The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title: The Epidemiology of Crime Guns: Summary
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Document Number: 254131
Date Received: October 2019
Award Number: 2013-R2-CX-0001

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THE EPIDEMIOLOGY OF CRIME GUNS

SUMMARY¹

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For
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September 2016

¹ This paper is a shorter version of a longer discussion of the research to appear in the Russell Sage Foundation Journal. This is not for publication prior to the publication of the RSF Journal version.
Introduction.

As a report from the National Research Council observed our knowledge of the way those who use guns in crimes acquire those guns is more conceptual than empirical. They noted that the existing information on how guns are acquired for use in crimes is dated, incomplete, and inconclusive (Wellford et al. 2005). Combined with the limitations Congress has placed on the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) and other federal agencies,\(^2\) this has resulted in limited useful information being available on the way guns move from legal possession to illegal possession and use in criminal activities. In part, it was this condition that prompted the National Institute of Justice (NIJ), in 2011, to form a topical working group on firearms and violence to advise it on advances since the 2005 report and to suggest priorities for firearms research. This working group concluded:

In the 1990s NIJ supported research to determine how individuals acquired the firearms that were used in the commission of crimes. These studies, although important additions to our understanding about the acquisition of firearms by criminals, are now almost twenty years old, and the methods used in these studies need significant improvement. The Group suggests that new efforts be undertaken to use improved methodologies to study and better understand the ways in which all criminals who use guns in the commission of their crimes acquire those guns. The first step in this effort would be the development of methodologies that would provide better estimates of gun acquisition than those used in the 1990 studies (NIJ 2011:2).

and:

There was widespread consensus in the group that research on how guns are acquired for criminal use and how those acquisition lines can be disrupted is vital. This has been mentioned above. In addition to the topics discussed above, this research area should include studies of the "life cycle" of crime guns (tracing guns from the gun crime to the manufacturer, identifying all intermediate owners and possessors and their means of acquisition). This research would assist in identifying possible new ways to disrupt acquisition of guns for use in crimes (NIJ 2011:3).

These conclusions and recommendations mirror those of the NAS report when it stated, “arguments for and against a market-based approach (to restricting access to guns) are now largely based on speculation, not on evidence from research” (2005:8).

This paper summarizes the results of research to improve our understanding of gun markets and suggests ways that information can be used, consistent with the current understanding of the Second Amendment, by law enforcement to limit access to guns by those who will use them to commit a crime.

\(^2\) Even though in recent years the Congress has reduced the limitations it imposed on the ATF that made it nearly impossible for the agency to provide trace data to law enforcement agencies and researchers, our research has faced numerous additional obstacles created by the agency that greatly lengthened the time it took to receive the information that the current law allows. For a summary of the history of these limitations see http://smartgunlaws.org
Literature Review

Studies of the acquisition of guns used in crimes have relied on two data sources: the tracing of guns recovered by police from a crime and surveys of inmates asking them about the acquisition of guns.

Trace Studies

Efforts to understand the scope and nature of the illicit gun market have relied largely on gun traces using ATF databases such as eTrace. Due to restrictions on data collection and record sharing, these are almost exclusively conducted at the local level, and require the local agencies’ cooperation and willingness to share information. These prior studies have produced somewhat fragmented, and at times, inconsistent results with regard to the sources of crime guns, and the nature of the illicit gun market.

In one such study, Wachtel (1998) assessed records for 5,002 firearms recovered by law enforcement agencies in the Los Angeles, California area between 1988 and 1995; 82 percent of the guns were recovered by the Los Angeles Police Department, and the remainder by law enforcement in nearby communities. Of the recovered firearms, 6 percent had been reported stolen. The initial purchaser and the possessor at the time of recovery were fully identified for 1,599 of the 5,002 guns; in 14 percent of these instances the gun was seized from the initial retail purchaser. Traces of the firearms recovered in the Los Angeles area were successful approximately half of the time: state records had data for 47 percent of handguns shipped to a California dealer, and the ATF National Tracing Center successfully identified the first retail dealer for 46 percent of the remaining weapons. Similarly, a trace study conducted by Cook and colleagues (2015) experienced a 65.5 percent trace success rate for five years (2009 through 2013) of requests submitted to the ATF National Trace Center by the Chicago Police Department (CPD). Interestingly, traces for non-gang guns were slightly more successful than traces for gang-related guns.

