Chapter 9
Using Public Health Approach Interventions to Reduce Violent Crime: A Focus on Domestic Abuse

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What Is the Public Health Approach to Reducing Violence?

Like traditional models of policing, the public health approach (PHA) is a product of police experiences of neighbourhood policing and problem-solving (College of Policing, 2017). The PHA differs from traditional models of policing in how it engages with the generative mechanisms of crime (Joyce & Schweig, 2014). Traditional models of policing centre around the enforcement of laws in relation to the actions of individuals; if an individual commits a crime, the police *react* (HM Government, 2018). In contrast, the PHA centres around preventative activities which address the causes of crime through working with partner groups and organizations who prioritize engagement, or 'interventions', with vulnerable groups (Stan, 2018). Hence, the rationale behind the PHA is that, through understanding societal problems at a population level, appropriate preventative interventions can be made and crime rates can be reduced (Faculty of Public Health, 2016).

As the PHA focuses on problems at the population level, it relies on working with partner groups and organizations who have access to a diverse range of skills which, when taken together, can effect change (Van Dijk et al., 2019). As such, central to the success of the PHA is influencing key partners to use their resources in a way that improves the well-being of the community. The ascendency of the PHA could not be timelier, with over 80% of calls to the UK police being about issues of vulnerability and social need (College of Policing, 2015). This feeds into the definition of public health, which goes far beyond just medical need. The UK Faculty of Public Health states that the definition of public health is 'the art and

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science of preventing disease, prolonging life and promoting health through the organized efforts of society' (Acheson, 1988).

Applying the PHA to Reduce Violent Crime: The SVRU and the Cardiff Model

Since the 1990s, evidence has emerged which supports the claim that a PHA which is comprehensively applied and embedded can reduce violent crime rates. In the context of the UK, two case studies which provide convincing evidence in support of this assertion are Scottish Violence Reduction Unit (SVRU) and the application of the Cardiff Model (Sivarajasingam et al., 2018). Following the central tenet of the PHA, the SVRU has worked with teachers, doctors, nurses and police officers to reverse Glasgow's status as one of the most violent cities in the developed world. At the turn of the twenty-first century, Glasgow had the highest murder rate in Europe, and Scotland's homicide rate for males aged 10–29 stood at 5.3 per 100,000 in 2002 (Hassan, 2020). Combined with the fact that the World Health Organization (WHO) declared violence a public health issue in 2002, there were several catalysts to inspire a new way in Scotland.

The first years of the SVRU focused primarily on Glasgow and made the culture around knife crime the priority (Scottish Violence Reduction Unit, 2017). The approach went on to have a substantial impact, including finger-printing knife carriers and a greater focus on DNA processes. Following this, the unit launched the campaign 'Safer Scotland', which focused on knife culture and crime. The campaign promoted a knife amnesty and gave knife carriers the chance to come forwards and dispose of their knives without fear of prosecution. As a result of this, 12,645 knives and other weapons were disposed of in Scotland over the first 5 weeks of the campaign (Hassan, 2020). From 2005 onward, the SVRU successfully applied the PHA by following four key steps. These steps were (1) define the problem through the systematic collection of data, (2) establish which factors could be changed through intervention, (3) implement and evaluate interventions and (4) apply effective interventions more broadly to have as wide an impact as possible (Scottish Violence Reduction Unit, 2017; Hassan, 2020).

One of the primary problems that needed to be tackled was Glasgow's reputation for gangs and the violence and territorial conflict associated with them. The comprehensive data gathering that the SVRU undertook allowed the unit to understand the key assumptions which gangs relied on. The first stage of this was the mapping and analyses of gangs in Greater Easterhouse, North-East Glasgow. This involved identifying 55 known gangs with around 1500 members. The SVRU summarized that these gangs comprised almost uniformly of young men who enacted and encouraged problematic behaviours in order to 'gain' respect locally, conquer territory and feed their urges for power (Scottish Government, 2017).

The SVRU took inspiration from the Cincinnati Initiative to Reduce Violence (CIRV) which aimed to unite church leaders, community voices and the law-and-order community with the purpose of challenging gangs that operated in the community (Engel et al., 2013). A crucial part of this process was the 'call in', in which gang members were confronted by members of the community and told how problematic their behaviours were. In Scotland, this became known as the 'self-referral session', and on a single day in October 2008 at Glasgow Sheriff Court, 85 gang members attended the first event (Tillyer et al., 2012). This was the first of the ten 'self-referral sessions' held over the next 2 years. In total, over 600 men and women attended these sessions, and analysis conducted by St. Andrews University showed that, in the groups who engaged with the CIRV, encouraging results were yielded. This included a 46% reduction in violent crime, an 85% reduction in weapons being carried, knife carrying being reduced by 58% and gang fighting being reduced by 73%. Furthermore, in the CIRV area, hospital admissions for serious violence reduced by 17%, and admissions for knife crime reduced by 34% (Williams et al., 2014).

