in Model (2) retains its statistical significance even when these network variables are added (β = 0.370, p = 0.001). In fact, the magnitude of the police index increases slightly in Model (2).

The positive but marginally statistically significant effect of the gang member variable in Model (1) disappears in Model (2) when the network variables are added. Given the differences between gang and non-gang members discussed in the literature on group processes and gangs (Thornberry et al. 2003), we further decomposed some of the network effects by adding in interaction terms for the percent arrest variables and gang membership in Model (3).\(^\text{20}\) The result is two additional dummy variables: (1) self-identified gang membership * less than 50 percent of alters are criminal, and (2) self-identified gang membership * greater than 50 percent of alters are criminal.

\(^{20}\) No discernable differences in network size or density were detected when interacted with gang membership and are therefore not included in the model.
criminal. These variables are designed to identify two types of gang members: those gang members whose networks are only partially saturated with criminal alters, and those gang members whose network is completely saturated by criminal alters. These two variables also correspond roughly with the more traditional distinction between “periphery” and “core” gang members in the literature (Klein & Maxson 2006). When these two variables are in the equation, the dummy variable for gang member is interpreted as a gang member who did not identify any criminal alters in his network. To test for the effect of any alter being a gang member, an additional dummy variable was added to indicate if any of the respondent’s alters were identified as a gang member (1 = yes, 0 = no).

Model (3) adds the two gang member * percent criminal alters interaction variables to the equation. As in the previous models, the police index remains one of the strongest predictors of legitimacy ($\beta = 0.341$, $p = 0.001$). Network density ($\beta = -0.160$, $p = 0.10$) and percent multiplex ties ($\beta = 0.182$, $p = 0.05$) also retain their statistical significance. When all four of the percentage criminal alter variables are added in the equation, three of them have a positive effect on perceptions of legitimacy: non-gang alters with < 50% criminal alters ($\beta = 0.131$, $p = 0.05$), non-gang members with > 50% criminal alters ($\beta = 0.156$, $p = 0.10$), and gang members with < 50% criminal alters ($\beta = 0.229$, $p = 0.10$). Only gang members with high saturated (> 50%) criminal networks have a strong negative effect on legitimacy ($\beta = -0.440$, $p = 0.01$). Put another way, for all of the groups in the sample except for core gang members, having criminal alters actually increases perceptions of legitimacy. This suggests that perhaps non-gang members and non-core gang members may actually learn some respect for legal authority from the experiences of alters with criminal experiences, especially when their networks are not
completely saturated with criminal alters. In contrast, for gang members in networks highly saturated with criminal alters the effect is highly negative. Finally, Model (3) also demonstrates a modestly significant negative effect for the mere presence of a gang member in one’s ego-centric social network ($\beta = -0.124$, $p = 0.10$).

Thus far, all of the models provide considerable support for one of our key hypotheses: offenders with more positive opinions of legal agents, but especially the police, also tend to have more positive perceptions of the legitimacy of the law. It appears that the notions of procedural justice studying in the general population also apply to active gun offenders. Furthermore, several network effects appear to exist above and beyond any individual effects and independently of and the influence of police. In particular, strong network ties and networks less saturated with criminal alters appear to have a positive effect on perceptions of the law, while network density has a negative effect. The main exception to our hypothesis regarding the effect of the percentage of criminal alters in one’s social network appears to be gang members with networks highly saturated with criminal alters—in these cases, the effect of criminal alters is highly negative, i.e., these alters appear to decrease the respondent’s perceptions of the legitimacy of the law.

**Legitimacy and Offending**

The final stage of analysis uses a series of logistic regressions to predict the effect of the legitimacy index and network variables on two different dependent variables: carrying a gun outside of one’s home and getting into a fight in the past year. TABLE 4 lists the unstandardized coefficients and standard errors from these models.

---Table 4 about here---
Models (1) through (3) demonstrate the results from the carrying a gun variable. Model (1) shows that only the individual level variable with a statistically significant effect on carrying a gun is whether or not the respondent was ‘currently working’—a pattern that holds in Models (2) and (3). Model (2) adds the network variables, two of which (network size and density) approach but do not quite achieve statistical significance at the .05 level. The direction of these parameters suggests that the likelihood of carrying a gun outside one’s home depends on the size of one’s network: those with larger networks are less likely to carry guns outside their homes. Prior research has interpreted the size of one’s network to be related to scope, in that those with larger networks might possibly have ties to a greater number of social circles. Thus, one possible explanation for this effect is that increased network size provides individuals with more options to choose from when deciding with whom they would like hang out on any given day. The density of a respondent’s network has a positive effect on carrying a gun, although again, this variable does not quite reach significance at the .05 level. Finally, although not statistically significant, the percent criminal alters variables appear to work in the complex manner that they did for the legitimacy index. Having a criminal alter appears to be protective for non-gang members, but harmful for gang members in networks highly saturated with criminal alters.

