

Weapon Amnesties

Toolkit technical report

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Weapon amnesties: YEF Technical Report

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Plain language summary

The objective of this technical report is to review the evidence on the effect of weapon amnesties on children and young people's involvement in crime and violence.

The core aspect of weapon amnesties is to encourage individuals to surrender weapons. In the UK this type of intervention is typically called a knife amnesty. Weapon amnesties typically involve placing a 'bin' or a collection box at a particular location, where weapons such as knives or guns can be surrendered. Weapon amnesties can also include compensation or 'buyback schemes', that offer payments for weapons handed in.

An individual may surrender a weapon, but without addressing the reasons for carrying that weapon (e.g., protection, fear, malicious intent), and the individual could procure another weapon and take part in violence. Furthermore, research is limited on why individuals may surrender a weapon or take part in weapon amnesties, therefore, our understanding about the theory of change involved in weapon amnesties is very limited.

The evidence on the effectiveness of weapon amnesties is very limited, but there are a number of primary evaluations. There is currently no systematic review or meta-analysis on the impact of weapon amnesties. Most of these have been conducted in the US, and the transferability of the findings to a UK context may be questionable. The availability of firearms in the US and the cultural relationship with firearms are significantly different to the UK context.

In evaluations of knife amnesties in England and Scotland, there were initial declines in the number of offences but the effects of the intervention were not sustained. For example, in London an evaluation found initial declines in police recorded knife-related offences five weeks following the intervention, but the rate returned to pre-amnesty levels after eight weeks.

Possible barriers to successful implementation of weapon amnesties may include: not choosing the right geographical location for the intervention; not choosing the right location for the collection bin; or not targeting the right weapons.

In summary, weapon amnesties, particularly knife amnesties, are often implemented by police forces in the UK, but police data shows that these are of limited effectiveness. Further research and evaluation studies, especially those using mixed methods designs, are needed to better understand when, where and how weapon amnesties may be effective.

Objective and approach

The objective of this technical report is to review the evidence on the effect of weapon amnesties on children and young people's involvement in crime and violence.

There is currently no systematic review or meta-analysis on the impact of weapon amnesties. Thus, the current technical report does not include a headline impact estimate or an evidence rating. The evidence on the effectiveness of weapon amnesties is very limited, but there are a number of primary evaluations. Most of these have been conducted in the US, and so the transferability of the findings to a UK context may be questionable, particularly due to the very different legislative landscapes and availability/use of certain weapons (e.g., firearms).

Inclusion criteria

Reviews considered for inclusion were high-quality systematic reviews and meta-analyses that examined the effectiveness of weapon amnesties, with a particular focus on knife amnesties, on children and young people's involvement in crime and violence. Whilst we focus mostly on knife amnesties in the current report, the approach is labelled as weapon amnesties as weapons other than knives may be surrendered.

No relevant systematic reviews or meta-analyses were identified, and so, the current technical report draws on recent evidence briefings and summaries relating to violent offending and weapon amnesties (i.e., Eades, et al., 2007; McNeil & Wheeler, 2019; Sethi et al., 2010; Wieshmann et al., 2021).

Eades et al. (2007) published a report on the evidence and policy landscape surrounding knife crime in England and Wales. The report also includes evidence from Scotland. Legislative issues, definitional issues, and an outline of the impact of knife crime is provided alongside some discussion on weapon amnesties in order to prevent knife crime is reported. McNeill and Wheller (2019) conducted an evidence briefing on knife crime for the College of Policing, and we also use this report to inform the current technical report. Similar to other publications on this topic, this report provides an overview of the causes and risk factors for knife crime. Interventions to reduce knife crime are presented and reviewed, including evidence on knife amnesties.

Sethi et al. (2010) edited a report for the World Health Organisation (WHO) on preventing violence and knife crime among young people in Europe. The report provides a detailed overview of the prevalence of violence amongst children and young people in Europe and outlines possible effective interventions and prevention programmes, in a way not too dissimilar from the YEF Toolkit.

Wieshmann et al. (2021) provide a detailed overview of violence in London, concentrating on the reasons why violence occurs and presenting some approaches to prevent and/or reduce violence, of which interventions to prevent knife carrying are one strand. Little information is provided about knife amnesties, but the report highlights the need for rigorous evaluation of existing weapon amnesty campaigns.

Exclusion criteria

Reviews that focussed only on gun crime and gun amnesties (e.g., Koper & Mayo-Wilson, 2006; Phalen et al., 2020), legislation to prevent gun crimes (e.g., McPhedran, 2016), or were too broad and did not report subgroup analyses related to knives or young people (e.g., Hinkle et al., 2020) were excluded. Reviews or studies on weapon amnesties that may be implemented in a region following armed conflict (e.g., WHO, 2009) were also excluded.