The SVRU's impact has been felt broadly across Scotland. Analysis of the Scottish homicide database indicates that all four homicide types (indoor stabbing, indoor no weapon, gang rivalry and domestic femicide) decreased in absolute terms between 2012 and 2015. As such, the SVRU has played a crucial role in reducing the rate of homicides, which have fallen by 56% since 2004/2005 (Skott & McVie, 2019). As with fatal violence types, there has also been an absolute reduction in all four types of non-fatal violence (Public Weapon, Public No Weapon, Domestic, and Work Related) between 2008/2009 and 2014/2015 (Scottish Government, 2017). The SVRU's 'No Knives Better Lives Campaign' and similar campaigns aimed at how young men behave in public space have had a significant impact (No Knives Better Lives, 2018). Over the first 10 years since the SVRU's creation in 2005, hospital admissions from injury with a sharp object fell by 62% (MacLeod et al., 2020). There has also been a 64% reduction in handling offensive weapons across Scotland. In 2017/2018, there were an estimated 172,000 violent crimes experienced by adults in Scotland, which is a 46% decrease on 2008/2009 levels (Hassan, 2020).

The Cardiff Model (CM) of violence prevention is a well-established instantiation of the PHA and involves data from hospitals being shared with the police and local authorities (Joyce & Schweig, 2014). Receptionists at emergency departments who follow the CM record the location and weapon used from people injured in violence. Since the implementation of the CM in 1997, there has been a reduction in hospital admissions for violence along with a reduction in the number of violent incidents recorded by the police (Kollar et al., 2019). Starting in the late 1990s, reception staff at an A and E in Cardiff started collecting additional information from assault patients. Such information included assault location, the weapon used and the time of the assault. When the data was anonymized, it was shared with a crime analyst from a local multi-agency violence prevention group (Florence et al., 2011). The crime analyst combined A and E data with that from the police, with the result being the creation of summaries of the weapons used and the identification of

violence hotspots. The intelligence that was produced from this enabled the partnership to apply several violent crime reduction strategies (Boyle et al., 2012).

For example, the data informed changes to police patrols, the relocation of police resources to the most high-risk times and putting more police resources into nightlife venues which were hotspots for violence (Droste et al., 2014). Further interventions included the pedestrianization of entertainment areas, mandatory use of plastic glassware in nightlife venues and changes to late-night public transport services (Warburton & Shepherd, 2004). The implementation of these strategies was associated with significant reduction in levels of hospital admissions due to violence over the following 4 years. Evaluations of the Cardiff Model have demonstrated a 36% reduction in hospital admissions related to violence in Merseyside and a 42% decrease in violence-related hospital admissions in Cardiff. Furthermore, for every $1 spent on the CM, almost $15 in the health system and $19 in the criminal justice system are saved (Florence et al., 2014).

Boyle et al. (2012) aimed to validate the CM by reducing the number of assault victims attending an emergency department in Cambridge, which sees around 95,000 patients come through it per annum. In 2005, Boyle et al. (2012) initiated data sharing with the research team at County Council. The research team instructed their receptionists to collect the three data items that the CM requires, which are a description of the location of the assault, the date and time of the assault and the weapon which was used. The result was a 20% reduction in the number of assault patients requiring emergency department care and a 35% reduction in the violent crimes with injury reported by police. By implementing the CM, violence victims admitted to Cardiff emergency departments halved between 2002 and 2013, and there was a 39% reduction in violence inside licensed premises. In total, £5 million is saved per year on Cardiff's health, social and criminal justice costs.

In practical terms, the sharing of data in the way which the CM supports can lead to important and effective operational adjustments (Sivarajasingam et al., 2018). For example, in Cardiff, police can patrol hotspot routes and use closed-circuit television systems in the most violence-prone areas. Furthermore, buses can make more frequent late-night stops in order to avoid overcrowding and in turn violence and rowdiness (Kollar et al., 2019). The CM has inspired the setting up of the East Palo Alto's Police Department's Fitness Improvement Training (FIT). FIT Zones implement health-related programs in public spaces which have been overrun by gang members. The rationale is that, by increasing outdoor physical activities in public spaces, such as power walking and Zumba dancing, residents will increase their presence in public spaces and regain ownership of their neighbourhoods. Since activities surrounding FIT have begun, shootings in the two FIT Zones are down 60% and 43%, respectively, compared with a decrease of 30% in other areas of the city that have not used the FIT Zones (Joyce & Schweig, 2014).

