Evaluation of Medics Against Violence

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Executive Summary

This report outlines the independent evaluation of Medics Against Violence (MAV) conducted in five secondary schools in the West of Scotland between 2011 and 2013. A mixed-methods approach was adopted to conduct an outcome and process evaluation. The outcome evaluation aimed to examine whether MAV was effective in changing attitudes towards violence (ATV) and empathy. The process evaluation aimed to explore the setting, implementation and acceptability of the intervention, and further understand the results of the outcome evaluation. This data was then used to consider how MAV could be developed to maximise its effectiveness.

Due to difficulties recruiting control schools an uncontrolled before-and-after study was conducted. The primary outcome was ATV and was measured using a validated scale, comprised of two sub-scales: attitudes supportive of a culture of violence and attitudes supportive of reactive violence. The secondary outcome was empathy. Questionnaires were completed at baseline (T1), immediately post-intervention (T2) and three months post-intervention (T3). The process evaluation consisted of focus groups with school pupils, and open-ended questionnaires and semi-structured interviews with MAV volunteers (healthcare professionals).

There was a statistically significant decrease in ATV scores between T1 and T2, indicating a reduction in pro-violent attitudes; however, this reduction was not sustained at T3. It should be noted that at all three time points a large proportion of the pupils scored near the lower limit of the scale (a floor effect). In particular, pupils had

lower scores for items on the culture of violence sub-scale compared to the reactive violence scale. This suggests that while pupils tended not to view violence as a valued activity, they were more likely to view it as acceptable in response to actual or perceived threats to self or family members. Similarly, qualitative analysis of the focus groups identified that pupils generally displayed anti-violence attitudes, however, a minority felt reactive violence was acceptable. There was no statistically significant change in empathy scores over time. This contrasts to the data from the focus groups where participants demonstrated empathy towards victims of violence and discussed the impact of violence on the interviewees in the film, indicating they had retained some of the concepts discussed in the session.

Pupils had appeared to engage well in the session and this was reflected in volunteers' experiences delivering sessions. The use of real footage, interviews and the Glasgow setting provided a sense of realism for the school pupils and they valued the opportunity to engage with the volunteers. Occasionally volunteers felt engagement was an issue in the most affluent areas, however, some felt able to adapt the programme and focused on victimisation prevention.

The process evaluation also identified themes regarding the delivery of MAV (number of volunteers, class sizes, role of teachers and campus cops, provision of IT equipment) , content of programme (age-appropriateness, psychological consequences of violence, association with alcohol), future developments (inclusion of first-aid, follow-up

resources, a committee of volunteers), recruitment and training . This identified what worked and where improvements could be made with MAV.

Both pupils and MAV volunteers felt youth violence was a considerable issue for young people in the West of Scotland and as such there was a need for violence prevention interventions. Whilst the outcome evaluation did not show sustained change, MAV has been successful in engaging young people and increasing their awareness of issues around violence. Moreover, the presence of only a small change may reflect the fact that pupils had low scores for the culture of violence sub-scale at all three time points. This study suggests that pupils may be more supportive of reactive violence, and highlights a need to examine whether prevention programmes should focus more on reactive violence.

The evaluation identified a number of specific areas for consideration in the development of MAV.

Logistics:

- Work with schools to ensure are sessions delivered to single personal and social education (PSE) classes
- Provide teachers with explicit information detailing their role (e.g. discipline, facilitating group work etc.) well in advance of the session.

- Ensure schools are informed regarding responsibility of setting up AV equipment in time for session start.
- Co-ordinate training sessions with up-coming school visits.
- Schedule two volunteers per visit, particularly when a new volunteer is delivering a session.
- Provide volunteers with at least six weeks' notice of upcoming visits.
- Provide information on the distance from local hospitals when recruiting volunteers for school visits.
- Increase volunteer numbers (including appropriate allied health professionals) through a recruitment drive to enable more school visits.
- Provide certification of visits for volunteers to use in appraisals.
- Empower volunteers to work with their health boards to arrange time away from clinical duties for volunteers.
- Implement follow-up sessions to reinforce material.

Content and resources:

- Develop alternative lesson plan and film that focus on victimisation prevention and safe alcohol consumption to be used with older pupils (e.g. secondary year 4) in the more affluent schools.
- Develop an adapted version of programme for younger pupils (e.g. primary 6 and 7).
- Ask presenters to clarify what aspects of the film are real and which are fictional at the start of the session.
- Adapt the programme to have a component focusing on reactive violence.

- Emphasise strategies for staying safe and the association between alcohol and violence.
- Incorporate material on psychological consequences of violence.
- Incorporate material on alcohol and violence.

Future developments:

- Increase advertising to schools in more deprived areas to ensure the target audience is receiving the programme.
- Enable other volunteers to be involved in the development and running of MAV (e.g. through a committee).
- Annual or bi-annual teaching group meetings to allow members to discuss their experiences and to facilitate development of programme.
- Develop first-responders trauma course to teach pupils how to respond to a casualty with violent injuries.
- Consider inviting an ex-gang member to attend the session to share their experience.
- Develop resources for pupils or teachers to use as a follow-up to the programme.

1. Introduction

This report describes the independent evaluation of Medics Against Violence (MAV) that was conducted 2011-2013. MAV is a novel programme for the primary prevention of violence, which aims to reduce future involvement in violence by changing young peoples' attitudes towards violence (ATV). Such attitudes are considered to mediate the translation of aggressive thoughts into violent behaviour and are a risk factor for violence (Borum, 2000, Ikeda et al., 2001, Goldberg et al., 2010). Therefore, modifying positive attitudes towards violence is a valid approach for violence prevention programmes (Funk et al., 2003). In addition to reducing pro-violent attitudes (the primary outcome) the programme also aims to enhance empathy (the secondary outcome) through demonstration and discussion of the impact of violence to victims and their families. Empathy is a socio-emotional skill which is critical to young peoples' social development (Neace and Muñoz, 2012). Previous research has shown an association with lack of empathy and aggression (Cohen and Strayer, 1996) and adolescent violence (Sams and Truscott, 2004). As higher levels of empathy provide some resilience against violence, a number of violence prevention programmes have aimed to develop this skill in young people (Neace and Muñoz, 2012, Howard et al., 1999, Mytton et al., 2006).

MAV sessions are delivered by healthcare professionals and consist of a fifty minute session as part of the personal and social education (PSE) curriculum. The session is normally delivered to secondary year two pupils; although due to the sensitive nature of the subject matter this at the schools' discretion. During the session the pupils are shown an 18 minute film entitled *Your Choice* which demonstrates the physical and psychological consequences of violence to the victims, offenders and their family. As

exposure to media violence can desensitise young people and lead to aggressive behaviour, the film does not focus on graphic images and instead utilises interviews of individuals whose lives have been affected by violence (i.e. a young man who has been paralysed, a mother whose son was murdered and a young man who is incarcerated for murder). A discussion is then held around the issues raised in the video in regard to victimisation and perpetration of violence. Finally, the pupils consider strategies of how to stay safe when they are out socialising or in the evenings.

This report first describes the methodology and then discusses the results of both the outcome and process evaluations. Finally, recommendations for the development of MAV will be detailed.

2. Methodology

2.1 Study design

The evaluation utilised a mixed-methods approach to incorporate both quantitative and qualitative techniques. Mixed-methods designs can either prioritise quantitative or qualitative data or give each form of data equal priority. This study will give quantitative and qualitative data equal priority with both being collected concurrently and thus utilise a concurrent triangulation design (Creswell, 2006). The data will then be analysed separately and then integrated to provide a deeper understanding of research findings.

Due to difficulties in recruiting control schools an uncontrolled before-and-after design was employed to collect the quantitative data, which took the form of questionnaires. In order to reduce the threat to internal validity (i.e. whether observed changes could have alternative explanations) only schools with no other violence prevention programmes completed the quantitative measures. The qualitative data was collected using pupil focus groups, which were conducted two weeks post-intervention and from healthcare professionals using semi-structured interviews and open-ended online questionnaires. It had also been intended to conduct semi-structured interviews with school teachers, however, there were difficulties recruiting teachers due to work pressures (i.e. school inspection, examinations) and industrial action. The study was given approval by the University of St. Andrews, School of Medicine, Ethics Committee.

2.2 Setting

All five schools in the Greater Glasgow area that requested the Medics Against Violence programme between 2011 and 2012 were invited to take part in the study. The five schools, which were from different urban communities across Greater Glasgow, all agreed to take part. However, due to school inspections and lack of time, one school (School A) declined to take part in the qualitative components but did complete the quantitative components. School E received the programme as part of a public health day during which the students received a number of other related sessions. As this would have posed a threat to internal validity of the questionnaire data collected from these pupils, only qualitative data exploring pupil experiences with MAV was collected.

2.3 Participants

2.3.1 School Pupils

The target year group for the programme is secondary year two (S2), however, due to the sensitive nature of some of the issues discussed in the programme, schools were allowed to choose the year group for which it would be most appropriate. Schools A, C, D and E delivered the programme to S2 pupils and school B delivered the programme to S5 pupils. Those schools that delivered the session to S2 pupils implemented the session at the end of the school year with the majority of pupils being 13.5 or 14 years. School B implemented the session at the start of the school year with the pupils being aged between 15 and 16 years. Four schools had a higher than national average level of socioeconomic deprivation as measured by percentage of students registered for free school meals in the academic year 2011/12 (Scottish average = 15.4%; Education Scotland, 2013), while school B had considerably lower levels of socioeconomic

deprivation. As PSE classes are not streamed (or tracked) by academic achievement, the range of abilities should be approximately equal between classes within schools. The school and sample characteristics are presented in table 4.1.

A number of teachers forgot to distribute the baseline questionnaires and as such these classes did not complete baseline measurements and were excluded from the study. Additionally consent was not provided by 7 pupils in the study. This resulted in a total of 472 participants at baseline (boys = 264) detailed in table 4.1. The loss of classes was greatest in school C, where over half did not receive the baseline questionnaire.

Table 1 School and sample characteristics

	School A	**School B**	**School C**	**School D**	**School E**
School Characteristics					
School year	S2	S5	S2	S2	S2
% on free school meals	38.1	5.9	19.3	25.4	39.9
Number of pupils in year receiving MAV	109	290	195	120	133
Questionnaire sample					
No. of pupils completing baseline	89 (82%)	219 (76%)	74 (38%)	90 (75%)	N/A
Gender (% boys)	43	53	55	69	N/A

All pupils who completed the baseline questionnaire were then asked to complete the questionnaire (without any features that could identify participants) following the MAV session (time 2; see table 2) and again at three months follow-up (time 3; see table 3).

Table 2 Completion of questionnaire at time 2

	School A	School B	School C	School D
Number of pupils at Time 1	89	219	74	90
Number of pupils at Time 2	71	217	58	78
% follow-up at time 2	79.8%	99%	78.4%	86.7%

Table 3 Completion of questionnaire at time 3

	School A	School B	School C	School D
Number of pupils at Time 2	71	217	58	78
Number of pupils at Time 3	45	212	66	66
% follow-up at time 3	50.6%	96.8%	89.2%	73.3%

Due to timetabling issues, only seven pupils were available to take part in focus groups at school E and all pupils in school B who consented to take part in focus groups attended at the same time. The number and gender of pupils taking part in focus groups is detailed in table 4.

Table 4 Focus Group Characteristics

	School A	School B	School C	School D	School E
Total no. of pupils participating	N/A	12	17	12	6
No. of pupils by group (no. boys)	N/A	1 x 12 (5)	1 x 6 (3) 1 x 5 (0) 1 x 6 (0)	1 x 6 (6) 1 x 6 (5)	1 x 6 (4)

2.3.2 MAV volunteers

Any healthcare professional who has experience working with young people who have sustained violent injuries can volunteer with MAV. Currently, 136 trained healthcare professionals from the Greater Glasgow area have registered with MAV; however, not all have managed to attend a school visit. The majority of volunteers are doctors or dentists, with a small number of nurses and paramedics.

All healthcare professionals who had either attended a MAV school visit or a training session were invited via an email to take part in an online questionnaire (using Survey Monkey), which resulted in 61 respondents. Prior to completing the online questionnaire participants were asked to read information pertaining to the study before completing an online consent form.

For the semi-structured interviews a purposive sample of the MAV volunteers was utilised to include volunteers from a range of specialities who were regularly delivering sessions (at least two per year). MAV were therefore asked to provide a list of healthcare professionals from each of the different specialities currently regularly volunteering with MAV. All 15 of the healthcare professionals identified were invited to take part in the interview via an email using the address held by MAV. Eleven healthcare professionals responded and agreed to take part and the only speciality not represented is cardio-thoracic surgery. Additionally, one other participant, who is a forensic pathologist and regularly delivers session, was identified during the interview process by other participants. As this speciality had been omitted from the list provided by MAV, this healthcare professional was invited to participate and subsequently agreed. Prior to taking part in the study participants were sent an information sheet and consent

form for completion. Speciality, grade and gender of each participant is detailed in table 5.

Table 5 Speciality, grade and gender of healthcare worker volunteers taking part in interviews

Healthcare worker	Speciality	Grade	Gender
A	Oral Medicine	Specialist Registrar	Female
B	Anaesthetics	Consultant	Male
C	General Surgery	Specialist Registrar	Female
D	Ear, Nose and Throat (ENT) Surgery	Consultant	Male
E	Psychiatry	Consultant	Female
F	Oral Surgery	Consultant	Male
G	Paediatric Dentistry	Specialist Registrar	Male
H	Anaesthetics	Consultant	Female
I	Oral Medicine	Consultant	Male
J	Accident and Emergency (A & E)	Consultant	Male
K	Orthopaedics	Consultant	Female
L	Forensic Pathology	Consultant	Female

2.4 Measures

2.4.1 Quantitative data

The questionnaires completed by pupils consisted of two scales measuring the primary outcome of attitudes towards violence (ATV) and the secondary outcome of empathy. To help minimise the risk of social desirability bias, questionnaires were anonymous and participants were informed that teachers would not look at them. An adapted version of the *Attitudes Towards Violence* (child) scale (Funk et al., 2003) was used

(Appendix A). As the scale was originally developed in the US, it was amended for use in a Scottish context and gun was replaced with knife, to reflect the high prevalence of knife crime in Scotland (see Leyland, 2006).

The ATV scale is a validated 16-item scale, with ten items labelled "culture of violence" and six items labelled "reactive violence". Culture of violence statements measure identification with violence as a valued activity (e.g. item 6 "I'd feel safer with a knife" or item 14 "People who use knives get respect") and reactive violence statements measure justification of the use of violence as a response to actual or perceived threats (e.g. item 4 "If a person hits you, you should hit back" or item 12 "It's ok to beat up a person for bad-mouthing me or my family"). Each item has four response choices (no, maybe, probably, yes) that add up to a total score representative of pro-violent attitudes. Reverse-scoring is used for four of the items (3, 5, 9, 10). The scale used was designed for use in 4th to 6th grade pupils (age 10 -12 years). Although there is an adolescent version of the ATV scale (Funk et al., 1999) for use in pupils aged 13 to 18 years, following discussions with teachers it was felt that the child version of the scale would be more appropriate due to the reading levels of some participants.

As empathy is considered to be protective against violence (Hoffman et al., 2011), a measure of empathy was included to investigate whether there was any change from baseline following the session and at three month follow-up. Empathy was measured using the Children's Empathetic Attitudes Questionnaire (CEAQ), which is a validated, self-report measure for empathetic attitudes (Funk et al., 2008; see Appendix B). Each of the sixteen items asks young people how they feel in different situations and has three

response choices (yes, maybe, no). The scale was originally developed in the US for use in 5th-7th grade students and was at an appropriate reading level for the study participants. The scale demonstrated good reliability in the present study (Cronbach alpha = 0.85).

2.4.2 Qualitative Data

2.4.2.1 School Pupils

Focus groups with pupils were conducted to provide an in-depth understanding of the pupils' experiences with the session, experiences of youth violence, perceptions of why young people got involved with violence and how they felt the programme could be improved. Of particular interest was how they engaged with the MAV volunteers, whether the session caused any emotional upset and whether they felt the programme provided enough information. The focus group were facilitated by a moderator (AG) and consisted of pupils from the same classes. Groups were conducted in the school classrooms so as to provide a natural environment to help facilitate discussion. Each session lasted one period (fifty minutes) and was based upon a topic guide (see Appendix C). The recordings were then transcribed verbatim by the researcher. Due to similarities in voices it was not always possible to distinguish between individual participants.

2.4.2.2 MAV volunteers

The purpose of the open-ended questionnaire was to examine how often MAV volunteers attended school visits, reasons for not being able to attend visits, reasons for involvement in MAV and how visits could be improved (see Appendix D). The use of the

online questionnaire allowed all volunteers to have the opportunity to provide feedback. Online questionnaires were favoured over postal questionnaires as healthcare workers often change clinical setting and email address provides are more reliable means of contact. Furthermore, all healthcare workers are computer literate and have access to computers through work. In January 2012 all MAV members were invited via email to complete the questionnaire, which was hosted on the SurveyMonkey website. To increase the response rate, volunteers who had not taken part received a second email invitation in January 2013. To minimise social desirability bias all questionnaires were anonymous.

Semi-structured interviews based upon a topic guide with MAV volunteers were conducted (see Appendix E). The aim of the interviews was to gain an in-depth understanding of volunteers' experiences delivering MAV sessions, reasons for involvement, experiences of youth violence through work, how MAV could be improved and perceptions of healthcare professionals' roles in violence prevention. Interviews were conducted over the phone and were digitally recorded. Telephone interviews were used in preference to face-to-face interviews as they provided better access to healthcare workers who were working in busy hospital environments. This allowed the interview time and date to be changed at short notice in response to clinical commitments and also meant an appropriate interview room in the hospital did not need to be located as participants were often at home when the interview took place.

2.5 Analysis

2.5.1 Quantitative data

Teachers were asked to instruct pupils to check their questionnaires to ensure they had not missed any questions, except in instances where they did not want to answer a certain question. However, despite careful administration some pupils inadvertently missed questions out or may have chosen not to answer the question. Missing items subsequently lead to an underestimation of an individual's total score for the scale (Downey and King, 1998). Although all participants with missing data could have been excluded from the study (e.g. using listwise deletion), this can result in reduced power (Roth et al., 1999) and bias the results (Schafer and Graham, 2002). Following a review of the literature on dealing with missing data for scale items, the mean person imputation method was chosen to replace missing items on the ATV and empathy scales (see Roth et al., 1999).

Data analysis was conducted using Statistical Package for the Social Sciences v. 21 (IBM Corp, 2012). A one-way ANOVA was used to establish if there were significant mean differences in the ATV scale score, the two sub-scale scores of culture of violence and reactionary violence, and empathy scale score between the three time points. Significant mean differences were defined using a .05 level of statistical analysis. One-way ANOVA was then used to explore whether there was a difference in scores between the four schools at each of the three time points. Post-hoc tests were used to examine whether there were any differences in means between groups. When Levene's test was non-significant (indicating homogeneity of variance) a Tukey post-hoc test was utilised. However, in the case that Levene's test was significant (indicating heterogeneity of

variance); Welch's F was reported from the ANOVA instead as this provides a more robust measure and a Games-Howell post-hoc test was utilised instead of the Tukey post-hoc test (Field, 2009). The differences in mean scores between male and female participants at each of the time points were examined using a t-test if the data was parametric or a Mann-Whitney test if the data violated the required assumptions.

2.5.2 Qualitative data

Following verbatim transcription (by AG) all interview and focus group transcripts and questionnaires were read and recurrent themes and issues were identified. These were then used to produce conceptual frameworks with themes and subthemes. NVIVO software (QSR International's Nvivo qualitative data analysis software 9) was utilised to apply the conceptual framework to index the themes and sub-themes in all transcripts. The indexing process was then used to guide the development of thematic charts which brought together data on similar themes by detailing all participant or focus group descriptions of the relevant sub-themes. The charting process enables data on each theme to be compared and to establish whether there are relationships between codes (Green and Thorogood, 2009).

Descriptive analysis was then undertaken to further understand each sub-topic on the thematic chart. This first involved identifying all elements from the thematic chart and then categorising the descriptive data accordingly. Categories were then assigned to classifications. Finally, the results of the pupil focus groups, and healthcare professional interviews and online questionnaires were integrated with the quantitative data to

provide a better understanding of the questionnaire results. Where appropriate, themes identified are discussed in the context of the current literature.

3. Outcome evaluation

This chapter will present the results of the outcome evaluation of MAV. Outcome evaluations measure how successful (or not) a programme has been in achieving its desired effects (Oxford Health Alliance, 2013) and are recommended for use in the evaluation of complex interventions in conjunction with a process evaluation, which then provides understanding as to why the programme succeeded or failed (Craig et al., 2008). In terms of MAV, this involved investigating whether there was a change in the primary outcome of ATV and the secondary outcome of empathy (see section 2.4.1).

3.1 ATV scores

The ATV scale has a minimum value of 16 and maximum value of 64. Higher scores indicate more pro-violent attitudes. The culture of violence subscale has a minimum value of 10 and maximum value of 40 and the reactive violence subscale has a minimum value of 6 and maximum value of 24. Internal consistency was acceptable in the present study. The total ATVC scale demonstrated good reliability (Cronbach alpha = 0.81) and the subscales of culture of violence (Cronbach alpha = 0.70) and reactive violence demonstrated acceptable reliability (Cronbach alpha = 0.77).

3.1.1 Changes in ATV scores over time

A one-way ANOVA with time and mean ATV was conducted. There was a significant difference in mean ATV score over time [Welch's $F(2,824) = 16.71$, $p = .<001$]. Figure 5.1 illustrates the change in mean ATV score and its two sub-scales (culture of violence and reactive violence). A Games-Howell post-hoc test revealed that mean ATV was statistically significantly lower at T2 (M= 25.86, SD=7.18, $p = .001$) compared to T1 (M =

27.71, SD = 6.91). Mean ATV at T3 (M = 28.94, SD = 8.38) was significantly higher than mean ATV at T2 (p = .001). However, mean ATV at T3 (M = 28.94, SD = 8.38) was not significantly different to T1 (p = .055).

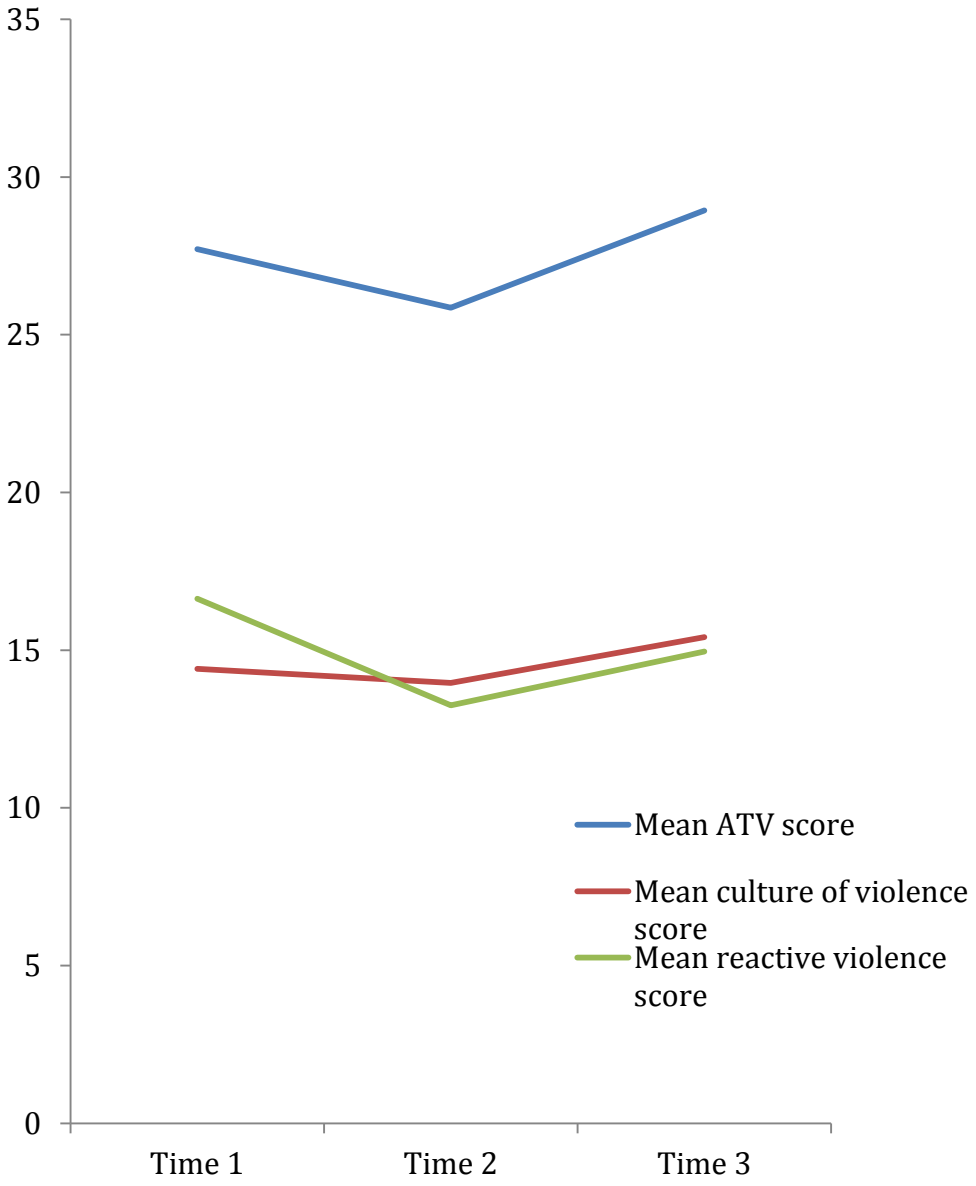

Figure 1 Mean ATV score, culture of violence score and reactive violence score at the three time points

3.1.1.1 Changes in mean culture of violence sub-scale over time

A one-way ANOVA with time and mean culture of violence was conducted. There was a significant difference in mean culture of violence [Welch's $F(2,813) = 9.923$, $p = .001$]. A Games-Howell post-hoc test identified a statistically significant increase in mean culture of violence score from T1 (M = 14.41, SD = 3.89, $p = .005$) to T3 (M = 15.41, SD = 5.19). There was a significant increase in mean scores from T2 (M = 13.96, SD = 3.93, $p = .001$) to T3. However, there was no significant difference between T1 and T2 ($p = .195$).

