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Abstract

Alcohol consumption by adolescents in the United Kingdom (UK) remains high. School-based interventions are expected to play a key role in preventing adolescent alcohol consumption. A series of focus groups were conducted with pupils who received alcohol education as usual and pupils who received a Northern Ireland adaptation of the School Health and Alcohol Harm Reduction Project (SHAHRP), a universal alcohol education programme designed to reduce the harms experienced by young drinkers. This study sought to compare and contrast the participants' engagement with, and enjoyment of the different alcohol education that they had received. Focus groups were completed with 129 pupils in 16 schools in Northern Ireland and Scotland. Alcohol education as usual was viewed negatively and was regarded as unstructured, boring, repetitive and unrealistic. In contrast, the adaptation of SHAHRP was viewed positively and was regarded as enjoyable and worthwhile, engaging and relevant to the participants' experiences of alcohol use. These findings suggest that one reason why alcohol education as usual may not be successful in preventing adolescent drinking and protecting adolescents from negative outcomes may be due to its failure to engage participants. Higher acceptability by pupils means that the adaptation of SHAHRP may be one viable alternative.

Key Words: Alcohol; adolescent; SHAHRP; harm reduction

Introduction

Although the proportion of adolescents consuming alcohol in the United Kingdom (UK) has declined in recent years, those adolescents who do drink appear to be consuming more per occasion (Fuller 2013; Hibell et al. 2012; McInnes and Blackwell 2013; Smith and Foxcroft 2009; Velleman 2009). While this trend may exist at a UK-wide level, it is important to note that regional variations exist (McInnes and Blackwell 2013; Velleman 2009). For example, previous findings indicated that in comparison to the rest of the UK, drinking prevalence and excessive weekly alcohol consumption among adolescents had increased in Northern Ireland (NI) in recent years (Smith & Foxcroft 2009). Data from the Young Persons' Behaviour and Attitudes Survey (Northern Ireland Statistics and Research Agency [NISRA] 2014) also demonstrated that of those who had ever drank a full drink, 56% had done so by 13 years of age and 84% had done so by 15 years of age. This compares to 32% of 13 year olds and 70% of 15 year olds in Scotland (NHS National Services Scotland NHSNSS 2013). However, when comparing lifetime drunkenness, the data showed that while 39.3% of 11-16 year olds in NI reported lifetime drunkenness (NISRA 2014), 44% of 13 year olds and 70% of 15 year olds in Scotland reported lifetime drunkenness (NHSNSS 2013). These findings demonstrate that adolescent drinking behaviour and its assessment is a complex issue, further complicated by the transitory and developmental nature of drinking behaviour and the variability in drinking patterns (see Percy & Iwaniec, 2010).

Nevertheless, in general, the findings indicate that alcohol consumption remains high in the UK compared to other European states (Fuller and Hawkins 2014; Hibell et al. 2012). This is concerning as excessive alcohol consumption by adolescents is associated with a range of both short- and long-term negative outcomes. Short-term negative outcomes can include problems at school (e.g. unauthorised absences, expulsion, and underachievement), unsafe sexual behaviour and unplanned pregnancies, trouble with the legal authorities and/or

parents, accidents and/or physical injuries, aggressive behaviour and falling out with friends (Ellickson, Ticker, and Klein 2003; Masterman and Kelly 2003; McBride et al. 2004). Long-term negative outcomes can include a greater likelihood of alcohol dependence (Bonomo et al. 2004) and problematic drinking in adulthood (e.g., Jefferis, Power, and Manor 2005; McCambridge, McAlaney, and Rowe 2011; Viner and Taylor 2007; Wells, Horwood and Fergusson 2004), social problems (e.g., DeWit, Adlaf, Offord, and Ogborne 2000; Grant, Stinson, and Harford 2001; Hingson, Heeren, and Winter 2006), anti-social and violent behaviour (Stacy and Newcomb 1995; Wells et al. 2004; White et al. 1999), reduced employment prospects (Bryant et al. 1996), and poorer psychological health (Kushner, Abrams, and Borchardt 2000; McGue, Iacono, and Krueger 2006; Viner and Taylor 2007; Wells et al. 2004).