Since the PHA started to guide and drive policing in the UK, there has been significant reductions in violent crime. The National Violence Surveillance Network (NVSN) provides consistent information on violence recorded in emergency department, minor injury units and walk-in centres. According to NVSN data, violence in England and Wales has fallen substantially since 2010. In 2016, 188,803

violence-related hospital attendances were recorded, a reduction of 39% when compared to 2010 levels. Other long-term trends have been similar. For example, according to the NVSN, 122,286 fewer people attended emergency departments in England and Wales in 2017 compared with 2010 (Sivarajasingam et al., 2018).

Domestic Abuse Interventions in Healthcare Settings

Interventions into domestic abuse form an important branch of the PHA to reduce violence. Providing useful findings on domestic abuse (DA) interventions in healthcare settings, Bacchus et al. (2010) conducted a 2-year evaluation of an intervention in the maternity and sexual health department of a UK hospital. Specifically, this intervention entailed an introduction of domestic violence clinical guidelines and a one-day programme on DA training for healthcare professionals. This was done in the hope that the introduction of these procedures would increase staff's knowledge of DA and enable healthcare professionals to conduct routine enquiry for DA. A further aim was to be able to refer women who had disclosed abuse to an on-site domestic violence advocacy service (Torres-Vitolas et al., 2010).

Training revolved around a specialist domestic violence trainer delivering group exercises, role-play and explaining DVD footage of routine enquiries. Female staff members were also able to use the advocacy service, and male victims and perpetrators were offered information about this service. Pretraining questionnaires which were circulated to healthcare staff indicated that 55% of maternity staff and 92% of sexual health professionals had no prior training around domestic violence. Post-training, 82% of maternity and 95% of sexual health staff reported that their knowledge of domestic violence had improved a lot (Bacchus et al., 2010). Auditing of maternity records took place between March 2006 and January 2007 and indicated that the rate of routine enquiry for domestic violence increased threefold from 15% in the first year of training to 47% in the second year (Bacchus et al., 2010).

Patients were far more likely to be asked about DA if the healthcare professional dealing with them had attended the training. Maternity and sexual health interventions are best categorized as 'opportune' points of intervention, as findings from Bacchus et al.'s (2010) interviews suggest that women's usual coping strategies to DA are compromised during pregnancy. Reasons for this include being more physically vulnerable, less mobile and more dependent on their partner for physical and emotional support (Feder et al., 2009). Maternity and sexual health services were shown to be opportune points of intervention for abused women at different stages of readiness to seek and accept help. Furthermore, routine enquiry by health professionals was successful at detecting women experiencing more severe forms of abuse. In terms of practical results, 22 of the 34 women interviewed were living with their abuser when they were referred to the domestic violence advocacy service, compared with only three at the post-intervention interview (Bacchus et al., 2010).

As a result of the advocacy programme, most women left their abusers. However, some were continually abused by their ex-partners post-separation, suggesting an essential need for post-separation interventions to maintain women's safety. Additionally, the training did not achieve universal enquiry for domestic violence amongst those administering it, which is reified by findings from US studies (Harwell et al., 1998). However, the results of the training programme were assuring, with clear improvements in health professionals' knowledge about how to screen for DA. Going forwards, ongoing clinical supervision, partnerships with specialist domestic violence agencies, clear referral processes and ongoing support for women post-separation are needed (Thompson et al., 2000).

One of the primary reasons why this intervention was successful, and a key factor in getting it up and running, is the provision of training by a specialist domestic violence trainer. Before the program was implemented, when rates of identifying and intervening in domestic abuse cases were less promising, staff had very little training around DA. As such, training enabled healthcare staff to expand their knowledge of asking about and identifying DA and was a key component in the promising results of the study. Therefore, any expansion of this program would need to retain its emphasis on the training of healthcare staff if it is to run successfully (Bacchus et al., 2010).

With DA being such a dangerous matter, it is never advisable to rely on the assumption that an intervention will not result in harm. Several potential sources of harm were identified during the investigation, such as breaches of confidentiality, failure to act on information and the negative stereotyping of women during evaluation. For example, one woman described how she was discharged with her baby to her abusive partner's home despite her case notes clearly stating that she was waiting for emergency accommodation (Torres-Vitolas et al., 2010). To add, several women described how confidential information surrounding the abuse they had been subjected to was discussed in front of other family members by health professionals. An even more disturbing account was given by a woman who was assaulted by her ex-partner after he discovered documentation of a previous abusive incident in her maternity records. Resultantly, she became too afraid to continue with the advocacy project. These issues will all need to be considered and addressed if the program is to be implemented on a wider scale (Bacchus et al., 2010).