Outcomes

The outcomes of interest in a review of weapon amnesties are diverse and varied but related to the involvement of children and young people's involvement in crime and violence. A future review of weapon amnesties could examine the impact of the intervention and perform subgroup analysis to compare the impact on weapon ownership, and violence using guns, knives, and other weapons. Moreover, the impact on levels of neighbourhood crime could be assessed if there were sufficient evaluations with subgroup analyses which allowed for the crimes committed by children and young people to be separated from the crimes committed by adults.

Description of interventions

The core aspect of weapon amnesties is to make it possible for individuals to surrender weapons without consequence. In the UK this type of intervention is typically called a knife amnesty (Sethi et al., 2010). Weapon amnesties typically involve placing a 'bin' or a collection box at a particular location, where weapons such as knives or guns can be surrendered (McNeill & Wheller, 2019).

The intervention targets weapons that may be used to inflict injury or harm in a violent act, but do not address the reasons why such violence occurs. As Eades et al. (2007, p. 27) state, "knife amnesties address but one tool of expression of interpersonal violence and do nothing to address the underlying causes of such violence". An individual may surrender a weapon, but without addressing the reasons for carrying that weapon (e.g., protection, fear, malicious intent), the individual may procure another weapon and proceed to take part in violence. However, not all knives are equally attractive for use in violence. A weapon is not needed to commit violence, but it would make the commission of violence more harmful/lethal.

A weapon amnesty may be implemented alongside a media campaign (e.g., #knifefree campaign; Wieshmann et al., 2021) or other prevention strategies such as improved safety measures in places where alcohol is consumed or improved communication with businesses that sell knives (Sethi et al., 2010). McNeill and Wheller (2019) refer to schemes in the UK such as Bin a Blade or Word 4 Weapons that implemented a knife amnesty and also aimed to increase awareness of the dangers of carrying a knife.

Theory of change/presumed causal mechanisms

There is limited evidence-based research on a possible theory of change or presumed casual mechanism in weapon amnesties. The College of Policing problem solving guide (2021) outlines that in relation to knife bins, these may work to reduce knife crime by: (1) reducing the number of knives in circulation; and (2) reducing the perceived need to carry a knife. Weapon amnesties may not be designed to affect long-term change, but instead offer an opportunity to remove dangerous weapons from circulation to reduce opportunity for use in violence¹.

Wieshmann et al. (2021) outlines that there are several 'drivers' that may explain why an individual may choose to carry a weapon. This was specifically focused on why young people carried knives in

¹ We are grateful to Iain R Brennan for these insightful thoughts and additions to our understanding of the theory of change.

London. These drivers include self-defence, victim coercion, causing harm against others, and selfpresentation (Wieshmann et al., 2021: 56). Therefore, an intervention such as a weapon amnesty, that specifically targets the act of carrying a weapon, may be effective in reducing the violence committed using said weapon. However, the presumed causal mechanism in weapon amnesties does not address the "underlying causes of the problem" (Eades et al., 2007: 28). As such, without additional intervention components that address the reasons why an individual may want to use a weapon and cause harm or injury, weapon amnesties may have little long-term impact.

In addition, McNeill & Wheller (2019) outline that there is no research on why individuals may surrender a weapon and take part in a weapon amnesty, therefore, our understanding about the theory of change involved in weapon amnesties is very limited.

Wieshmann et al. (2021) also raise an important issue of a possible undesirable intervention effect. By implementing an intervention such as a weapon amnesty may lead to increased public panic or fear about the prevalence of weapons and thereby unconsciously increase the numbers of weapons, assuming that individuals feel the need to carry a weapon for self-defence (College of Policing, 2021). This is particularly a concern if a weapon amnesty intervention is accompanied with a media campaign (e.g., #knifefree and London Needs You; Wieshmann et al., 2021). Other possible undesirable impacts may be that a knife bin could "provide cover" for individuals found to be carrying knives by the police (College of Policing, 2021). In such circumstances, the individual may use the explanation that they were bringing the weapon to the knife bin to justify possession. Furthermore, there is a risk of theft or attempted theft and so having a knife bin could also be a cause for concern about public safety (College of Policing, 2021).

Evidence base

Descriptive overview

There is no systematic review or meta-analysis on the effectiveness of weapon amnesties, therefore we must interpret the results of primary research cautiously. There are no high-quality evaluations of knife, or weapon, amnesties in the UK. The existing evidence from the UK literature is that there is weapon amnesties are not effective in reducing violence. There may be a significant number of weapons surrendered and initial declines in violence, but the effects are not sustained. However, we need a rigorous evaluation to better understand the effectiveness of weapon amnesties.