Two of the trace studies, Moore (1981) and Wachtel (1998) focused in on illicit gun trafficking markets. The Moore (1981) study examined the closed case files of thirteen street gun dealing (i.e. dealing without a license) investigations between 1974 and 1976. Moore found the predominant source of street firearms dealers to be through purchases from licensed dealers and residential thefts. Wachtel (1998) reviewed case studies of domestic gun trafficking investigations conducted by the ATF in Los Angeles between 1992 and 1995. Three quarters of the trafficked guns (n=14,328) were initially purchased at wholesale, either by licensed dealers (90 percent), or by unlicensed street vendors using a forged license (10 percent). Fourteen percent of the trafficked guns were initially purchased from retail dealers, with nearly half (41.6 percent) obtained by straw

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3 eTrace is a web-based firearms trace request system available to accredited domestic and international law enforcement agencies to assist in tracing firearms purchased in the United States. Through this interface, law enforcement can electronically submit firearms trace requests, monitor trace progress, get completed results, and query trace data. More than 5,600 law enforcement agencies are registered with eTrace (ATF 2015; Lisko and Arends 2015).
4 A noteworthy obstacle to these traces was that dealers failed to supply sales or disposition information for 40 percent (n=765) of guns traced to their location.
5 The guns submitted for traces were recovered between January 1, 2009 and September 17, 2013 from individuals less than forty years of age at the time of the recovery (Cook et al. 2015).
6 These investigations either led to a conviction or were still proceeding through the courts at the time of the study.

Trace studies have not only produced inconsistent findings, but have also been criticized by some for failing to be geographically representative (Braga et al. 2002). However, there have been a few efforts to capture these trends at a national level. For example, in 2010 Mayors Against Illegal Guns (MAIG) assessed national trace statistics for 2009. Overall, 238,107 guns recovered at crime scenes in the United States were submitted for tracing to the ATF National Tracing Center, of which 145,321 (61 percent) were successfully traced to a source state. The firearm was recovered in the same state in which it was initially purchased seventy percent of the time (n=102,067; MAIG 2010). Another national study reported the most prolific traffickers to be corrupt FFLs, which comprised nine percent of ATF investigations but nearly half of the guns accounted for (ATF 2000). Conversely, while straw purchases made up nearly half of ATF investigations they yielded fewer trafficked guns per investigation. Firearms stolen from manufacturers, licensed retailers, residences, and shipping carriers encompassed more than one quarter of investigations (ATF 2000). Given the moderate success rate of trace requests and the restrictions to generalizability, supplemental methods have been utilized for gun market research, most notably surveys or interviews with offenders.

Gun Offender Survey/Interview Studies

Unlike trace data, which rely on the correct filing of paperwork and cooperation of multiple government agencies, asking offenders about the illicit gun market can be a more holistic approach. These studies range in generalizability, with some surveys or interviews focusing on specific jurisdictions or offender groups (e.g. gang affiliated or juveniles), whereas others, such as the Survey of Inmates in Local Jails (SILJ) and Survey of Inmates in State Correctional Facilities (SISCF) are nationally representative of persons held in state prisons and local jails (Cook et al. 2015). However, it should be noted that gaining offender cooperation in discussing illegal transactions may have prevented full participation or candor in some of these studies. The following provides a description of findings elicited from offender surveys and interviews with regard to crime gun sources (note that this is not an exhaustive review):

As with the trace studies, findings regarding illicit gun markets and acquisition of crime guns are also mixed when offenders are interviewed or surveyed. However it is worth noting that the most common source of firearms across most of the surveys was from family and friends (Beck et al. 1993; Cook et al. 2007; Sheley and Wright 1993).