Domestic and family violence (DFV) training and the use of a DFV support specialist for women are new strategies within hospital settings (Baird et al., 2020). In-depth, longitudinal investigation of clinician experiences after these implementations is lacking. Identifying pregnant women who are subjected to DFV is the first step to providing support and intervention. Universal screening, which means asking all women about DFV during pregnancy, has been utilized by many healthcare providers in Australia. National and international surveys have stated that women approve of DFV screening. For example, a meta-analysis of qualitative studies on DFV by Feder et al. (2009) confirmed that women were overwhelmingly in favour of DFV enquiry by healthcare professionals.

Following the advice of the Queensland 'Not Now, Not Ever report' (Queensland Government, 2015), a DFV intervention strategy was implemented at a large

hospital in Queensland, Australia. Routine antenatal DFV screening began in the maternity service in 2016. This process involved midwives and other clinicians attending a full-day training workshop, which lasted 7 h and implemented a number of experiential teaching approaches. Contributing to the training was a local DFV community support group, and the main thrust of the workshop was to inform attendees about different approaches which could allow them to overcome barriers of routine DFV enquiries.

According to a Cochrane review conducted by O'Doherty et al. (2015), DFV screening increases the identification of women who need support and makes pregnant women more likely to disclose a history of abuse. As such, antenatal care provides an opportune moment to identify problems surrounding abuse and offer appropriate support. DFV screening does this through shifting the responsibility from the woman being abused, who would traditionally need to disclose the abuse, to the midwife, who now asks about the (potential) abuse. Building on this with their more recent study, Baird et al. (2020) interviewed ten midwives in order to understand their experiences of conducting antenatal DFV screening. The key finding of Baird et al.'s (2020) study is that screening is a foundational component in the fight to identify and provide support to women who are suffering from DA.

Despite Baird et al.'s (2020) finding that maternity staff were very willing to conduct routine DFV screening, there remain barriers which will prevent such screenings from realizing their full effectiveness. More support needs to be given to staff who conduct DFV screening so that the effectiveness of the screening can be assured. Themes which emerged from Baird et al.'s (2020) interviews include the healthcare staff not having enough time to ask women about DFV, the problematic presence of the woman's partner and the need for ongoing training. Sprague et al. (2012) have also reported the presence of a partner as an obstacle to screening. Furthermore, Eustace et al. (2016) and Spangaro et al. (2010) confirmed Baird et al's. (2020) findings that a lack of standardized training is a primary reason why health professionals do not ask women about domestic abuse and violence.

One of the positives found by Baird et al. (2020) was that all participating midwives asked women about DFV. However, there was anxiety amongst the midwives about being able to conduct the DFV screenings in a caring and professional manner and build rapport, with tight time constraints. Specifically, having a set time limit to conduct the antenatal appointment caused the midwives to feel pressured. As is reiterated by Salmon et al. (2006) and O'Campo et al. (2011), time is one of the most commonly identified barriers to DFV screening. As Miller and McCaw (2019) state, how the screening takes place can influence a woman's decision to disclose the abuse.

Reassuringly, despite the concerns of the midwives who were part of the Baird et al. (2020) study, none of the midwives felt they should discontinue the screening. This is reinforced by Spangaro et al.'s (2010) study, which found that all 32 women who took part in their study unambiguously agreed that their experience of DFV was valuable. What also became clear from Baird et al.'s (2020) study was that women valued being seen by the same midwife over multiple appointments and that this improved the development of the woman-midwife relationship. Crucially, this

long-term set-up allowed the midwife and the women to discuss DFV in an unhurried and comfortable manner. To add, continuity of midwives supporting the ongoing, as opposed to one-off, monitoring of risk for women, and in particular those who had already disclosed issues surrounding DFV, was useful (Hegarty et al., 2020).

As such, the most successful screening programmes are those which are built on an enabling environment. The delivery of antenatal screening for DVF at large, imposing and busy clinics is not conducive to implementing the optimal screening programme. A more appropriate model would centre around community-based services, where midwives educated and supported around DFV work in partnership with local professional community agencies and hospitals. In order to disclose a history of violence, women need to feel safe, supported and not rushed. It is therefore the role of hospitals and health services to strive for the creation and maintenance of such environments.