Model (3) examines the extent to which the legitimacy index predicts gun carrying. As predicted, the effect of the legitimacy index is negative and statistically significant ($\beta = -1.54$, $p = 0.05$). Those who report more positive opinions of the law are less likely to report carrying a

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21. The positive value of the parameter is most likely due to the fact that most of the probationers and parolees were employed as part of their release or sentence.

22. The gang members with less than 50% criminal alters are dropped from Models (2) and (3) because there was no variation in these cases: none of these individuals reported carrying a gun outside the home.
gun. Moreover, this variable has the largest effect of all variables in the models and improves overall model fit. In these models the network size variable also achieves statistical significance ($\beta = -0.155$, $p = 0.05$) when controlling for the legitimacy index. Model (3), therefore, suggests that both legitimacy and networks have an effect on carrying a gun.

Models (4) through (6) examine the fighting variable. Model (4) shows that age ($\beta = -0.85$, $p = 0.01$) and education ($\beta = -1.45$, $p = 0.05$) have a negative effect on fighting: older respondents and those with more education are less likely to have reported getting in a fight. Furthermore, and consistent with prior research, gang members are more likely to report getting into a fight ($\beta = 1.41$, $p = 0.001$).

The network variables are added in Model (5). Network size ($\beta = 0.060$) and density ($\beta = 0.658$) do not appear to have statistically significant effects on getting into a fight. However, there once again appears to be preventative effect of having criminal alters in both gang and non-gang networks with fewer than half of the alters reported as being criminal. Finally, there also appears to be a statistically significant effect of having even a single gang member in one’s social network ($\beta = 2.088$, $p = 0.05$).

Model (6) adds the legitimacy index, which is negative, but not statistically significant ($\beta = -0.581$). In addition, model fit does not increase relative to the Model (5). This finding suggests that one’s perceptions of legitimacy have no effect on the likelihood of getting into a fight. The network variables retain their significance in this model. The lack of significance here suggests that while perceptions of legitimacy influence crimes that require some forethought

\[23\] The gang member * > 50 percent criminal alters variables perfectly predicts failure—i.e., all of these individuals reported getting into a fight.
(like deciding to carry a gun on your person), perceptions of legitimacy do not appear to influence getting into a fight which prior research suggests tends to be less planned.²⁴

**Discussion and Conclusion**

Sociological studies of crime and deviance tend to focus on the reasons why individuals break the law. Most of these studies give virtually no consideration to the simple fact that criminally prone individuals spend the vast majority of their time in compliance with the law. Just like “normal” people, criminals obey traffic signals even if no one is watching, refrain from shoplifting, and try to avoid violent situations. In contrast, research on compliance with the law is based on data taken from general population surveys and, as such, tends to overlook the segment of the population responsible for most criminal offending—especially violent street crime. While both strands of research offer insight into law violating and law abiding behaviors, they have overlooked the ways in which perceptions of the law influences compliant and deviant behaviors, especially among the segment of the population most commonly deemed to be criminally prone.

By invoking research on legitimacy and procedural justice as well as an understanding of the effect on networks on social behaviors, this study asks: why do criminals obey the law? Consistent with prior legitimacy research, we hypothesized that criminals behave like their non-criminal counterparts—namely, that more positive perceptions of law enforcement will be associated with positive opinions of the law more broadly, and, in turn, that positive perceptions of the law will be associated with compliant behavior. We further argued that the contours of an

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²⁴ This also might be related to the way fighting is measured. Fighting can have multiple meanings—i.e., fighting for defensive reasons might take on a different subjective understanding than fighting, say, out of aggressive behaviors or mutual combat (e.g., a gang fight).
individual’s social network influence both their perceptions of the law as well as their compliance with the law.