3.1.1.2. Changes in mean reactive violence sub-scale score over time

A one-way ANOVA with time and mean reactive violence was conducted. There was a significant difference in mean reactive violence [$F(2,1282) = 16.63$, $p = .001$]. A Tukey post-hoc test identified a significant decrease in reactive violence scores from T1 (M = 14.68, SD = 4.43) to T2 (M = 13.25, SD = 4.64, $p = .001$). There was a significant increase in mean score from T2 to T3 (M = 14.96, SD = 4.75, $p = .001$). However, there was no significant increase in mean reactive violence scores between T1 and T3 ($p = .64$).

3.1.2 Differences in ATV scores between schools across time

The descriptive statistics for ATV and sub-scales by school at the three different time points are detailed in table 6.

3.1.2.1 Time 1

At T1 there was a significant difference in mean ATV scores between schools as determined by one-way ANOVA [$F(3, 468) = 9.60$, $p = .001$]. School A had the highest mean ATV score followed by school D, School C and School B (M = 26.05, SD = 6.73). A

Tukey post-hoc test identified that school A had significantly higher mean scores than school B (p = .001) but there was no statistical difference with School C (p = .18) and School D (p = .85). School B also had significantly lower scores than school D (p = .001) but there was no difference with School C (p = .17). There was no statistical difference between School C and School D at T1 (p = .59).

Table 6 Mean scores for ATV and sub-scales over time by school across time

Time	Scale	School A		School B		School C		School D	
		M	SD	M	SD	M	SD	M	SD
1	ATV	30.06	6.19	26.05	6.73	27.99	6.65	29.24	7.31
	Culture	15.13	4.10	14.08	3.73	14.31	3.50	14.64	4.29
	Reactive	16.35	3.92	13.25	3.99	15.12	4.67	16.12	4.66
2	ATV	28.87	7.15	23.55	5.49	28.78	7.75	27.38	8.70
	Culture	14.82	4.08	13.36	3.28	14.53	4.10	14.44	4.99
	Reactive	15.66	4.80	11.36	3.30	15.83	5.01	14.40	5.13
3	ATV	31.11	7.63	28.63	8.87	27.15	6.78	30.22	8.37
	Culture	16.78	4.94	15.47	5.38	13.78	3.71	15.90	5.70
	Reactive	15.98	4.46	14.56	5.01	14.74	4.55	15.77	4.12

3.1.2.2 Time 2

At T2 there was a significant difference in mean ATV scores between schools [Welch's $F(3, 137.64) = 18.36$, p = .001]. A Games-Howell post-hoc test identified that School B had significantly lower scores than School A (p = .001), School C (p = .001) and School D (p = .002). There were no other significant differences between schools in terms of mean ATV. There was however, a significant difference in culture of violence between

schools at T2, Welch's $F(3, 420) = 3.68$, $p = .012$. However, a Games-Howell post-hoc test identified that the only significant difference was between School A and School B ($p = .04$). There was significant difference in reactive violence at T2 [Welch's $F(3,135.36) = 30.75$, $p = .001$]. A post-hoc Games-Howell test indicated that school B had significantly lower mean reactive violence scores than school A ($p = .001$), School C ($p = .001$) and school D ($p = .001$). There were no other significant differences between schools.

3.1.2.3 Time 3

There was a significant difference between schools in mean ATV score at T3 [$F(3, 385) = 2.65$, $p = .049$]. Pupils in school A had the highest mean score (M = 31.11, SD = 7.63), followed by school D (M = 30.22, SD = 8.36), School B (28.63, SD = 8.87) and school C (M = 27.15, SD = 6.78). However, a post-hoc Tukey test found no significant differences between schools. There was a significant difference in culture of violence at T3 between schools as determined by one way ANOVA [$F(3, 385) = 3.48$, $p = .016$]. A Tukey post-hoc test identified that there was a significant difference between culture of violence scores at school A and school C ($p = .014$). There were no other significant differences between schools. There was no significant difference at T3 in reactive violence between schools as determined by one-way ANOVA [$F(3, 385) = 1.90$, $p = .13$].

3.1.3 Differences in mean ATV score between male and female pupils across time

The descriptive statistics for ATV and sub-scales by gender at the three different time points are detailed in table 7. A Mann-Whitney test identified that median scores at T1 were significantly higher in males for ATV ($U = 19421.00$, $z = -5.57$, $p = .001$), the culture of violence subscale ($U = 21475.00$, $z = -4.19$, $p = .001$) and the reactive violence

subscale (U = 19875.00, z = -5.26, p = .001). At T2 a Mann-Whitney test identified that males scored significantly higher on ATV (U = 17979.50, z = -2.76, p = .006) and the reactive violence subscale (U = 17667.00, z = -3.02, p = .003). However, no such difference was found for the culture of violence subscale. Finally, at T3 Males had significantly higher median scores for ATV (U = 13768.50, z = -4.36, p = .001), the culture of violence subscale (U =14345.50, z = -3.84, p = .001) and the reactive violence sub-scale (U = 14039.50, z = -4.11, p = .001).

Table 7 Mean scores for ATV and sub-scales over time by gender across time

Time	Scale	Male		Female	
		Median	Range	Median	Range
1	ATV	28.00	48.00	25.00	36.00
	Culture	14.00	30.00	13.00	21.00
	Reactive	15.00	21.00	13.00	21.00
2	ATV	26.00	42.00	23.00	33.00
	Culture	13.00	30.00	13.00	18.00
	Reactive	13.00	21.00	12.00	20.00
3	ATV	29.00	48.00	26.00	39.00
	Culture	15.00	30.00	13.00	24.00
	Reactive	15.73	21.00	13.00	20.00

3.2 Empathy Scores

The CEAQ scale had a maximum value of 48 and a minimum value of 16. Higher scores indicate more empathetic attitudes. The scale demonstrated good reliability in the present study (Cronbach alpha = 0.85).

3.2.1 Changes in mean empathy scores over time

A one-way ANOVA with time and empathy was conducted. There was a significant difference in mean empathy score over time [$F(2,1282) = 3.91$, $p = .02$]. A Tukey post-hoc test identified a statistically significant decrease in empathy score between T2 (M = 31.55, SD = 6.36, $p = 0.025$) and T3 (M = 30.44, SD = 6.02). However, there were no significant differences between T1 (M = 31.37, SD = 5.85) and T2 or T3.

3.2.2 Differences in empathy scores between schools across time

The descriptive statistics for mean empathy score by school at the three different time points are detailed in table 5.3. A one-way ANOVA with schools and mean empathy was conducted at each of the three time points. There was no significant difference between schools at T1 [Welch's $F(3, 184.22) = 1.53$, $p = .21$], T2 [$F(3, 420) = 2.22$, $p = .085$] or T3 [Welch's $F(3, 125.48) = 1.93$, $p = .13$].

Table 8 Empathy score by school across time

Time	School A		School B		School C		School D	
	M	SD	M	SD	M	SD	M	SD
1	30.13	6.29	31.52	5.31	31.95	6.14	31.77	6.34
2	30.49	6.37	32.25	5.90	31.59	6.62	30.54	7.22
3	29.35	6.30	30.87	6.01	31.07	4.93	29.16	6.67

3.2.3 Differences in mean empathy scores between male and female pupils across time

The descriptive statistics for median empathy score by school at the three different time points are detailed in table 5.4. A Mann-Whitney test compared median empathy scores between male and female pupils at each of three time points. Male pupils had significantly lower median empathy scores at T1 (U =15673.00, z = -8.11, p = .001), T2 (U =12984.00, z = -6.88, p = .001) and T3.

Table 9 Empathy score by gender across time

Time	Male		Female	
	Median	Range	Median	Range
1	30.00	29.00	34.58	27.00
2	30.00	30.00	35.00	28.00
3	29.00	30.00	33.00	29.00

3.3 Discussion of outcome evaluation

This outcome evaluation aimed to assess the effectiveness of MAV through measures of ATV and empathy. There was a small but significant decrease in mean ATV score at a group level immediately after the programme; however, this was not sustained at T3, where a small but significant increase in mean ATV occurred. A similar pattern was found in the sub-scales, with mean culture of violence increasing significantly between T2 and T3, however, the decrease between T1 and T2 was non-significant. There was

also a small but significant increase in mean reactive violence between T2 and T3 and a small but significant decrease between T1 and T3. This indicates that although MAV may have a small effect on pro-violent attitudes as measured by the ATV scale in the short-term, this is not maintained at three months.

The increase in score may be explained by the suggestion that young people may become slightly more pro-violent during adolescence (Shapiro, 1998). Furthermore, this may also be indicative of the difficulties in producing a sustained attitudinal change (Ajzen, 2001), particularly following a one-off intervention session. However, it should be emphasised that as the baseline scores for ATV were low, this represents a floor effect, whereby a large proportion of the participants score near the lower limit of the scale (Hessling et al., 2004) and may explain why there was no significant change in culture of violence scores between T1 and T2, and why there was only a small (significant) change in mean total ATV scores.

There was a significant difference in ATV scores between the schools at baseline. School A had the highest mean score; followed by school D, school C and then school B. This reflects exactly the deprivation levels of the schools as measured by the proportion of pupils receiving free school meals. It is important to note here that due to teacher requests, pupils in school B receiving MAV were aged between 15 and 16 years, whereas in the other schools pupils were aged between 13.5 and 14 years. As pro-violent attitudes increase during adolescence (Shapiro, 1998) and as such it might have been expected to find higher mean scores in this group. However, as this was not the

case, the findings from this study may be the result of deprivation – suggesting deprivation plays a more significant role than age.

Perhaps unsurprisingly, male pupils had significantly higher baseline median ATV scores than female pupils. This was also identified in the reactive violence and culture of violence sub-scales. Indeed, males are significantly more likely to become either a victim or perpetrator of youth violence both at a global (Mercy et al., 2002, Sethi et al., 2010) and a national level (Scottish Government, 2012) and have been found to be more directly aggressive than girls (Bjorkqvist et al., 1992). However, male pupils did demonstrate a small but significant reduction in mean ATV score between T1 and T2, whereas female pupils only had a very small and insignificant decrease between T1 and T2. Both males and females had significant increases in mean ATV from T2 to T3. These results suggest that MAV has an immediate impact on male pupils in terms of reducing pro-violent attitudes, although this effect is not sustained over a short timescale.

There was no significant difference in empathy scores between T1 and T2, however, there was a small but significant decrease in empathy between T2 and T3. There were no significant differences in empathy scores at any time points between schools, suggesting that empathy level in this population is not associated with socio-economic deprivation or age. Female pupils did have significantly higher empathy scores compared to male pupils at all three time points, although these did remain largely unchanged. Indeed, this finding of higher levels of empathy in adolescent females has been consistently demonstrated in the literature (Rose and Rudolph, 2006, Lam et al.,

2012), however, as empathy is associated with violence (Sams and Truscott, 2004), it is perhaps not unexpected female participants demonstrated lower mean ATV scores.

This outcome evaluation has a number of limitations that need to be considered. First, an uncontrolled before-and-after study was utilised due to difficulties in recruiting control schools, which increases the threat to internal validity and as such increases the risk of bias within the study (Higgins et al., 2011). Therefore the results need to be interpreted with caution. As a control group would also experience the threats to validity (e.g. history threat) detailed in section 4.1.3, any difference between the groups at post-test could more reliably be attributed to the treatment effect (Trochim, 2006). Thirdly, this is the first time the validated ATV scale (Funk et al., 2003) and Children's Empathetic Attitudes Questionnaire (Funk et al., 2008) have been used in Scottish school children and due to differences in weapon prevalence between Scotland and the USA, the scale was adapted to reflect this. While both scales demonstrated acceptable internal consistency in this study, the adapted version of the ATV scale has not been validated, nor have the scales been validated for use in this population. Therefore, there is a risk that the scales lack sensitivity which can lead to failure to detect changes in these constructs. Moreover, the low baseline scores indicate a floor effect, which may indicate that the scales were not able to detect a change in ATV. Alternatively, it may indicate that pupils had negative attitudes towards violence at baseline.

The study also suffered from missing data issues. A small number of participants omitted one or more item in the questionnaire and as such mean person values were

imputed to allow the total score to be calculated. Whist this is superior to listwise deletion (Roth et al., 1999, Schafer and Graham, 2002), which could increase the risk of bias by excluding cases with potentially higher ATV score, there is still a risk of error.

In conclusion, pupils had low mean ATV scores at baseline, which may indicate lack of sensitivity in the scale or may be reflective of negative attitudes towards violence in the pupils receiving MAV. While there was a small but significant decrease in mean ATV between T1 and T2, this effect was not sustained at T3, where a small but significant increase in mean ATV was identified. This decrease in score was more pronounced in school B (least deprived) and in male participants. There was no significant increase in empathy scores over time. However, due to the limitations discussed in section 5.6.1 it is difficult to draw any firm conclusions from these results. Further research in the form of a randomised controlled trial or cluster randomised controlled trial using appropriate validated scales would help decrease threats to internal validity and provide evidence as to whether any changes in outcome can be attributed to MAV. Moreover, due to the difficulties in producing sustained attitudinal change (Ajzen, 2001), the use of other outcomes should be considered, for example changes in behaviour (e.g. strategies for staying safe, knife-carrying) and knowledge of the risks associated with violence (Naidoo and Wills, 2009).

4. Process evaluation: school pupils

As process evaluations seek to establish whether a programme is reaching the target group (Naidoo and Wills, 2009), the first purpose of the focus groups was to identify whether young people felt youth violence was a problem that affected them. These perceptions were then compared with the literature on youth violence to investigate any similarities or differences. In addition, focus groups explored pupils' experiences of the MAV session, their knowledge, attitudes and behaviours towards violence, how they felt MAV could be improved and other methods for preventing youth violence

Due to the relative homogeneity between focus group members, focus groups were analysed at the group level, whereby the data produced by the group is the unit of analysis (Ritchie et al., 2003). This also allows for an appreciation of the immediate context, in which different comments are made (Ritchie et al., 2003). As this study adopted a concurrent triangulation mixed-methods design, items from the ATV scale were examined in the context of the themes identified by the focus groups to provide further understanding of the results.

4.1 Results

The classifications, categories and descriptive items identified in the descriptive analysis are detailed in Appendix F. Explanatory accounts of the categories will then be discussed utilising verbatim quotes where appropriate. Linkages between sets of phenomena and deviant cases will also be described and reference will be made to empirical literature where relevant.

4.1.1 Explanatory accounts

These explanatory accounts were generated using approaches described by Ritchie et al. (2003) and primarily involved using explicit reasons and accounts, whereby the "recurrence, range and diversity of explanations given by the participants themselves will be presented" (p.253). Additionally, explanations will be sought by inferring an underlying logic when there are repeated instances of co-occurrence of two or more categories or descriptive items. Finally, the data from this study will be examined in the context of other empirical studies, to ascertain any similarities /consistencies.

4.1.1.1 Experiences of youth violence

Participants had varying levels of experience with youth violence. While the majority were conscious of the problem within the West of Scotland, a minority had been more personally affected, either directly or through family members and peers.

4.1.1.1.1 Awareness of youth violence in their lives

None of the young people who took part in the focus admitted to being personally involved in the perpetration of youth violence, however, this could potentially be the result of recruitment bias, whereby the teachers selected the best-behaved pupils. Moreover, it is plausible that the young people most involved in the perpetration of violence are less likely to be in school. Nevertheless, all groups were aware of youth violence and analysis identified the following themes.

Awareness of violence in own neighbourhood. All groups, with the exception of the group from the most affluent school (School B), were aware of violence in their local area:

> CM5: *There's maybe umm quite a bit more here umm than you would find in other parts of the country and stuff ehm it can be quite horrible sometimes and sometimes it is like really bad* (group 1, School C).

One female pupil (group 3, school C) described an incident where she saw a boy who had been stabbed lying on the ground near her father's flat. Some groups felt their areas were worse than other parts of the city or the country and named particular hot-spots that they felt were particularly dangerous.

Awareness of violence in Glasgow city centre. The group from school B perceived violence to be a problem in the centre of Glasgow, rather than in their local area and this was something that frightened them:

> BF1: *just feel really unsafe in town at night just the people I think it's really scary* (group 1, School B).

School E also felt violence was a problem in the centre at the weekend due to the heavy police presence; however, the other schools were very much focused on violence being a problem in the area that they lived in.

Believe there is a problem with weapon carrying. Several groups felt weapon carrying, in particular knives, was an issue in their neighbourhood and all groups felt that knife carrying was an issue in Glasgow more widely:

> CM5: *there are in some parts of Glasgow and round about different places ehm it just means that eh knife crime rate just goes up and up and up cause people just don't listen they keep doing it* (group 1, School C).

The groups did not discuss whether their peers were involved in weapon carrying; however, two pupils (group 2, School C) had family members who had been involved with weapons. Moreover, one pupil (group 1, School E) described being hit with a metal pole when walking home one night. Indeed, a group from School D believed that some people in their neighbourhood would use anything (e.g. golf clubs) as a weapon.

Aware of violence at school. Less commonly, groups were aware of violence taking part in or around their school. One group from School C described several fist-fights that had taken place while they had been at school and a group from School D perceived that their school was targeted by boys from other areas.

Scheme-fighting. Several groups spoke about the fighting that went on between groups of young people from rival housing schemes. Some of the groups referred to these groups as gangs, whereas one group thought they did not constitute a gang:

CF5*: it's not always gangs it's just that obviously take Penilee for example Penilee's not like a gang like you get like the young ones and that it's just like people that like hang around together and defend*
CF4*: there isn't that much gang fighting nowadays*
CF5*: uhuh you just like defend your scheme's name* (group 2, School C).

This group believed that young people were fighting to defend their scheme's honour as "*that's how a scheme works*" (CF4, group 2 School C) and legitimise involvement in violence*.* The territorial based fighting identified by these pupils is consistent with research on youth groups and territoriality by Bannister et al. (2010) and Kintrea et al. (2011) who identified the presence of violent and aggressive territorial groups in Glasgow. Whilst this group (group 2, School C) did not believe territorial groups constituted gangs, other groups did refer to groups of young people who engaged in territorial based fighting as gangs. Thus the concept of a gang is as confused amongst the pupils as it is in the literature.

Peers involved in violence. Several groups were aware of peers who had been involved in violence, including boys who had been attacked or stabbed in housing schemes near them. One participant also had a friend who had been beaten to death, interestingly there was debate within the group as to whether this counted as violence as it did not involve knives:

CF1: *it's horrible my friend died through like through violence 4*

CF2: *4 weeks tomorrow*

CF1: *4weeks tomorrow* (simultaneously)

I: *that's terrible, I'm really sorry to hear that.*

CF2: *I know I think it's horrible*

CF: *It's disgusting*

CF: *it wasn't exactly violence but*

CF2: *it was violence he got punched*

CF1: *it was violence he got punched to death*

CF: *yeah I know I'm talking about knives and that*

CF: *oh*

CF2: *it's the same thing* (group 3, School C).

Personally been victimised. Only one participant had ever been a victim of violence. The incident happened when he walking through his housing scheme after Guy Fawkes night:

EM: *I was just getting chased you know right I thought it was my mate cause he found like a pole thing but he just whacked me right in the leg and I was like turned around and thought it was my mate and then it wisnae and I turned back around and he was just running for me and I was like what so I just started running* (group 1, School E).

4.1.1.1.2 Feelings towards youth violence in Glasgow

Anxiety associated with violence. Several groups discussed feeling scared of violence and at times felt quite vulnerable when they were out at night, particularly around people who had been drinking alcohol or taking drugs:

> DF4: *it isnae really good cause like they just walk about and that and you don't know what they could dae* (group 2, school D).

Fear of going out at night by young people not involved in violence was also identified by Deuchar (2009) and can result in decreased social mobility for these young people (Deuchar, 2009, Ralphs et al., 2009).

Negative feelings towards violence. The majority of groups demonstrated negative feelings toward violence and those involved in violence:

> DM3: *why do psychos wannae dae that? it's like I think*
>
> DF4: *it's sick how they can just stab people* (group 2, School D).

The group (group 3, School C) that had a peer who had recently died as a consequence of violence were particularly passionate in their strongly negative views towards violence, frequently using words such as "horrible" and "disgusting".

4.1.1.1.3 Demographics of those involved in violence

Violence worse in specific areas. The groups perceived violence to be worse in certain areas and listed areas they thought particularly violent. These tended to be deprived areas, although interestingly, only the group from the most affluent school (school B) explicitly acknowledged the association between deprivation and violence:

> BM: *it doesn't really happen around [name of area] cause its quite a affluent area but it does happen in other places in Glasgow* (group 1, School B).

Age of initiation into violence. The groups consistently felt it tended to be teenagers who were involved in violence; however, a minority of groups felt younger children were also involved:

> CF4*: because there is wee ones I know ranning aboot like that n' that*
> CM2*: equals first year [pause] they're crazy man*
> CF4*: no like P7s n that I know primary kids that do it* (group 2, School C).

These groups thought that younger children wanted to copy the older teenagers. This is consistent with findings by Kintera et al. (2011) who reported that although the main age for involvement in territoriality related fighting in Glasgow was between 13 and 17 years, children aged 11 to 13 years displayed imitative behaviour. Such involvement in fighting may be seen as representing a transition into adulthood.

Girls' involvement in violence. A minority of groups believed that some girls were involved in youth violence, however, this was limited to fighting other girls and often involved 'slagging' (i.e. verbal insults). Only one group were aware of girls taking part in scheme fights. This is consistent with Batchelor's (2011) findings from a qualitative study on young women's involvement in street gangs, whereby many girls engaged more in hair-pulling and slapping with a smaller minority did taking part in fighting amongst boys.

4.1.1.2 Perceptions of why young people are involved in youth violence

The focus groups all discussed a range of reasons as to why they believed other young people engaged in fighting, knife-carrying, gangs, and also discussed the association between youth violence and alcohol and drugs.

4.1.1.2.1 Reasons for fighting

The groups identified a range of reasons as to why they believed other young people became involved in fighting.

Peer pressure. Several groups identified peer pressure as being a strong motivator for involvement in violence. Epidemiological studies have identified that as association with delinquent peers can act as a risk factor for youth violence (Pardini et al., 2012, Herrenkohl et al., 2012, Bernat et al., 2012). Peer pressure arises as a result of adolescents' need to affiliate with a group and conform to their group norms; as such adolescents who perceive peer pressure to be high and have a high conformity

disposition are more likely to engage in antisocial behaviour, including under-age drinking and smoking (Brown et al., 1986). Indeed, Esbensen (2004) notes that the influence of peers is consistently associated with research on gang involvement and violent offending more generally.

Violence perceived as cool by young people. All groups, with the exception of the most affluent school (school B) and group 1 in school D, believed young people were involved in violence because they thought it was 'cool':

> CF1: *it's just like when you're smoking you think you look cool they think carrying about and being in like carrying a knife and being in a gang's cool and it's no it's disgusting it's not attractive* (group 3, School C).

The desire to look 'cool' in front of peers has been identified as a motivation for engagement in other health risk-behaviours such as underage alcohol consumption (Kloep et al., 2001) and smoking (Brady et al., 2008). However, it should be noted that although these young people perceived that other young people felt violence was cool, they did not share these views and instead expressed negative feelings towards it.

Family pressures to take-part in violence. Several groups also felt that families played a role in the development of violence and felt that those involved in youth violence had been 'brought up to be like that'. Indeed, Deuchar (2009) noted that some parents of interviewees encouraged involvement in youth violence.

Wanting to act tough. Groups consistently felt young people got involved with youth violence because they wanted to be perceived as 'hard' or' act the big wan' as this would give them respect from other young men. Walker and Bright (2009) propose that violence allows individuals, who do not have the skills necessary to develop personal respect, to maintain self-esteem by gaining respect from the victim. Furthermore, due to social norms within certain housing schemes, young men must respond to threats with violence or else face being disrespected (Vigil, 2003). This concept of wanting to be perceived as tough also relates to the concept of machismo whereby men who act violently or aggressively are perceived to be more of a man (Walker, 2001) and, may reflect their perceptions of masculinity Bannister and Fraser (2008).

Defending their scheme. Pupils were aware of other young people involved in scheme-fighting and became involved in youth violence in order to defend their housing scheme:

> CF4: *they don't fight for a reason they just fight for like*
>
> CF5: *for their scheme* (group 2, School C).