What makes the creation of these supportive environments necessary is that, despite women largely supporting screening, disclosure rates of DA remain low (Creedy et al., 2019). In fact, recent research has indicated that a trauma- and violence-informed care (TVIC) framework is needed. TVIC is the provision of a model which is centred around the relationship between trauma, health and well-being. The implementation of TVIC involves a shift towards the delivery of care that is tailored around the specific needs of the woman (Bowen & Murshid, 2016). Therefore, while one of the most effective ways to find out about DA and if a woman needs support is for a trained health professional to ask, there are several recommendations which should be considered.

The first of these recommendations is that health services should aim to implement a TVIC framework which puts the woman and her family at the centre of any care plan. One of the core principles behind this recommendation is that all women should have access to informed and caring midwives who have enough time to ask the woman about domestic violence. Furthermore, such consultations should take place in private, safe and comfortable environments where the woman can speak freely without recourse from the abuser or his family. A further recommendation is that healthcare providers should deliver DFV training to all frontline staff and implement unambiguous pathways for midwives to follow around domestic violence. Such pathways should allow victims to have access to all community DFV and sexual assault services. The continuity of midwifery care and in particular a woman's ability to see the same midwife were key to women feeling safe enough to disclose DA. Therefore, this assurance of continuity should be available to all women in order to maximize the chances of disclosure.

Halliwell et al. (2019) report findings of a multi-site evaluation of hospital-based advocacy services, which are designed to support survivors attending emergency departments and maternity services. The Independent Domestic Violence Advisors (IDVA) which were evaluated were located across five UK hospitals. Data were collected at the point of initial referral of the abuse survivor, at case closure and from survivors accessing hospital and community IDVA services. Relevant indicators included sociodemographic characteristics, experiences of abuse, health service use and health and safety outcomes. Once these indicators had been considered,

multivariate analyses are tested for differences in changes in abuse, health factors and other factors which influenced safety outcomes.

Outcomes which related to the change in domestic violence and abuse (DVA), when assessed at the closure of cases, showed positive changes in the safety of survivors who accessed IDVA services. The survivors who accessed hospital IDVA services were more likely to observe the cessation of abuse when exiting the service than those accessing the community IDVA services. In total, 62.4% of those who accessed hospital IDVA services experienced the cessation of abuse, compared with 48.3% in the community IDVA. Furthermore, hospital survivors experienced a greater reduction in physical abuse (86.2%) when compared with community survivors (71.2%). Hospital survivors were also more likely to report feeling 'much safer' (54.2%) compared to survivors who accessed a community service (50.1%). Overall, analyses demonstrated that safety increased if the support provided, whether hospital or community based, was more intensive.

In line with the results described above, those who accessed a hospital IDVA service were twice as likely to report feelings of safety when the case was closed. These feelings of safety were more likely to be reported if the survivor had been supported for a longer period or had accessed a higher number of resources. In fact, accessing six or more programmes increased safety by one and a half times, and the chances of achieving this outcome increased progressively with a greater number of support days provided by the IDVA (Halliwell et al., 2019). Such findings were also observed in community IDVA cases, with more intensive support and frequent contact through support programmes being key factors in engendering feelings of safety.

From this, it is appropriate to suggest that the primary feature that defines a good IDVA service is intensive support for those who have been abused, whether in a hospital or community setting. Other characteristics of a good IDVA service included the provision of a range of resources for the abused, as well as a long period of access. These factors enabled abuse survivors to feel safer and thus were strong predictors of trust building between the survivor and those administering the service. One of the clear limitations of the IDVA service was that the community arm of the service produced fewer desirable results than those of the hospital service. Therefore, the challenge going forwards is to bring the level of effectiveness of community IDVA services up to the level of hospital services. This could be addressed through following the good practice advice surrounding access to a range of resources and generous contact hours for staff and survivors to build trust and increase safety.

Educational Inclusion

Educational inclusion represents one of the earliest forms of intervention under the PHA given how this intervention is aimed at children. A comprehensive and well-balanced evaluation of the effectiveness of educational inclusion, and how it can lead to violent crime reduction, is provided by Vazsonyi and Belliston (2004), who

look at the PeaceBuilders program. PeaceBuilders is a large-scale violence intervention and prevention program which targets both male and female youth who are identified at different levels of risk for future violence. The intervention is implemented on a schoolwide level (Embry et al., 1996). The aim of the program is to address and change the antecedents that cause aggressive behaviour and provide useful strategies which help to avoid the reinforcement of negative behaviour.

