

Original Article

# More guns ... more or less crime? An Australian perspective on an international question

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**Abstract** This article reports on preliminary investigation of relationships between levels of legal firearms ownership and violent firearm-related crime in New South Wales, Australia. No evidence was found to suggest that increasing numbers of legally owned firearms are associated with increasing levels of crime; rather, modest negative associations were found between levels of legal gun ownership and violent firearm crime. The results suggest that reducing levels of legal gun ownership is not necessarily a prerequisite for reducing levels of violent crime, and that reductions in firearm crime can occur in the context of increasing levels of legal ownership.

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## Introduction

Potential relationships between legal firearms ownership and firearms misuse remain a contested issue within criminological and justice policy discourse. A majority of studies have been undertaken in the United States, and provide equivocal findings with substantial geographic and temporal variation. Whereas some have found positive relations between levels of firearms ownership and firearm misuse, others have found little or no evidence of a relationship, and still others have suggested an inverse relationship between firearms ownership and gun crime (for example, O'Carroll *et al*, 1991; Kleck and Patterson, 1993;

McDowall *et al*, 1995; Rosenfeld, 1995; Kwon *et al*, 1997; Ludwig and Cook, 2000; Rosenfeld *et al*, 2005).

These studies are of considerable interest, but it is unclear whether the findings can be generalised to other countries. Not only does the United States have constitutional provisions around firearms ownership which are not replicated elsewhere; its social and economic circumstances – and social history – are very different to that of other Western countries. As such, caution should be applied before extrapolating US-based observations about firearms and crime to other settings.

There are no current studies examining relationships between levels of legal firearms ownership and firearms misuse in Australia, a country that has successively increased the stringency of its gun laws over a period of decades. However, despite the lack of empirical evidence, Australian firearms legislative change has typically had at its foundation the premise that reducing the number of legally owned firearms in society will correlate meaningfully with increased public safety and reduced firearms misuse (National Committee on Violence, 1990).

Recently, though, this assumption has been called into question, with growing focus on reducing illicit firearms possession by persons known to be involved in criminal activity and assertions that it is illegal, rather than legal, firearms ownership that poses a risk to public safety (Standing Council on Police and Emergency Management, 2012). This assertion is supported by a considerable body of empirical evidence demonstrating that the majority of firearms used in homicides are not legally owned (for example, Mouzos, 2002; Mouzos, 2003; Mouzos and Segrave, 2004; Mouzos, 2005; Mouzos and Houliaris, 2006; Davies and Mouzos, 2007; Dearden and Jones, 2008). Adding to the currency of this debate, although Australia has extremely stringent restrictions on legal firearms ownership (see Baker and McPhedran, 2007 for an overview), the number of legally owned (or registered) firearms has been reported as steadily increasing over a period of years, which some have argued increases the likelihood of violent firearm crime (Shoebridge, 2012).

It is therefore timely to begin filling knowledge gaps about potential relationships between legal firearms ownership and firearms misuse in Australia, in order to improve the evidence base on which policing and justice policy decisions are made. This article provides preliminary analysis of whether the number of legally owned firearms correlates positively with various forms of firearm crime in the state of New South Wales. New South Wales was chosen for study in part due to the disproportionate amount of firearm crime it experiences, as a proportion of national firearm crime. In addition, unlike many other jurisdictions, time series information about the number of registered firearms, as well as time series data on firearm theft (a possible source of illegal firearms) and violent gun crime, is available for New South Wales.

**Table 1:** Number of registered firearms, firearms stolen and firearm-related crimes

<i>Year</i>	<i>Registered firearms</i>	<i>Murder with a firearm</i>	<i>Shoot with intent to murder</i>	<i>Robbery with a firearm</i>	<i>Firearms stolen</i>
2001	619 643	28	47	1006	851
2002	641 468	32	33	804	799
2003	653 834	26	28	772	718
2004	647 138	17	23	656	514
2005	649 467	22	22	480	531
2006	658 808	20	29	52	449
2007	672 957	11	16	539	560
2008	691 724	11	24	378	472
2009	730 420	20	15	464	550
2010	748 216	17	11	411	569

## Methods

Calendar year data about the number of registered firearms in New South Wales from 2001 to 2010, as well as the numbers of firearms stolen, and the number of murder and shoot with intent to murder incidents, were obtained from the New South Wales Parliament. Publicly available robbery with a firearm data, for each calendar year from 2001 to 2010, were obtained from the New South Wales Bureau of Crime Statistics and Research (2012).

Given the small and simple nature of the data set, relationships between the number of registered firearms and other variables of interest were calculated using Pearson's product-moment correlation coefficient.

## Results

Table 1 shows the number of registered firearms, as well as firearms theft and firearms crime figures.