This need for territorial groups to defend their housing scheme was also identified in a qualitative study by Deuchar (2009). Moreover, Kintrea et al. (2011) argued that as young people feel a strong sense of belonging to their housing schemes and indeed feel the schemes belong to them, they feel the need to fight to defend it. Kintrea et al. suggest that such strong place-identities and the associated friendships may be a result

of lack of opportunities to leave the area and additionally may provide family and social structure.

Excitement of violence. Less commonly, groups identified that young people were involved in violence for the thrill of it or for 'the buzz' as they described it. Similarly, group 1, School E felt it was the result of an 'adrenaline rush' induced by alcohol. This concept of 'the buzz' was also identified by Deuchar (2009), who reported that young people in his qualitative study described feeling a mixture of excitement and fear when fighting. Batchelor (2011) also identified excitement as one of the key motivations for taking part in violence in her qualitative study with young women in prison. The thrill and pleasure gained from engagement of violence has led to the development of the term "recreational violence" (Bannister et al., 2010), whereby territorial violence is a form of leisure activity.

Association with football. Only a minority of groups, which were both mixed-sex discussed the association between football and youth violence. This was attributed to the rivalry between Rangers and Celtic, referred to as the Old Firm. However, pupils also perceived that the alcohol consumption associated with football matches contributed to the problem. Only one group discussed the association between football, religion and sectarianism and felt it was a phenomenon other people were involved in and they did not feel it was an issue in their (Catholic) school. Violence and sectarianism related to the Old Firm is long-standing and well documented in the media (McVeigh, 2011), however, this group of young people did not associate with it.

4.1.1.2.2 Reasons for being in a gang

Protection. Groups consistently thought one of the main reasons for joining a gang was for the perceived safety they offered:

> DM3*: they think that if they're in a gang maybe they think they won't get harmed by anyone else they think they'd be protected*
>
> DM6*: aye they'd be like safer*
>
> DM*: mhm*
>
> DM2*: hide behind their gang members*
>
> DF4: *but if they'll be scared of them naebady will try to bully them or anything* (group 2, School D).

In addition to using violence to protect their own schemes, the pupils felt that other young people joined gangs to be protected. This desire for promoting personal safety was also identified by Bannister and Fraser (2008) in a qualitative study of young people in a deprived area of Glasgow. However, one group (group 3, School C) believed that while gang members think the gang's 'got their back', they would abandon other members in the event of any trouble.

Desire to feel part of something. One group (group 3, School C) believed that many young people joined gangs to 'feel part of something' and be accepted and concluded once somebody had joined a gang they became their family. As young people involved in violence are more likely to experience familial conflict (Herrenkohl et al., 2012), the gang can act as alternative to family. This desire to feel part of something is consistent with findings by Bannister et al. (2010) who reported that young people in their study

reported a sense of belonging in being part of a gang. Similarly, Deuchar (2009) notes that gangs provide members with a form of social bonding.

Unable to leave gang. Groups also consistently acknowledged the difficulties young people faced trying leave gangs for fear of violence. One group believed this difficulty in leaving highlighted a lack of genuine care on the part of the members:

> CF2: *if they were family see if you actually choose to leave that gang they would be there for you no matter what they're not they want to kill you if you try and leave the gang*" (group 3, School C).

This difficulty in leaving gangs was also identified by Kintrea et al. (2011), who reported that the only way to leave a gang was to join the army or move to a different area.

4.1.1.2.3 Reasons for carrying a knife

A number of the groups felt that knife-carrying had become a vicious circle and identified reasons for knife-carrying:

Protection. Groups consistently felt self-protection was a main reason for carrying a knife, particularly when young people were venturing into rival schemes as it meant nobody would they would not be attacked. However, some groups perceived knife-carrying to be a vicious circle:

> BM2: *It's sort of a problem that makes itself worse like if erm people are carrying knives then other people will want to carry knives to protect themselves it just gets worse and worse I suppose* (group 1, school B).

This need for protection was also identified by Bannister et al. (2010) as a motivating factor for carrying knives, particularly when venturing into another housing scheme. Interestingly, several participants identified that some people carried knives solely as deterrent and would be too scared to use them.

Respect gained from knife-carrying. Again the groups thought other young people carried knives to gain the respect of peers:

> DM2: *they think they're cool and everybodys like looks up to them just cause they've got a weapon* (group 1, School D).

Similarly, Bannister et al.(2010) reported that some young people felt that carrying knives meant others were fearful of you and you developed a reputation. Again the groups in this study felt negatively towards knife-carrying and perceived young people that carried knives to be showing off.

4.1.1.2.4 Association with alcohol and drugs

Focus groups consistently associated alcohol with violence, both in terms of their own experience and what they saw in the MAV film. Less commonly, some young people

made an association with drugs and violence. In particular, pupils associated drunkenness and violence with football, nightclubs and boredom as a result of lack of activities for younger teenagers. Groups considered that alcohol could result in violence for a number of reasons.

Lack of control associated with alcohol. Group 1, School B thought that alcohol consumption could result in a lack of control over behaviour:

> BM10: *it's just when people start drinking they can't really control themselves and just can't really prevent it* (group 1, School B),

Similarly, group1, School E felt that alcohol caused a 'rush of adrenaline' that made people want to take part in fighting. Indeed, it is reported that alcohol may contribute to violence impairing cognitive functioning in terms of self-awareness, emotional control and risk assessment (Graham et al., 1998).

Increased aggression. One group (group 1, School E) felt that alcohol caused an increase in aggression levels, which could result in violence. Again, this concept has some support in the literature and may be the result of lower levels of inhibition (Ito et al., 1996). Alternatively, in some cultures there is an expectation that alcohol results in aggressive behaviour, which may therefore encourage and legitimise aggressive behaviour following alcohol consumption (ibid).

Recreational drug use and youth violence. Some groups thought that some young people took recreational drugs like marijuana before they go and have a 'gang-fight'; however,

they perceived this to be less prevalent than alcohol use. This is consistent with the findings by Bannister et al. (2010), which identified that although some young people involved in youth violence took recreational drugs such as cannabis and ecstasy, this was less prevalent than alcohol use.

Violence and heroin addicts. One group associated violence with heroin addicts attempting to get money or getting young people to hold their drugs. The group felt very negatively towards intravenous drug users, referring to them as "junkies". Again, Bannister et al. (2010) reported that the young people in their study felt very negatively towards heroin addicts as they also believed they stole to fuel their habit.

4.1.1.3 Experiences with MAV session

Each group appeared to enjoy the session and reported having taken in some of the key messages. The next section details the results of the analysis which examined pupils' experiences of the sessions, perceptions of volunteers, logistics, age-appropriateness, engagement, understanding of session, and to ascertain whether there had been any unintended consequences (i.e. feeling very upset or stressed at session).

4.1.1.3.1 Perceptions of volunteers

Provision of realistic information from volunteers. Groups consistently felt that healthcare professionals' experience with violence enabled them to provide accurate information:

BM7: *I think talking to the doctors helped as well cause like they've seen casualties first-hand what can happen to someone if they're stabbed or someone's carrying a knife so it's kinda good to see their perspective on it cause they've actually seen first-hand how it happens and what happens* (group 1, School B).

Participants considered the volunteers to be a reliable source of information and also believed that the healthcare professionals would not lie to them. As a result, pupils perceived the information provided to them was truthful as well as accurate. This desire to be "told it like it is" consistent with findings from an evaluation of teen pregnancy programme (Witte, 1997), whereby adolescents expressed a desire to be informed of the consequences of unprotected sex using a realistic approach.

Healthcare providers made session more meaningful. A commonly expressed view was that the healthcare professionals' experience with violence made the session more meaningful than if it had been delivered by their class teacher:

I: What did you think of that [the healthcare professionals delivering the session]? Would you rather it was delivered by your own teacher?

FB5: *nah*

FB4: *it wouldn't have meant anything at all*

FB5: *aye cause we're so used to hearing it all from normal teachers its like they say it mostly every day* (group 2, School C)

Desire to lean about volunteers' experiences of youth violence and gain advice. The majority of groups enjoyed being able to talk to the healthcare professionals and valued the opportunity to ask questions. Although healthcare professionals may be perceived as authority figures by adolescents, these groups of young people were keen to receive information from them. Interestingly, a study of American adolescents reported that adolescents felt their healthcare providers should discuss a wide range of topics such as drugs, sexually transmitted diseases, alcohol and violence with them (Ackard and Neumark-Sztainer, 2001); however, a much smaller proportion reported that their healthcare provider actually did so.

4.1.1.3.2 Engagement and understanding of session

Relevance of session. Groups consistently felt strongly that the combination of CCTV footage, interviews, pictures of injuries and hearing the healthcare professionals' experience provided a sense of realism:

> EM2*: cause some like things like they can make it up but that was actual footage and it actually happened so we can kinda relate to it*
> (group 1, School E)

Moreover, the Glasgow setting helped increase the relevance of the film, particularly for school B, where the pupils had less experience of violence:

> BM4: *the fact that they tell you what happens like in Glasgow like cause it's like where we're from it's like more realistic you don't realise*

things like that happen until they show the pictures and things like that and they showed us like told us stories of what had happened in like the sort of town (group 1, School B).

In addition to the realistic nature of the footage, participants also acknowledged that the Glasgow setting made it more applicable to them as it increased their awareness of what was happening in their town. Indeed, the use of 'authentic voices' (i.e. a victim) and localised stories have been recommended for use in health communications to enhance effectiveness (Dorfman, 2010)

Confusion at video. A minority of participants in two groups (group 1, School C and group 1, School E) expressed some confusion at what parts of the film were real and or acted. For instance, there was confusion as to whether the boy in the wheelchair was acting and whether the acted section of the film was real. A minority of participants also stated that there was not enough information about how violence affected the families (i.e. the offender's family and the boy in the wheel chair).

Reflections on session. Groups consistently appeared to have considered the session afterwards in terms of the consequences of violence, and some had also spoken to their friends about it:

CM1: *yeah like me and my friends we spoke about it we like one of them was like yeah that was a bit gruesome but it was telling you more like what violence can do and all that* (group 1, School C)

Although MAV hypothesise that making young people aware of the consequences of violence will decrease their involvement, some evidence suggests that despite being aware of risks from certain behaviours, adolescents continue to engage in health-risk behaviours (Greene et al., 2000). It is proposed that this may be a result of believing other adolescents engage in the same behaviour and thus avoid thinking about known risks (Gerrard et al., 1996). Encouraging young people to reflect upon such risks in a peer group setting, may therefore be an appropriate target for intervention.

4.1.1.3.3 Feelings experienced during session

Shocked by session. Despite having an awareness of youth violence, the groups were shocked at the levels and consequences of violence as depicted by the CCTV footage and images of injuries in the film:

> DM5: *you see like a lot more goes on than you actually think and then like I was shocked when you saw like the people that were getting stabbed cause a gang fights* (group 1, School D)

Other participants were also shocked at the severity of the injuries and felt they demonstrated the "harsh reality" and "gave you a fright". The evidence supporting the use of interventions that use fear to encourage behaviour change, is mixed (Petrosino et al., 2003, Witte, 1992). Witte and Allen (2000) argue that if a threat is perceived to be serious and relevant, individuals will take action to avoid their fear. Thus if perceived efficacy regarding the ability to control the threat is high, individuals will take action to reduce the risk of the threat. Conversely, if self-efficacy is low and individuals are

unable to control their behaviour they may instead try to reduce the fear using tactics such as denial, perceived manipulation or minimization. Therefore, any intervention that aims to highlight the consequences of health-risk behaviours also needs to demonstrate strategies, which the target population can realistically utilise to avoid engaging in the specified health-risk behaviour. Indeed a meta-analysis (see Witte and Allen, 2000) of such interventions identified fear appeals as being most effective when portraying strong severity and susceptibility messages, and were accompanied by strong efficacy messages. According to the participants' response MAV does appear to convey a strong severity and susceptibility message; however, it is unclear whether all volunteers provide strong efficacy messages. Moreover, Bannister et al. (2010) caution that the ability for standalone educational programmes to produce behaviour change is limited in the context of a long-standing gang culture and instead longer term interventions that are implemented in a family and neighbourhood setting are necessary.

Feelings of upset at session. A minority of groups described feeling upset while watching the film. In particular one girl admitted crying at the part where it described a boy who had been stabbed crying for his mother. Some groups were also upset that people who had "done nothing to deserve it" got attacked. However, the participants who described feelings of upset still felt it was the "right thing" to be shown.

Graphic nature of film. There was differing opinions within groups in regarding the more graphic images (i.e. pictures of injuries, CCTV footage). Some participants felt some of the images were "disgusting", "hideous" and were concerned that people who were squeamish would not like watching it. However, other group members did not

think the film was too gruesome. Groups tended to conclude that as the film "showed you what would happen" it was appropriate to see. One group member (group 1, School C) acknowledged it was helpful if volunteers allowed pupils to wait outside during the film if necessary.

Age-appropriateness. All groups (except school B, who received the programme in S5) felt they were receiving the programme at an appropriate time as they believed other young people their age were now starting getting involved in fighting and socialising in the evening. Bannister et al. (2010) reported that the transition from primary to secondary school was associated with increased involvement in gang-related violence as it brings young people from different territories together. There was debate within the groups as to whether younger pupils (i.e. S1) should be shown the film. Many group members stated that younger pupils would be upset by it or wouldn't understand it, however, a minority of group members felt it should be shown to first years as they try and copy the older pupils. This notion of imitative behaviour in early adolescents in Glasgow, was identified by Kintrea et al. (2011). Interestingly, the group from school B strongly believed they should have received the session earlier or received an adapted version:

> BM12: *I think it's like really important that although we got it in like 5th year I think you should start doing it to younger people so they're more aware cause they don't really realise the consequences I don't think so if they were made aware like what could happen to people after they're being violent to them*

BF1: *I think that especially nowadays how young people start drinking a lot younger so they need to be more careful when they're like going and where they're going and who they're with* (group 1, School B).

4.1.1.3.4 Organisation of session

Length of session. Groups differed on whether they felt the session was long enough. The majority of groups identified that they did not have enough time to discuss the questions fully or have an opportunity to talk to the volunteers. Indeed, one group reported that by the time they got set-up and watched the video, they did not have any time for a discussion. However, less commonly, participants within groups thought the session was long enough. It should be noted that the pupils' experiences may be dependent on whether time was "wasted" at the start of the session.

Class sizes. Although engagement appeared to be generally good amongst the groups, group 1 school C, attended a session which consisted of two classes and felt it was too noisy as some pupils were giggling during the video and talked to their friends during the group discussion. There was mixed opinion within other groups regarding group size, with a minority of participants suggesting that they would prefer to have the session in bigger groups to allow discussion with more of their friends. Conversely, other group members believed this might contribute to a lack of attention and that small classes were preferable:

DF4: *it'd be better like if we had it in the hall with all the second years put together*

DM: *ah*

DM2: *nah*

DF4: *and like it was bigger*

DF3: *no because then you wouldn't have been watching* (group 2, School D).

4.1.1.4 Understanding of issues around violence

Focus groups were consistently able to demonstrate an awareness of the impact of violence on both victims and offenders,

4.1.1.4.1 Impact on victim's life

Awareness of physical consequences (e.g. paralysis, scarring). All groups had an awareness of the physical consequences of violence during the discussions. Participants frequently mentioned the boy in the wheelchair:

DM2: *like the wee guy just got stabbed in the neck and couldnae walk any more*

DM1: *I think it eh when that guy got paralysed I think it's ruined his life and it's ruined eh*

DM2: *and then he cannae do anything now he cannae move or anything he cannae get a pee*

DF4: *cannae feed himself or that* (group 2,School D).

Participants also mentioned the risk of facial scarring and subsequent difficulties gaining employment. Groups were also aware that violence could result in death and that there was no safe place to get stabbed. As this issue is explored during the MAV session, this indicates the pupils' have retained some of the information from the session and have an awareness of the physical consequences of violence and impact that it can have on an individuals' life.

Awareness of psychological consequences. Groups tended to focus less on the long-term psychological consequences of violence for the victim. In addition to the psychological impact of paralysis or permanent scarring, one participant in group 2, school C felt that it could result in victims being "scared to go certain ways". This reduced awareness of the psychological consequences may reflect MAV's focus on the physical consequences of violence.

4.1.1.4.2 Impact on offender's life

Believe life is ruined by being in jail. Groups were consistently able to describe the impact on the offender's life:

> CF1*: you're virtually you're taking your life away from you as well as someone else because you could get the jail* (group3, School C).

Indeed, groups it found interesting to hear the offenders' perspectives as they felt it showed them the consequences of using a knife.

Guilt. Less commonly, groups felt the offender would suffer from guilt afterwards and felt it would always be on their mind:

> CF2: and you'll feel so guilty
>
> CF3: and you'll feel the guilt you're like
>
> CF1: and guarantee yourself you're like what have I done (group 3, School C),

4.1.1.4.3 Impact on family's life

Awareness of the effect on the victim's family. A commonly identified theme was the suffering of families because of violence, particularly if the victim had been murdered. Several pupils made reference to Judith Scott's interview in the video, indicating that they had retained this information. Groups also discussed the impact on the family of boy in the wheelchair and were aware that his girlfriend now had to do everything for him. Some participants felt violence was particularly unfair on the families as they may not have done anything to hurt the offender but they suffer anyway. Indeed, Dahlberg and Krug (2002) acknowledge the considerable impact of violence on families in the *World Report.*

Awareness of the impact on offender's family. A minority of groups acknowledged the impact on the offender's family, in terms of disappointment in their actions and their absence whilst in jail:

CF1: *nah they do need to take the family into consideration cause they don't know how that person's feeling like their family would feel the exact same if it was the opposite way around their family's probably hurting anyhow cause they're getting put in jail*

CF3: *their families probably disappointed*

CF1: *mmhmm*

CF3: *that their child's done that* (group 3, School C).

4.1.1.5 Attitudes towards violence

As the primary outcome measure was change in pro-violent attitudes towards violence, the qualitative analysis also sought to identify displays of pro-violent and anti-violent attitudes during the focus groups. Groups displayed a range of anti-violence attitudes and a smaller number of pro-violent attitudes.

4.1.1.5.1 Anti-violent attitudes

As discussed (see section 4.1.1.1.2) some groups had very negative feelings towards youth violence, perceiving it to be disgusting. A number of other anti-violence attitudes were identified in the analysis.

Negative perceptions of knife-carrying. Several groups discussed knife carrying and believed it was wrong to carry knives:

EM2: *aye cause walking about with a knife isnae really the proper thing to dae you should just kinda leave it* (group 1, School E).

Moreover, group members recognised that carrying knives for protection (rather than with intent to use) was still dangerous not only to others but also to themselves.

Sense of unfairness for innocent victims. Several groups demonstrated particularly strong attitudes regarding the unfairness of attacks on individuals who were not involved in scheme or gang-fighting and as such had "done nothing to deserve it".

Negative feelings towards those engaging in youth violence. No groups felt positively towards perpetrators of violence and commonly demonstrated negative feelings towards young people who perpetrated violence:

> DF4: *it* [the film] *showed you how sad people are as well to do it*
>
> DM2: *like people hit folk for no reason just cause they walk by and look at them wrang*
>
> DM1: *say he's ugly and then* [laughs]
>
> I: *you said it can show you how sad people are what do you mean by that?*
>
> DF4: *like they could stab people for nae reason and walk about wi knives*
>
> DM2: *and act the big wan* (group 2, School D).

Negative feelings towards those involved gangs. Overall, groups demonstrated negative attitudes towards other young people involved in gangs:

CF1: *they'll be it people will be scared of them but the truth is people aren't scared of them people just laugh at them* (group 1, School C).

However, it should be noted that one participant in group 1, School E was "not too sure" whether gangs were a bad or a good thing.

Awareness that they can choose not to engage in youth violence. Less commonly, groups believed the film demonstrated that they had a choice in whether they became involved in violence as it showed what would happen if they "turned the wrong way". Indeed, an emphasis on choices is reported to be an effective way of engaging with adolescents (Hanna et al., 1999, Lloyd et al., 2009) and may be valid approach to delivering MAV sessions.

4.1.1.5.2 Pro-violent attitudes

Justify fighting if someone bad-mouths their mum. One group (school E) discussed instances when they felt violence was acceptable and perceived it be a justifiable response if their mother was criticised:

EM3: *I think if you have tae if you have tae like if somebody said something about your mam that's when you have to fight*
EM: [interjects] *like if somebody said something about your mam*
EM:*I think that's when you have to fight tae for*
EM: *just think the world's a big place*

EM3: *just tae just tae don't use weapons just start fighting or batter them and just* (group 1, School E).

Within this group participants distinguished between fighting and using weapons, the latter of which they felt was not justified. However, one of the female participants felt strongly that any form of physical violence was not an appropriate response.

Justify violence for self-defence. A minority of focus group members believed it was appropriate to utilise violence for self-defence despite demonstrating anti-violent attitudes more generally. This may indicate that some pupils feel violence is more acceptable in response to victimisation, and is an area MAV could specifically focus on during sessions in the future.

4.1.1.6 Avoiding violence

Focus groups discussed issues which related to a theme of avoiding violence, in particular increased awareness of dangers and strategies for staying safe. This may reflect the focus that some MAV volunteers place on safety.

4.1.1.6.1 Awareness of dangers

Awareness of risks of carrying knives. Several groups demonstrated an awareness of the risks of carrying knives, in terms of the damage they could do to others and also the risk to themselves. For instance, it was indicated that you could accidently injure yourself or have the knife used against you as illustrated here:

CM1: *yeah there's a problem because they think they're protecting theirselfs but they're really endangering other people's lives when like somebody attacks them they're gonnae react in a bad way*

CM5: *there are in some parts of Glasgow and round about different places ehm it just means that eh knife crime rate just goes up and up and up cause people just don't listen they keep doing it.*

I: *mmm*

CM6: *you're more likely to lose your life if you carry a knife than you are if you don't* (group 1, School C).

Moreover, participants demonstrated an awareness of the implications of using a knife:

DM3: *the video was actually quite life changing once you've seen what can happen when a fight starts like and it shows you it showed you what would happen if you had tae use a knife it can end up getting you in jail and it'd ruin the rest of your life* (group 2, School D).

One participant (group 2, School D) mentioned he had been given a knife from his uncle for "going into the forest" and had now stopped using it. Groups generally displayed negative attitudes against knife-carrying and some participants explicitly stated that they "already knew not to carry knives".

Increased awareness of dangers to self when out. Groups consistently described feeling more aware of the risks of victimisation, particularly knife crime, when they were out at night:

> BM1: *But you're more aware of people like anybody could be carrying a knife.*
>
> I: *mmhmm*
>
> BM: *I agree with eh* [BM1] *before I wouldn't have been as like wary but know I'm kinda like making sure that like I don't make eye contact with people because you've got no idea who could have a knife on them or anything* (group 1, School B).

Groups also reported taking such risks more seriously due to an increase in awareness of the impact of violence. Moreover, a minority of groups identified that they were at greater risk of violence if they had consumed alcohol.

Feelings of safety following session. There were differing opinions within several groups regarding whether the session made them feel more or less safe. A participant in group 1, School B noted that the session could result in feelings of fear:

> BM9: *Could have a negative affect though if you start getting scared of people* (group 1, School B).

However, the rest of the group felt that an increase in awareness did not necessarily lead to fear or paranoia:

> BM1: *I wouldn't say I was exactly paranoid just more wary more careful of who I talk to or look at in Glasgow* (group 1, School B).

Similarly, within two other groups a minority of participant described feeling frightened of violence when they were out:

> CF4: *like when you got to a football game like cause it frightened me like something could happen like even if you're just going to a football game with friends* (group 3, School C).

While the majority of group members did not report feeling anxious following the session, a minority did feel more fearful. This highlights a need for a balance to be struck between increasing awareness and not causing anxiety in pupils.

4.1.1.6.2 Strategies for safety

The strategies discussed by focus groups reflect what was discussed in the MAV sessions, however, such an approach means MAV effectively treats the symptoms of violence and not the causes and could be considered inconsistent with primary prevention.

Exercise caution when interacting with people. Several groups noted that as it is not possible to know who is carrying knives, it was important to be careful how they interact with unfamiliar people when out in the evening. This could involve avoiding making eye contact with people you don't know and not making offensive comments:

> BM10: *I'm kinda like making sure that like I don't make eye contact with people because you've got no idea who could have a knife on them or anything* (group 1, School B).

> EM2: *you should just really keep yourself to yourself if you're if you've no got anything nice to say then don't say it at all* (group 1, School E).

While such strategies may help reduce the risk of victimisation, it is important that they are not taken to the extreme, with pupils becoming fearful of interacting with new people.

Stay with friends. The majority of groups felt they would be safer if they remained with their friends when out in the evening and avoid walking around on their own. This was felt to be particularly important if venturing into another housing scheme. Indeed, a qualitative study of young people exposed to community violence also identified 'travelling with others' as a strategy utilised to increase personal safety (Teitelman et al., 2010).

Back away from anyone with a knife. Several groups mentioned that they would "back-off" off and try and run away if they were threatened with a knife:

> EM3: *I wouldnae fight if anybody had a knife on them I would run*
> EM2: *I think so would everybody* (group 1, School E)

While a minority of groups members stated they would use violence as form of self-defence, this did not extend to instances where the perpetrator had a knife. This may indicate that although participants may be willing to get into a fist-fight, they are aware of the dangers of knives.