In general, adding interview research has provided a much richer picture of offender gun acquisition processes than trace based studies alone. For example, a 1992 study of 100 imprisoned “armed career criminals” found five primary sources for the offenders’ guns, most of which were in the secondary market. These sources included private parties (off the street sales), involvement with criminal acts or associates, retail firearms, flea markets or gun shows, and from relatives (ATF 1992). More recently, Cook and colleagues (2007) interviewed gang members, gun dealers, professional thieves, prostitutes, police, public school security guards, and teenagers in Chicago, and supplemented their findings with data from government surveys of recent arrestees in twenty-two cities, and administrative data. Using a mixed method approach they concluded the underground gun market in Chicago is relatively thin, potentially due to the gangs’ monopolizing certain markets or activities, police, or due to neighborhood-specific factors. Additionally, they
found trends in acquisition and time to crime relevant to neighborhood crime rates. Contrary to research focused on more organized trafficking, Cook et al. (2007) and Webster et al. (2002) have found straw purchasing to be rare amongst juveniles in Chicago and Maryland, respectively, with juveniles rarely leaving their communities to get guns.

Implications

While there are numerous legislative and administrative barriers to conducting a thorough assessment of crime gun markets, there is still room for improvement on current methods. For example, the majority of the trace studies are limited to individual municipalities, which are more often than not, in high regulation states such as California, New York, and Massachusetts (Moore 1981; Wachtel 1993). Similar studies are lacking for areas with weaker gun regulations, such as some states in the southern and Midwestern United States. Additionally, inmate surveys are typically conducted independently of trace studies, rather than in the same jurisdiction. By applying both methodologies to the same jurisdiction we can gain a deeper understanding of the supply chain of crime guns, from the initial purchase, identified through a trace, to the offenders’ point of acquisition, as uncovered through the prisoner interviews. This study seeks to join these two methods and address some of the gaps in the research discussed.

Current Research

In the current research, similar to past studies, we use trace data from three jurisdictions (Chicago, New Orleans, and Prince Georges County, MD) that vary in the degree to which they have established regulations to restrict gun sales and survey data from inmates currently incarcerated who had committed a crime of violence in two of these jurisdictions (Louisiana and Maryland). In addition, and unlike prior research, we also interview the first legal purchaser if that purchaser was not the offender (referred to in this paper as tracking). In those interviews we seek to understand how the gun went from a legal purchase into the unregulated market. In total we have data on 23,557 gun traces, 192 tracking interviews, and 288 prisoner interviews. For a more detailed discussion of these data see Collins, Parker, Scott, and Wellford (forthcoming).

Results

The analysis of these data can be summarized as follows: 1) gun recoveries and trace successes vary across jurisdictions, and in some locations by crime; 2) gun regulations were associated with the proportion of guns purchased in-state and time to gun recovery, but not with the likelihood of the first legal purchaser and the offender being the same person, or with the likelihood of the gun being bought by a straw-purchaser; 3) first legal owners report that guns that end up being used in a violent crime are stolen from them or the sell them to the offender or someone else; and 4) imprisoned gun offenders cited stealing or buying the gun on the street as the most likely way to obtain a firearm to use in a crime.

Gun recoveries and traces. Across jurisdictions, less than 20% of violent gun crimes resulted in a recovery of a firearm. In these crimes, guns are most likely to be recovered in homicides followed by robberies and aggravated assaults. In New Orleans, crimes where guns were recovered differ in important characteristics from those crimes where the gun is not recovered. Of those firearms recovered and traced, approximately two-thirds result in a
successful trace. While the reasons for trace failure varied across jurisdictions, they almost all reflect problems associated with how as a country we have decided to maintain information on gun sales and possession. Table 2 shows the reasons for trace failure for each jurisdiction.

