Pathways and Outcomes A review of what administrative data in NI can tell us about the prevalence and prevention of paramilitary and serious youth violence.

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Pathways and Outcomes:

A review of what administrative data in NI can tell us about the prevalence and prevention of paramilitary and serious youth violence.

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Tables and Figures

Summary of key points

- Pathways into organised and paramilitary crime and complex and multi-faceted with few robust studies examining these relationships.

- International studies have found that the best predictors of organised and conflict related violence are those same psycho-social factors that are found in all forms of serious violence

- These high-risk predictors include being male, experience of childhood trauma, violent victimisation, lack of natural social supports and higher acceptance of traditional masculine norms (protectors, bread-winner etc.)

- These factors are present during adolescence and without appropriate and evidence-based interventions become more serious increasing the risk of higher intensity (and frequency) violence, organised crime and paramilitary activity.

- In Northern Ireland, it is important to understand the prevalence of violence, its root causes and relationship to life-course persistent and paramilitary style violence in order to implement policies designed to have a meaningful impact

- Data collected by relevant departments can help to understand pathways into paramilitary violence and identify opportunities for interruption

- This review of administrative data found that the interconnectedness between victim and perpetrator in the context of violence is not well understood in Northern Ireland. Relevant departments do not routinely collect or report these associations making it difficult to develop evidence-based policy responses.

- It is recommended that in the first instance, a cross-sectional survey is undertaken to establish the prevalence of violence.

- In the absence of longitudinal administrative data, it is recommended that policy follows the international evidence base and support strategies underpinned by gender conscious and trauma informed approaches.

- In the longer term, it is recommended that government departments collect and report on data related to violence, both victimisation and perpetration and departments with particular responsibilities (e.g. health) record, report and share information with other relevant departments to ensure coherence.

Aims

The Fresh Start agreement of November 2015 set out the Executive's commitment to tackling paramilitary activity and associated criminality. It set up an independent three-person panel – the Fresh Start Panel – to make recommendations on the disbandment of paramilitary groups. Its report was published in June 2016. The Executive responded to the Panel's report with the Executive Action Plan for Tackling Paramilitarism, Criminality and Organised Crime which was published on 19 July 2016. It contains 43 commitments in response to the Panel's recommendations. Within the Executive Action Plan an action plan was included specifically around vulnerable young people known as B13. This action stated:

"As part of the cross-departmental programme, the Executive Departments with responsibility for Education, the Economy, Health, Communities, Infrastructure and Justice, together with the Executive Office, should all identify the opportunities available to them to both prevent at-risk individuals becoming involved in paramilitary activity and measurably address the underlying issues that put some young people at a higher risk of becoming involved."

In seeking to identify and measurably address the underlying causes of serious violence and paramilitarism the aims of this paper are to:

1. **Map the administrative data collected in NI and outline what this can tell us about prevalence and risks of serious violence and opportunities for interrupting those patterns.**

2. **Highlight the gaps that currently exist in being able to respond to the needs of those most at risk in an evidence based and data driven way**

3. **Identify opportunities for the programme to add both strategic and operational value to efforts that are already being undertaken.**

Introduction

Context

Since the emergence of the violent sectarian conflict in Northern Ireland during the 1960's - commonly referred to as the 'Troubles' and generally regarded as Europe's longest running violent conflict (Lynch and Joyce, 2018), approximately 3,700 people lost their lives, about 40,000 people sustained physical injuries (McAlinden and Dwyer, 2015) and countless others suffered psychological trauma. Some estimates suggest that 80 percent of the population knew someone who had been killed or injured during the Troubles (Breen-Smith, 2012). Crimes against person and property permeated all aspects of life. Routine tasks such as shopping, travelling and socialising were often affected by conflict-related incidents such as police check-points, bomb scares, car hijacking, protests, parades and mass rioting (WRDA, 2010). Whilst the conflict touched a large proportion of the population, the impact was not consistently felt across class, regional and gender barriers. (McAlister, Scraton and Haydon, 2014). Young men from areas of high deprivation were at particular risk of conflict-related injury and death (Fay, Morrissey and Smith, 1998), and those who were more likely to be perpetrators of conflict-related crime were men. Years of living within a conflict situation forced communities to adopt mechanisms and strategies to cope with the intensity and fear (Muldoon, Trew and Kilpatrick, 2000). Men in particular were expected to protect both family and community. The symbolic power of defence and justice as motivating concepts (Gilligan, 1997) fuelled expectations intrinsically linked with masculinity. The ceasefires of the 1990's followed by the political accord provided the framework for new Northern Ireland. Despite set-backs that followed with power-sharing arrangements and ongoing community tensions, there was a general acknowledge that progress had been made. However, more recent studies (Harland and McCready, 2015; Walsh and Schubotz, in press) have illustrated that progress appears relative and violence continues to have a significant impact on communities across NI.

Paramilitary violence, whilst organised and situated within a particular socio-cultural and historical context are fundamentally a collection of aggressive, violent and controlling behaviours. As such, these can be understood and if they can be understood, they can be predicted and prevented. That is not to say that the process is easy but drawing on theoretical and empirical studies and making use of administrative data can help.

Paramilitary and organised violence is a complex social phenomena and therefore successfully reducing it requires careful consideration. Fortunately, those in NI can draw upon decades of research from elsewhere that have invested in understanding the factors that predict

In order to achieve the aims outlined in the previous section, the following sections will outline what we have learned about the perpetuation of violence; approaches that have been used to develop a more robust and coherent understanding of where violence takes place and opportunities for prevention (epidemiological, behavioural and implementation approaches); and outline two of the strongest predictors of violence globally-gender and traumatic responses to adversity.

Understanding and addressing violence

Despite being recorded throughout humanity, theoretical, empirical and technological advances over the previous forty years have provided significant advances in how we understand and respond to violence. Approaches that have been developed elsewhere but have been underpinned by robust theoretical and evidence based assumptions have shown promise in reducing serious forms of violence. Anchoring any violence reduction strategy in Northern Ireland to well-established approaches and underpinning these approaches to, evidence-based frameworks has the potential to effectively design policy in order to support practice; effectively evaluate the efficacy of such approaches; and bring to scale those approaches that are objectively measured to achieve the strategic objectives set out in the Fresh Start Agreement.

Three of the most implemented and evaluated frameworks that have helped to facilitate and understanding and reduction of serious violence include:

1. **Epidemiological approaches;**
2. **Behavioural sciences approaches; and**
3. **Implementation science approaches.**

Epidemiological approaches

Originally applied to the control and spread of contagion, epidemiology is the study of how prevalent violence is within and between certain groups. It often uses data at a population

level to plan and evaluate strategies to control the prevalence of violence (Last, 1995). In many ways a water-shed came in 1985 with the US Surgeon general declaring violence a public health concern (Centre for Disease Control, 1985). This has since been reiterated at an international level by many others such as the United Nations (UN) and World Health Organisation (WHO) (WHO, 2009). The words of the surgeon general had a profound effect on how violence would be studied and responded to. Situating violence within a public health perspective moved the focus from deterrence to prevention. By indicating that violence was a public health concern meant that violence could be monitored, it could be understood and if understood, it could also be prevented (Freire-Vargas, 2018). Common feature of public health approaches are that they use population based data to analyse and monitor trends; they identify risks within populations; they ideally involve government departments working in a joined up way, sharing data and resources; and they use data to inform practice (Bellis et al, 2012).

Insights provided by epidemiological studies have found that exposure to violence is traumatic and is also one of the most commonly experienced traumas globally. It is a persistent and significant social challenge (Englander, 2003). Global health data suggest that it is the leading cause of death for all young men under the age of 24 (UNICEF, 2017). Up to 500 young people are dying each day as a result of violence (Baxendale, Cross, & Johnston, 2012). Violence is also a costly problem. Excluding armed conflict globally, violence costs almost £30bn annually with implications for the individual, families, the community, and wider society (Bellis, Hughes, Perkins, & Bennett, 2012).

Such studies also highlight that being male is a significant risk factor associated with both perpetration and victimisation. Both during peace as well as conflict, violence is highly gendered. In the UK, official figures suggest that 78% of perpetrators of violent crime are male (ONS, 2018),

Violence as we know impacts on populations in a variety of ways and over a prolonged period of time. It affects physical health, mental health, social functioning, relationships, educational attainment and community cohesion. Violence also presents in a variety of ways such as in schools, in community, in youth services, in social settings such as bars and clubs and in medical facilitates such as A & E's. Epidemiological studies have found that in order to fully understand prevalence, systemic approaches are often required. This includes collecting and analysing data from a range of sources such as health, justice and education.

When analysed and compared to justice figures in England and Wales for example, trends show a year-on-year increase in the numbers of people seeking treatment following violent altercations (ONS, 2018).

Recent studies also suggest that early exposure to adversity may increase the risks of perpetration of violence in later life (Walsh, 2018). The long-term relationship between Adverse Childhood Experiences (ACEs) such as exposure to violence in the home and in the community, health-harming behaviours was first documented by Felitti et al. (1998) in their seminal study of more than 8,000 people in the United States. However, more recent studies have shown that adversity types are highly gendered, that is, not all people experience the same types of trauma (Grasso, Dierkhishing, Branson, Ford, & Lee, 2015) and even when they do, the behavioural outcomes vary considerably (Cecila, Viding, Fearon, Glaser, & McCrory, 2017).

Exposure to community-based violence and subsequent violent offending appears to be particularly gendered (McNaughton- Ryes, Foshee, Chen, & Ennett, 2018; Vaswani, 2018). Since the original Felitti investigation, later epidemiological studies such as those in the UK have confirmed the deleterious and dose-response effects of adversity during childhood on later offending behaviours. That is, those exposed to multiple adversities and violent trauma, significantly more likely to engage in violence (Bellis, Hughes, Leckenby, Perkins, & Lowey, 2014). Although understanding causal pathways into violence can highlight opportunities for prevention, few studies have been of sufficiently high quality to capture intersections between predictors of aggression (gender and exposure) and violent outcomes (perpetration of serious violence, paramilitarism and organised violent crime) (Hawkins et al., 2000; Farrington, Gaffney, & Ttofi, 2017).

One way to establish the association between victimisation and perpetuation is through the collection and analysis of high-quality population data. Routinely collected administrative data taken at a population level from government departments is one way to achieve this. This approach aligns well with other frameworks implemented elsewhere, such as the widely reported public health approach to violence implemented in Glasgow and the data driven approach implemented in Wales.

To reduce the burden of violence the World Health Organisation recommends that states employ public health approaches to understanding prevalence, risk and effectiveness of responses. Originally applied to the containment, spread and prevention of disease, public health approaches have become applied to violence prevention. These types of approaches

focus on the safety and wellbeing of the population as a whole, using population based data to understand the presence or absence of a particular issue of concern, identify key risk factors for the spread and contagion of those concerns and prevent significant social issues from affecting the physical health and psycho-social outcomes of the population (Lee, 2017). At the core of public health approaches is the use of population-based data accompanied by contextual evidence for supporting evidence based policy making, improving services and changing outcomes. The two case studies below illustrate the utility of this type of approach.

Scotland

Following the peak of serious violence in Scotland in the early 2000's, Scotland implemented a public health approach. Since then, rates for all forms of violence have either levelled off or reduced year on year (Fraser et al, 2010). This is partially because at a strategic level, the Scottish government, whilst recognising the complexity of serious violence also define it as preventable. The Scottish Executive claim that violence can be understood and once understood, strategies can be more robust and outcomes improved.

Through data driven policy, the Violence Reduction Unit was established alongside subsequent approaches in health (Navigators) and education (MAV & Mentors in Violence Prevention). The approach taken by Scotland is now being adapted to the context in London

England and Wales

Although crime tends in England and Wales have seen a gradual decrease since the late 1990's, this has not been the case with violent crime. Violence has risen considerably since 2014, particularly in relation to more serious forms of violence. In response, the UK government published a violence prevention strategy in April 2018 (Home Office, 2018), underpinned by the combined data of health and justice departments as well as trends in education and social care.

At its core is the understanding that violence is cyclical and the relationship between victim and perpetrator is often interconnected. For this reason, hospital data was critical in understanding real prevalence and targeting resources. These resources, through a fund of £11m are allocated to communities, youth services and police with the aim of implementing universal, targeted and specialised support.

Situating violence within a public health framework has significant utility. The framework results in shifting paradigms, whereby the focus changes from punitive responses to preventative approaches. Within this public health context, violence can be understood as an effect of a range of complex and interconnected biological, social, environmental and cultural

factors as well as a complex social issue on its own, affecting victims and perpetrators across the life-course (Dahlberg & Mercy, 2009). Applying an epidemiological approach to understand violence over recent decades has resulted in more accurate understandings of exposure but also risks associated with violent offending (Krug et al, 2002). With more accurate data, evidence-based approaches could be tested, implemented and scaled (Slutkin, 2012). Public health models generally rest on three distinct but often complementary approaches, primary, secondary and tertiary (Gilligan, 2001). Primary approaches are preventative in nature. They apply universal services and supports to a broad spectrum of a population of interest. Secondary approaches are more targeted in their implementation, isolating those with known risk factors from those of the general population and attempt to engage them in specific actions with the aim of reducing risks and improving outcomes. Tertiary approaches target a population who have persistently and chronically engaged in issues such as violence and who require highly specialised services and/or therapeutic supports. Despite its relative success in other contexts such as Scotland, Public Health approaches have their limitations. Although the model developed by WHO and later adapted by those such as Violence Reduction Unit focus on four distinct but complementary phases (understanding the prevalence, understanding risk, implementing a response and evaluating that response), teams often struggle to implement complex service designs even when the prevalence and risks are well established. One way that has been effective in overcoming these challenges as been a combined public health and implementation approach.

Behavioural science approaches

Whilst epidemiologists provide accurate estimates of the magnitude of a hazard, define the risk factors and develop tools to monitor trends, behavioural scientists answer questions related to why within human and social contexts. Behavioural scientists seek to understand paths of influence and capture these in theoretically grounded and evidence-based behavioural change models. They often begin with defining the behaviour/s that require attention, such as violence. Once defined, projects that integrate behavioural approaches will identify underlying factors that help to drive and sustain behaviours and use this information to develop target constructs (such as addressing cultural norms) to achieve behavioural objectives (the development of new social scripts) (Gielen et al, 2006) . Behavioural science tell us however that where particular target constructs, such as information sharing, are unlikely to add any additional value, then their effectiveness is greatly reduced. This often happens in relation to violence. Public health campaigns focus on education young people in order to increase their awareness of the dangers of violence. Behavioural insights suggest

that young people already understand the risks but this is neither appropriate nor sufficient to achieve behavioural change.