Our findings offer several insights into understanding the perceptions active gun offenders have of the law and legal authority, as well as providing an answer to the general question we have posed. Our data demonstrate that offenders in our sample tend to believe in the legitimacy of law. At the same time, sample participants have overwhelmingly negative views of police. In all of the models predicting legitimacy, the police index has the strongest and most consistent effect on an offender’s perception of the law, net of all other control and network variables.

The results also illustrate the influence of social networks on both perceptions of the law and offending. Whereas previous research hypothesizes about the effect of peer influence on perceptions of the law, this study directly measures the effect of various characteristics of the respondent’s ego-network. Dense ego-networks seem to have a negative effect on perceptions of legitimacy, suggesting that such closed networks—especially those saturated with criminal alters—decrease perceptions of legitimacy. More importantly, though, the content of an offender’s social network also appears to have an effect on their perceptions of the law and must be considered in conjunction with density. When criminal alters are present in a non-gang member’s social network, the effect appears to be positive on said individual’s perceptions of the law: having more criminals in one’s network tends to be associated with more favorable opinions of the law, suggesting a sort of “learning from the mistakes” of one’s associates. The same effect appears to occur for gang-members in networks where less than 50 percent of their alters are criminal. The main difference in this network effect is for gang members in highly
criminally saturated networks (> 50% criminal alters), in which case the effect is negative. Consistent with classic learning theories, the case of “core” gang members suggests that being associated with a large number of criminal alters is related to negative opinions of the law.

These findings provide some answers to our basic research question: why do criminals obey the law? The answer is that offenders comply with the law for many of the same reasons as non-offenders do. The active offenders in our sample were more likely to believe in the legitimacy of the law and its agents when they report having more positive perceptions of the police. Furthermore, those individuals with more positive perceptions of the law were less likely to carry a gun outside of their home. Interestingly, however, legitimacy does not appear to have an effect on getting into a fight, whereas the network variables do appear to have an effect. We believe this divergence likely stems from the different nature of these two acts: carrying a weapon requires some forethought, while getting into a fight is a generally unplanned, impulsive event that can happen in a variety of circumstances, and could just as well be defensive as not. In other words, the volition to fight is highly contingent on the context, spark, and interaction dynamics that are intrinsic to network interactions where disputes are likely and there are limited means to resolve them. As such, people might be more influenced by their perceptions of the law for crimes that require active thinking, as opposed to reactive situations such as fights which tend to happen out of unplanned situational factors.

This study is not without limitations. At least three are worth further consideration. First, at the present time our findings are largely circumscribed by survey’s sample: gun offenders and violent offenders in high crime and predominately African American neighborhoods in Chicago. The point of this study was to shed light on the perceptions of the
law held by highly active “criminals” in urban settings. By design, our study excludes simple drug offenders and individuals who do not reside in high-crime communities. We are hopeful that future research will expand this type of research to other settings and offending populations.

Second, our findings pertaining to any determined network effects are also constrained by the survey sample. To date, most survey research on social networks and crime have been drawn from samples of school-aged youth and with dependent variables constructed from “delinquency” indices. In contrast, our sample is of active adult street criminals and our dependent variables of interest were not mere delinquent acts (e.g., underage drinking), but more serious criminal offenses like carrying a firearm illegally. While some of our findings support this previous survey research, to the best of our knowledge no such comparable network survey of non-incarcerated adult street criminals exist. Future network oriented research should continue to explore new and creative ways of capturing the social networks of street criminals and the ways in which said networks influence behaviors and opinions.

Finally, Chicago’s gangs tend to be larger and more organized than gangs in most other cities. Therefore, the noticeable effect of “core” gang members in this study might also be limited to Chicago. However, the core versus periphery status of gang membership has been well documented in other locations, suggesting that our distinction based on network saturation has firm empirical grounding across different geographic locations (Decker & Curry 2000; Thornberry 1998). Furthermore, network studies by Fleshier (2002) and McGloin (2005) also highlight the different structural positions of gang members within larger social networks, thus

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25 This is a standard critique of nearly all gang research emanating from Chicago. See, for example, Maxson and Klein 2001.
lending further support to our differentiation of respondents based on the composition of their network.