There was a significant negative correlation between the number of registered firearms and shoot with intent to murder offences ( $r = -0.81$ ,  $P < 0.01$ ). There were negative, but not statistically significant, correlations between the number of registered firearms and murder with a firearm ( $r = -0.51$ ,  $P = 0.14$ ), the number of registered firearms and robbery with a firearm ( $r = -0.50$ ,  $P = 0.14$ ), and the number of registered firearms and firearm theft ( $r = -0.46$ ,  $P = 0.18$ ).

## Discussion

Although the current findings do not allow any inferences of causality (indeed, this should be explicitly avoided, given the preliminary nature of the investigation and simple data set used), they suggest that there is little, if any, relationship between the number of legally owned firearms and firearms misuse in

New South Wales, Australia. Rather, the data indicate that falling firearms misuse has occurred in the context of rises in the number of legally owned firearms. This does not support the view that increases in legal private ownership are associated with increases in violent crime in an Australian jurisdiction that experiences a disproportionate amount of firearm crime relative to other jurisdictions.

Placing these findings in a broader, international context, the results appear consistent with Makarios and Pratt's (2012) comprehensive analysis of policies and programmes that are effective in reducing firearm crime. That work conducted a meta-analysis of 47 studies evaluating policies and programmes around gun violence, and concluded that community-based interventions that focus on holding gun violence offenders responsible for their actions, as well as supporting and empowering communities at elevated risk of violence, were the most promising approaches to reducing firearms violence. In contrast, legislation aimed at reducing levels of legal access to firearms was not found to be particularly effective in lowering crime (Makarios and Pratt, 2012).

In terms of policy implications, this study suggests that law enforcement interventions to reduce levels of illegal firearms ownership, rather than levels of legal ownership, may be the most appropriate and effective focus for violence-reduction strategies. In addition, the role of community-based, specifically targeted crime prevention strategies should be carefully explored. It should be noted, also, that in terms of firearm theft, which represents one among a range of documented sources of firearms used in violent crime in Australia (Bricknell, 2012), there was no evidence that rising levels of legally owned firearms are linked with increasing levels of theft. Indeed, the opposite was observed, with declines in theft occurring over a period of years. This may indicate that current firearms 'safe storage' requirements mandated by law, coupled with ongoing secure storage awareness programmes run by firearm users' associations and industry partners, have impacted on the incidence of firearms theft in New South Wales.

This does, however, beg the question of where firearms being used in crime are obtained. Initial analysis of 3186 firearms seized by Australian law enforcement agencies suggests that the majority of firearms seized were prohibited firearms that had not been handed in to authorities during the 1996 firearms 'buyback' scheme (a government-funded confiscation programme of certain firearms that became prohibited in 1996) or were of unknown origin (unable to be traced due to lack of information), accounting for 44 per cent and 33.5 per cent of firearms, respectively (Clare, 2012). It should be noted that the exact circumstances under which those analysed firearms were seized was not stipulated, hence strong inferences cannot be drawn about use in crime or use in different 'types' of crime.

Recently, there has been a spate of 'drive-by' shootings in selected parts of New South Wales (specifically, these are concentrated in areas around Sydney).

Aside from garnering intense media coverage, these shootings have prompted intensive police action aimed at apprehending the offenders. While data are not currently publicly available about firearms recovered against these crimes, preliminary indicators suggest that many of the firearms being used were illegally imported handguns (Scipione, 2012), but detailed information has not been released at the time of writing. It will represent an important addition to knowledge to understand where and how these firearms used in crime were obtained.

This study contains a selection of unavoidable limitations. First, the small number of firearm-related murders and shoot with intent to murder offences mean that the results should be viewed with appropriate interpretive caution. Second, the study examined an increase in firearm numbers by 21 per cent, over 10 years. It is possible that different results would be obtained had the percentage increase been larger (for example, 50 or 100 per cent). While this possibility could not be assessed in the current context, data from other jurisdictions (which may also have experienced increases in levels of legal firearms ownership) may be able to shed light on this issue – if those data were made available. Third, time series data about the number of registered firearms by geographic region (for example, urban versus rural) were not publicly available; this limits the ability to conduct detailed spatial analysis of relationships between numbers of firearms and firearms misuse. Fourth, and importantly, the study did not examine impacts or otherwise of any epochs of firearms legislative change and/or policing practices on criminal activity with firearms in New South Wales, or the influence of socioeconomic factors on firearm crime trends. This direction will be explored in future work.

In summary, this is the first Australian study that empirically examines levels of legal firearms ownership in relation to levels of firearm crime. Australia is a country that has for the past two decades focussed its firearms policies around the principles of reducing and restricting legal ownership. These results suggest that reducing levels of legal gun ownership is not necessarily a prerequisite for reducing levels of violent crime and that reductions in firearm crime can occur in the context of increasing levels of legal ownership. Although the current data should be viewed with caution, they nonetheless suggest the long-standing assumption that reducing the number of legally owned firearms is required in order to increase public safety in developed nations needs careful reconsideration.