Stay sober. One group member identified not getting drunk as a strategy for staying safe. However, more commonly, groups stated they would avoid people who looked drunk.

Avoiding potentially unsafe areas. A minority of groups reported that they remained in their own housing scheme or avoided areas they perceived to be unsafe such as where "junkies" or gangs congregated:

> DM3: *there's been a couple situations where it's*[the session] *made me stop and think like where if I go tae an unsafe area like it's made me stop and think like if I should go up there or not*
> DM2: *you could go a different way to go there underground* (group 2, School D).

This necessity of having to stay in their scheme and avoiding certain areas was also identified by Deuchar (2009), and can restrict young people's opportunities to take part in recreational activities.

Avoiding getting angry. One group member described his attempts to control his anger following the session:

> DM3: *I've started behaving more cause like usually I would get angry too easily but see now after watching that like sometimes getting angry too easily can like really affect you* (group 2, School C).

Although other participants did discuss avoiding inciting anger in other people by not intentionally causing offence, this is the only participant that described trying to control their own anger.

4.1.1.7 Development of MAV programme

Groups expressed a desire for further information and discussed ways, in which the programme could be expanded.

4.1.1.7.1 Involvement of others affected by violence

Hearing experiences of a victim of violence. Just under half of the groups felt it would be useful to have a victim of violence attend the session and share their experiences. Although a small number of the healthcare professionals had also been victims of violence, they did not go into much detail regarding this during the session and pupils

were keen to learn more about their personal experiences. Moreover, it may be more appropriate to have a victim who is closer to the pupils' age as this would provide an alternative perspective. There is currently a lack of evidence on whether such an approach would be successful, however, it is something that could be upsetting for the victim and if considered, would need to be managed with caution.

Hearing experiences of an ex-offender. Less commonly groups expressed a desire to hear the perspective of an ex-gang member. One group felt that this could also be useful for those already involved with gangs:

> CF1: *like if we got somebody fae like that was in a gang and maybe he's changed their life around or something to come in and tell us like this is what I've done like even if even though you are in a gang you shouldn't start it but even if you are in a gang you shouldn't start it and you choose to leave this is what ya can do like with yourself* (group 3, School C).

However, there was debate in group 2 School D, with some participants believing this would be a good idea whereas others felt this could be "scary". Ex-gang members do take part in the Community Initiative to Reduce Violence (VRU, 2009) call-in sessions, which are delivered in the sheriff court to young people already involved in youth violence and involve a number of speakers including accident and emergency doctors and parents whose children have been victims of violence (Donnelly and Tombs, 2008). During these sessions the ex-gang members share their experiences of life in prison and the impact this had on their families, however, there is currently no evidence as to how

effective this component is in reducing pro-violent attitudes and/or encouraging behaviour change.

Sessions by police. A minority of groups discussed whether police should be involved in similar violence prevention programmes. While some group members (group 2, School D) explicitly stated they would value learning about the police's experience with youth violence, others were not supportive of this as they felt negatively towards the police. Moreover, one group (School E) felt it would be more appropriate for the police to utilise their role to engage with young people already involved in knife carrying and help them understand the consequences. As many adolescents perceive police officers as authority figures this can result in negative perceptions towards them. However, the evaluation of the use of campus cops in Scottish secondary schools identified that most pupils enjoyed the contact with the campus police officers, although some pupils continued to have negative perceptions of other police officers (Black et al., 2010). Involvement of a police officer would offer an alternative perspective in the MAV session. Moreover, their involvement would then constitute a multi-disciplinary approach to the prevention of violence, as recommended by Dahlberg and Krug (2002).

4.1.1.7.2 Desire for more information

Although some groups felt the level of information was sufficient, others expressed a desire for information on the following topics.

Desire to learn about first-aid. Group 1, School D wanted to learn about first-aid, in order to respond to somebody who had been stabbed.

Desire for information on global prevalence of youth violence. Group2, School D expressed a desire to learn about the problem of violence in other cities and countries and how it compares to the problem in Glasgow.

Need to know how respond to an attack. Group 1, School E felt it would be helpful to learn how to react if you were getting chased or threatened.

4.1.1.7.3 Session duration

Would like more sessions/time. The majority of group members expressed a desire for either a longer session or a follow-up session, to allow further discussion with the healthcare professionals:

> CM6: *more cause it would explain like maybe if so that there is time to talk and stuff you cut it into two weeks*.
>
> CM1: *yeah like*
>
> CM6: *Like one session is the video next session is talking about the video* (group 1, School C).

It should be noted that a minority of group members felt the duration of the session was sufficient to deliver the level of information provided. However, the desire by the majority of pupils for multiple sessions may indicate a need for more than just a one-off session. Indeed, it is difficult for one-off sessions to result in sustained behavioural

changes (Harrison et al.,2006) and as such MAV could consider working with schools to develop follow-up materials.

Receive session annually. Less commonly, groups felt the session should be repeated annually to help remind them of the messages. Group 1 school B referred to a film on firework safety that they had been shown annually, which they found effective in reinforcing the key messages. Another suggestion was to watch an increasingly intense film on an annual basis:

> CF: *like every year like a video that can be like more intense*
>
> CF2: *just to more like remind you* (group 3, School C).

This also highlights the need for more sustained intervention. Moreover, in addition to MAV, there is also a need for a whole-school approach to violence prevention. Such approaches are proposed to be more effective than stand-alone programmes in reducing health risk behaviours in secondary school pupils (Bond et al., 2004).

6.2.1.8 Other methods to reduce youth violence

Groups also discussed other methods beyond MAV, that they felt could be utilised to help reduce youth violence.

4.1.1.8.1 School-based activities

Would like drama sessions. Several groups expressed a desire for drama sessions on youth violence either as part of their drama classes or observing external actors. Theatre-based sessions have been used as components of health-risk behaviour interventions for adolescents, for example the *Safe Dates* dating violence prevention programme, which demonstrated a reduction in physical and sexual violence perpetration and victimisation (Foshee et al., 2004). However, as there were a number of components to this study, it is difficult to extrapolate the effectiveness of the theatre component in particular.

Would like dedicated violence prevention time. A minority of groups recommended that their school implemented a week or day dedicated to violence prevention. In addition to learning about youth violence, participants felt it could be a time to emphasise considerate behaviour to other pupils. This could help develop school wide norms that are not supportive of violence and is consistent with a social norms approach, which has demonstrated success in violence prevention (see Prothrow-Stith and Davis, 2010, Swaim and Kelly, 2008).

4.1.1.8.2 Role of criminal justice system

Believe need tougher sentencing. Groups consistently felt that sentencing for perpetrators of violence was not sufficient and that the jail period should be longer, with a minority feeling the death penalty should be utilised for those convicted of murder:

DM1: *eh like make harder sentences like erm longer jail terms because eh if somebody stabs somebody they might no they could only get three years or something like that it should be longer.*

DM6: *they should bring back the death sentence* (group 2, school D).

*Role of surveillance***.** Several groups felt a need for increased surveillance either in the form of CCTV and increased police presence on the streets, particularly around nightclubs, which they associated with violence:

DM2: *I think like during night times like when all the drunks get outae clubs n that and when they've got knives I think police should stand there like every nightclub* (group 1, school D).

This desire for increased police presence by some group members contrasts with the views of other group members, who felt negatively towards the police.

4.1.1.8.3 Activities

Activities for young people in the evening. Several groups believed that a lack of recreational activities in the evening resulted in underage drinking and violence. As such they felt more facilities were needed for young people to deter young involvement in violence. Indeed, diversionary activities (e.g. football) can provide an alternative to antisocial behaviour by reducing boredom and unsupervised leisure time and can also enhance pro-social skills (Morris et al., 2003). Such an approach has been utilised in

Glasgow by CIRV (VRU, 2009) and has become a means of engaging young people involved in violence (Deuchar, 2013).

4.2 Discussion

Young people were aware of and had been exposed to violence within their local areas, with the exception of pupils from school B who were only aware of violence in the centre of Glasgow. While group members consistently identified peers that were both perpetrators and victims of violence, only a small minority of participants had been directly involved in violence. Indeed, group members generally displayed anti-violent attitudes such as believing knife-carrying was wrong, concern for innocent victims and negatively describing those involved in youth violence (e.g. as 'sad'). However, a minority felt violence was acceptable in response to provocation (e.g. if their mother was bad-mouthed or they were threatened). This was consistent with findings from the questionnaire. At all three time points mean scores for items examining positive attitudes towards a culture of violence (e.g. "it's a good idea to hang out with people in gangs" or "people who use knives get respect") were low. As the scores were low at baseline this represents a floor effect and may explain why there was no significant change in culture of violence scores between T1 and T2, while there was a small (significant) change in mean total ATV scores. The questionnaire items that explored support for reactive violence (e.g. "it's okay to beat-up somebody for bad-mouthing me or family" or "if a person hits you, you should hit them back"), had higher mean scores at all three time points. Although there was a small but significant decrease in mean reactive violence scores between T1 and T2 (although this was not sustained at T3). The data from both the questionnaires and the focus groups therefore suggests that while

pupils are generally not supportive of violence, they may be supportive of reactive violence. Consequently, it may be appropriate for MAV to consider developing strategies for dealing with reactive violence.

Although pupils did not admit to any involvement in the perpetration of violence, they did discuss why they felt other young people were involved in violence. Groups attributed some of the fighting as a result of the need to defend their scheme or 'scheme-fighting' (see Deuchar, 2009, Bannister et al., 2010, Kintrea et al., 2011). Although some groups did refer to 'gang-fighting' this was used to describe fighting between schemes and not organised criminal activity, which is similar to the patterns of 'gangs' or 'territorial based groups' described by Kintrea et al. (2011). For pupils that lived in areas where this was prevalent, this could result in anxiety and also has the potential to limit their social mobility (Deuchar, 2009). Indeed at baseline, 40.9% of pupils answered yes to the item "I'm afraid of getting stabbed". Interestingly this rate was not lower at school B, although this may reflect their anxieties of being in the centre of Glasgow rather in their own neighbourhood.

Groups felt that in addition to defending their schemes, the main reasons for engagement in youth violence included: peer pressure; violence being perceived as 'cool' by other young people; family pressures (i.e. father or brother also involved); wanting to act tough to gain respect; and getting a 'buzz' (i.e. finding violence exciting). Despite the long-standing association between football and violence within Glasgow (McVeigh, 2011), this issue was only discussed by a minority of groups. Both the data from groups and questionnaires indicated that these young people generally felt negatively towards gangs and knife-carrying. However, they believed other young

people joined gangs in order to feel part of something and gain protection. Moreover, groups identified that it was difficult for young people to leave gangs due to fear of victimisation, an issue also identified in the literature (Bannister et al., 2010). Similarly, they thought a feeling of protection motivated other young people to carry knives. Consistent with current evidence (Kintrea et al., 2011, Bannister et al., 2010) group members believed engagement in violence began in early secondary school and continued through teenage years, with younger children keen to copy the older teenagers, possibly indicating that violence may represent a transition into adulthood. Indeed, participants from schools C, D and E (S2) felt they were receiving the programme at the appropriate age, whereas pupils from school B (S5) thought they also should have received the programme in early secondary school. However, the majority of participants felt it would not be appropriate for pupils in S1 or younger. While groups had an awareness of violence, they were shocked at the level and consequences of violence. In order to be potentially effective, fear appeals first need to make the threat appear serious and relevant (Witte and Allen, 2000). Indeed, pupils reported that the use of real CCTV footage, the Glasgow setting, interviews with real victims and offenders, and images of injuries helped make the session more relevant and provided a sense of realism and increased their awareness of the risks of youth violence

However, as this is a universal programme, MAV should not cause undue upset to pupils. Although a minority of group members expressed feelings of upset at some of the cases presented in the film, and found some of the images graphic, they still felt it was appropriate to watch the film. While it is important for young people to be aware of the risks of violence, it would not be appropriate to cause unnecessary anxiety. Focus group participants described feeling more aware of the risks to themselves when they

were out in the evening in terms of victimisation but the majority of participants did not describe feeling less safe following the session and they reported using strategies for staying safe (e.g. staying with friends, avoiding unsafe areas).

Participants generally appeared to enjoy the MAV session and were able to discuss and reflect upon it two weeks later in the focus group, indicating they had retained the concepts covered in the MAV session. In particiular, groups discussed the impact of victims and offenders and made references to the cases in the film. Despite no apparent empathy increase in empathy scores in the questionnaire, groups demonstrated empathetic attidues towards victims during the focus groups, which may be indicative of a lack of sensitivity in the scale utilised.

In particular, groups enjoyed being able to hear the healthcare professionals' experiences and have the opportunity to engage with them. Pupils also felt strongly that volunteers' experiences made the session more meaningful than if their PSE teacher had delivered it. However, some participants felt there was not enough time to discuss the questions with volunteers, partly due to time being wasted at the start of the session. As such groups were keen to either have a longer session or have two sessions. A minority of group members also felt it would have been beneficial to have police involvement in violence prevention sessions. Other focus groups expressed a desire to have a victim of violence attend the session to share their experiences and less commonly, a perpetrator of violence. A desire to learn relevant first-aid was also expressed and MAV are now developing a trauma first responders course for schools. MAV have secured $5000AUD funding from First State Investments to help develop this.

In addition to school-based violence prevention efforts, groups identified the need for upstream influences that need to be considerd. In particular, groups felt lack of activities contributed to engagement in underage drinking and violence, they believed an increase in recreational opportunities was necessary to reduce violence. Sport in particular has been shown to improve social skills and reduce delinquent behaviour (Deuchar, 2009) and has been utilised to engage with young people involved in youth violence (Deuchar, 2013).

While this study provided an understanding of young peoples' awareness of youth violence and experiences with MAV there are a number of limitations that need to be addressed. First, although teachers were asked to invite a range of pupils, in terms of abilities and behaviour to participate in the focus groups, most of the pupils were not involved in the perpetration of violence and it is plausible that the teachers did not select potentially more disruptive pupils. As such, the pupils taking part may not be representative of their year group. It would therefor be of interest to repeat the focus groups with participants who were known to be involved in youth violence. Secondly, due to timing issues the pupils in group B were all placed in the same focus group, which resulted in one larger group of 12 pupils, which meant some pupils had less opportunity to speak out. Finally, the pupils may have percieved me as an authority figure, which may have led them to be more conservative in their opinions of MAV or involvement in youth violence.

4.2.1 Summary

This section reported the qualitative findings from focus groups with pupils who received the MAV programme. Data was analysed thematically using the Framework method (Ritchie et al., 2003). The results demonstrated that while these young people were not currently involved in perpetration of violence, they were aware of violence in their neighbourhoods and in the centre of Glasgow. Moreover, the majority of pupils consistently displayed anti-violent attitudes, with a minority reporting that reactive violence was justifiable. These views were reflected in the questionnaire results and as such, it should be considered whether it would be appropriate to place greater emphasis on reactive violence. Nevertheless, groups generally appeared to engage well with sessions and demonstrated an awareness of the risks associated with youth violence and knife-carrying. The principal limitation identified by groups, was a lack of time to discuss the issues raised with the healthcare professionals. A number of other themes regarding logistics and content were also identified and recommendations for development in this area will be detailed in section 6.

5. Process evaluation: healthcare professionals

A process evaluation utilising online questionnaires and semi-structured interviews with MAV volunteers was conducted to identify whether volunteers felt they reaching the target group, their perceptions of youth violence, experiences delivering sessions, difficulties or concerns with programme, perceptions of success, whether they felt the training was sufficient and how MAV could be improved and developed. The analysis followed the procedure for Framework analysis (Ritchie et al., 2003; see section 2.5.2).

5.1 Results

The classifications, categories and descriptive items identified in the descriptive analysis are detailed in Appendix G. Explanatory accounts of the categories will then be discussed utilising verbatim quotes where appropriate. Linkages between sets of phenomena and deviant cases will also be described and reference will be made to empirical literature where relevant.

5.1.1. Explanatory accounts

The explanatory accounts were generated with the approaches described by Ritchie et al. (2003). This primarily involved utilising explicit reasons and accounts. In the case of repeated co-occurrence of two or more categories or descriptive items, explanations were sought by inferring an underlying logic.

5.1.1.1 Youth violence at work

5.1.1.1.1 Experiences of youth violence

All volunteers regularly experienced youth violence through their jobs. The nature of the violence experienced varied by speciality and is detailed below.

Deals with a large number of young people injured by violence. Those working in acute specialities such as emergency medicine, anaesthetics and general surgery saw the most incidents of violence, particularly at the weekend. For instance, an anaesthetist describes his experiences of violence at work:

> "*we get huge amounts of violence in when I'm on-call on a Saturday morning usually most of the morning and most of the day doing trauma cases which are almost always violence and alcohol related*" (Participant B, interview)

The high prevalence of violence at weekends reported by this anaesthetist is reflected in emergency department data, which identified that violent related injuries peak at the weekend (Bellis et al., 2008).

Treatment limited to dealing with injury. Those in the acute services also found the treatment they provided was limited to managing the injury and not addressing the underlying causes of violence:

> "*you often seen in the young men which is sort of a random type of attack with really no particular significant consequence you patched them up and off they went the next day"* (Participant C, interview).

This is consistent with a study by Wright and Kariya (1997) that investigated the incidence of assault within a Greater Glasgow Accident and Emergency department. The authors reported that the majority of patients with violent injuries had relatively minor injuries (e.g. lacerations and haematomas) and consequently 63% were discharged directly from Accident and Emergency.

Deals with psychological consequences of violence. Two of the healthcare professionals dealt primarily with the psychological consequences of violence as their roles as a consultant in oral medicine and psychiatrist:

> "*as a psychiatrist I get to deal with the you know the ripples there after the peripheral people the families that are affected and the lives you know whether it's post traumatic stress disorder you know whether it's depression whether it's children growing up without a father or whatever*" (Participant E, interview)

Treats a small number of children with violent injuries. The one healthcare professional that specifically looked after children occasionally saw violent injuries in this age group:

> "*I had experience of being in accident and emergency and seeing you know teenagers coming in having been involved in interpersonal violence and such like so in my current position I also deal with children who have not fortunately huge numbers but there are children who come in who have traumatised their teeth because of being involved with violence*" (Participant G, interview).

Those in the acute specialities felt they usually saw young people from the age of 13 upwards to 20. This is akin to empirical evidence which indicates that onset of serious violence begins from age 12 years and peaks at approximately 17 years (Office of the Surgeon General (US), 2001).

Involvement of older men. The minority of healthcare professionals working in acute settings also looked after men aged between 30 and 60 who were involved in violence. However, those that worked with the chronic consequences of violence (psychiatry and oral medicine) had many patients who were in their 40s.

Experienced higher rates of violence in West of Scotland. Healthcare professionals felt they dealt with much higher levels of violence when working in the West of Scotland, as was the case for this participant who describes her experiences working in general surgery:

"*I haven't actually seen that kind of level of violence anywhere else in Scotland and now I actually work in Edinburgh and I certainly don't see the same kinda levels in Edinburgh*" (Participant C, interview)

Indeed, the homicide statistics provided by the Scottish government (which is the most reliable proxy for overall incidence) demonstrate that the West of Scotland has the highest proportion of homicide (Scottish Government, 2012)

Homicide an unintended consequence of violence. A small number of healthcare professionals noted that from their experience, they believed that homicides involving young people were often not intended. For instance, this participant describes her experiences working in pathology:

"I have done you know literally dozens and dozens of post-mortem examinations of people who have died as a result of violence and anecdotally I would say that most of it is [sighs] or a let's say a lot of it is probably an unintended consequence there is a weapon to hand whether it's the knife they're carrying or whether […] *they can punch and kick it's because you always have your feet and hands"*
(Participant L, interview).

The pathologist felt that due to the patterning of many of the injuries (i.e. stab wounds in the groin or in the shoulder) the perpetrator did not intend to fatally injure the victim and had just got caught up in the moment. Similarly, in their qualitative work with

young people, Bannister et al. (2010) noted that lethal injuries between territorial groups were rarely intentional.

5.1.1.1.2 Feelings when dealing with youth violence

Healthcare professionals described mixed emotions when dealing with youth violence, with several participants suffering from psychological distress when managing such cases

Emotional burden of violence. The repetitive nature of patients with violent injuries was identified as being emotionally draining. This was the case for participant A, who describes her experience working in Emergency Medicine:

> *"you get tired of seeing it night after night after night really it wares you down"* (Participant A, interview)

This impact may have important implications for role fulfilment as it reflects the exhaustion component of burnout, which impacts on job performance and health (Maslach et al., 2001). Indeed, Accident and Emergency doctors within the UK have been shown to have high levels of psychological distress, which in part can be attributable to traumatic caseloads (Burbeck et al., 2002).

Stress of treating knife wounds. A minority of participants identified the actual processes of treating knife wounds as being particularly stressful due to the complexity of some injuries and difficulties in wound healing:

> "*it's very physically quite difficult and very stressful and then you suddenly find yourself thinking y'know I don't want to cause this patient any harm by me doing my job*" (Participant B, interview)

Facial injuries, in particular facial fractures can cause specific difficulties for anaesthetists (i.e. participant B) in terms of airway management (Amin et al., 2002). Complex tasks, such as difficult airway management and fear of harming patients (Nyssen and Hansez, 2008) are documented risk factors for stress in anaesthetists and is evident in this participant.

Excitement when treating violent injuries

Conversely, a minority of participants (all of which were female surgeons) described initially feeling excited when treating violent injuries as it provided them with an opportunity to go to theatre:

> "*as a junior doctor I think it's quite exciting really seeing that sort of stuff y'know and it is a bit exciting and you know you get to go to theatre and that's good too but I think it's as I kinda get older and now have a little boy I think oh man it isn't that exciting"* (Participant C, interview)

Despite feeling initially excited, the surgeons now identified feeling upset at the impact of violence on the young people's lives and the waste of resources.

Concern at the wider impact of violence on families. A commonly held view was the considerable impact that youth violence had on families of both victims and offenders, and the subsequent difficulties of supporting distraught families. Indeed, exposure to violence in early life is associated with adverse health outcomes in later life (Felitti et al., 1998). Conversely, Medic C was more concerned that the families did not seem bothered by the injuries:

> *"the thing I probably found most alarming about it was there wasn't there didn't really seem to be an awful lot of concern among the families"* (Participant C, interview).

This lack of concern among families may be reflective of ineffective parenting and lack of parental supervision, which can all act as risk factors for youth violence (Buka and Earls, 1993, Dahlberg, 1998).

Concern at long-term impact. Participants consistently experienced feelings of concern at the impact of violence on the victims' lives and to a lesser extent the impact on the offenders' lives:

> "*one person getting killed or one person having their life altered out of all recognition because they serve a lengthy jail sentence*" (participant H, interview).

Indeed, the concern for the lasting effects of violence was a commonly cited reason for volunteering with MAV.

Frustration at the pointless nature of violence. A minority of participants expressed frustration at having to manage cases of youth violence as they believed nobody gains anything from it, and as such it is a pointless act. For instance, this participant describes violence as:

> *"not only is it a waste of time for us it's such a waste of [pause] yeah for them really"* (participant C, interview).

This illustrates this participant's frustration at having to use her time to treat violence and also the waste of a young person's life.

Perceptions that violence related injuries are self-inflicted. A less commonly held belief was that many young people who attend hospital with violent injuries were responsible for their injuries either through alcohol or recreational fighting. The participants who believed this also admitted to feeling guilty for having this belief:

> "*it's a terrible moral kinda thing to say but it does pray on your mind that people who have done nothing wrong end up very ill and we haven't got the time to care for them because we're dealing with people who have just drunk too much*" (Participant A, interview).

Although there are no current studies investigating healthcare professionals' attitudes towards patients with violent injuries, a study of New Zealand emergency department staff reported that most staff felt negatively towards intoxicated patients, viewing their problems as self-inflicted and an unnecessary burden on the hospital (Gunasekara et al.,

2011). Similarly, studies of emergency department staffs' attitudes towards deliberate self-harm has shown that some staff feel negatively towards such patients as they felt they were in control of behaviour (Mackay and Barrowclough, 2005). Together, this suggests that some healthcare professionals may feel violent injuries are self-inflicted and therefore feel negatively towards such patients as it they may believe treating violence is a waste of resources and resent the fact it is taking time away from other patients.

5.1.1.2 Motivations for participation in MAV

Healthcare professionals' reasons for participation could be broadly divided into two categories: 1. the desire to prevent violence and, 2. for personal development. Some of the reasons for motivation are also described in the volunteer function inventory (VFI) constructed by Clary et al. (1998), which consists of six motivational functions of volunteering. In order to gain a better appreciation of the most commonly cited reasons for volunteering with MAV, a count of the reasons as they relate to the VFI is presented in table 7.2.

The data indicates that the majority of participants volunteered with MAV out of concern for the young people involved in violence and hoped that by volunteering, they could reduce violence. Interestingly, a considerably higher number of interview participants also identified the opportunity to develop new skills and learn from the pupils as a motivation for volunteering. Although this may simply be a consequence of the fact that the interviews were able to generate a much larger volume of data, it should be noted that those taking part in the interviews were the most regular

volunteers with MAV. The notion that they believed they were also gaining skills from the sessions may therefore explain why they volunteered on a more regular basis.