Table 3 shows data for each of the jurisdictions on the proportion of recovered and successfully traced guns first legally purchased in each state. In the jurisdiction with low regulations (New Orleans) a higher percentage were purchased in-state as compared to the two higher regulations jurisdictions. However, the proportion of offenders who were the first legal purchaser did not consistently vary by regulations status of the jurisdiction. In one high regulation jurisdiction 26% were same purchaser and offender; while that percentage was 15% in the other high regulation jurisdiction and 19% in the low regulation jurisdiction. Regulations status was associated with mean time to gun recovery: 12.2 and 13.8 years in the high regulation jurisdiction, as compared to 8.5 years in the low regulation jurisdiction.

In Table 4 we present the results of the tracking interviews of first legal purchasers where that person was not the offender. Of those we contacted, 41% indicated the gun had been stolen; 8% sold the gun to the offender; and 7% sold to someone else. Very few reported selling the gun at a gun show. These data, to the extent we can believe them, suggest a very diverse secondary market for the guns that are used in violent crimes.

Finally, in Figure 1 we summarize the responses of incarcerated offenders in the two jurisdictions (Louisiana and Maryland). In both jurisdictions, subjects reported that primary way that they would get a weapon was by stealing, buying, other means (trading, borrowing or renting) “on the street”. These accounted for over 60% of responses in both jurisdictions, although in Louisiana there were more stealing responses than in Maryland. Very few reported using buying from gun shows or other legal sources. They overwhelmingly indicated that the currently unregulated street market is their source of guns used in crimes.

Implications

Throughout this project we met with Firearms Committee of the IACP to brief them on our progress. At almost every meeting we were asked, what are the implications of our findings for controlling access to guns by those who use them to commit violent crimes? As we do now, we observed that because this research was descriptive and because data on guns is always subject to substantial errors, we did not expect to be able to offer strategic or tactical recommendations. While we still think this research as primarily descriptive and exploratory, there are some findings that merit consideration by those considering ways to reduce gun violence. These include directions that are external to the criminal justice system, and ideas for law enforcement (these are discussed in detail in Wellford, Collins and Acosta, 2016).

As all working in the area of gun violence have observed there is a need to improve tracing of recovered guns. Our observation is that law enforcement is increasing understanding the value of trace data. However, use of this data is hampered by the low rate of gun recovery and the high rate of unsuccessful traces. In large part this results from limitations that have been placed on the ATF. We are not in a position to prescribe how this can be corrected but it is clear that improvements in the information law enforcement needs to address gun violence must be
improved is ways that are consistent with the Second Amendment as interpreted by the Supreme Court. In addition, law enforcement needs the tools to track guns used in crimes beyond the first legal purchase. While some states have mandated these transfers be processed by licensed firearms dealers and/or that owners be required to keep records of the transfers, the best research (Braga and Herrau, 2014) find that in one state this does not occur and there is little enforcement of these laws. Again, our research does not suggest ways to address this issue, but it does indicate that this the part of the unregulated market that needs attention.

In recent years, law enforcement has had success in reducing crime through targeted enforcement. This same approach could be applied to gun markets. We suggest that law enforcement could better understand the nature of their illegal gun markets if they had better trace data, and used additional data similar to what we have used in this research (tracking and surveys) to target their efforts. This combined with data on secondary transfers that would accompany the improved regulations regarding record keeping on those transfers, would provide law enforcement with a better understanding of the markets they need to control to reduce gun availability to those who use those guns in violent crimes. Once markets are better understood, law enforcement will be in a position to use programs of proven effectiveness and, with their research partners, to mount controlled research to test new approaches to disrupting illegal gun markets.

While one can debate the extent of this impact there is no doubt in our reading of the literature that there has been an impact. Also, we realize that this impact may have come with some impact on trust of police in the very communities where crime has decreased the most.