Implementation approaches

Mihalic et al (2003) suggest that we are now at a place that we know the 'what' to implement but are still struggling with the 'how' to implement. Implementation science provides the framework that helps to facilitate the move from science to service. Decades of strong evidence has produced highly efficacious models of practice in the field of violence prevention. These are rarely implemented as designed or brought to scale in ways that contributes to population change.

Whilst these are often thought of as distinct designs, it is argued that when combined, provide a robust framework for understanding and responding to the causal pathways that lead some into serious and persistent forms of violent offending, including paramilitary violence. These three concepts will be outlined in more detail throughout

Implementation has been defined as the activities that are designed to put into practice a programme or activity (Fixsen et al, 2005) and defined as the practice of putting into place actions that have been proven to be effective in research settings (Metz et al, 2015) and moving them into 'real world' settings. (Mitchell, 2011). When we review the implementation of any new innovation, what we are often exploring is the degree to which the process of change was managed within the parameters of a well-defined practice or programme. Implementation drivers are those variables within the ecological framework that can either help or hinder the extent to which the new practice or programme is implemented and embedded within the existing structures or cultures. Fixsen et al (2005) developed a conceptual model for understanding the reciprocal relationship between these drivers. Defined across three broad areas, the drivers postulated by Fixsen and Blasé included organisational drivers, leadership drivers and competency drivers. Mihalic et al (2003) too described interconnected drivers, each impacting on the other. A mixture of competency and organisational drivers such as staff characteristics, organisational leadership, training and community support for the new innovation each contribute to how well a programme will be implemented.
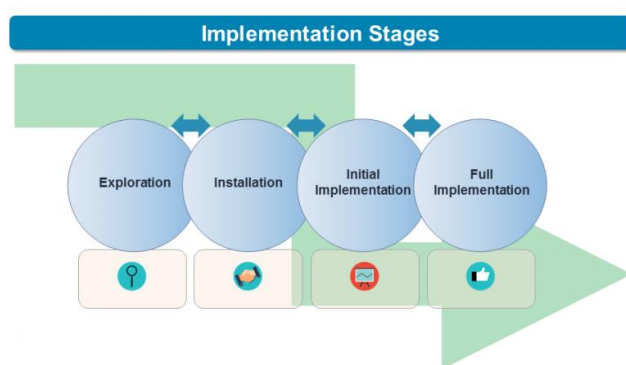
Figure 1: Implementation science process

Wiggins et al (2010) discuss what they believe to be four key stages associated with the journey towards full implementation. The first stage they argue is a process that starts with the exploration a new programme, where a local need is identified (Bridge et al, 2008), resources are secured and a programme is found to be a good fit for that specific need. The second is the installation of the new model and creating the structures and processes (Durlak et al, 2008). Once a programme has been selected and is being implemented, the ideal situation is one in which "the content and quality of the original program are maintained, so that the outcome of the replications are as good as those found in the controlled testing of the original program" (Tomioka et al, 2012: 2).

Specific risks of violent crime (gender and trauma)

In the context of preventing serious violence and paramilitary activity, Taylor, Walton and Young (2013) describe three levels at which it must be understood: the act; the immediate origins; and the wider origins. The immediate violent acts in this context means understanding the prevalence of particular forms of violence in order to fully define the need. From here, working backwards can help to identify points of interruption. That is, if the pathways that lead someone to engage in violence can be understood then opportunities to intervene at the earlier possible point in order to reduce violence and improve outcomes can be maximised. The social determinants of violence has been widely investigated over recent decades (Gadd & Jefferson, 2007). This has resulted in studies reporting the impact of family functioning, substance use, negative peer relations and community cohesion (Walsh, 2018) as significant predictors of violence. However, systematic reviews which are powered to undertake macro level analysis and provide a more comprehensive overview of risks have suggested that whilst important, these factors are insufficient on their own to result in violent behaviour (Derzon, 2010). Three factors appear to mediate the relationship between these influences and engagement in the perpetration of violence. Gender, victimisation and early on-set violent offending have all been cited as a consistent predictors of violence, even when controlling for the criminogenic effects of other social factors (family, peer, school, SES).

According to the World Health Organisation (WHO, 2007) being male is the greatest risk factor, with 15-29-year-old men accounting for three quarters of all victims of homicide globally. Being male not only increases the likelihood of being the victim of violence but also increases their likelihood of becoming the perpetrator of violent acts. Almost 96 percent of the prison population across 164 countries is male (Muncie, 2005). This suggests that there are particular gender issues associated with offender but additional data related to trauma amongst this population suggests that there exists an explicit pathway between offender and offence, mediated by particular forms of trauma such as violence. Regular exposure to multiple and varied forms of violence, such as verbal and physical conflicts with friends, family or siblings results in violence being perceived as a 'normal' part of life and therefore being 'unseen, unrecognised and unrecorded' (Fraser et al., 2010).

Despite being a global problem and almost exclusively a male issue, research exploring the causes of men's violence and challenges as a result of exposure to violent crime largely focusses on men's perpetration of violence against women (Dagirmanjian et al., 2016). Systematic reviews and meta-analyses have to date tended to focus intervention effectiveness and systemic risk factors for engagement in violence and crime (Egan et al., 2008; Johnson, 2009; Derzon, 2010; Tfofi, Farrington and Losel, 2012; Malvaso, Delfabro and Day, 2016). In order to understand exposure to crime and perceptions of crime it is therefore important to identify those who need additional supports and prevent further victimisation.

Gender and masculinity

Interpersonal, community based violence appears to be particularly associated with male experiences and male culture (Mahalik et al., 2003). This is expressed during early adolescence when global crime figures illustrate a significant rise in prosecutions against young men for violence related offences. Whilst traditionally explanations of men's violence have centred on biological factors, theories around the social constructions of behaviour such as social learning theory (Bandura, 1977)) and ecological theory (Bronfenbrenner, 1979) provide a more promising approach (Mehta and Beer, 2010). However, applying a gender lens to a systemic framework can aid a fuller understanding of young men's perceptions of crime and so far, relatively few studies have explored adolescents' perceptions of crime from a gender perspective (Dodge, Bosick and Van Antwerp, 2013; Yuan and An, 2017). Some studies have demonstrated that young men understand the risks of crime but are influenced by, and develop certain scripts about, expected behaviour, as they grow up (Mac na Ghaill, 1994). These expectations are explicit but unspoken and exaggerated according to the degree to which each young man conforms to masculine ideals.

Connell and Messerschmidt (Connell, 1995; Connell and Messerschmidt 2005, Messerschmidt, Martin and Messner, 2018) have been instrumental in providing a theoretical framework for our understanding of masculine identity and conflict. According to their notion of hegemonic masculinity there is a hierarchy of masculine norms and behaviours. In practice this means that men who support more traditional forms of masculinity are more aggressive in their social responses (Amato, 2012; Reardon and Govender, 2013). In striving to achieve normative masculinity, young men can refute any thoughts, feelings or behaviours perceived to be feminine and also actively police other young men's behaviours (Harland and McCready, 2014). Particularly young men from deprived areas are trapped in a social context which encourages them to attain traditional masculine traits and punish those who do not (McAlister, Scraton and Haydon, 2014). Here, Galtung's notions of structural violence (1969) and cultural violence (1990) provide a useful additional conceptual framework, as they can help to explain how scripts of expected behaviour which may condone physical violence and crime as a means of attaining or maintaining status. In the context of Northern Ireland for decades this has presented as inter and intra-community violence and paramilitary control. Findings from a pilot study carried out by the Centre for Men's Studies at Ulster University (Harland, 2011) showed that attitudes towards the roles of men had not significantly changed within the post-ceasefire generation. Among 11 and 12-year-old boys who took part in this study, 96 percent believed it to be an important quality of a man to defend his family and 89 percent thought it to be vital to defend themselves. Confirming the findings of classic studies of working-class boyhood in Northern Ireland (Jenkins, 1983), Beattie, Harland and McCready (2006) found that boys living within a paradigm of conflict often feel that they must prove themselves, and violence was a vehicle to do so. In the preferred and dominant narrative about the peace process, violence and sectarianism is no longer condoned.

McAlister, Scraton and Haydon (2014) suggest that in Northern Ireland it is in those communities most affected by the conflict where conflict legacy issues remain. They are those same communities affected by complex and multifaceted social issues. A report by Harland (2011) showed that despite a reduction in sectarian crimes, police have consistently recorded a rise in race crime, knife crime and vandalism. More recently, statistics from the PSNI (Police Service in Northern Ireland) revealed a two-fold increase in so called 'punishment attacks' between 2016 and 2017 (Irish News, 20th November 2017).

In the absence of high-quality population level studies, it is in the qualitative investigations that the experiences of young men across Northern Ireland are found. Despite their limitations, experiences of young men more generally can be inferred. In a study which followed 1,000

young men in Northern Ireland over a period of five years, Harland and McCready (2015) found that young men were very aware of the risk of crime, particularly violent crime, and the majority had direct experience of violence and aggression. In a subsequent study exploring young men's experience of crime in violence across NI Walsh and Schubotz (in press) found that young men were exposed to community-based violence during early adolescence and generally lacked the skills to avoid violence. Perpetration of violence was defined as justified within the context it took place and characterised as either protective or status enhancing. That is, they suggested violence was justified if it was to protect someone from harm or required as a means of 'keeping face'. The pattern in all these studies however has been that violence in all its forms continues to affect communities in Northern Ireland.

But there is a problem in reducing violence to only a gender issue. The obvious pattern is that not all males are violent and not all males offend. Whilst important other factors mediate the relationship between gender, masculine identities and violence (Derzon, 2010. The literature suggests that exposure to violent trauma is one of these and in the context of Northern Ireland, it is important to understand the interface between gender, trauma and violence.

Traumatic responses to adversity

Childhood trauma, particularly violent trauma is a significant predictor of violent behaviour (Widom, 1989). Although pervasive, trauma exposure is highly gendered with the majority of victims of violence being young men and the majority of perpetrators young men (Finkelhor, D., & Ormrod, R. (2000). Childhood trauma is associated with increased mental health problems and disturbances in affective and interpersonal self-regulatory capacities (Cloitre et al., 2009) and can affect victims across the life-course (Tuner & Lloyd, 1995). This is exacerbated when the victim is persistently exposed to the same trauma or lacks appropriate supports to deal with the index trauma. The result is often a range of externalising difficulties. Untreated, the impact of such trauma can impact more than 30% of cases over the longer-term (Smith et al, 2007) increasing the likelihood of psycho-social difficulties such as violent behaviour (Porshe et al, 2011) and risk of re-victimization (Ford et al., 2009). Four decades of data appears to suggest that there is an association between trauma exposure and violence amongst young men (Falshaw, L., Browne, K. D., & Hollin, C. R. (1996) and young people engaged in youth justice systems are more likely to have experienced chronic and complex trauma during childhood (Kerig, 2012; Dierkhising et al, 2013). But the dual role of young men as both victims and perpetrators (Harland and McCready, 2015) has largely been disregarded

and we know little about the therapeutic needs of young people exposed to various forms of crime (Finkelhor et al., 2009).

Summary

In summary, the evidence to date suggest that well executed, evidence based approaches that target the causal factors associated with serious violence and underpinned by data driven strategies are required if all forms of violence, including serious, organised and paramilitary activity is to be effectively addressed. Decades of research and examples of good practice illustrate that:

- violence, in all its forms is socially and economically costly;
- violence can be understood and prevented;
- the fundamental drivers of serious violence, whichever form they take are often the same;
- whilst important, justice services are unlikely to address violence alone. Other departments such as health and education are critical to understanding and responding to the root causes of serious violence and paramilitary activity;
- in order to improve outcomes, it is important to understand the issues (prevalence); the factors driving and sustaining them (risks); and the activities that are aligned to those needs for a desired outcome (implementation perspective) and;
- functional data can help to understand prevalence and risk at a population level.

Reviewing each of the strands associated with violence prevention (detection, risks, design, and implementation) is beyond the scope of this paper. The aim is to focus on the area of detection in order to establish risks. Therefore, the remainder of this paper will focus exclusively on outlining what we know about the prevalence of violence in NI, where it presents and what administrative data can tell us about possible points of interruption.

In Northern Ireland there are four primary departments responsible for collecting data pertinent to the prevalence of violence and its prevention in order to inform policy and enhance delivery.