Table 10 Volunteer Function Inventory and number of volunteers

Function	Description	Number of interview participants	Number of questionnaire participants
Values	The opportunity to express altruistic and humanitarian concern for others	12	45
Understanding	The opportunity for new learning experiences and to develop new knowledge and skills	6	2
Social	The opportunity to develop social relationships or take part in an activity viewed as important by others	2	1
Career	The opportunity to develop career benefits by either preparing for a new career or maintaining skills relevant to current career	0	2
Protective	Allows the individual to reduce negative feelings (e.g. guilt over being more fortunate than others) or personal problems	2	0
Enhancement	The opportunity to develop psychologically and feel better about self	2	7

Only a very small number of participants were motivated to take part in MAV for social reasons and this may indicate that participants get little social benefit out of MAV which could be a result of delivering sessions on an individual basis or due to a lack of events for volunteers. Interestingly, only two participants described volunteering as a means to enhance their career (e.g. through continued professional development credits), however, the majority of interview participants felt that although they did not volunteer for career reasons, participation in other members could be improved by awarding CPD credits. Volunteering to reduce negative feelings (i.e. protective) was only apparent in two interview participants who both experienced youth violence growing up. Finally, a minority of participants described that MAV enabled them to feel better about themselves, in terms of wanting to feel like they were doing something positive. More detailed explanations of participants' motivation for participation in MAV will now be discussed.

5.1.1.2.1 Preventing violence

Participants discussed a number of reasons in relation to preventing violence.

Reducing violence related workload.

All healthcare professionals were strongly motivated to help reduce their violence-related workload and reduce violence related harm:

> "*have seen devastating consequences of knife crime working in Emergency Medicine, in this role often feel like I'm mopping up the*

effects of problems in society, so keen to be involved in trying to address these problems" (Participant 19, questionnaire).

A number of healthcare professionals had a variety of additional reasons for wanting to prevent violence, through their involvement in MAV.

Personally impacted by violence. A minority of interview participants described having been personally been affected by violence when growing up, either as a victim, family member of a victim or had personally been involved in fighting. These early experiences were a motivating factor for volunteering as participants believed they had greater understanding of how young people felt about violence, for example this participant describes her experiences growing-up:

"I did grow up in a very you know deprived housing estate surrounded by chaos and violence and ehm so I experienced that as a teenager I know what it was like to you know kind of live and run you know not run with the gang but be in the periphery" (Participant E, interview)

This participant notes that her experiences of growing up on a deprived council estate enable a better understanding of the appeal of violence to young people and what it is like to live in that environment. Indeed, a personal identity with those who are suffering has been identified as a motivation for volunteering (Hwang et al., 2005).

Wanting own children to be safe. A less common reason for volunteering was a concern for their own children's safety:

"*I'm a mum of a boy and I worry about him going out*" (Participant K, interview)

These participants hoped that volunteering with MAV may help create a safer world for their children. However, it is interesting that in this context the participants do not discuss changing the social determinants of violence to create a safer environment for their children.

Concern for innocent victims. Interview participants recurrently expressed a belief that a number of victims were innocent and had been unlucky in terms of being in the wrong place at the wrong time. These participants therefore wanted to help prevent more innocent young people being victimised:

"a lot of people aren't innocent but there are innocent people that get caught up in it and end up having their lives kinda ruined because of it you know because it's stops them getting jobs it stops them getting […]*what they want in life because they're stigmatised with facial scarring*" (Participant F, interview)

In this quote, the participant expresses his concerns for others. Indeed, personal values related to altruistic and humanitarian concerns are one of the motivational functions for volunteerism (Clary et al., 1998). Interestingly, this contrasts with a less commonly held belief that violence-related injuries are self-inflicted (see 7.2.1.1.2).

Approval of prevention approach. A number of volunteers were attracted to MAV because of the emphasis on prevention, which they felt was a novel approach to tackling violence:

> "*Interested in getting at the roots of the violence problem in Glasgow and making our streets safer. Tired of patching up young people with no hope of improving situation"* (Participant 18, questionnaire).

> *"it's really that we're obviously not getting through with anything that we're doing at the moment when MAV started and I heard about it I thought that's a great idea it's just get them young and hopefully change the culture"* (Participant K, interview).

Participant 18 indicates that she was tired of simply dealing with the consequences of violence and wanted to take action to try and prevent injuries. Similarly, Participant K felt that current prevention measures have been ineffective and MAV offered a new approach to violence prevention. This theme of prevention is also reflective of the understanding function for volunteerism (Clary et al., 1998).

5.1.1.2.2 Personal development

Healthcare professionals were also attracted to MAV to enhance their own personal development and felt volunteering facilitated this in a number of ways:

Doing something different. Less commonly, participants stated that a reason for their participation was the opportunity to do something different from normal clinical work and take on a different role:

> *"it's a little bit different from what we usually do a little bit of education I'll give it a go"* (Participant H, interview).

The opportunity to develop new skills and knowledge is also reflected in the VFI, under the understanding function of volunteering (Clary et al., 1998).

Find sessions stimulating. Many participants enjoyed taking part in the sessions as they found working with the young people stimulating as they were able to learn from their experiences of violence as:

> *"also personally trying to do something that was just different for me so another avenue just to give me a bit of personal development more intellectual I suppose stimulation"* (Participant L, interview)

Again the opportunity to develop new knowledge from others is an aspect of the understanding function of the VFI (Clary et al., 1998).

Working as a multidisciplinary team. Less commonly, participants (particularly those from specialities such as pathology and as such were more isolated in their clinical role) felt volunteering allowed them to work as part of a multi-disciplinary team. It also

provided a social aspect, which they enjoyed and benefited from. The opportunity to engage with peers and take part in something valued by others is representative of the social function of the VFI (Clary et al., 1998) and is reflected in this participant's experience with MAV:

> "*it's very much a camaraderie all sort of working towards the same goal and because we're all volunteers we all feel part of a team*" (Participant F, interview).

Giving something back to the community. Some participants, particularly those from more deprived backgrounds felt they had a duty to do something for the communities they came from:

> "*I'm very fortunate in that you know I was only ever supported in my aspirations to do medicine* […] *you know I think I'm exactly the sort of person who ought to give something back*" (Participant E, interview)

This participant indicates that she was only able to escape deprivation and have a career in medicine due to support from her family and feels a duty to help others in similar situations. Wanting to give something back to the community is representative of the value function of volunteering (Clary et al., 1998). However, this participant later describes her feelings of guilt at the death of two family members as a result of violence and this may also indicate a protective motivation, whereby she is trying to reduce her feelings of guilt over being more fortunate than others.

5.1.1.3 Perceived impact of violence

As healthcare professionals provided the pupils with information regarding the consequences of violence during the session, it was important to understand what they perceived the impact of violence to be in terms of the health consequences, and the impact on victims, offenders and their families.

5.1.1.3.1 Health consequences

The health consequences reported by participants can be broadly divided into physical and mental health outcomes.

Impact on victim's physical health. Participants consistently spoke of the risk of injury or death. When discussing injury types, participants mainly spoke of ones encountered through their speciality. For instance, the orthopaedic surgeon discussed the inoperable damage that can be done to tendons in the hand. The general surgeon discussed the damage that can be done to the intestines and maxilla-facial surgeons discussed the damage to teeth and facial scarring. Finally, the forensic pathologist discussed which locations a stab injury can result in death as some are from areas that many people would not expect (e.g. the shoulder or top of leg).

Impact on victim's mental health. Only a minority of participants also discussed the lasting impact violence can have on a victim's mental health in terms of post-traumatic stress disorder, anxiety and depression. This link between violence and poor mental health is highlighted in the World Report on Violence and Health (Krug et al., 2002). An interview participant, who was a psychiatrist, noted that it could be difficult for

volunteers without a mental health background to discuss the psychological consequences of violence with the school pupils:

> "*maybe some of my colleagues are you know slightly exposed because they know nothing about mental health but that's not a medics against violence issue that's just you know the world at large that's the NHS*" (Participant E, interview).

Participant E feels there is a lack of consideration about mental health issues by other MAV volunteers and society in general. Indeed, negative attitudes and stigma towards people with mental illness is a persistent problem (Schomerus et al., 2012) and leads to discrimination by friends, family, employers and worryingly some mental health professionals (Corker et al., 2013). The lack of consideration of the psychological effects of violence by other participants and the lack of content on mental health issues in the MAV programme, may reflect society's attitude towards mental health. Developing the MAV programme to include a greater emphasis on mental health issues could therefore act as a platform to develop pupils' awareness of mental health issues specific to violence and more generally.

5.1.1.3.2 Impact on victims' lives

Participants also discussed what they perceived were the long-term consequences on victims' lives and provided the pupils with this information.

Stigma. This was particularly mentioned by the maxilla-facial surgeons who believed that young people who had facial scarring could end-up being stigmatised for the rest of their lives:

> *"end up having their lives kinda ruined because of it you know because it's stops them getting jobs it stops them getting you know eh you know what they want in life because they're stigmatised with facial scarring"* (Participant F, interview)

Indeed, young people with scarring have reported feeling stigmatised and concerned that others would judge them for being involved in criminal activity (Brown et al., 2008).

Reduced life opportunities. Interview participants reported the difficulties victims of violence can face when trying to find employment or start relationships either through stigmatism from scarring or as a consequence of an injury (e.g. from having tendons in hand severed, chronic pain).

5.1.1.3.4 Impact on offenders' lives

Participants also discussed the impact that violence had on the offender's life in terms of jail sentences and mental health.

Wasting life serving a jail sentence. A minority of participants acknowledged that there were often two lives wasted in a murder as illustrated by this quote:

> "*I've seen too many teenagers eh in the mortuary as a consequence of that very often there'll be another teenager or more than one locked up in in prison as a result of it as well*" (Participant L, interview)

Furthermore, in addition to spending a significant time in prisons, those convicted of violent acts also have reduced opportunities, particularly in terms of employment, with those with a criminal record having poorer employment prospects (Pager et al., 2009).

Risk of committing a serious act of violence by carrying a knife. A less commonly held belief was that many young people carry knives without intending to use them:

> "*if you're just unlucky and you stab somebody and they die you know you're the guy who's going to jail for murder and you're not actually any different from all the other teenagers who put a knife in their pocket and went out that night*" (Participant H, interview).

This participant feels that often the perpetrator may not have intended to use their knife to kill or seriously harm anybody and serious acts of violence were an 'unlucky' consequence of going out with a knife. This is consistent with findings from a study by Bannister et al. (2010), which identified that although some young people carried knives for protection, they did not always intend to use the knife.

Effect on offender's mental health. A minority of participants also discussed the enduring consequences that committing an act of violence can have on an offender's mental health, in regard of coming to terms with what they had done. The psychiatrist in

particular saw many such cases:

> *"it's not just the victims I see I also will see down the line gang members who've found themselves in their 30s and 40s and just do not know how to adjust to life but know they have to and you know the kind of fall-out from that sort of life who are now rudderless and have no idea what to do with themselves"* (Participant E, interview)

Participant E stressed that she makes this point to the school pupils, and noted that some of the pupils often expressed surprise at the fact she treats perpetrators of violence.

5.1.1.4 Perception of causes of youth violence

What participants perceived to be the causes of youth violence influenced the messages they delivered in the sessions. Participants widely believed that violence was a multi-factorial problem:

> "*to look at violent crime and youth violence in isolation is impossible because it's all part of alcohol drugs social deprivation and you can't you can't look at it in isolation because so much of it comes from these other factors as well*" (Participant D, interview)

Descriptive analysis identified three broad categories that participants believed contributed to youth violence: alcohol and drugs, individual factors and environmental factors.

5.1.1.4.1 Alcohol and drugs

Participants consistently associated violence with alcohol use and many also associated it with drug abuse. Alcohol use in particular is strongly associated with violence (World Health Organization, 2010, Budd et al., 2003) and is a problem within the target age-group with 10% of Scottish 13 year olds, 29% of 15 year-old boys and 25% of 15 year-old girls reporting that they drink alcohol at least once a week (Currie et al., 2012). Participants believed alcohol contributed to violence in different ways.

Lack of control after drinking. Participants believed that alcohol consumption resulted in a lack of control of anger, which could lead to violence:

> "*that comes back to the ones who had been drinking and who weren't able to control their anger*" (Participant A, interview).

This participant's experience is consistent with the evidence which suggests that alcohol consumption may affect the part of the brain responsible for aggression inhibition and impairs cognitive functioning in terms of assessment of risk, emotional control, self-awareness (Graham et al., 1998).

Culture of alcohol use. Participants perceived Scotland to have a culture of alcohol use whereby getting drunk and behaving inappropriately was legitimised as illustrated by this quote:

> "*it was just an accepted part of life just that violence drink and the unravelling of life because of that*" (Participant C, interview).

This concept of a culture of alcohol and violence was identified in the Scottish Social Attitudes survey (Ormston and Webster, 2008), which reported that 67% of respondents felt that drinking alcohol was a major part of Scottish life and this was indicative of a Scottish drinking culture. It is argued that in some cultures normal social rules do not apply during periods of intoxication, as the alcohol and not the individual is considered to be the cause of violence (Graham et al., 1998). This lack of blame on the individual can therefore legitimise violence in some social groups if alcohol has been consumed.

5.1.1.4.2 Individual factors

A number of themes regarding individual factors for involvement in violence were also identified.

Thrill of violence. Participants who had experienced youth violence growing up expressed an understanding of appeal of violence to teenagers:

> "*I don't think everybody appreciates that it's that it's really quite thrilling there's a certain attraction and thrill to that you know that I can understand why 13 14 15 year olds for all that it might look crazy within the vicinity of violence there's something terribly exciting about it*" (Participant E, interview)

This participant describes the excitement she experienced being on the periphery of violence as a teenager and understands the attraction to violence. Indeed, Howard (2011) argues that the quest for excitement can motivate violence as it results in a high state of arousal, which is pleasurable to certain individuals. The thrill or 'buzz' that violence gives some individuals was also described by the young people in Deuchar's (2009) qualitative work.

Lack of awareness of consequences. Participants consistently felt that young people had a lack of awareness of the damage they could inflict by carrying a knife and did not intend to cause serious harm:

> "*I think a lot of these youngsters that are you know playing around with knifes and machettes and all the rest of it haven't a clue about the damage that they can do and the ease with which people can lose their lives*" (Participant J, interview).

These perceptions about the inability of some young people to calculate risk are supported by research which suggests that the parts of the brain (i.e. the amygdala,

hypothalamus, prefrontal cortex) required for decision making, emotional regulation, behavioural inhibition and calculating outcomes of behaviour are still developing during adolescence and may help explain why adolescents are more likely to be involved in risk-taking behaviour (Kelley et al., 2004). While participants did not consider the theoretical basis for a programme such as MAV, some participants appeared to believe that if they informed young people of the consequences of violence, this could reduce their involvement in violence. However, as behaviour is determined in a large part by the social context in which it occurs, simply providing information may not be sufficient to result in behaviour change (Naidoo and Wills, 2009). Indeed, as Naidoo and Wills note, individuals continue to smoke and engage in unprotected sex despite having knowledge of the risks of such behaviours.

Bravado. Participants from more deprived backgrounds considered there was an element of bravado that young people put on:

> "*it's massive bravado you know these guys are from a background where if you don't stick your head above the parapet and parapet and curse and swear at everyone in the room then you're a nobody"* (Participant I, interview).

This participant thought it was necessary for young people to act in a violent manner in order to succeed in their local area. The need for young people to display bravado has also been documented in literature as a necessary adaptation to surviving and living in a hostile environment, such as many of the housing-schemes in which victims and perpetrators of interpersonal violence are living (Gomez et al., 2004). Indeed, this need

for bravado and looking 'big' in front of their peers was documented by Deuchar (2009) in a qualitative study of young people living in Glasgow.

5.1.1.4.3 Environmental factors

Participants felt violence was a multi-factorial problem and discussed a range of factors to which young people were exposed that may be involved in the development of violent behaviour. Participants consistently associated violence with the well-documented association between violence and socio-economic deprivation (Leyland and Dundas, 2010, Bellis et al., 2008, Hsieh and Pugh, 1993) and acknowledged this association was a consequence of a number of factors.

Lack of opportunities. Participants perceived that lack of opportunities, particularly in the form of employment, in deprived communities contributed significantly to involvement in violence:

> "*you do see the rubbishness of life y'know the rubbishness of their lives and you think well you know what have you got going for you really*"
> (Participant C, interview)

> "*I think a lot of that stems from generations that have had no employment prospects no sense of community the communities are just they're desolate there's nothing to do"* (Participant A, interview).

Both employment and having a stable relationship are protective against involvement in crime (including violence), however, in certain areas young people do not have the education, life skills and employment prospects necessary to maintain a job or relationship (Dahlberg and Potter, 2001). Furthermore, the issues of territoriality in the West of Scotland can result in young people being confined to their housing scheme due to fear of violence, which limits their social mobility (Deuchar, 2009).

Normality of violence. Participants recurrently identified that within certain communities carrying a knife and gang-fighting was viewed as normal and acceptable behaviour:

> *"their attitude to violence is incredibly casual that it just happens and you get slashed and you get pudged and that's just part of life like walking and talking and it is difficult to get the message over to these people they don't see anything wrong with slashing when if they've annoyed you*" (Participant D, interview).

> "*some parts of the city that would almost be seen as normal for a fourteen year old boy to pick up a knife when he's going out and other parts of the city that would be seen as absolutely horrendous*" (Participant J, interview).

This notion may partly be explained by subcultural theory, in which social norms in certain areas of society dictate that young people need to respond to threats with

violence to avoid being disrespected (Vigil, 2003). This highlights a need for a normative approach to prevention, whereby interventions are interventions are delivered within the social context in which the behaviour occurs (Bannister et al., 2010). As MAV currently is only delivered in a school setting this may potentially limit its effectiveness.

Culture of violence. A commonly expressed view by participants was the presence of a culture of violence within some communities, which inevitability led to involvement in violence by adolescents:

> *"the society these kids live in it's just so engrained them by the time by the time they are teenagers*" (Participant L, interview).

This perception of a culture of violence may also be explained by subcultural theory. For instance, Vigil (2003) argues that the limited space in housing estates can result in territorial issues and due to the higher number of single-parent families, there can be a lack of control over young people. Alternatively, strain theory posits that in certain parts of society where culturally defined goals cannot be achieved using legitimate means, the breaking of social codes is viewed as normal behaviour (Merton, 1938). Indeed, this was identified by participant F, who had personally experienced growing up in a deprived area:

> "*they often come from deprived backgrounds they have all these issues that come with that you know the they haven't got anything and they*

want stuff that other people have got and they use everything they can to try and get it" (Participant F, interview).

Again this highlights the considerable role socio-economic deprivation plays in the development of violence.

Territoriality. Participants believed it was harder for young people from deprived areas to avoid violence as the prevalence of gangs who would fight for their 'schemes' (i.e. neighbourhood) was much higher. One participant also highlighted why he believed young people felt they had to defend their area:

"*you see people saying things like oh this is my street and I'm defending it and you think that actually the bottom line is you've just got a dull life and you're trying to pretend you're a mercenary for the street*" (Participant B, interview).

Indeed, some territorial-based groups are so prominent in some areas that they define the housing scheme and it can therefore become very difficult to avoid the associated violence (Deuchar, 2009).

Cycle of violence. A minority of participants also spoke of the cycle of violence (see Widom, 1989), whereby young people who previously experienced violence and aggression by parents and other adults are now committing violent acts:

> *"you could see his notes from having been a child that had been neglected […] he'd come in with something involving violence […] and you kinda oh there's the start of his violent spell that y'know in in a few years time oh he'll be the thirteen year old that's stabbed and in another ten years it'll be somebody else who's had a bigger stabbing"* (Participant C, interview).

The cycle of violence has received considerable attention in the literature and demonstrates an association between childhood exposure to violence and later perpetration of violence in the home or the in the community, or indeed further victimisation of violence (WHO, 2007).

Lack of positive role models. A small number of participants considered the lack of positive role models, in particular father figures, to be involved in the development of violence. This concept is also supported in the literature on youth violence, for instance Dahlberg and Potter (2001) acknowledge the need for positive role models, particularly to offset the impact of living in poverty and experiences of maltreatment.

5.1.1.5 Experiences delivering sessions

Overall, participants enjoyed delivering the sessions. The descriptive analysis identified six categories that allowed further exploration of how the sessions were delivered and identified successful and unsuccessful aspects of the programme. The categories identified were interactions with pupils, messages delivered, class sizes, logistics, content and experiences with teachers and campus cops.

5.1.1.5.1 Interactions with pupils

The following themes describe how the healthcare professionals perceived they interacted with the pupils.

Avoiding lecturing. Several participants stressed how important they felt it was to avoid lecturing the pupils, and to talk at their "level":

> "*I always think simple things like you know if you're doing the groups I get down on my knees and try and simple things like try and speak to them at eye level try and not you know do a lecturing*" (Participant E, interview).

Poor communication in the form of lecturing or giving patronising advice by adults in authority (i.e. doctors, teachers) to young people can leave the young person feeling not respected (Drury, 2003) and they therefore may not be receptive to the session. Communication techniques such as putting yourself at the same level as the young person and avoiding talking down, as identified by Participant E, are recommended to help reassure young people they are being respected and help improve communication (Lloyd et al., 2009). The recommendation of such techniques is something that could be incorporated into the MAV volunteer training.

Relating to pupils. To a lesser extent, participants felt they were able to relate to pupils and that was a vital part of helping the pupils listen and take on-board key messages. Interestingly, this theme was more prevalent among participants from a deprived background. For instance, Participant I felt having experience with young people and

understanding their "banter" was crucial for a good session. This is consistent with strategies for relating to adolescents detailed by Hanna et al. (1999) which recommend having a sense of humour and being able to laugh at yourself enable young people to view healthcare professionals as real people and subsequently develop trust.

Perceptions of socio-economic class. Two of the participants from deprived backgrounds stressed they did not want to be perceived as middle class doctors. Participant I liked to provide pupils with his personal background so they didn't view him as "*just a highly educated individual"*. Conversely, Participant E did not discuss her personal experiences but did acknowledge that the participants will view her as a middle class doctor:

> "*in some ways I kinda smile because these kids will look me and just think och you know [laughs] you know middle class doctor what would she know sort of thing and I sit there thinking oh I know more than you think you*" (Participant E, interview).

Informing pupils of personal background may indeed be a useful strategy for engagement and could be included in MAV volunteer training. Hanna et al. (1999) also recommend emphasising commonalities and avoiding being seen as symbol of authority to enable young people to view healthcare professionals as real people, which can help young people relate.

Involvement of younger healthcare workers. There was disagreement between some participants as to whether younger healthcare professionals were the most appropriate volunteers. Participant C (a registrar) wondered whether the session would be better

delivered from younger doctors as they would be able to relate to the pupils more:

> *"especially somebody like myself who's relatively junior as first year reg being able to say this is what life is like when you are a junior doctor and hopefully they can slightly more relate to me but I don't know if whether they really can I mean I think I'm quite you know young at thirties rather than a fifty year old consultant but I suspect if you're 13 then being 32 is not young"* (Participant C, interview).

In addition, Participant A (a registrar) and Participant J (a consultant) believed it would be positive to have younger medics involved to help increase volunteer numbers and that it would also be beneficial for their training. However, Participant H (a consultant) thought the session was better delivered from senior healthcare professionals:

> "*makes it a bit more robust maybe gives it a wee bit more gravitas than if you have very junior medics doing it*" (Participant H, interview).

Despite potentially making the session more "robust" it is important that senior healthcare professionals avoid taking on an expert stance and asserting their credentials before trying to relate to the young people using the techniques detailed by Hanna et al. (1999). This will help prevent the pupils perceiving the healthcare professionals as authority figures and subsequently distancing themselves.

Enable young people to speak to medics. A minority of participants felt that many of the young people did not have any opportunities to speak to medical staff. They were therefore keen to allow them to have the opportunity to ask lots of questions. Moreover, Participant B felt that the fact they were medics meant they would not be perceived as authority figures:

> "*I think we're in a quite a privileged position and it's also who we're not we're not the police which is a big advantage cause we're not going in and saying we'll get you if you if you don't respond to these things*" (Participant B, interview).

Participant B believed that as medics, they were in a position where they were able to provide young people with information about the consequences of youth violence rather than resorting to telling them what to do, which is an ineffective form of communication with adolescents (Hanna et al., 1999).

5.1.1.5.2 Messages delivered

Participants spoke about the messages they tried to convey during the session, which focused on one or more of the following items.

Staying safe. A minority of participants considered the majority of pupils they spoke to be more at risk of victimisation and not perpetration:

"*I'm probably a wee bit more interested in the young trying to influence the youngsters to avoid violence as opposed to stop it obviously you want them to stop it but in any one class I think even in a relatively a relatively deprived area in anyone class there might just be one or two people that have are on the edges on it so trying to trying to influence the majority to say don't get involved in this in the first place and here's how to avoid being a victim if at all possible"* (Participant J, interview).

This participant therefore focused on advising the pupils of strategies that they can use to help stay safe and avoid potentially dangerous situation. The focus on victimisation prevention strategies enables the majority of pupils to benefit from the programme.