**Works Cited**


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### Cases Cited

FIGURE 1. Geographic Distribution of N = 141 Respondents of the Chicago Gun Project by Police Beats

N of Respondents

- 0
- 1
- 2
- 3 - 4
- 5 - 6

Experiment Area
Control Area
Figure 2. Distribution of Legitimacy Index
Figure 3. Proportion of Respondents from CGP and Tyler and Huo (2002) samples that Agree/Disagree that “People Should Obey the Law Even if it Goes against what they think is right”

Pearson Chi-Squared = 3.717, p = 0.054
FIGURE 4. Proportion of Respondents from CGP and Tyler and Huo (2002) samples that Agree/Disagree that “Most Police Treat People with Respect”

Pearson Chi-Squared = 113.32, p = 0.0000
**Table 1. Sample Characteristics and Descriptive Statistics**

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<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
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<td>Gender (1 = Male)</td>
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<td>0.28</td>
</tr>
<tr>
<td>Race (1 = African America)</td>
<td>0.85</td>
<td>0.34</td>
</tr>
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<td>Age (in years)</td>
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<td>10.2</td>
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<tr>
<td>Less H.S. Diploma (1 = yes)</td>
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<td>0.32</td>
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<td>Ever a Gang Member (1 = yes)</td>
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<tr>
<td>Currently Working (1 = yes)</td>
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Table 2. Summary and Descriptive Statistics of Dependent and Independent Variables

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<thead>
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<th>Mean</th>
<th>Standard Deviation</th>
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<td>0.0001</td>
<td>0.349</td>
</tr>
<tr>
<td>Deterrence Index</td>
<td>-0.042</td>
<td>0.326</td>
</tr>
<tr>
<td>Perceptions of Police Index</td>
<td>-0.0004</td>
<td>0.339</td>
</tr>
<tr>
<td>Perceptions of Prosecutors Index</td>
<td>0.0003</td>
<td>0.284</td>
</tr>
<tr>
<td>Carry a Gun</td>
<td>0.702</td>
<td>0.458</td>
</tr>
<tr>
<td>Fight in Last Year</td>
<td>0.234</td>
<td>0.424</td>
</tr>
<tr>
<td>N of Alters</td>
<td>4.99</td>
<td>2.73</td>
</tr>
<tr>
<td>Density</td>
<td>0.797</td>
<td>0.281</td>
</tr>
<tr>
<td>% Multiplex Ties</td>
<td>0.415</td>
<td>0.308</td>
</tr>
<tr>
<td>% of Criminal Alters</td>
<td>0.247</td>
<td>0.227</td>
</tr>
</tbody>
</table>
### Table 3. OLS Regression of Perceptions of Legitimacy on Individual, Procedural Justice, and Network Characteristics (N = 141)

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (in years)</strong></td>
<td>0.00743**</td>
<td>0.00780**</td>
<td>0.00645*</td>
</tr>
<tr>
<td></td>
<td>(0.0027)</td>
<td>(0.0026)</td>
<td>(0.0026)</td>
</tr>
<tr>
<td><strong>Black (1 = yes)</strong></td>
<td>-0.0931</td>
<td>-0.108</td>
<td>-0.117</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.075)</td>
<td>(0.072)</td>
</tr>
<tr>
<td><strong>High School Diploma (1 = yes)</strong></td>
<td>0.212*</td>
<td>0.216*</td>
<td>0.228**</td>
</tr>
<tr>
<td></td>
<td>(0.091)</td>
<td>(0.089)</td>
<td>(0.085)</td>
</tr>
<tr>
<td><strong>Currently Working (1 = yes)</strong></td>
<td>-0.0461</td>
<td>-0.0313</td>
<td>-0.0292</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.052)</td>
<td>(0.050)</td>
</tr>
<tr>
<td><strong>Gang Member (1 = yes)</strong></td>
<td>0.0958+</td>
<td>0.0786</td>
<td>0.0935</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
<td>(0.057)</td>
<td>(0.10)</td>
</tr>
<tr>
<td><strong>Parole vs. Probation (1 = parole)</strong></td>
<td>-0.115-</td>
<td>-0.113*</td>
<td>-0.128*</td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
<td>(0.057)</td>
<td>(0.055)</td>
</tr>
<tr>
<td><strong>Perceptions of Police</strong></td>
<td>0.337***</td>
<td>0.370***</td>
<td>0.341***</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.081)</td>
<td>(0.078)</td>
</tr>
<tr>
<td><strong>Perceptions of Prosecutors</strong></td>
<td>0.144</td>
<td>0.139</td>
<td>0.0865</td>
</tr>
<tr>
<td></td>
<td>(0.095)</td>
<td>(0.091)</td>
<td>(0.089)</td>
</tr>
<tr>
<td><strong>Deterrence Index</strong></td>
<td>0.0947</td>
<td>0.0751</td>
<td>0.0579</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.079)</td>
<td>(0.076)</td>
</tr>
<tr>
<td><strong>N of alters</strong></td>
<td>-0.0106</td>
<td>-0.00771</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.010)</td>
<td></td>
</tr>
<tr>
<td><strong>Density of Ego Network</strong></td>
<td>-0.155+</td>
<td>-0.160+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.089)</td>
<td>(0.085)</td>
<td></td>
</tr>
<tr>
<td><strong>% Ties that are Multiplex</strong></td>
<td>0.206*</td>
<td>0.182*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.085)</td>
<td>(0.081)</td>
<td></td>
</tr>
<tr>
<td><strong>Less than 50% of alters have been arrested</strong></td>
<td>0.176**</td>
<td>0.131*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.061)</td>
<td>(0.066)</td>
<td></td>
</tr>
<tr>
<td><strong>Greater than 50% of alters have been arrested</strong></td>
<td>-0.0306</td>
<td>0.156+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.071)</td>
<td>(0.089)</td>
<td></td>
</tr>
<tr>
<td><strong>Gang Member &lt; Less than 50% of alters have been arrested</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gang Member &gt; Greater than 50% of alters have been arrested</strong></td>
<td>0.229+</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.13)</td>
</tr>
<tr>
<td><strong>At least one gang member in Ego Network</strong></td>
<td>-0.440**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.13)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-0.285+</td>
<td>-0.306+</td>
<td>-0.270</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.17)</td>
<td>(0.17)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>141</td>
<td>141</td>
<td>141</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.30</td>
<td>0.39</td>
<td>0.45</td>
</tr>
</tbody>
</table>