Sethi et al. (2010) outline that in evaluations of knife amnesties in London and Glasgow the observed desirable effects of the intervention were not sustained. In London, the evaluation found initial declines in knife-related offences five weeks following the intervention, but the rate had returned to pre-amnesty levels after eight weeks (Eades et al., 2007; Metropolitan Police, 2006; Sethi et al., 2010). Similarly, in Glasgow, the number of individuals presenting to emergency departments with serious stab wounds declined up to 10-months post intervention but returned to pre-intervention levels after one year (Sethi et al., 2010).

Assessment of the evidence rating

As there was no systematic review or meta-analysis on the effectiveness of weapon amnesties, we could not conduct an assessment of the evidence rating.

Impact

Summary impact measure

There is currently no meta-analysis on the effectiveness of weapon amnesties, and as such, no mean effect size for the impact on the involvement of children and young people in crime and violence. Therefore, the current technical report cannot provide a headline impact estimate.

Implementation and cost analysis

There is currently no evidence on the implementation or cost of weapon amnesties. One could estimate that weapon amnesties would be low cost, due to the simplicity of the intervention (e.g., a weapons bin in a supermarket recycling centre) and lack of personnel required. However, if the intervention is not effective or sustained weapon amnesties may not be very cost-effective.

Possible barriers to successful implementation of weapon amnesties may include: not choosing the right geographical location for the intervention; not choosing the right location for the collection bin (for example a location without CCTV); or not targeting the right weapons. For example, a weapon amnesty needs to be implemented in an area where there is a problem with weapon-related offences or the intervention may not be effective. As Wieshmann et al. (2021) highlight in relation to violence in London, a highly-localised approach is essential to understanding and responding to violence. Similarly, if a collection bin is placed in the reception area of a police station, immediately next to a monitored reception desk, this may not encourage individuals to come forth and surrender a weapon due to fears they will be identified or possibly reprimanded for another offence. Finally, a weapon

amnesty needs to target the right weapon. There are many examples of gun amnesties in the USA, but a gun amnesty may not be as effective in the UK where guns are not as readily accessible.

Findings from the UK

Evaluations of knife amnesties have taken place in several boroughs in London (e.g., Croydon, Southwark, and Hillingdon) and also in Strathclyde, Glasgow (see Eades et al., 2007 for overview). Generally, evaluations report a substantial number of weapons being surrendered however, as the following paragraphs outline the benefit of removing these weapons from circulation are not sustained in the long-term. During the national amnesty for five weeks starting in May 2006 89,864 knives were surrendered. As Eades et al. (2007, p. 27) point out, if every household has just one kitchen knife this is just 0.0041 percent of the knives available for crime. Yet, a kitchen knife may not be a desirable or direct replacement for a knife surrendered in a weapon amnesty and evaluations may not categorise the type of weapons/knives collected.

Bleetman et al. (1997) conducted an evaluation of 'Operation Blade' in Strathclyde, Glasgow. This intervention was implemented in response to a rise in the numbers of individuals who were presenting to emergency departments with injuries sustained from an assault, particularly injuries from knives or 'stab wounds'. The intervention targeted young people and specifically, young people's intention to carry knives (Bleetman et al., 1997). Operation Blade began in 1993 and alongside a knife amnesty, also included "an intensified stop and search campaign", additional safety measures in nightclubs and bars (e.g., closing a 2am instead of 3am; CCTV cameras, improved street lighting, training of stewards, and metal detectors), and talks with retailers who sell knives and secondary school students (Bleetman et al., 1997; p. 153). The evaluation compared the number of victims of assaults by examining records from the emergency department at Glasgow Royal Infirmary hospital. Data for the pre-intervention timepoint was collected in January 1993 and for the post-intervention, data from January 1994 was examined. Bleetman et al. (1997) found that there was a decrease in the number of patients in emergency departments for assault related injuries during the months that Operation Blade was implemented, but the impact was not sustained at the post-intervention timepoint. Specifically, in January 1993 there were 282 victims of assault who attended the emergency department, but in January 1994 there were 290.

What do we need to know? What don't we know?

Weapon amnesties, particularly knife amnesties, are often implemented by police forces in the UK, but police data shows that these are of limited effectiveness (McNeill & Wheller, 2019; Metropolitan Police, 2006). Further research and evaluation studies, especially those using mixed methods designs, are needed to better understand how weapon amnesties may be effective. For example, we need to understand the motivations for surrendering a weapon in a weapon amnesty and what other additional intervention components are needed to prevent knife crime.

There have been a number of evaluations of weapon amnesties but there is currently no systematic review and meta-analysis of the effectiveness of these interventions. The majority of evaluations on weapon amnesties have been conducted in the USA, thus, the findings of such a review may not be readily transferable to the UK context.

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