Dangers of engaging in violence and knife-carrying. The majority of participants focused on perpetration prevention although felt there was often only several pupils in the class who were at risk of engaging in violence (due to current antisocial behaviour):

"*despite perhaps the disruptive ones being the most difficult to control their possibly the ones where if you can get a few pupils to take it in what we're trying to say then that can have the most positive effect*" (Participant K, interview)

The focus on perpetration prevention contrasts to victimisation prevention, which was a focus for a minority of volunteers. Interestingly, participants acknowledged that only a minority of pupils were at risk of perpetration. This changes the orientation of MAV

from a universal intervention, which is targeted at a whole group (i.e. school year) to a more selective intervention, which is targeted at individuals or a sub-group who are at higher than average risk of violence perpetration (Johnson, 2002).

Emphasises choices. Several participants felt life choices were an important aspect of the programme and tried to emphasise that young people did have a choice not to get involved in violence:

> "*As an A&E nurse and a primary teacher I am only too aware of the effects of gangs and knife crime and indeed how the youth of today think and act. It is with this knowledge that I felt I may be able to help supply the children with the necessary knowledge to enable them to make informed choices*" (Participant 45, questionnaire).

Indeed, providing young people with information to allow them to make choices is regarded as an important aspect of effective communication with adolescents (Hanna et al., 1999, Lloyd et al., 2009) and as such may be an area that all participants should emphasise in the session. Moreover, Naidoo and Wills (2009), note that as simply telling individuals what to do is both ineffective and unethical, health educators should work to enable individuals to make informed choices about health risk behaviours.

5.1.1.5.3 Class sizes

The majority of participants had experienced a range of class sizes. Most commonly between twenty (one PSE class) and forty pupils (two PSE classes put together).

Occasionally participants were asked to take whole year groups in sessions delivered in school sports halls. Issues relating to class size can be broadly grouped into the following points:

Difficulties engaging bigger classes. The majority of participants believed it was harder to engage larger classes (upwards of 30 pupils):

> "*group was quite large and felt some kids were intimidated by the stronger characters and so didn't contribute as much as they would have liked to*" (Participant 19, questionnaire)

> "*I have been on visits (by myself) where the number of children in the group has been as high as 60. This makes any meaningful discussion/ participation very difficult*" (Participant 22, questionnaire).

Participants identified large classes were particularly difficult at the group work stage, and subsequently a minority of participants even omitted group exercises:

> "*I feel sometimes cause you're kinda going spending a few minutes with it then trying to go back and the kids will obviously get distracted between things eh and sometimes if it's a bigger class I'll just address it from the front"* (Participant B, interview)

Participant B acknowledged that this approach results in the session being a "kind of lecture", which was an aspect other participants avoided to improve engagement with

the pupils. However, it should be noted that Participant F, who was particularly confident at delivering the sessions did not mind large group discussions and was therefore happy to take very large groups of pupils and deliver sessions in the sports hall. However, as the majority of participants thought that engagement was difficult in large classes, it is questionable whether sessions with large groups are as effective.

Feel too small classes don't generate discussion. Several participants had taken very small groups (5 pupils) and felt that pupils did not want to speak out and contribute so it was not possible to generate any substantial discussion:

> "*I think you need a reasonable number to keep it interesting and you need a good mixture if you've very small classes it becomes very difficult you need a bit of you know a bit of banter between the children as well*" (Participant F, interview.

This inability to generate discussion with small groups of pupils may reflect a lack of teaching skills by participants and an aspect that should be incorporated in the volunteer training.

Believe 20 pupils are ideal for sessions. The majority of participants felt groups of 20 pupils were ideal as it was possible to split pupils into four small groups and the discussion was maintained. This equates to one personal and social education class, which was how the programme was designed.

5.1.1.5.4 Logistics

Participants identified logistical issues that influenced programme delivery, which could be broadly divided into the following five categories.

Lack of preparation by schools. Participants frequently commented that often the biggest problem was lack of preparation by the schools:

> "*I don't think that end comes from the comes from medics against violence it's probably the individual schools cause some schools are excellent and they're ready before you and others you turn up and they look blankly at you and say who are you and why are you here so they the downside of it is the organisational element of it from the schools point of view*" (Participant D, interview).

Participants reported that time was often wasted at the start of the session in terms of not having identified a classroom, not setting up AV equipment, not having enough seats and not being met by the class teacher.

Difficulties covering all material. A minority of participants had difficulties covering all the material provided in one session and sometimes ran out of time, particularly if schools were not organised and the start of the session was delayed. However, one participant reported he sometimes did not have enough material to fill the session as the school pupils would not contribute to the discussion:

> "*often you've got a fifty minute lecture you've got a twenty minute video a five minute introduction that still leaves you with 25 minutes*

> *to kinda almost do a one man stand-up routine*" (Participant B, interview).

However, it should be noted that this participant often omitted the group work when he felt the class size was too big and instead conducted the discussion from the front of the class. This approach may have resulted in decreased engagement from the pupils and they may also have felt less comfortable speaking out in front of a large class.

Volunteer numbers. The majority of volunteers preferred to do the session with at least one other volunteer as it made the group work component easier to facilitate and added a different perspective if they came from a different speciality:

> "*it is better if the two people are there because it everybody comes from a different background and the perspective adds to it and it's just easier with the group discussions if you've got more than one person doing it*" (Participant D, interview).

Conversely, one participant preferred delivering sessions individually as found it easier just to take control:

> "*I often find it easier if I'm doing it myself otherwise because it's a bit like well this is me and this is them*" (Participant H, interview).

However, this participant did acknowledge that delivering a session with a medic from a completely different speciality was beneficial as they have different perspectives. In particular, it may be of benefit to pair mental health and physical health practitioners together.

Session as part of a multi-agency days. Four participants had also delivered sessions as part of multi-agency days, whereby the pupils received different sessions from external speakers on other issues related to health and well-being. The majority of these sessions had been successful; however, one participant commented that as it was delivered to an entire year group the group work component was not feasible.

5.1.1.5.5 Perceptions on content

Participants generally felt the content of the film and group discussions was informative and interesting for pupils. The following items were identified as being relevant to the evaluation of the appropriateness and effectiveness of content.

Age appropriateness. Participants felt they were targeting pupils of the correct age (S2) as and were reaching them before they began to become involved in violence:

> "*second year senior school is a better age because they tend to be a bit more receptive to listening to what you've got to say"* (Participant D, interview).

Data from the US indicates serious violence typically begins from twelve years (Office of the Surgeon General (US), 2001), which may indicate that S2 is an appropriate time for perpetration prevention. It should be noted that no participants commented on delivering sessions to S5 pupils. A minority of participants felt programme should be delivered according to life experience rather than age:

> "*talking to 12 13 year olds in a well-to-do-area you just don't get a response they all just absolutely shocked by it and you don't get that whereas if you maybe waited till they were you know 15 or something you might get a bit you might get a bit more of a discussion from them*" (Participant F, interview)

These participants felt that pupils from more affluent areas should receive the programme from about 15 years as they believed thus is the age when young people start to consume alcohol regularly and are subsequently at increased risk of victimisation. Indeed, Currie et al. (2012) report that 29% of 15- year-old boys and 25% of 15-year-old girls living in Scotland, consume alcohol at least once a week.

Adaptability of content. While a minority of participants thought the programme in its current format was less relevant to those in more affluent schools, others felt they could adapt the programme to focus on victimisation prevention:

> "*these children are a lot more naïve and so you're talking a lot more about what behaviour is sensible* […] *the dvd presentation we use is quite good because it's quite clear that the different contributors are*

from different socioeconomic groups and mark scott's mum he was from a very privileged background […]so you do need the kind of emphasis does change a wee bit but I think it's relevant to all of them really" (Participant H, interview).

Again we see the shift in focus to victimisation prevention rather than perpetration in the more affluent schools. These participants felt able to utilise the programme to communicate the risks of violence to the pupils and then focus on strategies for staying safe when pupils are socialising in the evening.

Feel content is able to shock pupils. Several participants believed that although many of the pupils had been exposed to violence, they were still genuinely shocked by the video:

"*they do find they do find the violence a bit shocking some of them laugh but I think that's because they're uncomfortable a lot of them are upset by the stories they're being told particularly by Mark Scott's mother she speaks very well also the boy who's in the wheelchair you do get a reaction so I think the material is appropriate I think it's fine"* (Participant H, interview).

Despite the perceived appropriateness of the "shock-tactic" approach, the efficacy of public health interventions that aim to shock people into not engaging in health-risk behaviours is unclear. For instance, a meta-analysis of organised prison visits for young people at risk of delinquency concluded that such programmes, which depict exaggerated scenes of murder and rape, are actually less effective than no intervention

(Petrosino et al., 2003). Conversely, other *fear appeal* programmes have demonstrated success and in order to explain this disparity Witte developed the extended parallel process model (Witte, 1992). This model suggests that in order for these programmes to be successful individuals' first need to realise that they are susceptible to the risk and have high perceived efficacy they can avoid it. Witte (1997) conducted further qualitative research with adolescents to develop a programme to deter against teenage pregnancy and HIV-infection and reported that the adolescents wanted to be informed of the negative consequences using a realistic approach and also methods for avoiding such consequences. This is consistent with the DVD, which was designed to demonstrate the consequences but without frightening the pupils.

Relevance of film. Participants generally believed the film was an excellent resource and pupils engage due to the use of real footage:

> "*the dvd that is shown is very good and very hard hitting and I think it definitely gets the message through very well because kids who are laughing and joking at the beginning of it by five minutes into it are nearly always quiet and paying attention to it and I think the fact that they can see situations and people they can relate to*" (Participant D, interview).

Participant H felt the inclusion of individuals with different socio-economic backgrounds was beneficial as it increased the relevance of the film for pupils in the more affluent schools. Conversely, another participant noted:

"*I received feedback to say dvd was too middle class - maybe it is"*

(Participant 4, questionnaire)

Several participants also thought the film need updated as the offender in the film is now back in prison, a fact some pupils are aware of. Furthermore, participants were concerned that as the Mark Scott murder was a long time ago, it could cause the film to feel a bit dated. As a result MAV are now developing a new film, which will be informed by the results of the evaluation.

5.1.1.5.6 Role of teachers and campus cops

As discussed, the majority of participants preferred to deliver the session with another medic. However, as it can be difficult to recruit two or more medics per session, it is important to consider the role of the teachers and campus cops as they are already present in the school and can attend the session with more ease. All participants had considerable experience working with teachers when delivering the programme and a smaller number had also worked with campus cops during sessions. The following items identified how teachers and campus cops contribute to the session and what, ideally, their role should be.

Teachers as disciplinarians. Participants appreciated that teachers maintained discipline during the session as many volunteers did not have much experience of disciplining young people and often did not want to take on that role:

> *"the more regular class teacher will usually stay with the class and that is definitely of benefit to someone like myself who is maybe used to dealing with children on a one to one basis but the kinda crowd control aspect of teaching is something I'm not too familiar with so that's definitely helps*" (Participant G, interview).

However, one participant felt the teachers were sometimes too strict for the purpose of the session:

> "*I try to tell the teachers if language gets a bit rough just ignore for this one session I'm not gonna be upset by it but it's happened to me on a few occasions that you're actually getting to a few nitty gritty points with them and then you know they swear or something or other and they get ejected so it kinda deflates the whole thing*" (Participant F. interview).

This participant considered that the use of bad language enabled him to relate to the pupils and talk to them on their level. This approach is consistent with strategies identified by Hanna (1999) as being useful for communicating with adolescents.

Engaged teacher helpful for group work. Many participants felt having an enthusiastic teacher was particularly helpful for group work as they were able to facilitate discussions and contribute local knowledge. However, there did appear to be a lack of

clearly defined roles as some participants reported that teacher involvement was variable:

> "*some of the teachers sit at the back and don't say a word and your left going oh and actually some of them really get involved and really give you personal stories* […] *I think that's actually quite an interesting part of it and quite a good part of it as well cause I think a lot of the students maybe look to their teacher for kind of understanding and leadership*" (Participant C, interview).

Conversely, one participant felt the teachers role should restricted to maintaining discipline:

> " *It's helpful if there is* […] *someone else to facilitate the group that's not their own teacher you know I mean their own teachers are there to maintain discipline and order and attention and they're very good at that*" (Participant E, interview).

This lack of clearly defined roles highlights a need for MAV to provide teachers with direction regarding their role.

Teachers need more information. Several participants identified that providing teachers with more information on youth violence prior to the session may enhance their participation:

> "*have the teacher kinda pre-empted on what we're going to do and we'd like you to break them up we'd like you to ask them questions and y'know here's some of the answers and here's some facts for you to contribute"* (Participant C, interview).

Providing teachers with more information is a role that can be taken on by MAV and could also enable them to re-enforce the messages after the session in subsequent PSE classes. MAV have developed resources for teachers to use with classes after the session, however, as these are not used by all teachers further research is needed to establish why.

Campus cops help facilitate the session. The participants that had worked with campus cops reported that they were helpful in maintaining group work and provided an alternative perspective in the group discussions. The inclusion of campus cops would provide a multi-disciplinary approach to the session and would be consistent with the public health approach to violence (Dahlberg and Krug, 2002).

5.1.1.6 Perceived engagement

How volunteers felt pupils engaged in the session is important to understanding the results of the outcome evaluation. Analysis identified items that described how the

pupils contributed towards the session and how they responded to the information provided.

5.1.1.6.1 Pupil contributions

Lack of response from some pupils. Some participants sometimes found it difficult to get pupils to contribute to group discussions:

> "*part of the trouble again as well is trying to get 14 year olds to speak out in a class where they don't wanna be seen as either teachers pet or contributing too much or damming their self by discussing what kinda knife they actually use*" (Participant B, interview).

Participants reported this was particularly challenging within smaller classes and were unsure of how to deal with the situation.

Pupils with more experience of violence able to contribute more to discussions. Many participants believed pupils from the most deprived areas often had more personal experience of violence and this enabled them to contribute more to the session:

> "*if you go to a school where you know part of the culture or their families know people that've been involved in knife crime or were affected by knife crime it's actually quite interesting because you can have a bit of debate"* (Participant F, interview).

Similarly, participants reported that pupils from most affluent areas contributed less:

> "*sometimes in the more affluent 2nd years have no exposure and feedback can be difficult*" (Participant 21, questionnaire).

However, some participants felt they were able to utilise the material in a manner that engaged pupils with less experience of violence by focusing more on perpetration prevention. This is therefore an aspect that could be covered in the training for MAV volunteers.

5.1.1.6.2 Pupil responses

Good engagement with DVD. The majority of participants thought that generally most pupils appeared to be paying attention to the DVD and any poor behaviour tended to stop as soon as the DVD started:

> "*even with these classes where you know they are quite disruptive kids you still find that when you deliver the dvd you usually get almost complete silence yeah you think they are they're at least watching it*" (Participant L, interview).

> "*the presentations are still very powerful the children are almost universally wherever I've shown it the children watch it they don't talk and they watch the dvd and what I do is I don't watch the dvd I watch their reactions to what they're watching*" (Participant H, interview).

Variable engagement in discussions. Participants felt that while generally engagement in the group discussions was good, some pupils did seem to switch off after the DVD:

> *"I think it's easy for a few kids to eh sort of switch off and not really want to engage in the discussion bit of it they seem to like watching the dvd but some of them I think kinda shrug their shoulders a bit about some of the discussions"* (Participant J, interview).

Indeed, some participants acknowledged that the pupils who disengaged were probably the pupils most "at-risk":

> "*I probably wasn't getting through to the few I really need to"* (Participant 33, questionnaire).

This lack of engagement by the pupils potentially most at-risk led a minority of participants to question whether the programme could be successful for the pupils that don't want to engage:

> *"wonder really quite how successful it can be for those who don't wish to engage you're not going to reach those people are you really"* (Participant C, interview).

These perceived difficulties of engagement highlight the difficulties a top-down intervention, such as MAV, has in trying to reach those most at-risk.

Difficulties with pupils' behaviour. Interestingly, the interview participants did not

describe any difficulties in dealing with bad behaviour from pupils, however; ten questionnaire participants reported dealing with bad behaviour on at least one occasion. This experience may have contributed to interview participants' willingness to volunteer for more sessions. Alternatively, those that deliver more sessions may enhance their ability to manage pupils' behaviour or develop skills at engaging pupils.

5.1.1.7 Perceived effectiveness of MAV

Participants felt it was not possible to quantify the success of MAV in reducing pro-violent attitudes and preventing violence solely on the basis of their experiences delivering sessions:

> "*I wouldn't vouch an opinion on it until I'd seen some evidence I think it's one of those things we have to be quite firm about because there is so much effort so much energy going into it and that's good but we have to measure it to make sure it's effective*" (Participant A, interview).

While participants consistently thought more evaluation was necessary to gauge whether MAV was effective, they did discuss what they would consider to count as success, the difficulties measuring effectiveness of MAV and their desire for feedback.

5.1.1.7.1 Perceptions of success

Consideration of behaviour change by pupils. Many participants viewed making the pupils stop and think about their behaviour (either safety or potential perpetration) as a positive outcome:

> *"you want to give something to them that makes people think really and whether they can obviously change their behaviour would be the positive outcome but even just to think*" (Participant C, interview).

Similarly, participants believed if pupils were receptive to the messages conveyed, this indicated success:

> "*Feeling like you may get the message across to even a few individuals*" (Participant 37, questionnaire).

The data suggests that the majority of healthcare professionals viewed sessions as successful if the pupils appeared to be taking in and thinking about the information presented.

Pupils displaying anti-violence attitudes. Less commonly, participants identified that following the session the pupils demonstrated appropriate anti-violence attitudes as illustrated by this quote:

> *"the sort of class hard men they come in and they're you know kicking people and pulling hair and all the rest of it but by the time the video's*

finished they're slightly more sobered their attitude has changed"
(Participant K, interview).

It should be noted that while the participants were able to identify an immediate positive effect, they do not have contact with the pupils following the session and as such cannot know if this effect is sustained in the long-term. This perception of success may therefore indicate a biased interpretation of results.

Positive response from teachers. A minority of participants described having positive feedback from teachers; however, they did not necessarily believe this constituted success:

"*I get the kinda headteacher and the teachers saying oh yes yes you know they very much enjoyed that session but I'd want to think you know that we are making a difference and a little bit of interest to them*" (Participant C, interview).

While the participants identified that the teachers felt the pupils enjoyed the programme, they would prefer to have feedback directly from the pupils to better understand whether the programme is of interest to them. If pupils' feedback was positive, this information could be utilised to enhance volunteer recruitment and sustain volunteer participation

Impact in the short-term. Less frequently, participants expressed concerns that while

session made a short-term impact, it may not be sustained particularly in the context of alcohol consumption at the weekend:

> "*it's difficult to know what happens in the long term I mean certainly the impression I get from the sessions is that it's made a difference* […] *the problem is getting the message across to someone when sober is different from getting some from getting the message to someone who's drunk on a Friday and a Saturday night*"(Participant D, interview).

Participant D acknowledged that while pupils seem to be receptive to the programme during the session, it is difficult to ascertain whether such changes are sustained.

Positive response from pupils. Participants consistently reported that pupils generally seemed to interact with the sessions, found them interesting and appeared to be giving appropriate answers:

> "*almost without exception all the kids will you know answer the questions and will input with the asking questions and seem to be asking them the right questions in a lot of cases having the right answers for example if you're saying should you carry a knife then you're getting the right answers*" (Participant L, interview).

Participants particularly enjoyed these interactions with pupils as it enabled them to hear the views of young people and learn about their experiences with youth violence. However, one participant noted that at times he felt that pupils were not responding positively:

> "*it can feel a bit fruitless if you go in thinking there's bunch of kids who're talking and chewing at the back and wanted out and you think well that was rubbish"* (Participant B, interview). `

Participant B thought that a poor response from pupils may lead some MAV volunteers to believe the programme is ineffective, which may subsequently result in decreased participation from these volunteers,

Discussion of programme by pupils. One participant identified that she was aware that pupils were talking about the session with their peers and viewed that as a positive outcome:

> "*well actually they will mention about 'oh somebody in another class said this' and so they're obviously talking to each other about it and that's not a bad thing*" (Participant K, interview).

Moreover, one participant thought MAV could potentially exert wider effects by pupils

speaking to their siblings:

> "*if one of these kids goes back home and says to their older brother 'look John you know I was hearing today I know you've been in out with that gang and blah blah blah do you know what this could happen to you and all the rest of it' that's all unmeasurable influence*" (Participant J, interview).

However, whilst the pupils may show an increase in knowledge and change in perceptions, it should be cautioned that does not always result in behaviour change (Naidoo and Wills, 2009). Nevertheless, as MAV is an educational intervention, increases in participants' knowledge and consideration of behaviour change, can be considered indicators of programme success.

Preventing one violent incident counts as success. A minority of participants felt that if the programme could prevent one violent incident that would be enough to justify the programme:

> "*I think if we can stop one person getting killed or one person having their life altered out of all recognition because they serve a lengthy jail sentence that is worthwhile*" (Participant H, interview).

These participants believed that if MAV was able to prevent one young life being

wasted, this would constitute success. However, the participants did not consider whether or not this would be cost-effective. This may reflect the fact that they volunteer their time and as such do not consider the financing of MAV.

5.1.1.7.2 Difficulties measuring success

Difficulties evaluating prevention interventions. Several participants identified difficulties in evaluating the effectiveness of MAV as the violent events that do not happen are immeasurable:

> "*we only know about the events that are actualised in other words violence that happens we don't know about violence that doesn't happen* […]*so medics against violence will have the same problem in evidencing its effectiveness*" (Participant E, interview).

Participant E likened this problem to the difficulty in evaluating suicide prevention programmes, in her role as a psychiatrist. As MAV (and many other violence prevention programmes) are educational interventions, it is appropriate to use educational objectives such as attitudes, levels of knowledge, or acquisition of new skills and behaviours (Naidoo and Wills, 2009). However, as these do not necessarily predict behaviour (ibid), they cannot determine whether such interventions have been effective in reducing rates of violence. Interestingly, participants tended to focus on quantifiable outcomes rather than qualitative data, which may be reflective of a more positivist approach to research. Nonetheless, qualitative research may provide more insight as to why an intervention succeeds or fails.

Difficult to assess long-term impact. Participants felt although the programme gets the message across at the time, it would be difficult to assess if the programme had any long-term effects. In particular, they believed the pupils most likely to be involved in violence would be more likely to have disengaged from school, an issue that has been demonstrated in the literature (Ellickson et al., 1997). Conversely, one participant thought the effects of the programme would not be immediate:

> *"we're in more immediate positions you give a drug and something happens straight away whereas you do this and you think well I can't see the reaction*" (Participant B, interview).

This participant compares delivering the sessions to his current role as an anaesthetist, in which patients may improve immediately. Conversely, he believed the effects of MAV would be more apparent in the future and therefore did not provide a sense of success.

5.1.1.7.3 Feedback

Many participants were not aware of the evaluation of MAV, however, did feel an evaluation was needed to determine the effectiveness of the programme. Participants also consistently expressed a desire for a more formalised feedback process, in terms of personally receiving feedback from schools and being able to feedback their experiences and suggestions to MAV. The following themes were identified as relating to feedback.

Feedback to improve own performance. A minority of participants thought they would benefit from personalised feedback either from the schools (i.e. what worked well) or using peer-appraisal:

> "*if it was just done on a kinda more peer to peer basis with the other person at the session kinda of going through it you could possibly do it in a slightly non-threatening manner but still give you a little bit of a sense it was worthwhile the kids got something out of it as well as you actually getting something out of it too*" (Participant G, interview).

In addition to improving session delivery and gaining a sense of the usefulness of the session, the wish for feedback may reflect a desire to feel appreciated.

Desire to see feedback for impact of MAV. Participants consistently expressed a desire to know if the sessions had any impact on pupils as this could help justify their involvement in MAV:

> "*I think you feel better about giving up your time and […] you know that it was of value and you know the schools were grateful"*
> (Participant C, interview).

Use of social media to feedback to MAV members. One participant suggested using social media as a resource for volunteers to provide feedback on their school visit and provide information on issues such as parking.

5.1.1.8 Concerns and difficulties

A number of participants described some negative personal feelings and issues they felt needed further consideration.

5.1.1.8.1 Personal feelings

Feelings of isolation. A minority of participants described feeling isolated as a result of delivering sessions individually and a lack of group meetings, which results in volunteers being unable to discuss their sessions:

> "*if only there was more of a social event to kinda have somebody else to discuss things with it would make it a bit easier to have somebody else there*" (Participant C).

The experiences of these participants' contrasts with the social aspect that other participants identified a motivating factor taking part in MAV. As lack of social contact may result in decreased participation, this may highlight the need for two participants per school visit or alternatively a forum for volunteers to discuss their experiences.

5.1.1.8.2 Issues for consideration

Need for a committee or regular meetings. A minority of participants believed a lack of a committee or regular group meetings resulted in difficulties implementing change or developing new resources. Less commonly, participants also expressed a desire for meetings to provide a social context for MAV to help combat feelings of isolation (see section 5.1.1.8.1.).

Query whether MAV is reaching schools most at risk. Participants described sometimes having less response from pupils in more affluent schools. Moreover, a minority of participants considered they were not always targeting the most appropriate schools as the pupils were not at risk of perpetration of violence:

> "*sometimes I do wonder if we're preaching to the converted and not managing to get to the people that we really should"* (Participant D, interview).

> "*one of the criticisms I guess I would make is that in my experience it's very often the middle class schools that are invited and I think we need to work harder at getting right to the heart of where violence is*" (Participant I, interview).