The functions of these departments vary but in the context of violence and its prevention can be summarised as:

Department	Function
Justice	The Department of Justice is responsible for the resourcing, legislative and policy framework of the justice system in Northern Ireland and has a range of powers relating to the prevention of policing and justice.
Health	The aim of the Department of Health is to improve the health and social well-being of the people of Northern Ireland through leading major programmes of cross-government action at a population level. This includes interventions designed to modify behaviours and improve health and well-being. The Department has three main business responsibilities: Health and Social Care (HSC), which includes policy and legislation for hospitals, family practitioner services and community health and personal social services; Public Health, which covers policy, legislation and administrative action to promote and protect the health and well-being of the population; and Public Safety, which covers policy and legislation for fire and rescue services.
Education	The Department of Education aims to promote the education of the people of the north of Ireland and to ensure the effective implementation of education policy. It has responsibility for curriculum matters, youth services and good relations.
Communities	The aim of the Department for Communities overall aim is tackling disadvantage and building sustainable communities. It has responsibility for a number of key areas such as housing. social security, welfare employment services, the community and voluntary sector, culture, sports and leisure, as well as historic and cultural affairs

Within these departments, there are a number of agencies whose data is more relevant to the issue of violence than others. Those agencies include:

Figure 2: Relevant public agencies

Paramilitary violence

Twenty years after the Good Friday Agreement, attitudinal data was collected in the Northern Ireland Life and Times Survey showing that a significant proportion of adults aged over 18 (14.2%) continue to believe that paramilitary groups have a controlling influence on their communities (Duncan & Browne, 2019). While this group were in a minority overall, there were significant regional variations and those from areas of higher deprivation and areas characterised as either Loyalist or Republican (a proxy for higher levels of paramilitary activity), were more likely to perceive the influence of paramilitary groups as higher. Although the Young Life and Times Survey did collect data on young people's perceptions of paramilitaries, this report will not be available until Summer 2019. It is anticipated however, that the proportion of young people aware of paramilitary activity will be relatively higher than the adult population and their perception of how much influence paramilitaries have on communities is also likely to be higher. This assumption is supported by previous qualitative studies (Harland and McCready, 2015; Walsh and Schubotz, in press) that are indicative of heightened awareness and fear of paramilitary groups amongst young people but particularly young men who are more routinely active in the community and are at increased risk of recruitment and intimidation from paramilitaries. Again however, it is assumed that there will be significant regional
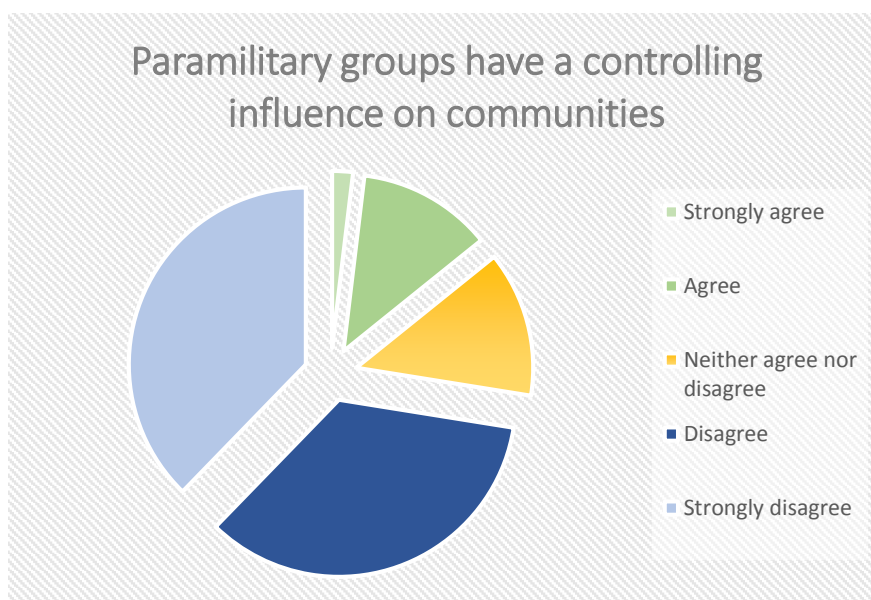
Figure 3: Influence of paramilitary groups

variations with Derry and Belfast likely to be highest.

Official figures from PSNI generally support the public perception that there is ongoing activity within both loyalist and republican paramilitaries with respect to assaults and shootings. Data related to the security situation in NI illustrate a significant number of victims of serious assaults and shootings year on year (PSNI, 2019). The findings also show significant difference between loyalist and republican communities. Whilst republican groups have been responsibility for the majority of shootings over the previous ten years, loyalist paramilitaries have been responsible for the majority of paramilitary style assaults in the same period.

Figure 4: Paramilitary style shootings

The figures also show that despite peaking in 2009/10 followed by a significant decline in paramilitary style assaults in the following three years, there has been an upward trend by both paramilitaries groups since 2013/14, but particularly within loyalist paramilitary groups.

Paramilitary assaults-Police Recorded
Security Situation Statistics Northern Ireland

Figure 5: Paramilitary style assaults

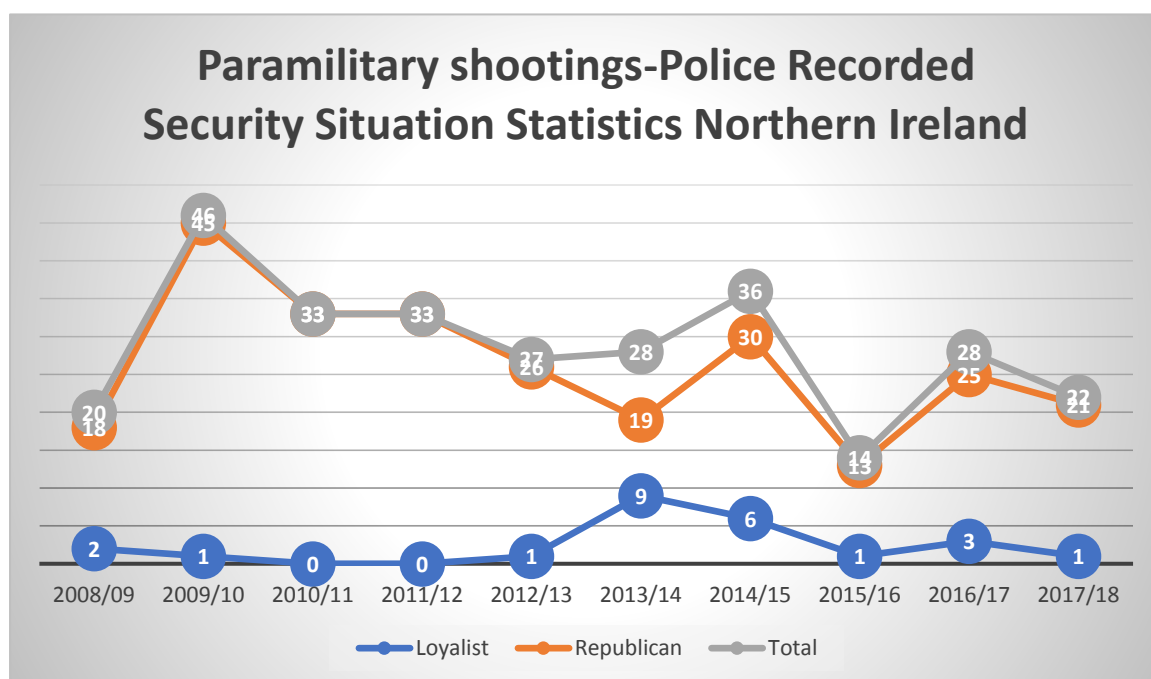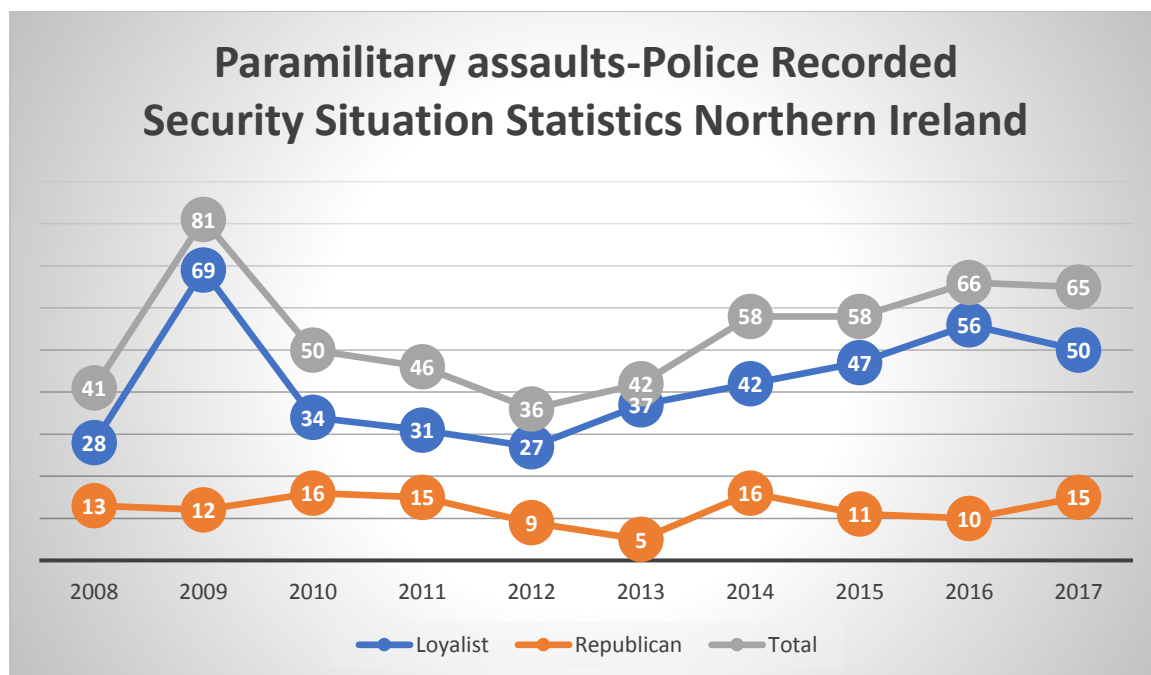Latest figures from PSNI show that there were 155 people arrested under Section 41 of the Terrorism Act 2000 during the past 12 months compared to 140 during the previous 12 months. Like perceptions of paramilitary influence, there was significant regional variation. Interestingly those areas that respondents were most likely to suggest that paramilitaries were active in their communities were those areas with the highest rates of arrests for paramilitary activity. Derry City and Strabane and Belfast accounted for the majority of the increased arrests on the previous year. Conversely, Mid and East Antrim saw a year-on year decrease of 16 arrests (PSNI, 2018). This may be indicative of the increase in more serious forms of paramilitary violence amongst paramilitaries in republican areas compared with those in loyalist areas.

Although justice figures are of critical importance they can only provide a partial overview of the broader experience. Exposure to paramilitary violence, in all its forms is under-reported and this has persisted as a legacy of the troubles. Other sources of information can add value to this justice data. For instance, the Housing Executive report that in the six months April 2018 to September 2018, there were a total of 200 families who presented as homeless due to paramilitary intimidation (Housing Executive, 5th March 2019) (see table 1). This figure, if the trend continues is consistent with figures over the previous fourteen years. And although the general trend is downwards, the fact that several hundred people are forcibly removed from their homes by paramilitary groups and organised crime illustrates the ongoing security

problem facing communities, the longer term outcomes of residents and the durability of paramilitary style violence and intimidation.

Table 1: Paramilitary intimidation (Housing Executive)

Reason Year	Intimidation	Bomb/fire damage (Civil disturbance)	Total
2004-05	959	87	**1,046**
2005-06	888	57	**945**
2006-07	764	44	**808**
2007-08	548	41	**589**
2008-09	569	48	**617**
2009-10	769	40	**809**
2010-11	694	54	**748**
2011-12	462	33	**495**
2012-13	584	37	**621**
2013-14	666	29	**695**
2014-15	590	27	**617**
2015-16	544	36	**580**
2016-17	661	53	**714**
2017-18	558	44	**602**

When these figures are transposed onto the number of serious assaults over the previous ten years (see fig. 7), we see that generally the trends upward and downward are well aligned but the prevalence of paramilitary intimidation are significantly higher than the reported number of incidents of attacks.
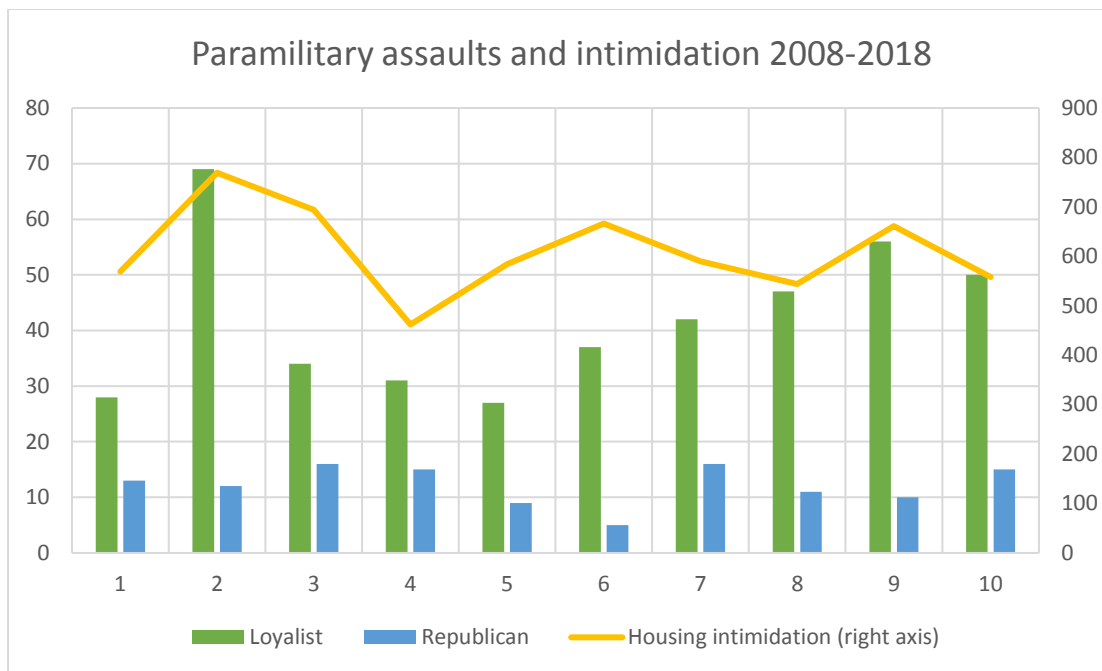
Figure 6: Combined paramilitary assaults and housing intimidation

The figures outlined above are useful. They provide an overview of how prevalent paramilitary activity is each year. They tell us about variation between different groups and different regions. They also provide some indication of the seriousness of violence that paramilitaries are engaging in. The housing intimidation figures also provide an indication of the strength of association between reported victimisation in one area and increased reports of violent crime in other area. Although the overall correlation between housing intimidation was not at the point of statistical significance, figure 8 illustrates that the strength of the relationship was higher in loyalist areas ($p=.09$) than in republican areas ($p=.47$) with a positive correlation between assaults and housing intimidation.
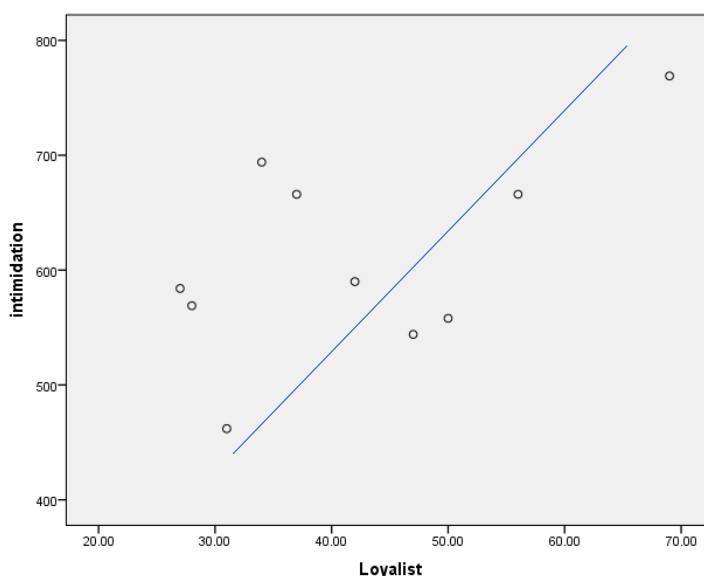
Figure 7: Correlation between loyalist assaults and housing intimidation

What this information does not provide however, is any indication of risks or any points in a person's life that provide opportunities for reducing those risks.