## References

- Baker, J. and McPhedran, S. (2007) Gun laws and sudden death: Did the Australian firearms legislation of 1996 make a difference? *British Journal of Criminology* 47(3): 455–469.

- Bricknell, S. (2012) *Firearm Trafficking and Serious and Organised Crime Gangs*. Canberra, Australia: Australian Institute of Criminology.
- Clare, J. (2012) Final report of the national investigation into the illegal firearms market. Minister for Home Affairs Press Release 29 June, <http://www.ministerhomeaffairs.gov.au/MediaReleases/Pages/2012/Second%20Quarter/29-June-2012---Final-report-of-the-national-investigation-into-the-illegal-firearms-market.aspx>.
- Davies, M. and Mouzos, J. (2007) *Homicide in Australia: 2005–06 National Homicide Monitoring Program Annual Report*. Canberra, Australia: Australian Institute of Criminology, <http://www.aic.gov.au/publications/current%20series/rpp/61-80/rpp77.aspx>.
- Dearden, J. and Jones, W. (2008) *Homicide in Australia: 2006–07 National Homicide Monitoring Program Annual Report*. Canberra, Australia: Australian Institute of Criminology, <http://www.aic.gov.au/publications/current%20series/mr/1-20/01.aspx>.
- Kleck, G. and Patterson, E.B. (1993) The impact of gun control rates and gun ownership levels on violence. *Journal of Quantitative Criminology* 9(3): 249–287.
- Kwon, I.G., Scott, B., Safranski, S.R. and Bae, M. (1997) The effectiveness of gun control laws: A multivariate statistical analysis. *The American Journal of Economics and Sociology* 56(1): 41–50.
- Ludwig, J. and Cook, P.J. (2000) Homicide and suicide rates associated with the implementation of the Brady Handgun Violence Prevention Act. *Journal of the American Medical Association* 284(5): 585–591.
- Makarios, M.D. and Pratt, T.C. (2012) The effectiveness of policies and programs that attempt to reduce firearm violence: A meta-analysis. *Crime and Delinquency* 58(2): 222–244.
- McDowall, D., Loftin, C. and Wiersema, B. (1995) Easing concealed firearms laws: Effects on homicides in three states. *Journal of Criminal Law and Criminology* 86(1): 193–206.
- Mouzos, J. (2002) *Homicide in Australia: 2000–2001 National Homicide Monitoring Program (NHMP) Annual Report*. Canberra, Australia: Australian Institute of Criminology.
- Mouzos, J. (2003) *Homicide in Australia: 2001–2002 National Homicide Monitoring Program (NHMP) Annual Report*. Canberra, Australia: Australian Institute of Criminology.
- Mouzos, J. (2005) *Homicide in Australia: 2003–2004 National Homicide Monitoring Program (NHMP) Annual Report*. Canberra, Australia: Australian Institute of Criminology.
- Mouzos, J. and Houliaris, T. (2006) *Homicide in Australia: 2004–2005 National Homicide Monitoring Program (NHMP) Annual Report*. Canberra, Australia: Australian Institute of Criminology, <http://www.aic.gov.au/publications/current%20series/rpp/61-80/rpp72.aspx>.
- Mouzos, J. and Segrave, M. (2004) *Homicide in Australia: 2002–2003 National Homicide Monitoring Program (NHMP) Annual Report*. Canberra, Australia: Australian Institute of Criminology.
- National Committee on Violence. (1990) *Violence: Directions for Australia*. Canberra, Australia: Australian Institute of Criminology.
- New South Wales Bureau of Crime Statistics and Research. (2012) Online crime trends query, <http://bocd.lawlink.nsw.gov.au/bocd/cmd/crimetrends/Init>, accessed 10 July 2012.
- O’Carroll, P.W. *et al* (1991) Preventing homicide: An evaluation of the efficacy of a Detroit gun ordinance. *American Journal of Public Health* 81(5): 576–581.
- Rosenfeld, R. (1995) Gun buy-backs: Crime control or community mobilization? In: M.R. Plotkin (ed.) *Under Fire: Gun Buy-Backs, Exchanges, and Amnesty Programs*. Washington DC: Police Executive Research Forum.

- Rosenfeld, R., Fornango, R. and Baumer, E. (2005) Did ceasefire, compstat, and exile reduce homicide? *Criminology & Public Policy* 4(3): 419–449.
- Scipione, A. (2012) *Media Conference to Discuss Crime in Sydney, 31 August 2012*. Sydney, NSW, Australia: New South Wales Police Force.
- Shoebridge, D. (2012) Private arsenals of up to 329 guns – And no action from O’Farrell. Greens New South Wales Media Release, 2 June.
- Standing Council on Police and Emergency Management. (2012) Communique – 29 June, <http://www.attorneygeneral.gov.au/Media-releases/Pages/2012/Second%20Quarter/29-June-2012---Communique---Standing-Council-on-Police-and-Emergency-Management.aspx>, accessed 15 July 2012.