Moreover, as one participant describes, the young people in the deprived areas may also be at greater risk of victimisation:

> *"in some of the poorer parts of Glasgow it's really difficult for them I think to avoid it and then subsequently avoid physical assault and you know a bottle being thrown at them or whatever it happens to be*" (Participant J, interview).

As volunteers are limited in the number of visits they do, it may be the case that delivering sessions in the most affluent schools instead of schools in the most deprived

areas, is not the most effective approach. However, prioritising schools according to level of deprivation would shift the focus of MAV from universal to selective prevention.

Presenter fatigue. A small number of participants expressed feelings of boredom when delivering multiple sessions:

> "*that sounds silly it actually is probably one of the reasons that does put me off maybe doing say one after the other cause you just think pff that dvd again"* (Participant C, interview).

Similarly, another participant felt the repetitive nature of the programme could result in volunteers not delivering the programme to the best of their abilities:

> *I think if you do it too often it gets into a bit of a rut and mm I don't think you I don't think you deliver it quite as well to the children* (Participant A, interview).

As one of the potential benefits of MAV is the consistency of the programme, having variations of the programme to reduce presenter fatigue is not necessarily a viable option. Moreover, having different presenters deliver back-to-back sessions is a waste of resources. However, increasing volunteer numbers to ensure the same volunteers are not doing all the visits may help with this issue.

5.1.1.2.9 Improving MAV

All participants discussed methods for improving MAV which reflect four different themes.

5.1.1.9.1 Logistical improvements

Providing schools clearer instructions. Participants consistently thought schools were not prepared for their visit and schools should be provided more information on what to expect, particularly in terms of number of pupils per session and identifying appropriate classrooms prior to the session. Very occasionally there was a miscommunication, which resulted in participants arriving at the school at the wrong time and subsequently meant the session had to be postponed or cancelled.

Ensuring AV equipment is set-up in advance. A commonly expressed view was that time was often wasted setting-up the DVD at the start of the session:

> "*there's been times when it's taken half the session finding a dvd player and plugging it and getting the sound to work*" (Participant D, interview).

As such, participants felt that clear direction from MAV was needed and schools should be told to set this is set-up in advance.

Pairing new volunteers with an experienced presenter. The majority of volunteers preferred to deliver sessions with two volunteers and although this was not always

possible, participants believed all new volunteers should always attend sessions with experienced presenters until they felt comfortable:

> *"ensuring that we always send newbies out with a few other people and to and give them a couple of sessions to get the hang of things before sending them in on their own"* (Participant A, interview).

Attending a session with an experienced presenter enables the volunteers to first observe sessions to gain an understanding of timing, the structure of the session and at what level to pitch the material. Being accompanied by a colleague may also help reduce initial anxiety in delivering the session.

5.1.1.9.2 Content and resources development

Providing an evidence-based resource. One participant thought a resource detailing the current evidence on violence prevention would enable participants to develop more points for discussion and feel more confident in their knowledge:

> "*it would make people if you came in armed with a load of facts if you just read up on something you're probably gonna be much more able to raise discussion points if you're informed about things*" (Participant B, interview).

Increase use of social media. One participant felt that MAV should have an increased presence on social media sites such as facebook and twitter as this would be the most

appropriate means to engage young people following the session.

Developing videos to match life-experience of pupils. As schools represented a wide range of socio-economic deprivation, one participant noted it would be useful to develop different videos to match life-experience of pupils (i.e. have a video that focuses on staying safe and one that focuses more on perpetration prevention). However, this approach would change MAV to a targeted intervention instead of universal and would result in difficulties in determining which schools were at greater risk of perpetration and which were at greater risk of perpetration.

Re-naming programme Choices. Less commonly, participants discussed young peoples' life choices during the session and as such one participant believed it should be re-named from MAV to Choices:

> "*the main strength of the programme is making young people appreciate that they have choices and I would actually re-name the programme choices because I think that for me is the major feature of it*" (Participant I, interview).

As detailed previously, providing young people with information and allowing them to make their own choices is an important aspect of effective health communication with adolescents (Lloyd et al., 2009, Hanna et al., 1999).

5.1.1.9.3 Increasing member satisfaction

Opportunities to discuss experiences with other members. A minority of participants expressed a desire opportunity to either meet with other volunteers or use social media to discuss their experiences and provide a social aspect to MAV.

Opportunity to be involved in the development and running of MAV. Less commonly, participants expressed a desire to have a role in the running of MAV and be part of a committee or help develop resources:

> "*I think a lot of people who get involved in it are quite strongly motivated by it and would like to see changes and improvements and things and at the moment the infrastructure isn't there and it's been running for four or five years now*" (Participant B, interview).

Providing feedback to members. Participants consistently expressed a desire for feedback on whether MAV was effective and as such would be more encouraged to do sessions if they felt MAV was having an impact (see section 5.1.1.7.3). This therefore highlights the need for an on-going evaluation.

Rewarding participation. Participants commonly felt that rewards in the form of certificates or continued professional development credits would help participants justify using their time for MAV and apply for discretionary points:

> "*it may encourage people to do it because people are generally doing it on our what's it called our SPA which I don't know if you know what*

that is but basically a professional activity time so if that if we if we did get CPD credits it could sort of prove what we've been doing in that time" (Participant D, interview).

Indeed, Clary et al. (1998) note that rewarding participation does increase motivation for future participation in volunteering. However, a minority of participants identified that while it may be possible to receive CPD for attending the training or delivering one session, it may not be possible to receive CPD for delivering the same programme on multiple occasions:

"*I think that might be quite difficult to achieve to be honest because you can really only justify CPD credits for doing something once* […] *Igive a number of lectures to our new doctors every 4 months but I can't claim CPD all the time for it I can only claim it once in like five years*" (Participant J, interview).

As it may not be possible to award CPD credits for every session delivered, it may be more feasible to provide members with a certificate for each session. These could then be used in appraisals to illustrate the time spent volunteering with MAV.

5.1.1.9.4 Future developments

The analysis identified a number of themes pertaining to the future development of MAV.

Using MAV as a template. Several participants thought the programme could be used as a template for healthcare professionals from different specialities to develop programmes for other health-risk behaviours:

> "*I think it would be very useful to create the template how it's been organised how it's run what the training is to let other organisations start from scratch as well if people wanted to target alcohol or drugs or teenage pregnancy*" (Participant B, interview).

Similarly, Participant 24 suggested developing a "Medics Against Binge Drinking" programme. As alcohol consumption is strongly associated with youth violence (Krug et al., 2002, Sethi et al., 2010) this could also be utilised in the context of violence prevention. Alternatively, alcohol could be given increased consideration in the MAV programme as its association with violence was a theme identified by pupils and volunteers.

Increasing number of school visits. A minority of participants thought that MAV should attempt to recruit more schools for visits:

> "*I think the main thing is you could deliver the programme to more schools because I'm not quite sure but I think at the moment we're struggling to meet demand*" (Participant H, interview).

A small number of participants felt that MAV was currently not reaching the schools most in need of the programme (see section 5.1.1.2.8). If MAV were therefore able to increase the number of volunteers and thus the number of school visits, it should ensure it attempts to recruit schools from all areas.

Inviting victims of violence to attend sessions. Two participants considered that asking a victim of violence to share their experiences at a session delivered to half a year group would be beneficial. This would fundamentally change the delivery model of MAV, however would be consistent with the pupils "request" for this.

Modify a programme for younger years. Several participants queried whether they were targeting the exact age group and felt there was a need for a programme for younger pupils. MAV are now currently developing a programme for primary schools entitled Brave, Confident, Strong Individuals (bCSI) and one participant expressed her to desire to be involved in this:

> "*I am looking forward to the delivering the primary programme when it is ready as I feel the earlier we can reach children the better the chance of encouraging them to make the right decisions in life"*
> (Participant 45, questionnaire).

Increasing teacher involvement in programme delivery. One participant suggested that in order to accommodate more school visits, healthcare professionals could deliver a hard-hitting session to half a year group and then the teachers could facilitate the group-work component with their individual classes:

> *"it's very labour intensive if we're gonna cover the whole of scotland then it's just not going to work the way we're doing it at the moment so I guess that would be my suggestion that we do much more liaison work and training work with the guidance staff […]where the medics come and speak at a high level to the school with very high impacting slides or discussion that will really grab their attention […]then the guidance staff take that away and we work on a new kind of education material that they can use within the school*" (Participant I, interview).

However, this would result in a complete change in the delivery model of MAV. Moreover, school pupils consistently identified the opportunity to speak to healthcare professionals as being fundamental to the integrity of the programme and as such the removal of this element could be detrimental.

5.1.1.10 Preparation for school visits

Participants had variable experiences with training and how prepared they felt. Analysis identified the following items as relating to training experiences and confidence in session delivery.

5.1.1.10.1 Experiences of training

*Need for formal training***.** Just over a third of interview and questionnaire participants did not attend the training session prior to their visit. This may reflect some of the less formal teaching practices that can occur within medicine:

> "*in medicine we have the tradition of do one see one you know see one sort of see one do one teach one you know so we don't spend an awful lot of time learning"* (Participant E, interview).

However, this approach may not necessarily be effective as participants who did not attend the training felt less prepared and more anxious prior to their first sessions:

> "*I didn't have any training this is possibly why I was nervous*" (Participant K, interview).

Training was a useful experience. Interview participants who did attend training believed it was a useful experience as it was very well organised and talked through what would happen in a session. This was consistent with results from the questionnaire where 9 out of ten participants who attended the training responded that it was either "very useful" or "extremely useful".

Use of demonstrative examples in training. Several participants suggested it would be useful to film an experienced presenter delivering a session to help new volunteers with timing and identify successful components.

5.1.2.10.2 Confidence in session delivery

Anxiety prior to sessions. Participants consistently described feeling anxious prior to delivering their first session:

> "*initially was absolutely terrified I'm not somebody who's naturally at home with children even though I've got three and obviously you're out of your role your kinda comfort zone of dealing with patients*" (Participant A, interview).

> "*I probably wouldn't feel that confident on the basis of the training alone if I didn't do any teaching at all or I didn't have any children and I just arrived in a classroom to deliver the first teaching session I think that can be quite tough really*" (Participant I, interview)

In particular, those that had not attended a training session and those that were not used to working with young people were the most anxious. Conversely, participants who had come from a more deprived background were more relaxed going into the schools:

> "*I probably feel quite comfortable amongst them and at ease amongst these kids*" (Participant E, interview).

Daunting doing visits on own. Participants who had to deliver their first session on their own felt particularly nervous before the first session and thought it was best to pair a

new volunteer with an experienced presenter.

Confidence in delivery increases with experience. Participants believed that the more sessions they took part in, the more they were able to develop their own approach and felt more confident in their new role:

> "*once you've done it a lot you're pretty confident in the material you don't need notes you know pretty much what they're going to say because in fact the responses are you know there's a fairly well-defined range of responses*" (Participant H, interview).

5.1.1.11 Participation

The questionnaire indicated that the majority of sessions were delivered by a small number of participants, with 18.7% delivering 11 or more sessions (see Figure 6.1).

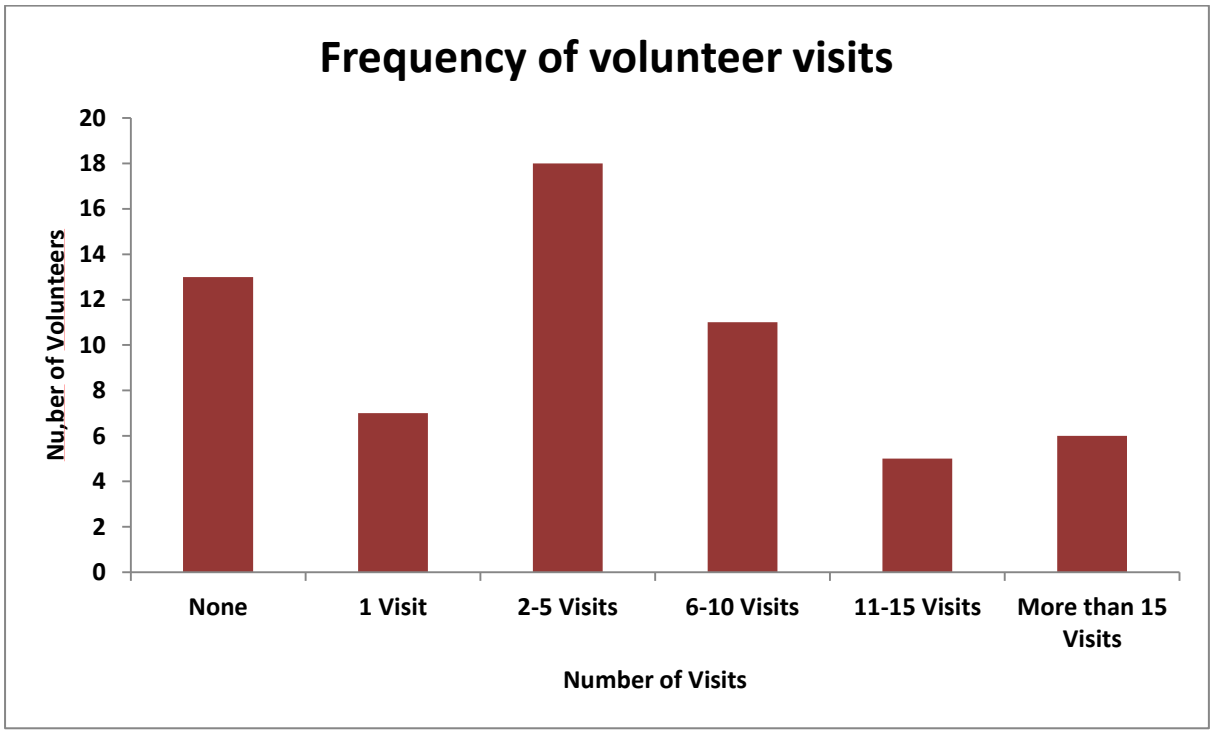

Figure 2 Graph demonstrating number of visits per volunteer

All participants who participated in the questionnaire and interviews were limited in their ability to take part in sessions due to clinical commitments. Indeed, several noted that they were doing fewer sessions than they had done previously. There were also rare occasions when participants had to cancel sessions at the last minute and this resulted in feelings of guilt. Analysis identified several reasons why clinical commitments and other factors impacted on participation and how MAV could attempt to improve participation.

5.1.1.11.1 Limitations of participation

Fewer non-clinical sessions. Participants consistently felt they now had fewer non-clinical sessions (i.e. a morning or afternoon when they are not on the ward, in theatre or in clinics) in which they could do school visits. This was partly due to the strain on the NHS:

> *"I think we're all finding it harder and harder because of work commitments and [pause] when I started off I used to do you know a lot but now I'm sort of down to maybe one every three or four months and the last one I had to do I had to call off at the last minute cause I had to go and do some operating*" (Participant F, interview).

The reduced time available to healthcare professionals results in difficulties recruiting two volunteers poses a considerable barrier to recruiting two volunteers as suggested by a number of participants (see section 5.1.1.9.1). This supports the supports the

suggestion to increase the number of junior staff and other relevant healthcare professionals.

Difficulties co-ordinating sessions with clinical commitments. Participants also spoke about difficulties in fitting sessions into a working day. In particular, having sessions in the middle of the day could coincide with both morning and afternoon sessions. Such logistical issues need to be considered to increase the likelihood of volunteer availability.

Required to do sessions in non-work time. To a lesser extent, participants were prevented by their health boards from doing the sessions in their non-clinical time and could only take part on days off which could be off-putting:

> "*I had to do them on my days off or do them before nightshift and things like that and that's just hard-going isn't it really when you've got the rest of life to organise*" (Participant C, interview).

Such unwillingness of health boards to allow staff to attend sessions indicates the need for an organisational shift in medicine from cure to prevention. Moreover, it is feasible that healthcare professionals working within health boards that do not allow MAV visits in non-clinical time will be less likely to deliver sessions. This subsequently may lead to decreased opportunities for school visits within these health boards.

Unable to travel to further afield for sessions. As the majority of participants were based in Glasgow hospitals, they found it difficult to travel out with Glasgow (i.e. to Ayrshire,

Edinburgh) or even to the other side of Glasgow. This highlights a need to recruit volunteers from the other health boards and consider such issues when allocating school visits.

5.1.1.11.2 Improving participation

Providing advanced notice of sessions. Many participants were keen to have advanced notice of sessions, ideally at least six weeks, which would enable them to better commit to MAV:

> *"would be good to get a list of upcoming visits for a few months at a time so I could compare with rota and commit myself - if I sign in advance I will always keep to it, but when it's short notice or you hear about one or two visits at a time I either already have plans or tend to think 'oh I've had a busy few weeks, I need my day off' or 'I'll wait and do the next one"* (Participant 19, questionnaire).

Being able to do visits in local area. A minority of participants commented that they would be more likely to do visits nearer their place of work or home and would find information on distances between schools and hospitals useful as this enable them to easily identify more accessible visits. Moreover, by engaging more volunteers in the running of MAV (see section 5.1.1.9.3), volunteers may feel empowered to approach schools local to their home or workplace independently.

Obtain health board or governmental approval. A minority of participants suggested that MAV obtain permission and encouragement from relevant health boards or the government to use non-clinical time to take part in MAV:

> *"If you look at the aims of the health board this is just the sort of thing they should be promoting. They should be saying to all of the consultants that this is the sort of thing that they should be doing as part of their SPAs*" (Participant 23, questionnaire).

Participants recommended that obtaining such support could be achieved by presentations by MAV relevant authorities. Alternatively, MAV could empower volunteers to take on this role and approach the relevant health boards themselves.

Arrange school visits to fit with training. Some participants felt new members lost the enthusiasm or became more nervous if they were unable to take part in a session shortly after the training session:

> "*the trouble is people have had the training and then they haven't had a chance to go out on a school visit immediately then the kinda enthusiasm for doing it can then wear off again you feel fired up and if you haven' done one for nine months and you go into somewhere by yourself it can be a bit of a daunting process*" (Participant B, interview).

Advertising MAV. Several participants felt MAV needed to increase their presence at educational conferences and in hospitals and even consider another recruitment drive to gain more volunteers.

5.1.1.12 Relationship between doctors and public health and violence prevention

In order to better understand what participants felt their role was in regard to public health and violence, their experiences of public health more generally and their perceptions on the role of doctors in violence prevention was analysed

5.1.1.12.1 Experience of public health out with MAV

Provide prevention advice during hospital admission. The two anaesthetists and the ENT surgeon regularly provided lifestyle advice on smoking, alcohol and weight loss to patients:

> "*I'm an anaesthetist so people when they go for operations you can you know use that to deliver advice about alcohol consumption smoking you know all that sort of thing*" (Participant H, interview).

However, no other participants were involved in the provision of broad preventative advice.

Previous involvement of public health interventions. Only two participants (the psychiatrist and the oral surgeon) had previously been involved in other public health interventions, which were relevant to their speciality. One general surgeon felt the opportunity to be involved in public health motivated her to participate:

"*I think that's probably what attracted me to medics against violence as well really is y'know yeah never done anything like it before*" (Participant C, interview).

Role of doctors in public health. Participants had varying feelings about the role of doctors in public health. Interestingly, many participants felt promoting health was part of a doctors role:

"I *do see it as part of our role I suppose I have a tendency to think from you know a social determinants framework*" (Participant E, interview)

"*doctors do undoubtedly have a huge roll in in advising people to lead healthier lifestyles and most of that traditionally we thought of as drinking and smoking and eh exercise"* (Participant D, interview).

However, it should be noted that not all of the participants who believed clinical health professionals have a role in public health, actually engaged in public health activities. Conversely, a minority of participants felt that clinical healthcare professionals could not take on a public health role due to time constraints:

"*if somebody says you should take on the role of doing something as well you say well I've got quite enough to do at the moment an eight*

minute consultation about seeing somebody diagnose them explain what it is do a referral do a prescription and then you know lecture them on the dangers of violence and public health as well"
(Participant B, interview).

Interestingly, despite this comment, this participant did actually provide health promotion advice in his role as an anaesthetist. These varying attitudes and inconsistencies between attitudes and behaviours indicate a lack of clarity amongst clinical healthcare professionals on the role of public health.

5.1.1.12.2 Role of doctors in violence prevention

Doctors could utilise alcohol reduction strategies. A minority of participants thought that doctors could also be involved in alcohol reduction strategies as a way of indirectly tackling violence. Indeed, one participant considered there was potential to develop a Medics Against Binge Drinking programme (see section 5.1.1.9.4).

Medics should be using their role to increase awareness of violence. A small number of participants suggested that medics should highlight the problem of violence to the general public and influence government through the media:

"*I suppose there is uh a campaign group sort of side of it as well in terms of the media and the political side of it* […] *I think they as a*

professional voice I think they do have a part to play in terms of the general debate around the subject" (Participant G, interview).

One participant had previously tried to increase awareness of violence through articles in the local newspaper. This approach is consistent with the spectrum of prevention which encourages providers to use their professional voice to educate not only clients but also influence policy (Cohen and Swift, 1999).

Role in information sharing. One participant felt that healthcare professionals should be working more with police and local authorities to share data on violent injuries. Such an approach is consistent with a successful information sharing partnership between the health service, police and local government, developed in Cardiff (Florence et al., 2011).

Need societal change beyond doctors' involvement. A minority of participants believed that healthcare professionals were limited in what they could do as a change in societal functioning is needed:

"*It* [*violence*] *just seems so inevitable and I'm not sure whether without a change in maybe social and employment status there is anything else the doctors can do sorry that was bleak"* (Participant C, interview).

5.2 Discussion

Semi-structured interviews and online questionnaires were conducted to explore MAV volunteers' experiences with youth violence, motivation for participation, experiences delivering the session, how they felt MAV could be improved and perceptions of the role in healthcare professionals in violence prevention and public health more generally.

Participants all reported experiencing youth violence through their work. While the majority of participants generally treated young men with a range of violent injuries such as facial scarring, abdominal wounds and even death, a minority of participants treated patients with who had mental health problems secondary to violence. Regardless of speciality, participants consistently expressed concerns regarding the impact that violence had on victims' and perpetrators' lives in terms of stigmatism and reduced life opportunities (e.g. employment, relationships). Participants generally expressed empathy towards victims (and at times offenders) as they believed violence often stemmed from deprivation and an associated long-standing culture of violence and associated alcohol consumption. Such beliefs are consistent with the literature on youth violence (Leyland and Dundas, 2010, Bellis et al., 2008, Hsieh and Pugh, 1993)) and are indicative of the social determinants of violence and health inequalities more generally (Marmot, 2005). However, a minority of participants expressed views that such injuries were self-inflicted and resented not being able to care for other patients.

As a result of their experiences with youth violence, participants were strongly motivated to volunteer with MAV in the hope that it would decrease the harm to young people. Moreover, participants reported that within a clinical setting their treatment was limited to dealing with violent injuries and not addressing the causes of youth

violence, which they hoped could achieve through MAV. Interestingly, while many participants felt public health and health promotion should be a part of a clinical healthcare professionals' role, not all engaged in public health activities beyond MAV. A minority of participants felt that clinical healthcare professionals should not be obligated to carry out public health activities. The lack of consistency on attitudes towards the role of clinical healthcare professionals can also be found in the participants' experiences with health boards, in so far as, some participants were permitted by their health board to use their non-clinical time for volunteering with MAV sessions, whereas others were not. This may reflect the current emphasis on cure rather than prevention within the health sector and indicates a lack of clarity of the role of clinically-based healthcare professionals within public health.

The considerable majority of participants cited reasons pertaining to altruistic and humanitarian concern for others as the main motivating factors for volunteering with MAV, whereas a minority believed it enabled them to develop new knowledge and skills or feel better about themselves. Few participants volunteered for social or career benefits. This may be reflective of a lack of recognition of these components by MAV. First, only a minority of participants reported that MAV provided them with social opportunities. Moreover, a small number of participants expressed feelings of isolation when volunteering, which was a consequence of delivering sessions on their own and a lack of group meetings and group identity within MAV. Indeed, some participants believed MAV could be improved by implementing regular meetings and also developing a committee to guide the running and development of MAV. In terms of career, participants do not currently receive CPD credits for their involvement and as such volunteering with MAV, may have little or no impact on careers. However,

participants consistently reported that being providing with CPD or even certificates would be of benefit and may increase motivation.

A small number of participants grew-up in deprived housing estates and therefore identified with many of the young people, which is considered a key motivation for volunteering (Hwang et al., 2005). Moreover, this group of participants felt most strongly that they had a duty to give something back to the community. Interestingly, participants from more deprived backgrounds appeared more comfortable delivering sessions and appeared to use more techniques that would enable them to relate to pupils, such as avoiding lecturing, utilising humour, and providing personal background information. Such techniques are recognised as being instrumental to effective communication with adolescents (Hanna et al., 1999, Lloyd et al., 2009).

Independent of personal background, participants reported that pupils generally engaged well with the programme, in particular the film, which participants reported had the capacity to shock the pupils. However, it was noted that the film may need updating in the future as Shaun (the perpetrator) is now back in prison. Engagement in group discussions was identified as being more variable, with a minority of participants feeling they were not able to engage with pupils most at-risk. Conversely, participants consistently felt that those from more affluent areas and had less exposure to violence consequently contributed less to the discussions. This led a minority of participants to question whether MAV was always reaching the schools and pupils most in need. However, as MAV is a universal prevention programme, targeting specific schools on the basis of socioeconomic deprivation would shift the focus to a selective intervention. A shift towards a more selective approach could lead to difficulties in determining which

schools are most at-risk. Moreover, if the programme was only delivered to the most "violent" schools, some schools may be concerned of the impact that on their reputation.