In practice, the program is based around five key principles: praise people, avoid put-downs, seek wise people, notice negative behaviour or 'hurts' and right wrongs. To promote change, specific behaviour techniques are used, including symbolic and live models, role-plays and rehearsals and individual and group rewards. Materials used to help implement these techniques include the 'I Help Build Peace' workbooks; Praise Boards, which are written records of positive events; home notes; and posters made by children. Teachers received a 1-h preintervention orientation, 4 h of training workshops and 2 h of coaching per week which took place in the first 8 to 12 weeks of the program's implementation (Embry et al., 1996).

The Vazsonyi and Belliston (2004) study looked at eight urban schools in the USA which were randomly assigned to the intervention, with the total number of participants being 2380 children of predominantly minority ethnic backgrounds. Overall, results indicated the differential effectiveness of the intervention. High-risk children reported the greatest decreases in aggression and the largest increase in social competence. As such, the study provides encouraging evidence that relatively low-cost, school-based efforts are able to reduce the likelihood of children becoming violent in the future. The sample for Vazsonyi and Belliston's (2004) study of PeaceBuilders was conducted in the Tucson metropolitan area. The targeted region had experienced an increase in violent offenses from 1990 to 1993, which included increases in juvenile arrests, vandalism and weapons violations (Flannery et al., 2003). In total, the sample included 4600 children from kindergarten to the fifth grade. For the study, data were collected by trained project staff members, while children completed in-class surveys which were administered by project staff.

Significant reductions were reported over time for children who were classed as high risk, and this applied to both male and female students. Specifically, social competence increased, and aggression decreased amongst these high-risk groups. Even for medium-risk children, significant increases in social competence were found, while for low-risk children, significant changes occurred in terms of aggression for both male and female pupils. As such, the findings from this review of PeaceBuilders are encouraging and show promise in addressing problematic behaviours and improving levels of social competence and decreasing aggression. PeaceBuilders proved more effective when administered at earlier stages in the child's development. Specifically, children in the delayed treatment condition showed significantly higher rates of aggression and lower social competence when compared to those who received treatment at an earlier stage (Flannery et al., 2003).

The PeaceBuilders program was effective primarily because its five guiding principles are diverse and as such can be applied on a broad scale throughout schools. Building on these foundations, more specific and tailored techniques then aided the success of the program. These techniques, including role-playing, rehearsals and

individual and group rewards, enabled the different needs and tastes of a range of students to be addressed. Also, ensuring the success of the program was the orientation, training and coaching that the teachers received throughout the process, which ensured high standards of delivery. Therefore, to get an intervention based around educational inclusion running successfully, it is advisable to establish at least three (but more ideally five) principles which will guide the practical implementation of the intervention. These principles should follow from the rationale that negative and harmful behaviours should be challenged and that positive behaviours (like praising people) should be encouraged. From these key principles, the group implementing the intervention should then create more specific techniques (like role-playing and interactive sessions) which practically apply the underlying principles.

These findings of the PeaceBuilders program are significant, as other studies have suggested that children who live in a climate of violence are more likely to suppress empathy. Furthermore, these children learn that violence is the best strategy to deploy to achieve their goals (Beland, 1996; Snyder & Sickmund, 1999). In response to such problems, recent violence prevention efforts which prioritize educational inclusion have shifted to large-scale, universal educational programs (Powell et al., 1996). Schools are the optimal setting for intervention, as at school, children spend large amounts of time with teachers and their peers. Furthermore, in a school setting, large groups of at-risk children can be targeted (Blechman, 1996; Gottfredson, 2001). Strategies which are effective in terms of intervention in schools focus on behavioural monitoring and reinforcement, classroom management and skills training. Other than PeaceBuilders, several school-based intervention programs have displayed promising findings (Kelder et al., 1996; Orpinas et al., 2000).

An example is the Resolving Conflict Creatively Program (RCCP), which significantly slowed increases in aggressiveness and decreases in social competence (Aber et al., 2003). The RCCP begins in kindergarten and extends through to 12th grade and aims for constructive conflict resolution. By doing this, RCCP reduces early social-cognitive and behavioural risks and thus prevents later violence. The RCCP was founded in 1985 and is a collaboration between Education for Social Responsibility Metropolitan Area, the New York City Board of Education and a community-based non-profit group. In New York City, 6000 teachers have been trained to deliver interventions based on RCCP, and more than 200,000 have received this intervention. The philosophy which guides the RCCP is that aggressive and violent behaviour is learned and in turn can be mitigated through education. The reduction of violent behaviour, the promotion of care, the learning of conflict resolution and the promotion of a positive learning environment are amongst the main aims of the RCCP.