*** p<0.001, ** p<0.01, * p<0.05, + p<0.10
Table 4. Logistic Regression of Carrying a Gun outside of Home and Getting into a Fight in the last 6 Months on Individual, Procedural Justice, and Network Variables.

<table>
<thead>
<tr>
<th></th>
<th>Carry a Gun (1 = Yes)</th>
<th>Fight in Last 6 months (1 = yes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>-0.0204</td>
<td>0.00384</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Black (1 = yes)</td>
<td>0.0733</td>
<td>-0.216</td>
</tr>
<tr>
<td></td>
<td>(0.56)</td>
<td>(0.61)</td>
</tr>
<tr>
<td>High School Diploma (1 = yes)</td>
<td>0.346</td>
<td>0.416</td>
</tr>
<tr>
<td></td>
<td>(0.66)</td>
<td>(0.71)</td>
</tr>
<tr>
<td>Currently Working (1 = yes)</td>
<td>0.778+</td>
<td>0.863+</td>
</tr>
<tr>
<td></td>
<td>(0.42)</td>
<td>(0.44)</td>
</tr>
<tr>
<td>Gang Member (1 = yes)</td>
<td>0.523</td>
<td>0.415</td>
</tr>
<tr>
<td></td>
<td>(0.44)</td>
<td>(0.53)</td>
</tr>
<tr>
<td>Parole vs. Probation (1 = parole)</td>
<td>0.663</td>
<td>0.484</td>
</tr>
<tr>
<td></td>
<td>(0.42)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>N of Alters</td>
<td>-0.170+</td>
<td>-0.177*</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.088)</td>
</tr>
<tr>
<td>Density of Ego Network</td>
<td>1.276+</td>
<td>1.010</td>
</tr>
<tr>
<td></td>
<td>(0.70)</td>
<td>(0.72)</td>
</tr>
<tr>
<td>% Ties that are Multiplex</td>
<td>0.271</td>
<td>0.461</td>
</tr>
<tr>
<td></td>
<td>(0.71)</td>
<td>(0.73)</td>
</tr>
<tr>
<td>Less than 50% of alters have been arrested</td>
<td>-0.349</td>
<td>-0.131</td>
</tr>
<tr>
<td></td>
<td>(0.52)</td>
<td>(0.54)</td>
</tr>
<tr>
<td>Greater than 50% of alters have been arrested</td>
<td>-0.483</td>
<td>-0.467</td>
</tr>
<tr>
<td></td>
<td>(0.61)</td>
<td>(0.60)</td>
</tr>
<tr>
<td>Gang Member * Less than 50% of alters have been arrested</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.05)</td>
</tr>
<tr>
<td>Gang Member * Greater than 50% of alters have been arrested</td>
<td>0.961</td>
<td>0.619</td>
</tr>
<tr>
<td></td>
<td>(0.88)</td>
<td>(0.90)</td>
</tr>
<tr>
<td>At least one gang member in Ego Network</td>
<td>0.385</td>
<td>0.390</td>
</tr>
<tr>
<td></td>
<td>(0.64)</td>
<td>(0.67)</td>
</tr>
<tr>
<td>Perceptions of Legitimacy</td>
<td>-1.537*</td>
<td>-1.879**</td>
</tr>
<tr>
<td></td>
<td>(0.75)</td>
<td>(0.70)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.274</td>
<td>0.147</td>
</tr>
<tr>
<td></td>
<td>(1.03)</td>
<td>(1.38)</td>
</tr>
<tr>
<td>Observations</td>
<td>138</td>
<td>138</td>
</tr>
<tr>
<td>-2 (Loglikelihood)</td>
<td>-78.83</td>
<td>-73.75</td>
</tr>
</tbody>
</table>