Some participants acknowledged the majority of pupils (particularly in the more affluent areas) were more at risk of victimisation and instead focused on victimisation prevention rather than perpetration prevention. While some participants felt the programme in its current format could be utilised for this, others thought it needed more work in this regard. Moreover, some participants believed pupils in the more affluent schools would benefit more from having the programme in S4 when they were starting to go out to bars at night. Again, this would raise difficulties in determining which schools were 'affluent enough' to receive the programme in S4.

In addition to pupils' experiences with violence, meaningful group discussion was also hindered by large or very small class sizes. This is consistent with the findings from the focus groups, whereby school pupils felt large class sizes were detrimental. While MAV is designed to be delivered to classes of approximately 20 pupils, participants reported having to contend with a range of class sizes from entire year groups to 5 or 6 pupils. Participants generally attributed this to a lack of organisation on the schools part and was consistent with other organisational problems encountered at schools such as time wasted setting up the film or locating a classroom. As such, participants consistently suggested that clearer communication between MAV and the schools was necessary to ensure schools were prepared for the visit so as the allocated time could be used most effectively. This would provide enable more time for discussion between pupils and volunteers, an element of the programme that the pupils particularly valued. Such

contact is important as it may subsequently help break down barriers between the young people and health professionals more generally.

In addition to improving communication between MAV and schools on logistical issues, several participants believed teachers needed further information to enhance their participation. While the majority of participants felt that teachers were effective at maintaining discipline and generally helped facilitate group discussions, others thought they needed more direction in terms of their role in the session (these participants reported that teachers had not been involved in the session) and more information on youth violence. Participants hoped that this would enable the teachers to re-enforce the messages after the session in subsequent PSE classes. Conversely, one participant noted that the teacher's presence hindered discussion and another believed they could be too strict for the purpose of the session, which again hindered discussion. Participants also valued the input of campus cops in terms of maintaining discipline and facilitating discussion. However, the majority of participants felt sessions were most successful when two volunteers were present. In addition, to helping facilitate discussion they were able to provide different perspectives on issues, and importantly provide support and guidance for new presenters who often felt anxious prior to sessions. Participants acknowledged the difficulties in recruiting two volunteers per session, mainly due to increasing clinical commitments, and as such suggested that as a minimum, new presenters should be accompanied by an experienced presenter for at least the first few sessions. Participants thought such an approach would help supplement the training session, which was perceived as useful by the majority of participants who attended. However, it should be noted that just over a third of participants did not attend training,

reflecting the culture of "on the job learning within medicine". Interestingly, those that did not attend training did report more anxiety prior to the session. While the majority of participants did feel the training and resources helped prepare them for sessions, several participants noted that demonstrative example (e.g. films of sessions) and more evidence on the epidemiology and prevention of violence would enhance the training.

In order to enhance their own performances, participants expressed a desire for feedback from schools. Moreover, participants acknowledged the need for an evaluation of MAV to determine its efficacy. However, the difficulties in measuring the long-term impact of an educational approach such as MAV were recognised. Despite this, participants believed the programme got a positive response and felt if it got pupils' to think about their behaviour, discuss the session or display anti-violence attitudes that would count as a success. It should be noted that the healthcare professionals' perceptions on success may represent favourable biases towards the programme, however, within the focus groups, the majority of school pupils appeared to have considered the session in terms of the consequences of violence. An increase in knowledge would be considered a positive outcome for an educational intervention (Naidoo and Wills, 2009) such as MAV.

Interestingly, although participants discussed whether or not they felt MAV was effective in reducing attitudes towards violence, they did not consider a theoretical basis of how MAV could potentially work. Despite this, participants did consistently report that young people had a lack of awareness of the consequences of violence and believed that if they were able to demonstrate the impact of violence, this would enable them to make better decisions. Indeed, a minority of participants specifically

emphasised that pupils had a choice regarding involvement in violence and this notion of choices was discussed by a minority of focus groups. However, there is a lack of evidence to support the notion that increasing knowledge on the risks of a behaviour decreases involvement in the behaviour (Naidoo and Wills, 2009). Moreover, programmes that exaggerate the consequences of risk behaviour, such as the Scared Straight programme, which aimed to deter adolescents from engaging in delinquent behaviour have been shown to be detrimental (Petrosino et al., 2003). Nevertheless, Witte (1999) reported that adolescents felt that realistically demonstrating the negative consequences of teenage pregnancy would reduce engagement in unprotected sex. This highlights the importance of not sensationalising violence and instead providing a realistic portrayal of the risks of violence. The use of real footage, in particular interviews and discussion of healthcare professionals' experience of violence, is consistent with this approach.

Participants made a number of suggestions for developing MAV. However, it should be noted, that some of these improvements such as two volunteers per visit and increasing number of schools will be difficult to achieve without increasing the number of volunteers. Currently, the majority of visits are being delivered by a minority of volunteers but due to increasing clinical commitments (secondary to pressures on the NHS) even the most dedicated participants are reducing the number of visits and have occasionally needed to cancel visits at the last minute.

Due to the strong association between deprivation and violence, participants generally felt there was little else they could do as healthcare professionals to prevent violence. Indeed, a small number of participants thought they could use their professional voice

to raise the issue of violence. Alternatively, a minority of participants felt they could be involved in alcohol reduction strategies, which may have the wider effect of reducing violence.

While this study provides insights as to healthcare professionals' understandings of youth violence and their experiences with MAV there are several limitations that need to be considered. First, the semi-structured interviews were conducted over the phone and as such non-verbal communication cannot be utilised as a further source of information (Opdenakker, 2006). Secondly, although all 136 healthcare professionals registered with MAV were invited to take part in the online questionnaire only 61 did so, therefore the data collected from the questionnaire may not be representative of all volunteers. Finally, as the data from this study (although anonymous) will be fed back to MAV, some participants may have been reluctant to be critical, particularly as some volunteers work closely with the MAV founders. Moreover, participants may be biased in their perceptions of MAV and as such may have overly favourable views in terms of its ability to engage with pupils and perceptions of success.

5.2.1 Summary

This section reported the qualitative findings from semi-structured interviews and open-ended questionnaires with healthcare professionals currently volunteering with MAV. Data was analysed thematically using the Framework method as detailed by Ritchie et al. (2003). The results demonstrated that these healthcare professionals regularly experienced youth violence through work and were strongly motivated to prevent it for both altruistic and personal reasons. Despite this strong desire, many participants were limited by clinical commitments in terms of the number of sessions

they could deliver. Moreover, many participants believed there was little healthcare professionals could do beyond MAV to prevent violence. Indeed, involvement in public health initiatives more generally was variable and may reflect the lack of focus on prevention within the health sector.

While healthcare professionals felt pupils generally engaged and were positive about the session, they did acknowledge the need for objective measures to establish the effectiveness of the programme. Moreover, although participants appeared to believe that MAV was successful they did not have an understanding of a theory behind the programme, attributing success to the demonstration of consequences of violence. A number of themes regarding logistics and content were also identified and recommendations for development in this area will be detailed in section 6.

6. Conclusions

The outcome evaluation demonstrated an immediate reduction in ATV scores post-intervention, which was not maintained at T3. However, the process evaluation demonstrated that MAV has been successful in engaging young people and increasing their awareness of the dangers associated with violence and strategies for staying safe. Indeed, a major strength of this study was the conduction of a process evaluation, which helped further understand the results of the outcome evaluation. First, analysis of the focus groups identified that pupils generally had negative attitudes towards violence, although a minority felt that reactive forms of violence were justifiable. This is consistent with the results of the questionnaire, whereby pupils had low mean scores for the culture of violence sub-scale and higher scores for the reactive violence sub-scale. The fact that there was only a small reduction in ATV scores immediately post-intervention may indicate that pupils felt generally negatively towards violence prior to the intervention and a large reduction in pro-violent attitudes would not have been possible. Alternatively, it may indicate a lack of sensitivity in the scale. Nevertheless, as the biggest reduction was in mean reactive violence scores and some pupils were supportive of this, MAV could consider adapting the programme to place a larger emphasis on this. Secondly, while the outcome evaluation did not demonstrate any significant increase in empathy scores, analysis of the focus groups identified that pupils demonstrated empathy towards victims of violence and their families. This may indicate that the CEAQ lacked context specificity in regard to violence and as such was not able to detect any change. As pupils were able to discuss the consequences of violence this demonstrates that they have retained some of the information delivered during the session, and can be considered a positive outcome for an educational intervention such as MAV (Naidoo and Wills, 2009).

Analysis of the qualitative data also identified a number of themes regarding content, delivery and future developments. In particular, it should be emphasised that the use of real footage and hearing healthcare professionals' experiences led to good engagement from school pupils, although this could occasionally be an issue in more affluent schools. While some healthcare professionals felt they were able to make the session more relevant to this population by focusing on victimisation prevention, others felt the programme needed development in this regard. Moreover, as volunteers lacked an awareness of the theoretical underpinnings of MAV, they need to be better informed of the mechanisms behind attitudinal and behavioural change (e.g. see Naidoo and Wills, 2009). Further work is also needed to improve communication between MAV and schools to ensure each healthcare professional only takes 20 pupils in a session and time is not wasted. Importantly, participation from members needs to be improved to ensure that the burden of session deliver does not fall on a small group of volunteers

Both the healthcare professionals and school pupils felt violence was an issue that affected young people in the West of Scotland. The healthcare professionals were therefore keen to use their roles to attempt to prevent youth violence. Similarly, the young people expressed a desire for interventions, believing that the levels of youth violence need to be reduced.

6.1 Implications for MAV

Based on the results of the evaluation of MAV the following points are recommended to help guide the development of the programme.

Logistics:

- Work with schools to ensure are sessions delivered to single personal and social education (PSE) classes
- Provide teachers with explicit information detailing their role (e.g. discipline, facilitating group work etc.) well in advance of the session.
- Ensure schools are informed regarding responsibility of setting up AV equipment in time for session start.
- Co-ordinate training sessions with up-coming school visits.
- Schedule two volunteers per visit, particularly when a new volunteer is delivering a session.
- Provide volunteers with at least six weeks' notice of upcoming visits.
- Provide information on the distance from local hospitals when recruiting volunteers for school visits.
- Increase volunteer numbers (including appropriate allied health professionals) through a recruitment drive to enable more school visits.
- Provide certification of visits for volunteers to use in appraisals.
- Empower volunteers to work with their health boards to arrange time away from clinical duties for volunteers.
- Implement follow-up sessions to reinforce material.

Content and resources:

- Develop alternative lesson plan and film that focus on victimisation prevention and safe alcohol consumption to be used with older pupils (e.g. secondary year 4) in the more affluent schools.
- Develop an adapted version of programme for younger pupils (e.g. primary 6 and 7).
- Ask presenters to clarify what aspects of the film are real and which are fictional at the start of the session.
- Adapt the programme to have a component focusing on reactive violence.
- Emphasise strategies for staying safe and the association between alcohol and violence.
- Incorporate material on psychological consequences of violence.
- Incorporate material on alcohol and violence.

Future developments:

- Increase advertising to schools in more deprived areas to ensure the target audience is receiving the programme.
- Enable other volunteers to be involved in the development and running of MAV (e.g. through a committee).
- Annual or bi-annual teaching group meetings to allow members to discuss their experiences and to facilitate development of programme.
- Develop first-responders trauma course to teach pupils how to respond to a casualty with violent injuries.
- Consider inviting an ex-gang member to attend the session to share their experience.

- Develop resources for pupils or teachers to use as a follow-up to the programme.

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Appendix A: Attitudes Towards Violence Scale

The Attitudes Towards Violence Scale

Below is a list of statements about violence. Please read each statement carefully and answer it by circling the response that best fits with what you think.
Don't just tell us what you think we want to hear!

MEDICS AGAINST VIOLENCE

Gender: **Date of visit:**

	No	Maybe	Probably	Yes
1. It`s good to have a knife.	1	2	3	4
2. Parents should tell their kids to fight if they have to.	1	2	3	4
3. I think it's too dangerous for people my age to carry knives.	1	2	3	4
4. If a person hits you, you should hit them back.	1	2	3	4
5. I`m afraid of getting stabbed	1	2	3	4
6. I`d feel safer if I had a knife.	1	2	3	4
7. I would join a gang.	1	2	3	4
8. People with knives are cool.	1	2	3	4
9. If a person tries to start a fight with you, then you should walk away from them.	1	2	3	4
10. I try to stay away from places where I could get hurt.	1	2	3	4
11. Teenagers who are in gangs know what they are talking about.	1	2	3	4
12. It's okay to beat up a person for bad-mouthing me or my family.	1	2	3	4
13. It's okay to carry a knife if you live in a rough neighbourhood.	1	2	3	4
14. People who use violence get respect.	1	2	3	4
15. It's okay to do whatever it takes to protect myself.	1	2	3	4
16. It's a good idea to hang out with people in gangs.	1	2	3	4

Appendix B: Childhood Empathetic Attitudes Questionnaire

The next set of questions asks some questions about how you might feel in different situations.

Instructions: Below is a list of statements about how you might feel in different situations. Please read statement carefully and answer it by circling the response that best fits with what you think.

Don't just tell us what you think we want to hear! We want to know what you really think.

1. Seeing a kid who is crying makes me feel like crying

No Maybe Yes

2. Other people's problems really bother me

No Maybe Yes

3. I would feel bad if the kid sitting next to me got in trouble

No Maybe Yes

4. It bothers me when my teacher doesn't feel well

No Maybe Yes

5. When I see a kid who is upset it really bothers me

No Maybe Yes

6. It would bother me if my friend got grounded

No Maybe Yes

7. I understand how other kids feel

No Maybe Yes

8. When I see someone who's happy, I feel happy too

No Maybe Yes

9. I would feel bad if my mum's friend got sick

No Maybe Yes

10. I feel sorry for kids who can't find anyone to hang out with

No Maybe Yes

11. I'm happy when the teacher says my friend did a good job

No Maybe Yes

12. I feel happy when my friend gets a good grade

No Maybe Yes

13. When I'm mean to someone, I usually feel bad about it later

No Maybe Yes

14. It's easy for me to tell when my mum or dad has a good day at work

No Maybe Yes

15. If two kids are fighting, someone should stop it

No Maybe Yes

16. I would get upset if I saw someone hurt an animal

No Maybe Yes

Appendix C: Topic guide for use in focus groups with school pupils

For use with school pupils to evaluate their experience of the Medics Against Violence session and attitudes towards violence.

Views on youth violence:

- Explore experiences with violence
- Explore perceptions about what makes a gang
- Explore ideas around why people get involved with violence
- Explore ideas around what could improve youth violence

Impact of Medics Against Violence Session:

- Explore their experience of the MAV session
- Explore whether their behaviour has changed since the MAV session
- Understand what aspect of the MAV session had the biggest impact
- Identify how MAV could be improved

As this is a focus group further questions may expand upon the above topics depending on the participant's response.

Appendix D: Medics Against Violence Members Survey

Q1. Are you?

☐ Doctor

☐ Dentist

☐ Nurse

☐ Paramedic

Other (please specify)

☐

Q2. Why did you join Medics Against Violence?

☐

Q3. Have you been to a training session?

☐ Yes I went to a training session but have not been on a school visit

☐ Yes I went to a training session prior to my first school visit

☐ No I didn't attend training but I went on my first visit with an experienced presenter

Q4. How useful were the volunteer training sessions at Medics Against Violence?

☐ Extremely useful

☐ Very useful

☐ Moderately useful

☐ Slightly useful

☐ Not at all useful

Q5. What could we do to improve the training sessions

Q6. How many school visits have you been on?

- ☐ None
- ☐ 1 visit
- ☐ 2-5 visits
- ☐ 6-10 visits
- ☐ More than 15 visits

Q7. What did you most and least enjoy about the school visits?

I most enjoyed

I least enjoyed

Q8. What could we do to improve the school visits in terms of the following?

Organisation and logistics

Usefulness to the target audience

Satisfaction for MAV members

Others

Q9. If you have not taken part in any school visits yet can you tell us why?

Q10. Please add any further comments or suggestions you would like to make about the Medics Against Violence programme here. Many thanks for your time

Appendix E: Topic guide for use in semi-structured interviews with healthcare professionals

For use with MAV volunteers to evaluate reasons for getting involved with Medics Against Violence and experiences with MAV

Views on youth violence:

- Explore experiences with violence
- Explore impact of youth violence at work place
- Explore ideas around why people get involved with violence

Reasons for getting involved with Medics Against Violence:

- What encouraged them to volunteer for MAV
- Have they been involved with any public health programmes before
- How many sessions have they delivered

Experiences delivering the MAV session:

- Explore their experience of the MAV session
- Explore how they felt prior to delivering their first session
- Identify whether the training adequately prepared them for the sessions
- Explore how many pupils/volunteers are best for each session
- Explore strengths and weaknesses of the programme
- Identify any difficulties they have had delivering the programme
- Explore any ways in which the programme could be improved.

Participation in MAV sessions:

- Identify what limits their participation in MAV
- Explore how participation could be improved i.e. CPD, logistics
- Explore whether there is anything else that Medics could do to help prevent youth violence

Effectiveness of MAV:

- Explore whether they think MAV has been successful in changing attitudes towards violence
- Explore whether they think their sessions have been successful in engaging the pupils

As this is an interview further questions may expand upon the above topics depending on the participant's response.

Appendix F: Table of classification of categories and descriptive items in descriptive analysis of MAV volunteers' data.

Classifications	Categories	Descriptive items
Experiences of youth violence	Awareness of youth violence in their life	Awareness of violence in own neighbourhood Awareness of violence in Glasgow city centre Believe there is a problem with weapons Aware of violence at school Scheme-fighting Peers involved in violence Personally been victimised
	Feelings towards youth violence	Feel anxious Feel negatively towards violence
	Demographics of those involved	Violence worse in specific areas Age of initiation into violence Girls' involvement in violence
Perceptions of why young people are involved in youth violence	Reasons for fighting	Peer pressure Violence perceived as cool by young people Family pressures to take-part in violence Wanting to act tough Defending their scheme Find violence exciting Association with football
	Reasons for being in a gang	Protection Feeling part of something. Unable to leave gang
	Reasons for knife-carrying	Protection Feel carrying a knife gains respect
	Associated with alcohol and drugs	Feel alcohol causes a lack of control Believe alcohol increases aggression Recreational drug use and youth violence Violence and heroin addicts
Experiences with MAV session	Perceptions of volunteers	Believe healthcare professionals' experience enables them to provide realistic information Felt healthcare providers made session more meaningful Wanted to lean about volunteers' experiences of youth violence and gain advice
	Engagement and understanding of session	Felt session was relevant Confusion at video Thought about session afterwards

Experiences with MAV session cont.	Feelings experienced during session	Felt shocked by session Feeling upset at session Feelings towards graphic nature of film Feelings on age-appropriateness
	Organisation of session	Length of session Class sizes
Understanding of issues around violence	Impact on victim's life	Awareness of physical consequences (e.g. paralysis, scarring) Awareness of psychological consequences
	Impact on offender's life	Feel life is ruined by being in jail Believe offenders will suffer from guilt
	Impact on family's life	Awareness of the effect on the victim's family Believe offender's family also suffer
Attitudes towards violence	Anti-violence attitudes	Believe knife-carrying is wrong Feel violence is unfair on innocent victims Feel negatively towards those engaging in youth violence Felt negatively towards those involved gangs Awareness that they can choose not engage in youth violence
	Pro-violent attitudes	Believe its ok to fight if someone bad-mouths mum Using violence for self-defence
Avoiding violence	Awareness of dangers	Awareness of risks of carrying knives Feel more aware of dangers to self when out Feelings of safety following session
	Strategies for safety	Exercise caution when interacting with people S Stay with friends Backs away from anyone with a knife Stay sober Avoiding potentially unsafe areas Avoiding getting angry
Development of MAV programme	Involvement of others affected by violence	Hearing experiences of a victim of violence Hearing experiences of an ex-offender Sessions by police
	Desire for more information	Desire to learn about first-aid Desire for information on global prevalence of youth violence Need to know how to respond to an attack

Development of MAV programme cont.	Session duration	Receive session annually
Other methods to reduce youth violence	School-based activities	Would like drama sessions Would like dedicated violence prevention time
	Role of criminal justice system	Believe need tougher sentencing Role of surveillance
	Activities	Activities for young people in the evening

Appendix G: Table of classification of categories and descriptive items in descriptive analysis of MAV volunteers' data

Classifications	Category	Descriptive items
Youth violence at work	Experiences of youth violence	Deals with a large number of young people injured by violence Treatment limited to dealing with injury Deals with psychological consequences of violence Treats a small number of children with violent injuries Involvement of older men Experienced higher rates of violence in West of Scotland Homicide an unintended consequence of violence
	Feelings when dealing with youth violence	Emotional burden of violence Stress of treating knife wounds Excitement at treating knife wounds Concern at the wider impact of violence on families Concern at long-term impact Frustration at the pointless nature of violence Perceptions that violence related injuries are self-inflicted.
Motivations for participation	Preventing violence	Reducing violence related workload Personally impacted by violence Want own children to be safe Concern for innocent victims Approval of prevention approach
	Personal development	Doing something different Find sessions stimulating Enjoys working as a multidisciplinary team See MAV as additional charity work Wanting to give something back to the community
Perceived impact of violence	Health consequences	Impact on victim's physical health Impact on victim's mental health
	Impact of victims' lives	Stigma Reduced life opportunities Effect on victim's mental health
	Impact on offenders' lives	Wasting life serving a jail sentence Risk of committing a serious act of violence by carrying a knife. Effect on offender's mental health

Perceptions of causes of youth violence	Alcohol and drugs	Lack of control after drinking Culture of alcohol use
	Individual factors	Thrill of violence Lack of awareness of consequences Bravado
	Environmental factors	Lack of opportunities Normality of violence Territoriality Cycle of violence Lack of positive role models
Experiences delivering sessions	Interactions with pupils	Avoiding lecturing Perceptions of socio-economic class Relating to pupils Involvement of younger healthcare workers Enable young people to speak to doctors
	Messages delivered	Staying safe Dangers of engaging in violence and knife-carrying Emphasises choices
	Class sizes	Difficulties engaging bigger classes Lack of discussion with small classes Believe 20 pupils are ideal for sessions
	Logistics of session	Lack of preparation by schools Difficulties covering all material Volunteer numbers Perceptions of multi-agency days
	Perceptions on content	Age-appropriateness Adaptability of content Content is able to shock pupils Relevance of DVD
	Role of teachers and campus cops	Teachers as disciplinarians Engaged teacher helpful for group work Teachers need more information Campus cops help facilitate the session.
Perceived engagement	Pupil contributions	Lack of response form and some pupils Pupils with more experience of violence able to contribute more to discussions.

Perceived engagement cont.	Pupil responses	Good engagement with DVD Variable engagement in discussions Query success for those that don't want to engage Difficulties with pupils' behaviour
Perceived effectiveness of MAV	Perceptions of success	Consideration of behaviour change by pupils Pupils displaying anti-violence attitudes Positive response from teachers Impact in the short-term Positive response from pupils Discussion of programme by pupils Preventing one murder would count as success
	Difficulties measuring effectiveness	Difficulties evaluating prevention interventions Difficult to assess long-term impact
	Feedback	Feedback to improve own performance Desire to see feedback for impact of MAV Use of social media to feedback to MAV members
Concerns and difficulties	Personal feelings	Feeling of unappreciated Feelings of isolation
	Issues for consideration	Need for a committee/regular meetings Queries whether MAV is reaching schools most at risk Presenter fatigue after multiple sessions
Improving MAV	Logistical improvements	Providing schools clearer instructions Ensuring AV equipment is set-up in advance Increasing volunteer numbers by recruiting junior doctors Pairing new volunteers with an experienced presenter
	Content and resources development	Providing an evidence-based resource Increase use of social media Developing videos to match life-experience of pupils Re-naming programme Choices Increase graphic nature of pictures
	Increasing member satisfaction	Opportunities to discuss experiences with other members Opportunity to be involved in the development and running of MAV Providing feedback to members Rewarding participation

Improving MAV cont.	Future developments	Using MAV as a template Increasing number of school visits Inviting victims of violence to attend sessions Modify a programme for younger years Increasing teacher involvement in programme delivery
Preparation for school visits	Experiences of training	Need for formal training Training a useful experience Use of demonstrative examples in training
	Confidence in session delivery	Anxiety prior to sessions Daunting doing visits on own Having the life-skills to cope with the situation Confidence in delivery increases with experience
Participation	Limitations of participation	Having a decreasing number of non-clinical sessions Difficulties co-ordinating sessions with clinical commitments Required to do sessions in non-work time Unable to travel to further afield for sessions
	Improving participation	Providing advanced notice of sessions Being able to do visits in local area Obtain health board or governmental approval Arrange school visits to fit with training Advertising MAV
Relationship between doctors and public health and violence prevention	Experience of public health out with MAV	Provide prevention advice during hospital admission Previous involvement of public health interventions Role of doctors in public health
	Role of doctors in violence prevention	Doctors could utilise alcohol reduction strategies Medics should be using their role to increase awareness of violence Views medics as useful to prevention but not essential Role in information sharing Need societal change beyond doctors' involvement