The RCCP curriculum is delivered by teachers who receive initial training and ongoing training from staff developers. The curriculum has the aim of developing key skills, including communicating clearly, expressing feelings, dealing with anger, countering bias and creating a cooperative environment. Lessons which are based on the RCCP curriculum facilitate student-directed discussion, and these sessions are tailored to age groups. Peer mediation is a key component of the curriculum and involves children being taught conflict resolution skills and to be actively

involved in creating a peaceful environment. Children who are trained to do this are called mediators. These mediators work in pairs, wear special T-shirts and are trained to offer their assistance in settling conflict if they see conflict emerging, though they do not intervene in physical fights (Aber et al., 2003).

A study conducted by the Metis Associates and the Education Development Centre (1990) showed that teachers believe that the RCCP has positively affected their teaching and has reduced aggression amongst their students. The NCCP (National Centre for Children in Poverty) conducted an evaluation of the RCCP to investigate its impact on child development (Ray et al., 1996). Data collection took place between 1994 and 1996 and involved the evaluation of 11,000 children in New York elementary schools. In terms of outcomes, children who were exposed to more RCCP lessons showed decreases in hostile attributions and aggressive problem-solving strategies, decreases in conduct problems and a slower rate of acceleration of aggressive fantasies (Ray et al., 1996; Aber et al., 2003).

The results of the study provide compelling evidence of the RCCP's effectiveness and how the RCCP curriculum can have a positive impact on social-cognitive behaviours which are associated with aggressive behaviour and violence. Similar findings have emerged from the evaluation of cognate violence prevention programs. For example, an evaluation of the FAST-Track prevention model's Promoting Alternative Thinking Strategies (PATHS), which has a similar curriculum to RCCP, has proved the efficacy of the program. Fifth-grade children who took part in PATHS had consistently lower levels of aggressive and disruptive behaviours than children in the comparison school. As such, both the RCCP and FAST programs demonstrate the need for school-based early interventions into violence and aggression reduction (Metis Associates, 1990).

Similar findings were observed with the FAST-Track prevention trails, conducted by the Conduct Problems Prevention Research Group (CPPRG). The CPPRG (2002) indicated that the program decreased rates in conduct problems by 37% in children who were at high risk of behaviour problems in kindergarten. A similar program called Peacemakers was found to decrease incidence of self-reported and teacher-reported aggressive behaviours as well as decreases in suspensions following the implementation of the program (Shapiro et al., 2002). The Responding in Peaceful and Positive Ways (RIPP) program was shown to reduce violent behaviours and suspensions during and after its implementation (Farrell & Meyer, 1997). To add, the level of violence reduction was most dramatic in students who exhibited high levels of violent behaviour at the pretest stage. Similarly, two studies which evaluated the Linking the Interests of Families and Teachers (LIFT) programme found that LIFT reduced young children's playground aggression (Stoolmiller et al., 2000).

The results of the RCCP evaluation have implications for the implementation of violent prevention programs and the creation of effective social policy. The effectiveness of the RCCP demonstrates the need for school-based intervention programs which address the social-cognitive antecedents of aggression. Overall, children who received more RCCP displayed positive changes in social-cognitive processes and developed their interpersonal skills, which created nonviolent solutions to conflict

(Stoolmiller et al., 2000). Even more reassuring is that the findings show that the RCCP is effective for children from different economic, cultural, gender and ethnic backgrounds. As such, the findings indicate that a universal school-based violence prevention program can be implemented in an effective manner.

One of the key factors which allowed the RCCP to work was how it was embedded from the early stages of a child's development and maintained in older children. Specifically, the RCCP begins in kindergarten but, crucially, is maintained until the 12th grade. As such, any future version of the RCCP needs to be maintained throughout all age groups (from nursery up to Year 11). This ensures that early social-cognitive and behavioural risks are reduced and addressed from an early age. Effectiveness of this intervention was also secured through ensuring that teachers received initial and ongoing training from staff developers. The program cannot work if those who deliver it are not equipped. As such, if a similar program was to be implemented elsewhere, teaching staff would need to receive training around the aims and practical elements surrounding implementation.