Schools in the UK are expected to play a key role in preventing adolescent drinking behaviour by protecting their pupils from the negative outcomes of use. For example, in NI, every grant-aided school is required to have an illegal drugs and alcohol education policy and to provide education about drugs and alcohol (Northern Irish Council for the Curriculum, Education and Assessment 2004). The Council for the Curriculum, Examinations and Assessment (CCEA) in NI has published guidance for schools on the development of a drugs and alcohol education policy and the development and implementation of a drugs and alcohol education programme (Northern Irish Council for the Curriculum, Education and Assessment 2004). The main objective is the development of knowledge about drug and alcohol use and misuse, associated risks and effects, and the implications of this behaviour on personal, social, and economic outcomes. In 2007, the National Institute of Health and Care Excellence (NICE) also issued guidance on alcohol education in schools, but its recommendations were general in nature and did not specify evidence based actions (NICE 2007). However, in the UK at least, apart from requirements for delivery as part of science lessons, there is no

mandatory or consistent setting in which alcohol education is delivered, thus leading to a wide variety in the content and quality of alcohol education between schools. For example, it could be delivered as part of a Personal Development programme, a developed Personal Social and Health Education programme (PSHE/PSE), or the Personal Development element of the *Learning for Life and Work* area of learning (Department of Education Northern Ireland 2012). Furthermore, it is clear that despite the legal obligation on schools to provide alcohol education, not every pupil receives it. According to the Young Persons' Behaviour and Attitudes Survey 2013 (NISRA 2014), only 76.6% of adolescents reported receiving any type of school education on alcohol in the past year.

In Scotland, alcohol education is part of the Curriculum for Excellence (described in Scottish Executive 2004, and first implemented in 2010-2011). Participants are presented with information about the effects and risks of alcohol use, with the aim of helping them to lead healthier lifestyles. Again, there appears to be no mandatory or consistent setting in which this alcohol education is delivered. A critique of this approach by the Scottish Youth Commission on Alcohol reported that many teachers indicated that they had a lack of confidence in their abilities to effectively deliver alcohol education (Scottish Youth Commission on Alcohol 2010). It was suggested that teacher training and support (including for PSE teachers) was inadequate, and lacked appropriate provision of information and resources. Although no formal evaluation of Scottish school alcohol education has been undertaken, contemporaneous population surveys show that although fewer 15 year olds reported drinking in the last week in 2013 in comparison to 2010, the number of 15 year olds who had consumed alcohol in the last week and who reported being drunk in the last week had increased (NHS National Services Scotland, NHSNSS 2013).

In contrast to general school curricula, the effectiveness of school based adolescent alcohol prevention programmes have been examined in some detail (e.g. Faggiano et al. 2008;

Foxcroft et al. 2003; Foxcroft and Tsertsvadze 2012a, 2012b; Komro and Toomey 2002). Such reviews have concluded that those programmes which have psychosocial and/or developmental components designed to impact on a range of health and lifestyle behaviours are more likely to be effective, in particular in reducing drunkenness and heavy episodic 'binge' drinking. Due to their content, these generic programmes are also more likely to have a positive impact on a broader set of problem behaviours, such as drug use and anti-social behaviour. However, it is important to note that Foxcroft and Tsertsvadze (2012a, 2012b) found that not all of these types of programmes were effective, and that others were only effective within sub-groups (i.e. sex, baseline alcohol use etc.). These authors were unable to identify a pattern in programme characteristics (i.e., sample size, intervention duration etc.) which explained the difference between effective and ineffective activities. Differences in programme content (i.e., programme curriculum) or context of delivery (i.e., programme facilitators, target age group, study location) may moderate effectiveness, but this needs to be better understood if further general implementation of these programmes is to be recommended.

The School Health and Alcohol Harm Reduction Project (SHAHRP) is a universal school-based programme with a psychosocial and developmental orientation. It combines a harm reduction philosophy with skills training, education and activities in order to instigate positive behavioural change concerning the harms experienced because of alcohol consumption (McBride et al. 2004). In the original programme evaluation of SHAHRP with 13-15 year old pupils in Australia, the intervention was effective (compared with educational as usual) in increasing knowledge and safer attitudes towards alcohol, decreasing alcohol-related harm and reducing alcohol consumption (McBride et al. 2004). Adapted versions of SHAHRP have been implemented in Northern Ireland (NI) (*[name deleted to maintain the integrity of the review process]* 2012), and as part of the Drug Education in Victorian Schools

(DEVS) programme in Australia (Midford et al. 2014), and both trials have produced similar positive findings.