Previous studies into ideological and politically motivated violence have found answers to this important aspect difficult to find. Firstly, cases are generally so few that developing a framework for isolating and supporting individuals with risk factors in this small population is not clinically useful.

Secondly, risk factors associated with engagement in ideological or politically motivated violence are inextricably linked with well established risk factors for other forms of violence (Wynia, Eisenman & Hanfling 2017). These include being male, experience of violent trauma, peri-trauma factors such as lack of family and/or social supports, being younger during first violent offence and growing up in communities where violence is normalised. Given that many of these risks are conflated with other forms of violence, it appears that when attempting to understand paramilitary crimes, actions could understand and target the issues of violence more generally.

Although we are ultimately concerned with reducing the prevalence and impact of more serious forms of violence such as organised crime and paramilitary violence, the evidence suggests that there are statistically significant relations between victimisation and perpetration as well gender. Working back in the administrative data, through less serious forms of violence and victimization can therefore illustrate opportunities for prevention.

Justice data

Organisations within the justice family and are the most likely to hold and report on figures related to violence. Prosecution and court figures are a reasonable (if somewhat underestimated) proxy for the prevalence of violence more generally. DOH regularly publish figures on court prosecution and disaggregate data on age, gender and primary offence.

The PSNI provide regular reports via the 'recorded crime' in NI monthly and annual updates. PSNI have consistently reported that violence against the person crimes are overwhelmingly the majority of reported crimes

POLICE RECORDED CRIME FEB 18-JAN 19
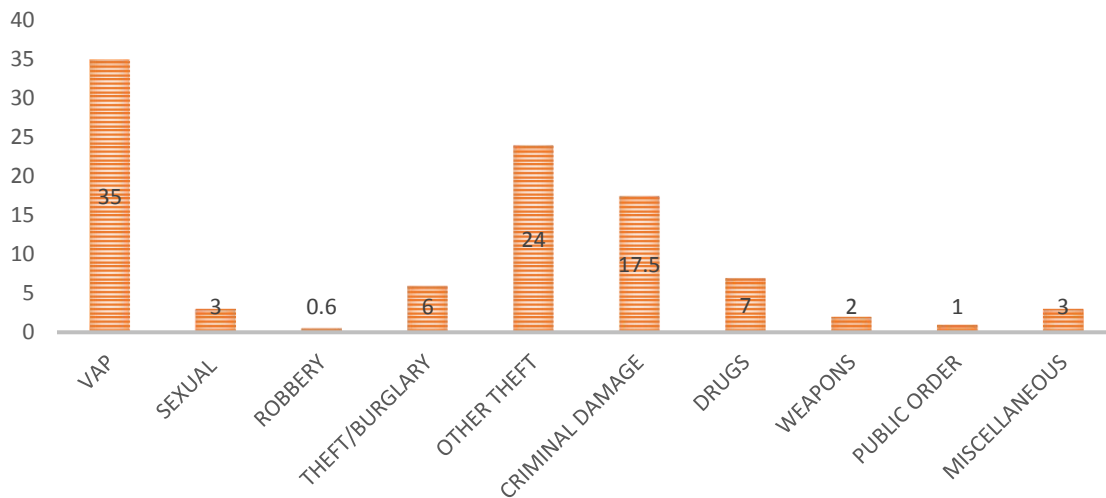
Figure 8: Police recorded crime

Figures for the 12 months period between 2017/18 and the 12-month period 2018/19 show that there was a 3.5% increase in the number of violent incidents equating to 1195 more reported incidents.

Reported violent crime tends (NICS, 2018)
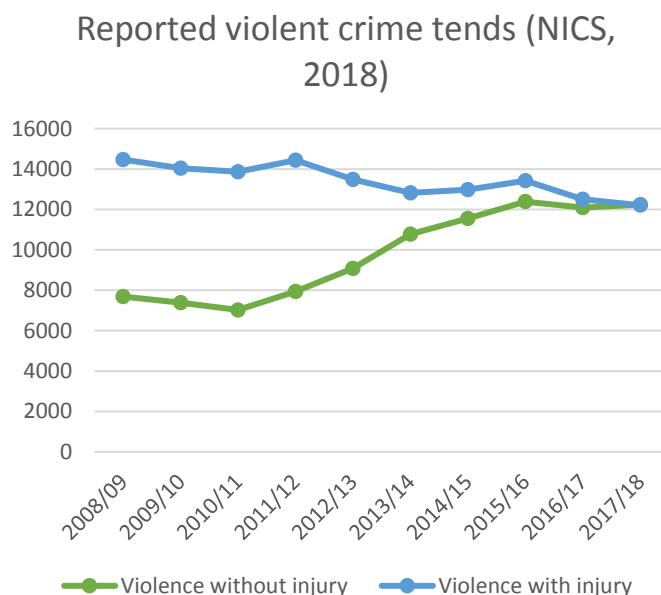
Figure 9: Violent crime trends

As figure 10 shows, figures from PSNI, the NI crime survey (Campbell and Rice, 2018) suggest a significant increase in violent incidents that were reported to the police but have not resulted in serious injury. They show a year on year trend upwards although there has been a modest (15.6%) reduction in violence with injury between 2009/09 and 2017/18, the number of incidents have remained fairly stable over the previous ten years (Campbell and Rice, 2018).

Figures from the 2017/2018 survey show that violence related crimes are estimated to have risen considerably over the previous four years in relation to both violence with and violence without injury (see fig. 11) (Campbell and Rice, 2018). For all forms of violent crime, the

estimated prevalence is 43000. This is the best estimate with an upper estimate of up to 63,000 incidents.

Estimated incidents of violence
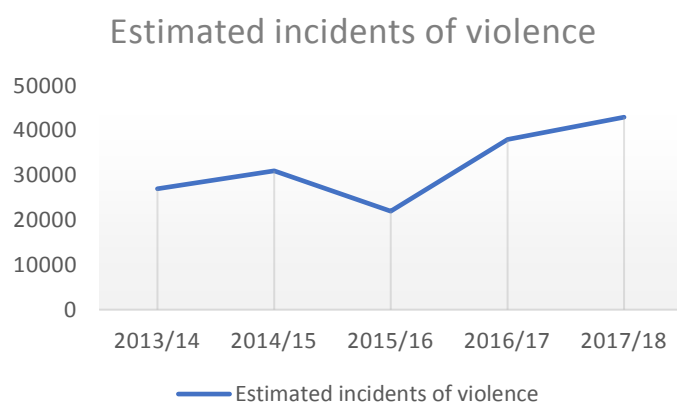
Figure 10: Estimated violence trends

When compared with the number of reported incidents of violence, the trends in both reported and estimated prevalence of violence are broadly similar over recent years, but the number of estimated violent crimes from the Northern Ireland Crime Survey are in the region of ten times higher than those reported.

Reported vs estimated violence
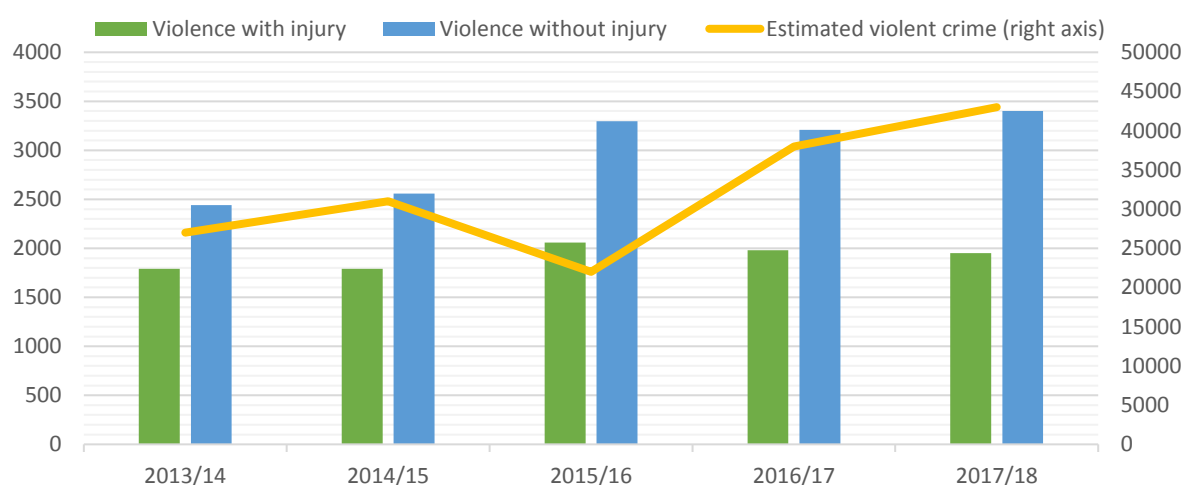
Figure 11: Reported vs estimated violent crime

Although the crime survey adds to the police and court data by estimating for prevalence of certain crimes, even this is limited in that respondents are aged 16 and over.

Open source data shows that over a ten year period violence with injury and violence without injury for under 18 year olds has followed distinctly different trends. Whilst there appears to be a downward trend in violence with injury since 2009/10 followed by a relatively modest

increase since 2014/15, the trend for violence without injury has followed a significantly upward trajectory since 2012/13.

Open data PSNI violence reports (under 18) (2019)
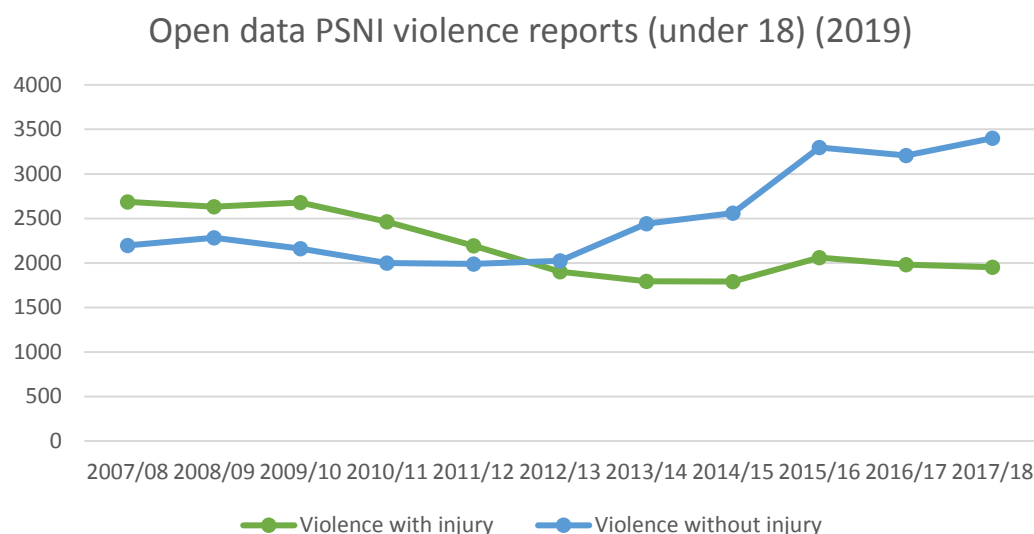
Figure 12: Violence reports (under 18)

Additionally, the figures show that compared with the twelve months previous, there was a increase of reports in relation to violence related crime including VAP (+4%), robbery (+8%) and weapons offences (+10%) (PSNI recorded crime, 2019).

Findings from the recorded crime report outline the types of violent crimes where those crime involved knives and sharp instruments. These include homicide, attempted murder, threats to kill, ABH and GBH as well as robbery and sexual assaults.

% of Violent and sexual offences involving knives and sharps
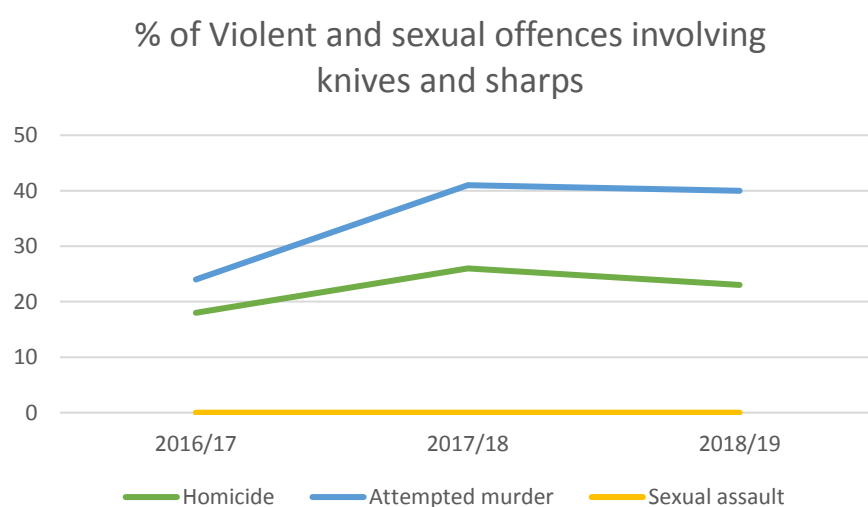
Figure 13: Violent crime involving sharps

As can be seen, more serious forms of violence have seen a significant increase over the previous three years. In particular, the use of knives and sharps have risen sharply.