Given the promising nature of these findings, it is recommended that school-based prevention comprises a central component of legislative efforts to prevent violence. Schools are the optimal environments for the implementation of these prevention programs as children spend most of their day in school. Furthermore, the interactions that children have with their teachers and peers greatly impact their social development. Therefore, through teaching critical life skills, interventions in school can prevent violence and promote academic learning. School-based prevention programs should form an integral part of communities' violence given how several evaluations demonstrate that, when implemented properly, school-based prevention programs put children on positive trajectories in terms of social and emotional markers. Crucially, such programs slow the rate of increase in aggressive social-cognitive processes which lead to violence. Such programs can be implemented at relatively low cost in relation to the academic and behavioural achievement that is yielded.

A further program that has been shown to be useful in preventing violence is that of 'Shifting Boundaries', which was utilized in 30 public middle schools in New York City, with over 2500 students participating. The program was designed around a six-session curriculum which emphasizes the laws and consequences for the perpetrators of dating violence and sexual harassment (DV/H). This intervention utilized building-based restraining orders for those not conducting themselves appropriately, increased security presence in unsafe 'hotspots' and posters to increase awareness of DV/H. Student surveys were implemented at the time of intervention, straight after the intervention and 6 months post-intervention. The result was that behaviours improved because of the interventions, with a reduction in sexual violence victimization involving either dating partners or peers (Taylor et al., 2012).

DV/H is a serious problem in school settings and amongst adolescents in that it can lead to serious injury, poor mental and physical health, increased risk of school avoidance and deviant behaviour (Gruber & Fineran, 2008; Howard et al., 2007). In Taylor et al.'s (2012) study, data collection, which took the form of surveys, was

conducted from September 2009 to June 2010 in New York City with 30 public middle schools. These schools were assigned to four cells: (1) receive the building and classroom interventions, (2) receive the building-only intervention, (3) receive the classroom-only intervention and (4) control group, in which the school experienced its normal class schedule. The interventions in 'Shifting Boundaries' are informed by the theory of reasoned action (TRA), which posits that attitudes towards and perceived norms about the desired behaviour facilitate the intention to change a behaviour (Ajzen & Fishbein, 1980).

The classroom-based interventions were implemented by trained personnel known as SAPIS (Substance Abuse Prevention and Intervention Specialists) over a period of 6–10 weeks. This six-session curriculum stressed the consequences for the perpetrators of DV/H, the role of bystanders as interveners and state and federal law surrounding DV/H. One of the key features of the curriculum was to enable students to determine and set personal boundaries. Key activities included exploring laws that apply to sexual harassment and activities which disregard personal boundaries. The building-based intervention arm of the program included the introduction of building-based restraining orders, which were called a 'Respecting Boundaries Agreement'. Further features which were part of the building-based intervention included the placement of posters in school buildings which increased both awareness and reporting of DV/H in school. Furthermore, Taylor et al. (2012) incorporated a building-based hotspot mapping, advocated for by Astor et al. (1999). This intervention involves schools working with students to identify unsafe areas within the school. The maps that the students produce are used to plan for a greater faculty or security presence in hotspot areas.

Data collection was conducted by school personnel who were trained by Taylor et al.'s (2012) research team and took the form of pencil-and-paper surveys. Staff distributed the surveys before schools were assigned to one of the four study conditions, immediately after the treatment was completed and 6 months after the intervention. The odds ratio of students in the building-only intervention reporting sexual harassment victimization was 107% more than that of the control (no intervention) group. Furthermore, students in the building-only intervention reported a 34% reduction in the frequency of perpetrating sexual harassment compared to those in the control group. In the post-treatment stage, there was a 32% reduction in the prevalence of sexual victimization by a peer for students in the combined intervention arm compared to those in the control group. Also in the post-treatment stage, the frequency of sexual victimization by a peer was 34% lower in the combined intervention arm than the control group.

At the six-month post-treatment stage, there was a 35% reduction in the frequency of sexual victimization by peers in the building-only treatment group and a 40% reduction in the combined treatment group. Also at the 6-month post-intervention stage, students in the building-only and combined intervention groups reported significantly lower prevalence of perpetrating sexual violence on peers (47%) than the control group. Keeping with the 6-month post-intervention stage, students in the building-only group reported a 50% reduction in the prevalence of sexual victimization by a dating partner and a 53% reduction in the frequency of

such events. Overall, the building intervention was effective in reducing the frequency of sexual harassment. Additionally, regarding sexually violent behaviour, the building-only and combined treatments were consistently effective in reducing sexual violence and victimization, whether involving peers or dating partners, at the six-month post-intervention stage. As such, the building component can be effective both as a stand-alone intervention and when implemented alongside the classroom intervention. Overall, there is compelling scientific evidence that the building intervention and the combination of building and classroom interventions are effective in reducing youth violence (Taylor et al., 2012).

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