The combined effectiveness of SHAHRP and a Brief Intervention for parents is currently being tested in a cluster randomised controlled trial (Steps Towards Alcohol Misuse Prevention Program [STAMPP]). The trial (ISRCTN47028486) is designed to test the efficacy of the combined interventions, in comparison to alcohol education as usual, in reducing problematic drinking and alcohol-related harms among adolescents. 105 post-primary schools in Northern Ireland (NI) and Glasgow/Inverclyde Education Authority areas (Scotland) have been randomised into intervention and control conditions, and the trial is expected to report in Summer 2016.

The adapted version of SHAHRP was delivered in two phases over two consecutive academic years. Phase one was delivered during the second year of post-primary school (Year nine in NI and S2 in Scotland) when the participants were at least 12 years old and phase two was delivered during the third year of post-primary school. The programme activities incorporated various strategies for interactive dissemination including the delivery of utility information, skill rehearsal, individual and small group decision-making and discussions based on scenarios suggested by students. Particular attention was paid to the identification of alcohol-related harms in specific scenario-based exercises (i.e. a night out), and strategies were discussed which might be employed to reduce these harms.

A series of focus groups were conducted with pupils who received the adapted version of SHAHRP (hereafter Intervention participants) and pupils who received alcohol education as usual (hereafter Control participants). These sought to examine participants' views on their respective alcohol education with a view to allowing post-hoc comparison between the views of Intervention and Control students. Discussions included a focus on their engagement with,

and enjoyment of the different types of alcohol education that they had received. Foxcroft and Tsertsvadze (2012a; 2012b) have argued that not all alcohol education programmes are effective but these authors were unable to identify a pattern in programme characteristics (i.e., content, context of delivery etc.) which distinguished between effective and ineffective programmes. This study sought to identify some of the programme characteristics which influenced participant engagement and enjoyment, as this influences effectiveness (Buckley and White 2007; White, Buckley, and Hassan 2004). This qualitative study therefore provides the opportunity to potentially explore and explain the outcomes of the empirical trial.

Methods

Participants

Purposive sampling was used to ensure that both study sites (NI and Scotland) were represented; and that there was an equal representation of Intervention and Control participants, males and females; and in Northern Ireland, those attending Grammar and Secondary schools. All 16 schools approached agreed to participate, including eight Intervention and eight Control schools (representing 15% of the total number of schools in the trial). The contact teacher in each school selected what they considered to be a representative sample of their Year 10/S3 pupils (aged 13-14 years) for participation. A total of 129 pupils participated (Male = 62 (48%), Female = 67 (52%)), with a mean of eight participants per group (range six to twelve). Participants did not receive any compensation for their involvement.

Procedure

The focus groups were completed after Intervention participants had already received both phases of the adapted version of SHAHRP. The discussions took place in a quiet classroom during school time, lasting between 28 and 48 minutes, depending on participant engagement. The average duration was 34 minutes.

Informed parental consent was obtained through each school prior to participation in the focus groups. Participants also provided consent on the day of the focus groups, after receiving detailed information about the purpose and procedure of the study.

Prior to the focus groups, a series of open-ended questions were developed in order to minimise any bias and ensure consistency between the groups (Patton 2002), as well as to stimulate discussion. Intervention participants were asked to answer questions and provide their opinions about the adapted version of SHAHRP; while in contrast, Control participants were asked to answer questions and provide their opinions about alcohol education as usual. It is important to note that although the CCEA in Northern Ireland has published guidance for schools on the development and implementation of a drugs and alcohol education policy and programme (Northern Irish Council for the Curriculum, Education and Assessment 2004), and that alcohol education in Scotland is part of the Curriculum for Excellence (Scottish Executive 2004), there is no mandatory or consistent setting in which alcohol education is delivered. Therefore, the application and delivery of alcohol education as usual differed between schools and the adapted version of SHAHRP is not being compared to the same educational approach in each school.

The researchers who conducted the focus groups used prompts throughout the discussions in order to clarify answers or to explore and obtain details about specific issues as they arose. The discussions were digitally recorded and transcribed verbatim by a professional

stenographer. Ethical approval for the study was granted by Liverpool John Moores University's ethics committee.