Interestingly, the general trend

upwards in both paramilitary related violence and broader prevalence of community-based violence appear similar. The international literature would suggest that violence, in all its forms have similar root causes. Being situated in the community, it is not surprising that with an increase in more general forms of interpersonal violence, a similar increase is found with paramilitary style violence.
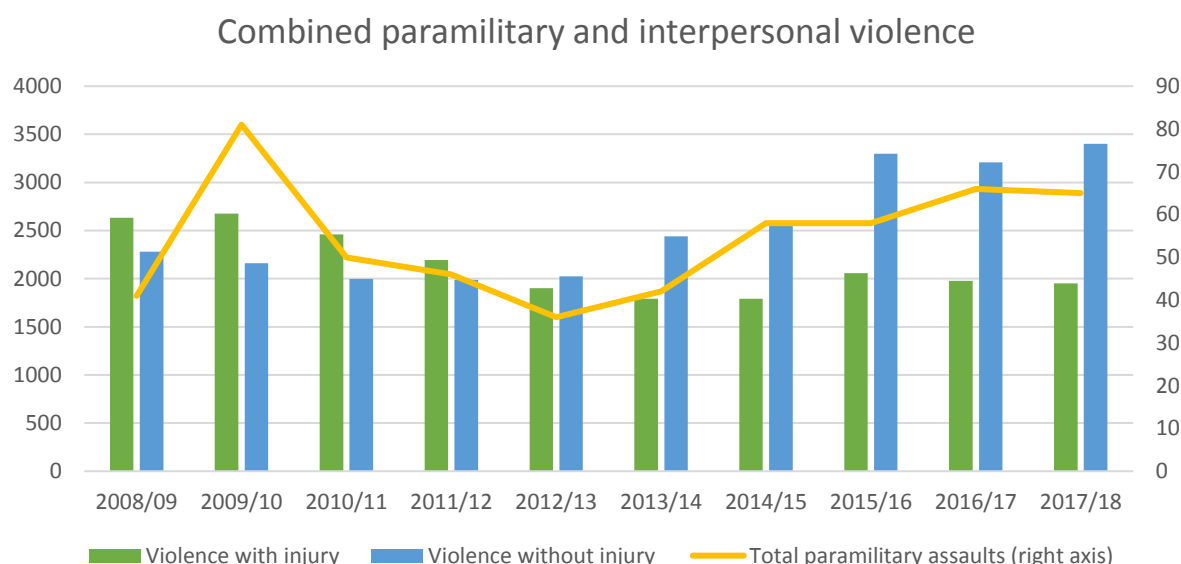
Figure 14: Combined paramilitary and community violence

The literature suggests that where violence is normalised (e.g. through gender constructions), and where whole communities are exposed to multiple and intergenerational trauma, violence and aggression permeates all aspects of that community. The pattern above suggests that through understanding and responding to the root causes of all community based violence, these approaches have the added value of reducing the prevalence and impact of organised and paramilitary style violence.

As significant predictors of violence, it is important therefore not only to understand prevalence but in the context of victimisation and how that victimisation is understood and responded to. The court service through DOJ publish regular reports on court activity and disposals. The most recent report (DOJNI, 2017) provides detailed data on through-put, and disposals by court type, gender and age. Whilst this disaggregated data is of critical importance, in relation to the evidence related to pathways into violence through violent victimisation, it cannot be easily discerned from either the published reports or raw data, the proportion of youth offenders that were brought before the courts who were male and for which offences. It does

however support the evidence more globally that the majority of those in contact with justice agency are male and a significant proportion of offences relate to violent offences.

Gender

Gender is an important demographic characteristic in all violence prevention literature and the same is true when exploring convictions and offences with 80.5% all offenders being male (Crone, 2018). Routine reported data on PACE (Police and Criminal Evidence Order) statistics in 2019 show that there was a total of 22,300 arrests made under PACE in the period 2017/18, of which 84% (n=18816) were male. Whilst figures are disaggregated on reasons for 'stop and search', reasons for arrests under PACE Order, broken down by offence type, gender and age are not routinely reported on.

Official figures from DOJ show that being male significantly increases the risk of both prosecution and custody. Most recent figures from DOJ show that males (89%) accounted for the majority of prosecutions in Crown courts (Graham, 2018). Figures on the custodial population in 17/18 however, show that 96% were male (Crone, 2018). In relation to VAP, adult men under the age of 21 were more than ten times more likely to be in custody as a result of VAP than women (*ibid*). The same figures show that overall, VAP in 17/18 accounted for 35% (>21) and 32% (<21) of the primary offences amongst the custodial population.

The Youth Justice Agency with responsibility for the 'prevention of youth offending' for those aged 10-18 (YJA, 2012) publishes regular workload reports. The most recent (YJA, 2018) provide detailed information on YJA population, disaggregated by status, religion, area, gender and age. The report shows that the gender pattern established in adult prison systems begins early. Young men accounted for 83% of the total custodial population in 2017/18. Across the whole youth justice system, young men accounted for 78% of the total number of referrals. In addition to gender, looked after status was another significant risk with an increasing trend for care experienced young people to be engaged in custodial services. In the year previous, 39% of the total custodial population were 'looked after' and in 2017/18, this figure rose to 43%.

YJA population by gender (%)

□ Young Women □ Youg Men
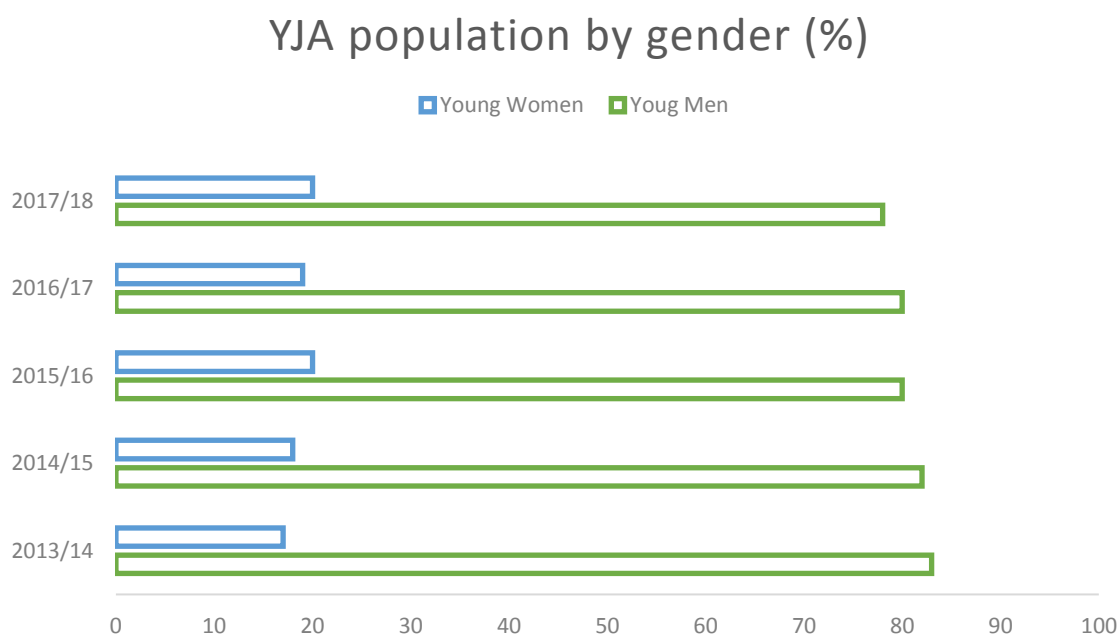
Figure 15: YJA population by gender

Although not routinely undertaken, DOJ implemented qualitative studies in 2015 and 2016 in an effort to understand the experiences of victims of sexual and community based violence. In 2015, DOJ undertook twelve interviews with victims of sexual abuse and violent crimes. Although the report suggests that five of these were male, the focus of the report appeared to be limited to sexual abuse and gender-based violence with little or no indication around the specific needs of males within the study and how exposure and responses are differentiated by gender (DOJ, 2016). In 2016, DOJ undertook a separate study with 15 young victims of crime. The interviewees were both male and female. Half of the respondents were victims of sexual crimes and the other half were victims of physical assault, although crimes were not differentiated by gender. Interestingly, in only one case did the young person report the crimes to the police themselves (DOJ, 2017). Although the purpose of qualitative studies is not to make broad generalisations, it does suggest that only a minority of violent crimes come to the attention of PSNI, court and Youth Justice Agency complicating an already complex picture illustrated above.

Age

In addition to gender, it appears that there is an upward trajectory as children transition into mid-late adolescence. This aligns well with established literature of the development of criminal behaviour, its peak during adolescence and gradual decline during adulthood. However, we also know that for a minority, their criminal careers begin in childhood and extend

into adulthood. For this population, their crimes, both in terms of intensity and frequency increase. Unfortunately, there is no way, using publicly available data to track those trajectories and establish potential points of interruption-points at a young person life that the risk of engaging in more serious crimes, violence and paramilitary activity could be reduced and their outcomes could be improved

% of all YJA referrals 2017/18 (age)

We can take for granted that the whole population is under 18 years of age, so the need for combined gender and age data when looking at outcome is of lesser importance. However, the routinely published reports do not
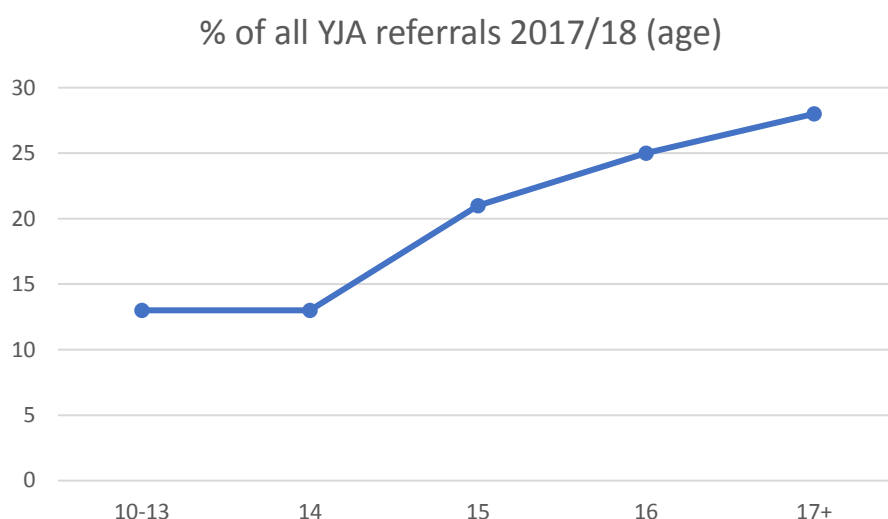
Figure 16: YJA referrals by age

include data on offence types in their raw data

This pattern continues into the adult justice system. Within the crown courts, the majority of convictions (26%) related to VAP (Graham, 2018). Whilst 30-39 year olds were more likely to be dealt with via the Crown Courts, under 18 year olds were significantly more likely to receive out of court diversionary orders and be dealt with via a magistrates court (Graham, 2018). Despite this, VAP accounted for 21% of diversionary disposals (Graham, 2018). Figures on the custodial population in 17/18 show that 96% were male and in relation to VAP, adult men under the age of 21 were more than ten times more likely to be in custody as a result of VAP that women (Crone, 2018).

Reoffending

The policy and practice challenges are complex. Without fully understanding the cyclical nature of violent offending and identifying measurable interruption points, those who begin offending careers early in childhood are significantly more likely to continue that offending into early adulthood. And as their offences become more serious, the costs to society and longer term outcomes for themselves become more pronounced.

DOJ in NI report on reoffending rates for NI. Recent figures for the period 2010-2016 show that levels of one year, reoffending have somewhat increased in that period from 16.7% in 2010 to 18.5% in 2016.

In both adult and youth cohort reoffending has increased. In the youth cohort (n=1543), figures for reoffending have increased from 16.7% in 2010/11 to 18.5% in 2015/16. Of the 2015/16 cohort, 36.9% (n=569) had committed at least one offence (r=0-80).

Within these figures, it appears that 49% of all those who reoffended were under the age of 18 at their first offence (n=1999). The age of first offence appears to be statistically significant with those aged 13 or under more likely than all other age groups to be included in the 2015/16 cohort of those who reoffended.

Of all those who reoffended, 86% were male. This is reflected in the prison statistics with men consistently over-represented in the custodial population (Crone, 2018).

The one year proven offending rate for those under 18 at their first offence is relatively high at 31% (n=404 v 124) compared to the adult population at 20% (3466 v 680). Additionally, it appears that those convicted of VAP as a primary offence, were significantly more likely to engage in another offence characterised as VAP (32%) and more broadly, more likely to engage in other aggressive crimes (Duncan & Browne, 2018). Again, this mirrors the custodial population with 35% of prisoners' principal offence related to VAP (Crone, 2018).

Despite these demographic predictors, the trends for reoffending in males peak at around the age of 17 following the well-established age-crime curve. This is not the same for females with no consistent trends in the context of age and reoffending pattern. (Duncan & Browne, 2018). This pattern is further evidenced by the majority of adult prisoners in the lower age bands. Indeed, almost two thirds (65%) of adult, sentenced prisoners in 2017/18 were under the age of 40.
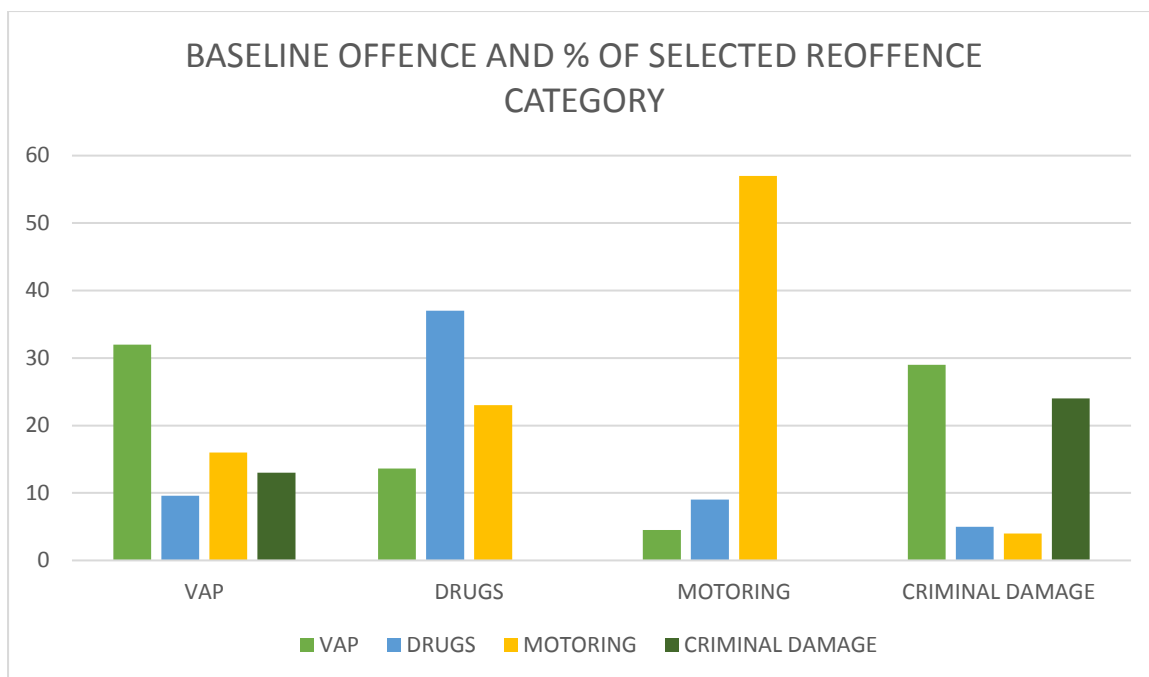
Figure 17: Baseline offences and reoffending rates

It is widely accepted in literature the reported crimes and convictions mask the true extent of violence in society. Whilst these figures provide an indication of changing trends and risk factors, they do not provide a reliable indicator of prevalence. There are a number of reasons cited for this but some of the most commonly accepted reasons are under-reporting to police, and in the context of NI and the legacy of the conflict, this is exacerbated more than in most communities as well as normalisation of violence. Indeed, the most recent crime survey found that almost one third of respondents indicated that failure to disclose crimes were because they were 'a private matter' that could be dealt 'with by ourselves (Campbell and Rice, 2018). Again, in NI, previous studies have demonstrated how violence is normalised in many communities, particularly amongst young men.