*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

a = variable perfectly predicts failure, not included in model
APPENDIX A – EGO-CENTRIC NAME GENERATOR QUESTIONS

INTRODUCTION

“Next I want to ask you some questions about the people you interact with in various ways. This information will help to better understand the social support system of local residents. Please understand that I’m not interested in the full names of the people you interact with, and we will not be contacting them, so please just provide their first name or their nickname. We are interested in their characteristics and what neighborhood they live in. We’re not interested in exact addresses. Feel free to name as many people as you like.”

PROS-SOCIAL NETWORKS

1. “There are some household jobs you can’t really do alone – for example, you may need someone to hold a ladder or to help you move furniture. Who would you turn to for help?”

2. “Who have you gone out with socially in the past 6 months? For example, to dinner, the movies, or a sports event?”

3. “In the past six months, who have you worked with to help deal with a neighborhood problem? For example, public safety issues or traffic problems?”

4. “Who are the people in your neighborhood that while you do not consider them friends, you are polite to because you do not want to create problems?”

5. “Suppose you had an important matter to discuss, for example, an important change in your life, problems with a loved one, or just feeling down or depressed. Looking back over the last six months, who are the people with whom you discussed matters important to you?”

6. “Suppose you needed to borrow a large sum of money, who would you turn to for help?”

7. “If you needed help finding a job, whom would you ask about possible jobs?”

ILLEGAL NETWORKS

8. “Suppose you needed to obtain a gun for some reason, who would you go to for help finding one?”

9. Looking back over the past two years, can you name some people whom you were arrested/picked-up with by the police? [have you ever been charged on a case with any of your friends or associates? What about the case you are on probation for?]

10. “Who could you count on to have your back in a pinch/fight?”
**APPENDIX B – ALTER QUESTIONS FROM NAMES OBTAINED FROM EGO-CENTRIC GENERATOR QUESTIONS**

**THE ALTER QUESTIONS**

1. What is _____’s gender?
2. What do you consider your relationship to _____ to be? Some people can be connected to you in more than one way. Tell me all the ways that person is connected to you.
3. Do you work with _____?
4. Does _____ belong to any organizations or clubs with you?
5. How old is _____?
6. What is _____’s race?
7. What is the highest level of education _____ has completed?
8. Regarding _____’s work or employment status, is _____ currently:
9. Does _____ live in your neighborhood?
10. What are the cross streets nearest _____’s home?
11. Does _____ live on the same block as you?
12. What is _____’s marital status?

13. How often do you talk to _____?
14. How long have you known _____?
15. To the best of your knowledge, has _____ ever been arrested for a violent or gun-related crime?
   a. If YES, have you ever been involved in such an incident with _____?
16. Is _____ a gang member?
   a. If YES, what gang is _____ affiliated with/belong to?

**Ties Between Alters**

“This section is intended to get an idea of how connected various people within your social network are to each other. Please think about the relationship between the people you just mentioned. Some of them may be total strangers in the sense that they wouldn’t recognize each other if they bumped into each other on the street. Others may be especially close, as close or closer to each other as they are to you. I will be asking how well you know two people you previously mentioned. Your answer options include: strangers (0), not strangers but not close (1), close (2).”

How well do **ALTER 1** and **ALTER 2** know each other?