Justice data presented here confirms findings from previous studies in NI and elsewhere that have established that adolescence is a period of rapid change as well as rapid onset of exposure to community-based violence (Harland, McCready and Walsh, 2010; Harland & McCready 2015; Shirlow & Murtagh, 2006). Between the ages of 12 and 17, young men are at particular risk and this review illustrates that neither the reported crime figures nor the crime survey capture both perpetration and victimisation. Indeed, findings from the Crime Survey 2016/17 show a significant decrease in reporting violent crimes to the police. From a peak of 59% in 2009/10, latest figures suggest that only 36% of violent crimes were reported to the police (Campbell and Rice, 2018). Therefore, establishing any interface between the two or

understanding pathways into and opportunities out of more serious forms of paramilitarism is severely limited.

Education data

On an annual basis, DE publish figures obtained through the Education Authority in relation to expulsion and exclusions (DE, 2019). In relation to expulsions, the most recent report (DE, 2019) shows that there was a total of 4069 pupils suspended and a total of 6491 suspensions across all key stage groups in NI for the period 2017/18 with the highest number between years 8-10 and the highest proportion of the year groups in years 11-12. The figures also show that in this year, boys and young men accounted for 80% of the overall number of suspensions.

Education Authority figures show that this pattern has been consistent over many years. The 2018 DE report shows that there was a total of 6805 recorded suspensions in the period 2016/17. In this group, boys and young men were also at great risk of suspension.

SUSPENSIONS 2016/17

■ boys and young men ■ girls and young women
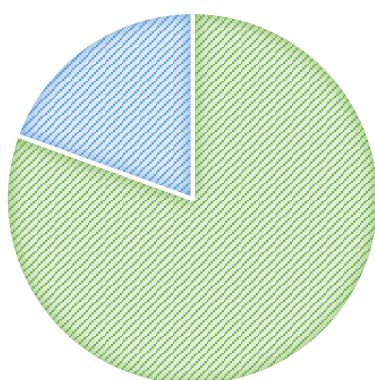
Figure 18: School suspensions 16/17

DE do publish disaggregated data on reasons for suspensions. In this year, various forms of aggressive behaviour on pupils, on staff and against property were the main reasons cited, accounted for 36% of all reasons across both genders. For boys and young men, the likelihood of engaging in violent and aggressive behaviour was significantly more likely.

% of pupil suspensions due to violence/intimidation by gender-2013/14-2017/18
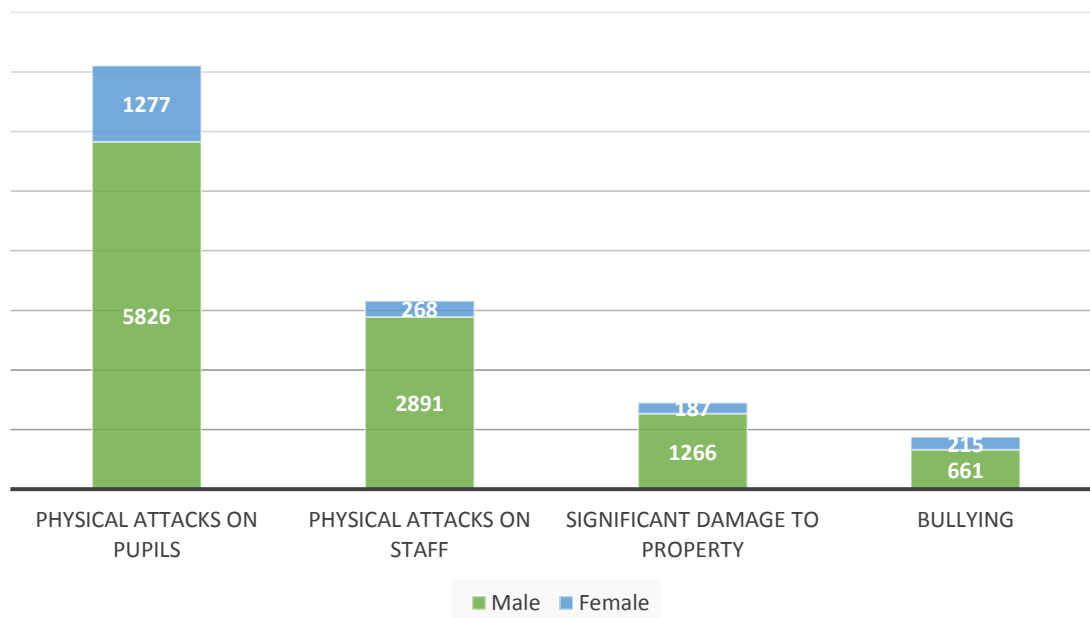
Figure 19: School suspension due to violence

These figures align highly with data reported by DENI over previous five years when, excluding verbal aggression, the total number of violent incidents resulting in suspensions equated to 11,015 and on average boys and young men were responsible for 82% of these altercations (see table 2). Whilst useful, these figures mask several factors required to fully understand prevalence of violence during childhood and its association with the perpetration of more serious violence in later life. For instance, these figures only capture suspension and given schools across NI administer these rules with considerable variability, it is likely that additional altercations have taken place which either the school are unaware of or, the actions did not result in suspensions. Additionally, these figures although useful for understanding the gendered relationship between violence in school and suspensions, they do not provide any detail on the victims of those altercations. Again, it is likely that the proportion of boys and young men who are victims of school-based violence align highly with the proportion of boys and young men responsible for the violence.

Year	Number of suspensions related to physical violence	% male
2016/17	2458	81%
2015/16	2665	83%
2014/15	2022	83%
2013/14	1949	82%
2012/13	1921	83%

At a glance, the figures from court data, PSNI recorded offences, youth justice agency data and education data appear to be aligned on gender as a significant predictor of violence. As the table below illustrates, year on year, males are consistently responsible for the majority of violent incidents, from low level incidents to severe forms of violence and organised crime.
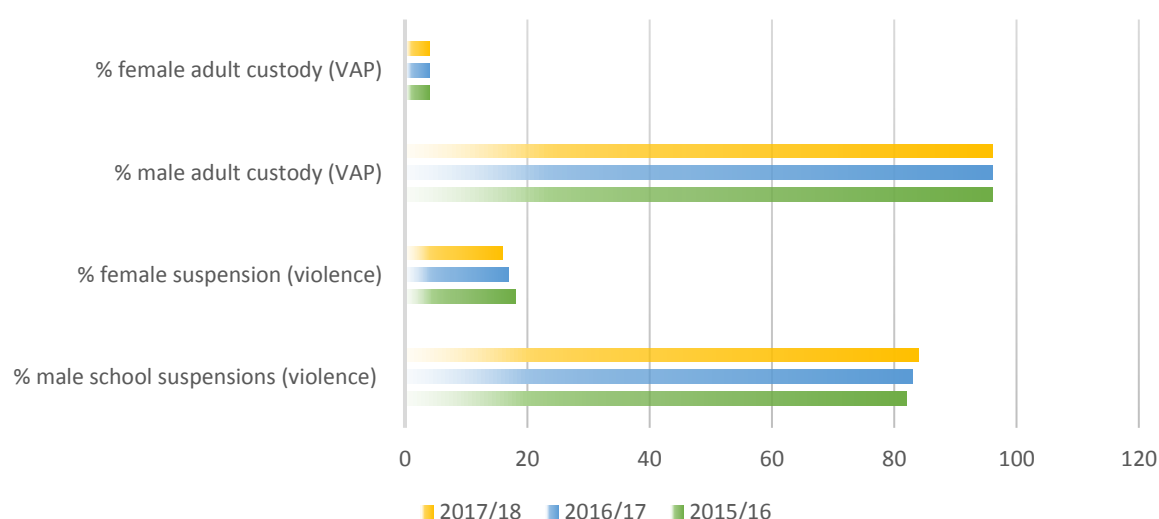
Figure 20:Violence by gender

What is not clear however are the trajectories; how apparently isolated incidents of violence are related to subsequent violence; and how early exposure to violence mediates the relationship between victimisation and perpetuation. In this sense, education today, justice data, even when combined with education data provides only a partial picture of the prevalence and impact of violence.

Given that violence is traumatic and when experienced either directly or vicariously, is a significant predictor of detrimental psycho-social outcomes (Walsh, 2019) including violence,

there is a role for health authorities in helping to understand prevalence as well as put in place measures that will mitigate risks of serious violence at a later stage.

Health and Social Care data

Northern Ireland is in the fortunate position of having joined up health and social care systems. Both will be reviewed in turn.

In the context of understanding why some people engage in serious forms of violence, including paramilitary and organised violent crime and others do not, early childhood trauma such as maltreatment and exposure to community violence has been demonstrated to have a profound impact on development and behavioural responses. This is exacerbated further when the legacy of conflict is taken into account, with some communities exposed to decades of serious violence. Childhood trauma is associated with increased mental health problems and disturbances in affective and interpersonal self-regulatory capacities (Cloitre et al., 2009) across the life-course (Tuner & Lloyd, 1995). Untreated, the impact of trauma can impact more than 30% of cases of victims over the longer-term (Smith et al, 2007), increasing the likelihood of psycho-social difficulties (Porshe et al, 2011) and risk of re-victimization (Ford et al., 2009). Co-occurring psychiatric symptoms is highly prevalent (Howe, 2005). However, these often present as behavioural difficulties and/or conduct disorders, yet they are indicative of exposure to trauma. As noted in each of the previous sections, the deleterious outcomes of trauma are well established. However, not everyone experiences the same trauma types and even when they do, behavioural responses to that trauma vary. Around 45,000 of children and young people in NI have a mental health need at any one time. More than 20% of young people experience "significant mental health problems" 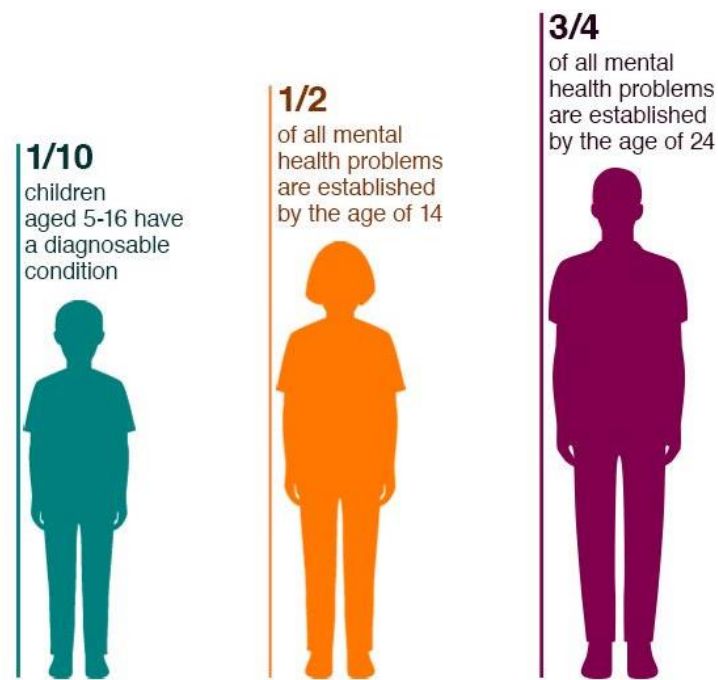by the time they reach 18 (DoH, 2016). However, 50% of these complex psychological disorders present by the age of 14 and although there are a range of evidence-based treatments designed to reduce the impact of such trauma, there is a significant gap in identifying those who require additional support and engaging them in such treatment. Just like justice figures show that for the minority of young people who continue to offend into adulthood, their violent offences become more frequent and more intense, those who continue to experience mental health issues without assessment and without treatment experience more persistent and more severe psychological difficulties as well as engage in more problematic behaviours. It is of no surprise that we see those who offend earlier that the general youth population (below the age of 13) are significantly more likely to persist and engage in more serious and violent crimes. The relationship however in NI cannot currently be established from routinely collected data given the challenges collecting and sharing information between systems.

1/10
children aged 5-16 have a diagnosable condition

1/2
of all mental health problems are established by the age of 14

3/4
of all mental health problems are established by the age of 24

Within social care in NI, there have been significant policy developments over recent years. This has changed the context of health provision, and particularly mental health provision for children and young people. These include the Bamford Review report "*A Vision of a Comprehensive Child and Adolescent Mental Health Service*" (DoH, 2006), *'Transforming your Care'* report (HSCB, 2011), the review of CAMHS (DoH, 2012) and the findings of the *'Systems, Not Structures - Changing Health and Social Care'* (Bengoa et al, 2016). A service model that introduced a new vision for the implementation of child and adolescent mental health services in NI was published in 2012. The model, underpinned by evidence-based approaches and stepped care, highlighted that responding to the mental health needs (and behavioural outcomes) of children and young people affected by trauma necessitated a joined-up response and involved not only clinical professionals but also those from other sectors such as education and justice (DoH, 2012). This stepped care approach situated five distinct but interconnected phases within the context of early intervention, prevention and improved outcomes across multiple sectors.

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Targeted Prevention	Early Intervention	Specialised Intervention Services	Integrated Crisis Intervention Child and Family Services	Inpatient and Regional Specialist Services

Studies have consistently demonstrated that looked after children and young people are at significantly greater risk of engaging with justice services (Convery & Moore, 2006; McSherry et al, 2015). We know that the reasons are complex and multi-faceted but in terms of prevalence, figures from YJA support these general findings. So, it is important to understand the specific needs of this population, social care trends and how these relate to trends in other sectors such as justice and education. Latest figures from the DoH show that as of December 2018, 2315 children on the children protection register (DoH, 2019). Of these, a significant

proportion (42%) were on the register as a result of violence and physical abuse or combination of physical abuse alongside other forms of maltreatment (DoH, 2019). We know that not all looked after young people go on to offend but we also know that certain characteristics put young people at greater risk. Even though only 7% of the looked after population in 2016/17 were cautioned or convicted in that year (DoH, 2018), we know that proportionally, this rate is significantly higher than the general youth population and the looked after population are twenty times more likely to engage with justice services (McSherry et al, 2015). The offending rates for Northern Ireland have been consistently above that for England over recent years and latest figures show that while the rate of offending in NI was 7%, it was only 4% in England, mirroring a similar trend over the previous five years (DoH, 2018). We also know that young men are significantly more likely to be exposed to community-based violence. The impact of poly-victimisation is widely accepted as a significant predictor of violence. This might partially explain why boys and young men who are looked after are significantly more likely than girls to be cautioned or convicted (DoH, 2018). When exploring reasons for those cautions or convictions, figures from the Department of Health show that the highest proportion of offences were related to violence or aggression (64%).

Figure 21: LAC cautions or convictions

We also know that young men are less likely to engage in therapeutic and helping relationships. In the absence of social supports (commonly found in family systems), peri-trauma factors are exacerbated, and young people are at much more risk of engaging in thought supressing activities (such as substance misuse) and externalising difficulties (such as violence). Additionally, without these natural supports, they are at great risk of exploitation by organised crime gangs and paramilitaries.

Summary of what the routinely report data can tell us

Of the data reviewed across each of the key departments, it is clear that a huge amount of data is collected and made available. In the context of security threats, conflict related violence, and other forms of violence, justice services are most likely to collect and report this information. This is reasonable given their strategic role and objectives.

However, in the context of a public health approach, when the aim is to understand pathways into and opportunities to avoid paramilitary crime and serious violence, justice data is insufficient. We know that the root causes of violence, in whatever form they take are often the same. We know those at greatest risk are those who have been victims themselves and these are most likely to be males. Younger males who interface with community risk taking behaviours such as violence at a younger age are significantly more likely to engage in violence as they transition into later adolescence and adulthood.

Whilst documenting the frequency of violence and understanding some key demographics is important, it is insufficient for understanding causal pathways that create the conditions for more persistent and more serious forms of violence.

Additional and disaggregated data is required. This involves capturing more complex data and joining up systems so that individual histories can be understood.

Table 3 summarises the data that is routinely available from the agencies reviewed and illustrates that gaps that exist both within and between departments.

Table 3: Overview of administrative data in NI

Dept	Org	Frequency	Perpetrator	Victim	Victim & Perp	Gender	Age	Gender and age
Justice NB: *Although YJA do not routinely publish this data, youth justice figures are found	**PSNI**	✓	✓			✓	✓	
	*YJA							
	Courts	✓	✓		✓	✓	✓	
	NIPS	✓	✓			✓	✓	

elsewhere e.g. courts ** Limited to >16 year olds	**Crime Survey	✓		✓		✓	✓	✓
Health NB: There are no routinely reported health data related to violence. However social care data through the Department is published in relation to LAC and offending	BHSCT							
	NHSCT							
	SEHSCT							
	SHSCT							
	WHSCT							
	NIAS							
Education	Education Authority	✓	✓					✓
DFC	Housing Executive	✓		✓				

The routinely published data presented in the previous section illustrates some important points in relation to violence.

Violence consistently accounts for a significant proportion of all crimes and when perpetrated has significant economic and social costs.

The number of reported violent crimes has risen over recent years. This includes assaults and paramilitary style assaults.

Estimated violent crime has also risen with some indications that it is ten times higher than the number of violent incidents reported.

More detailed data collection on this would help inform policy and evaluate performance

Justice services reasonably enough collect the majority of violence related data

Violent offending in all its presentations is highly gendered

Few of the relevant agencies collect and report on the strongest predictors of serious violence (age, gender, trauma)

There are no agencies that track victim/perpetrator status

Significantly, health data does not currently inform serious violence prevention policy

There are significant limitations with how data is currently collected and reported, and this is problematic because:

- we do not fully understand the prevalence of violence, particularly amongst young people;
- we do not understand the relationship (if any) between exposure to violence as a victim and then perpetration;
- It is problematic because we do not know what opportunities exist to improve outcomes for individuals, change offending trajectories and ensure that the risks associated with engaging in more serious forms of violence such as organised crime and paramilitary activity are reduced as much as possible.

We know from international literature and from studies undertaken in comparable contexts that several risk factors are strong predictors of violent offending. Gender, as we have already established, i.e. one. Previous victimisation is another. Peri-trauma factors (such as a lack of social supports) is another.

In order to advance our understanding, a second phase of data collection was undertaken. During this phase, questions were put to relevant departments and statutory agencies. It was anticipated that those who would collect the most pertinent data related to prevalence of violence amongst young men (victimisation and perpetration) were Department of Justice, Department of Education and Department of Health.

Whilst the PSNI collect and report and a wide variety of offending statistics, their routinely reported data remains limited. It is limited in the fact that there it is difficult to disaggregate the data relating to violence by both age and gender. In response a FOI was submitted asking PSNI to share relevant data disaggregated by these demographic factors over the previous five years. PSNI responded indicating that the estimated cost of complying with the request would exceed 'appropriate cost limits. Following this, a second FOI was submitted, this time asking for relevant violence data over a one-year period. Again, PSNI responded indicating that the costs for complying with the request could exceed appropriate costs limits. Although PSNI confirmed that it held the information requested, systems that are in place do not allow for easy access of that data nor analysis. It is reasonable to assume then that not only is this information not reported on, but it is not analysed internally either.
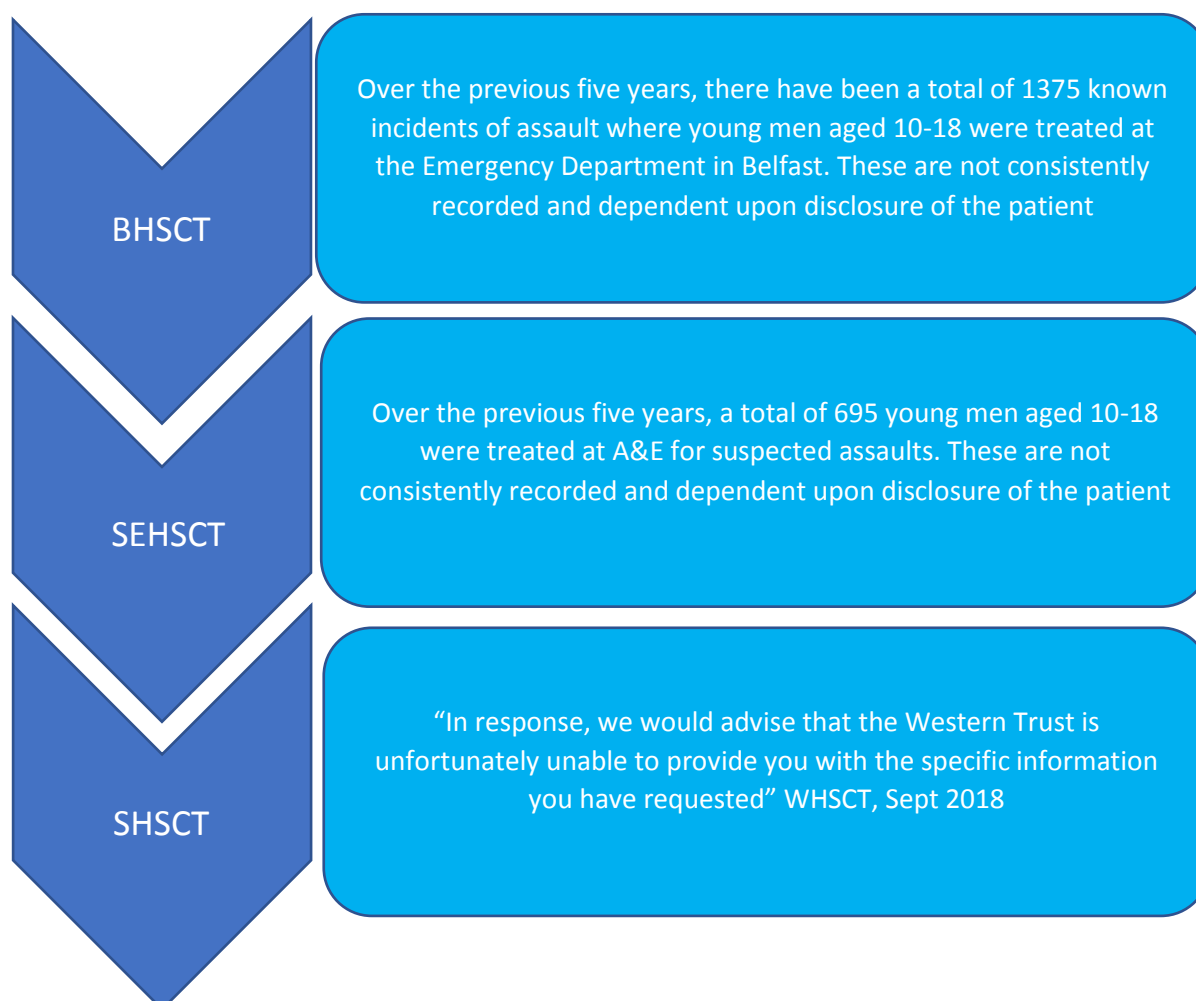
Evidence suggests that justice data only provides a partial estimate of the extent of violence within communities. This data depends on a variety of factors such as victims reporting incidents, standards of evidence and prosecution rates. Including additional sources of
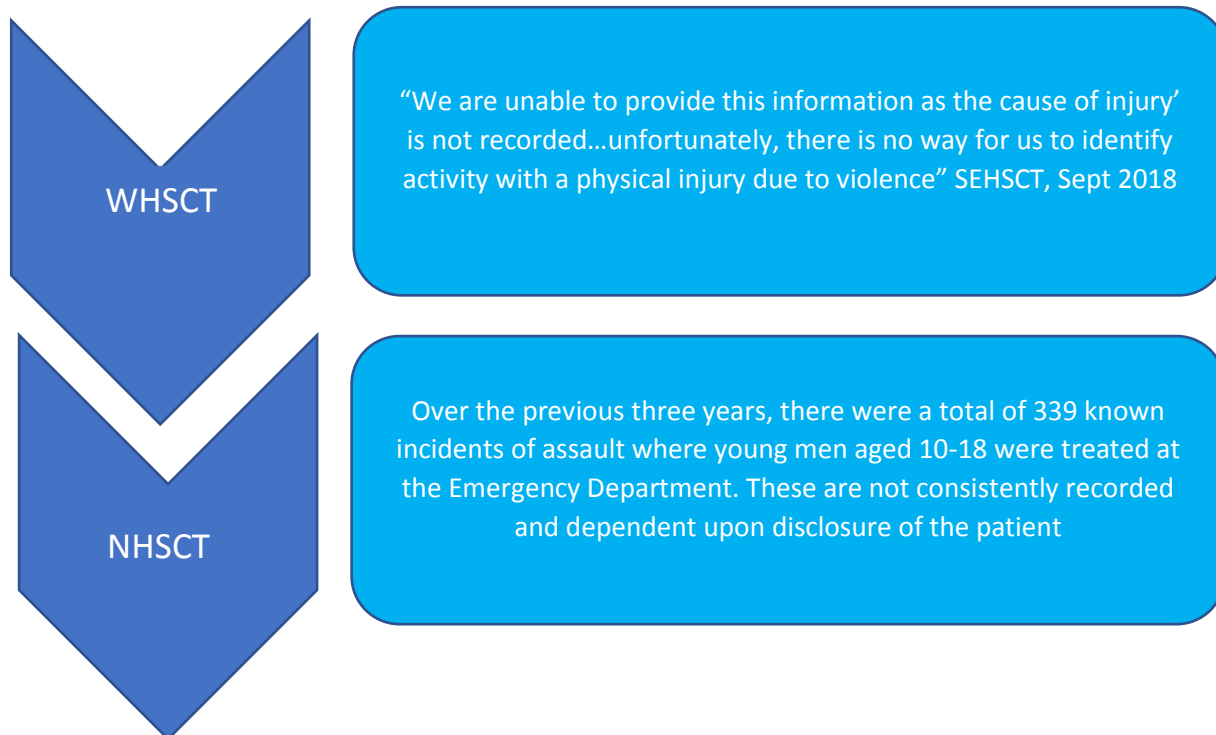
violent victimisation helps to provide a fuller and more comprehensive overview. As a result, the Department of Health were asked for data related to violent victimisation that was not reported (see table 4).

Table 4: FOI question to DoH

Question to the Department of Health	Response from the Department of Health
Could you advise on the amount of young men aged 10-18 who attended Emergency Department following an injury as a result of violence?	The department does not collect or hold that information. This information may be found within each individual Trust.

In response to the DoH, questions were asked of each Trust in NI. They were asked what data they held in relation to presentations at Accident and Emergency, specifically with regards to injuries following violent assaults. As the literature indicated that young men who are exposed to violent trauma during adolescence are significantly more likely to engage in violence as a perpetrator, the question related specifically to young men within the age range 10-18. This is the response from each Trust.

BHSCT
Over the previous five years, there have been a total of 1375 known incidents of assault where young men aged 10-18 were treated at the Emergency Department in Belfast. These are not consistently recorded and dependent upon disclosure of the patient

SEHSCT
Over the previous five years, a total of 695 young men aged 10-18 were treated at A&E for suspected assaults. These are not consistently recorded and dependent upon disclosure of the patient

SHSCT
"In response, we would advise that the Western Trust is unfortunately unable to provide you with the specific information you have requested" WHSCT, Sept 2018

WHSCT

"We are unable to provide this information as the cause of injury' is not recorded…unfortunately, there is no way for us to identify activity with a physical injury due to violence" SEHSCT, Sept 2018

NHSCT

Over the previous three years, there were a total of 339 known incidents of assault where young men aged 10-18 were treated at the Emergency Department. These are not consistently recorded and dependent upon disclosure of the patient

Given that there was no consistency in how each individual health Trust collect and report on presentation of violence, the Northern Ireland Ambulance Service Trust were asked for figures relating to treatment provided where the chief complaint was related to assault. In response to the FOI request on 3ʳᵈ April, 2019, The Northern Ireland Ambulance Service confirmed that these figures are not routinely published but are collected at a regional level. Between the years 2016 and 2019, a total of 660 young people aged 10-18 treated by the ambulance service and 51% attended A & E as a result. This is important because it illustrates that even if A& E data were available, NIAS is also critically important. Of the total number of young people treated for injuries following violence, 70% were young men. The figures did not distinguish between sexual and other forms of violence.

In addition to health data, it was assumed that Department of Education would also hold information related to exposure to violence (see table 5). Given that it is a statutory obligation for all children and young people to attend school until the age of 16, exposure to violence here could be a significant gauge of the wider exposure to violence in the community.

Table 5: FOI question to DENI

Question to the Department of Education	Response from the Department of Education
Could you advise how many incidents of violence were recorded in post primary schools across NI over the previous five years?	"The Department has searched its record and it doesn't hold any information in relation to violence in schools" DENI, December 2018

The education authority, with responsibility for ensuring that efficient and effective primary and secondary education services are available to meet the needs of children and young people, and support for the provision of efficient and that effective youth services are in place was contacted in order to establish what, if any data they held in relation to the prevalence of violence in schools. Table 6 outlines the question that was put to them and their response.
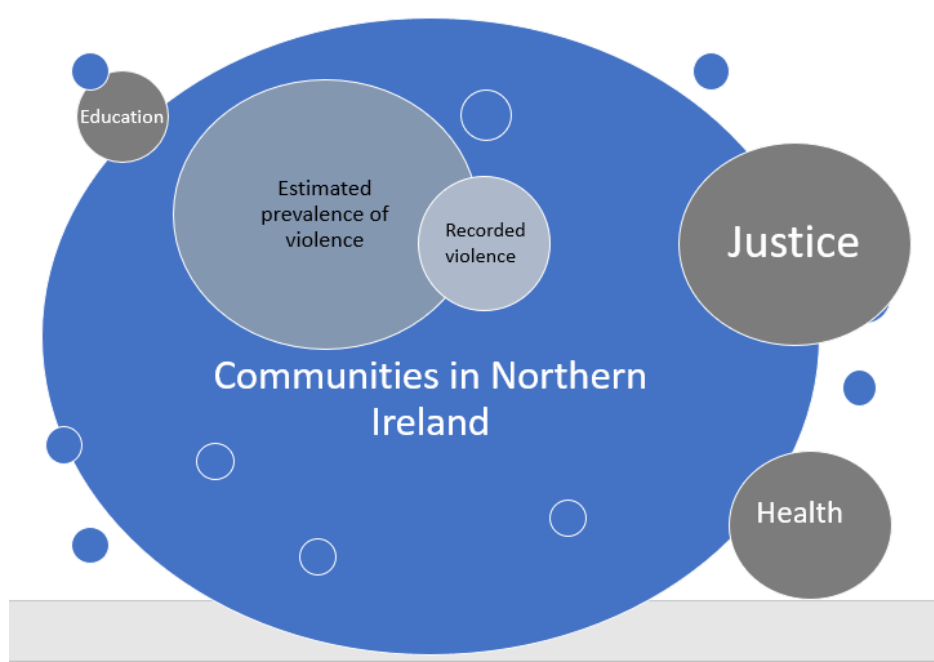
Table 6: FOI question to EA

Question to the Education Authority	Response from the Education Authority
Could you advise how many incidents of violence were recorded in post primary schools across NI over the previous five years?	"The Education Authority does not hold information relating to the information you have requested" EA, November 2018

Interestingly, neither the Department nor the Education Authority routinely collect data related to the prevalence of violence. Despite the availability of suspension and expulsion information, this has implications for formal, non-formal and youth services but also indicates that violence related data is not shared between education systems and other systems. Again, it suggests that within some government departments, most likely to have contact with victims of violence, there are no standardised methods of collecting, collating, analysing or reporting on this.

What the current data tell us can be illustrated below. Figure 22 illustrates that within communities across Northern Ireland, violence remains a part of the fabric of life. Administrative data by way of police reports and justice figures have consistently demonstrated this. But what the evidence has also consistently demonstrated is that violence presents in and affects a range of systems. Those systems most able to record such

presentations include health systems and reduction systems. But as Figure 22 shows, violence appears to be the remit of justice services.

Figure 22: Illustration of administrative data in NI

The relationship between reported crime, estimated prevalence and sources of information which have the potential to increase our understanding of the root causes as a means of implementing evidence based and targeted services varies considerably. Overall, it is widely accepted that estimated rates of violence are significantly higher than reported violent crime. In Northern Ireland that is approximately ten times greater. Beyond this, the reports generally tell us little about the victim and importantly how their exposure to violence is a predictor of later perpetration. This is exacerbated by the fact that it is primarily in the justice services that any violence data is collected and reported. They provide the majority of data, with other relevant services providing limited or no data in some areas.

This review has outlined the utility of situating a strategic organised crime and paramilitary violence approach within a broader violence prevention framework. The evidence suggests that whilst presentations differ depending on culture and context, the aetiology of all forms of community-based violence are similar. Empirical studies have found that there is a relationship between victimisation and perpetration however this relationship is mediated by other important demographic (such as being male and early-onset offending), and cultural factors (such as higher acceptance of normative masculinity).

Gender

Age

Demographic

Cultural

Victimisation

Pathways   Context

Perpetration

Social

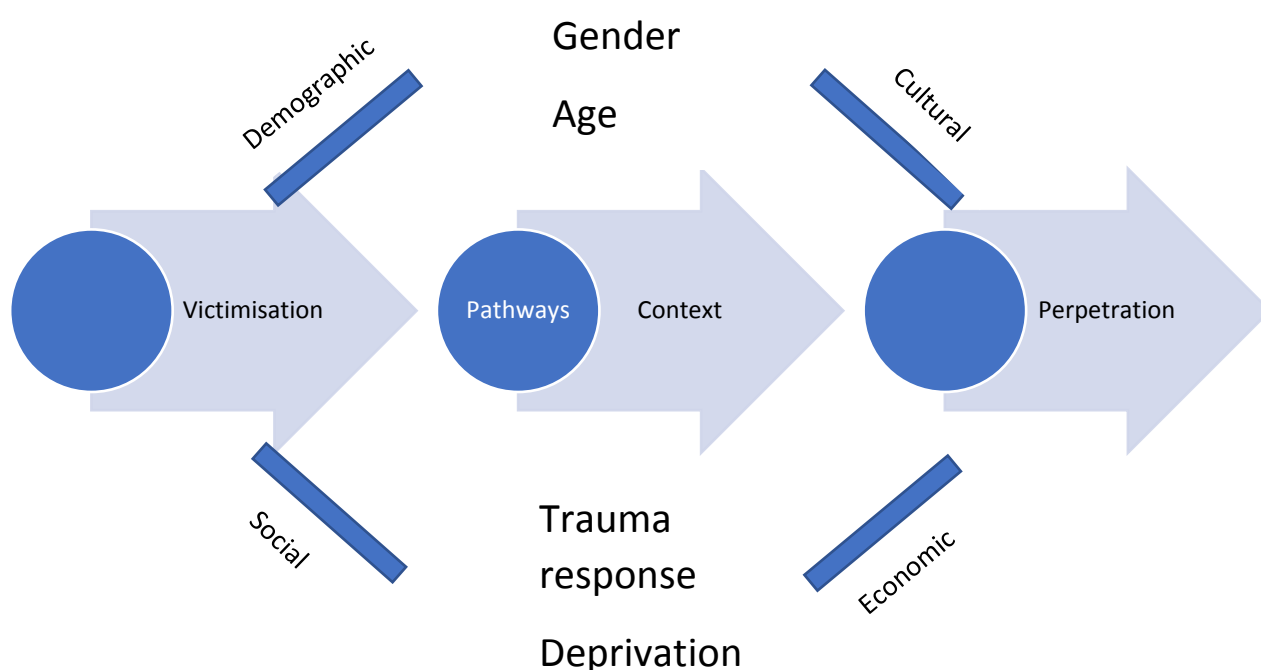Trauma response

Deprivation

Economic

Figure 23: Causal pathways into violence

When seeking to understand and respond to the perpetration of violence, studies have suggested the importance of understanding root causes. Therefore, there is a need to estimate prevalence but within the context of other significant predictors. When understood, these provide opportunities for points of interruption.

Frameworks developed elsewhere have shown promise in reducing serious forms of violence. In relatively comparative contexts such as Scotland, this has been the public health approach. Widely advocated by those such as the World Health Organisation, the public health framework breaks an evidence-based response to violence into four distinct but interrelated phases. It begins with defining the need through understanding prevalence. Once the need is established, the risks are investigated and labelled. With this anchor, evidence-based interventions can be put in place with the help of an implementation science approach. Once implemented as intended, ongoing review and prevalence monitoring can estimate effectiveness.

This review has taken the public health approach and began with using administrative data collected in Northern Ireland as a means of estimating prevalence and risks.

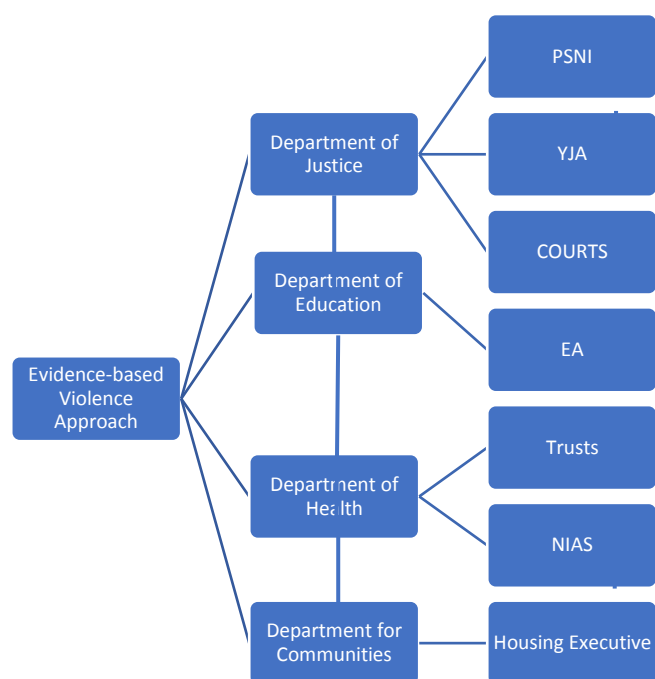The ideal relationship between systems in NI can be illustrated as:

Figure 24: Ideal data sharing illustration

However, this review found that there is only partial evidence available. Different agencies collect different data related to violence and even organisations within the justice family do not routinely report on the most pertinent data required in this review. Additionally, there is a dearth of data sharing. Systems are not designed to facilitate integrative approaches and whilst there is evidence that complex internal systems such as health and justice, independently

established joined up information sharing systems, this is not extended at an inter-departmental level.

However, this review has demonstrated that whilst limited, there is much more data available to organisations which are not reported. For example, a response from PSNI to a FOI request indicated that information is available but would take a relatively long period to access and respond to that specific questions posed. Therefore, it seems that the data collection and reporting systems can be illustrated as:
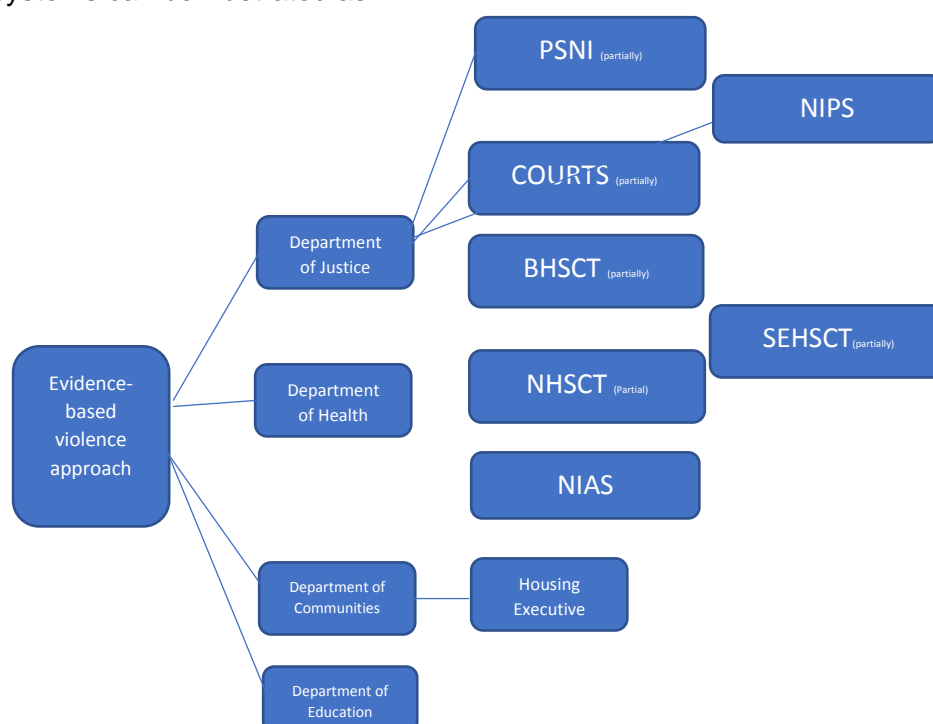

Figure 25: Data sharing illustration NI

Although the data that is collected provides estimates on prevalence of violence, this picture is only partial. It is therefore difficult to extrapolate an overall picture of serious violence and therefore to identify points for interruption. Different agencies employ different categorisations, definitions, evidence thresholds and recording protocols. Different agencies collect data in different ways and then there is the issue of recorder subjectivity. This exercise has shown that even when data is collected, it is often not reported nor shared. Therefore, a comprehensive understanding of root causes of violence is made more difficulty, policy responses are based on limited information and activities are commissioned on the basis of only partial evidence.

Following this review four recommendation are made:

Shorter Term Recommendation	Activity
1	It is recommended that schools in NI collect and report incidents of violence and report these to the education authority in a consistent way;
2	It is recommended that the education authority publishes details of violence related incidents on an annual basis in order to complement data from other statutory organisations;
3	It is recommended that A & E departments across all trust areas routinely document incidents where patients are presenting for treatment following a violent altercation; and
4	It is recommended that each Trust, provides violence related data to the department for collation, analysis and reporting.

Longer Term Recommendation	Activity
1	It is recommended that the tackling paramilitarism programme board adopt a combined public health, behavioural science and implementation approach to understanding and responding to serious and organised violence;
2	It is recommended that in the first instance, a cross-sectional survey is undertaken to establish the prevalence of violence in NI;
3	In the absence of longitudinal NI data, it is recommended that policy follows the international evidence base and support strategies underpinned by gender conscious and trauma informed approaches; and
4	In the longer term, it is recommended that government departments collect and report on data related to violence, both victimisation and perpetration and departments with particular responsibilities (e.g. health) record, report and share information with other relevant departments to ensure coherence.

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