Data Analysis

The transcribed focus groups were analysed in accordance with the methodology of Braun and Clark (2006). This procedure involved six steps: (1) familiarisation, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. The analysis was completed by the two researchers who conducted the focus groups. One of the researchers imported the transcripts into the software package NVIVO while the other used paper copies of the transcripts. Although NVIVO facilitates the electronic analysis of qualitative data, a software package can sometimes impede an examination of the data in its totality and in its original context. This may lead to 'over coding' and the loss of a deeper level of interpretation (Richards 2002). Therefore, the use of two different analytical approaches were a deliberate attempt to reduce the possibility that meaning and interpretation was lost during coding. Regular meetings were held between the researchers to discuss areas of consensus and discrepancy and to review and revise emerging themes.

Results

The data collected from discussions with participants was categorised within four broad themes: 'Perceived Learning Outcomes', 'Materials', 'Mode of Delivery', and 'Delivery Style'.

Perceived Learning Outcomes

Perceived learning outcomes from the two types of alcohol education differed. Intervention participants, in general, were positive about the education they had received and were able to identify and discuss in detail learning outcomes. They identified and discussed alcohol-specific topics that were addressed during all ten lessons in the program. In particular, they discussed and commented on 'units of alcohol' and 'drinking guidelines', the 'effects' and 'consequences' of alcohol use; and 'real-life situations' where alcohol consumption occurs, the potential dangers that these situations present, and realistic strategies to deal with them.

> *I didn't know anything about the amount of units in alcohol and the concentration of alcohol, so it was good to learn about that*
>
> *Female, Scotland*

The participants also discussed the benefits of learning about these alcohol-specific topics. For example, they felt that learning about 'units of alcohol' facilitated a greater awareness of the relationship between consumption and behavioural outcomes; while learning about the 'effects' and 'consequences' of alcohol consumption could positively influence their decision making about drinking behaviour in the future.

> *Plus, like, for later in life, it's giving them information of alcohol and they can decide ... knowing the facts, whether they want to drink or not, they know the facts and the consequences it's going to have on them*
>
> *Male, Northern Ireland*

The adapted version of SHAHRP was not entirely free from criticism however. For example, the Intervention participants identified a number of alcohol-specific topics that they felt should have been covered, including alcohol dependence and the effects of alcohol on elderly

people. Although SHAHRP primarily concerns adolescent alcohol use, this suggests that young people are interested in, and recognise the consequences of use across the lifecourse.

> *What about, like, again, old age, like you're an elderly person. For example, what happens if an elderly person still drinks, would it cause more trouble for them or would it just, like, keep them drinking? Like, how would it help other people, you know, since they're a young age, they keep drinking and get addicted, would you…how elderly people stop that*
>
> *Male, Northern Ireland*

Overall, the participants enjoyed the programme and believed it to be worthwhile; and any criticisms about learning outcomes focused on making suggestions for adding to and improving it.

In contrast, the Control participants indicated that they received very little education about alcohol and that anything they did learn, was perceived to already be 'common knowledge' or things that they already knew.

> *We don't really get a lot…*
>
> *Female, Scotland*

Fewer alcohol-specific topics were mentioned. The 'effects' and 'consequences' of alcohol consumption were the only topics identified, these were not discussed in any great detail, and the benefits of learning about such topics were not identified. The portrayal of adolescent alcohol consumption during alcohol education as usual was criticised; it was characterised as unrealistic and age inappropriate due to a focus on extreme levels of adolescent drinking and anti-social behaviour.

It's really repetitive. We get it a lot every year, and it's basically just the same information every single year, and it's all negative views

Female, Scotland

Overall, the Control participants indicated that they obtained little benefit as a result of taking part in their usual alcohol education and in general, it was perceived negatively.

Materials

The materials of the adapted version of SHAHRP included a workbook for both phase one and phase two of the programme which participants completed under the instruction and guidance of a trained teacher; and accompanying CD-ROMs for phase one and phase two which contained videos and interactive games for use in the classroom by the teacher and participants. In general, the materials received a positive appraisal. Participants indicated that the workbooks helped them to learn about and remember alcohol-related facts. The design of the workbooks, the activities and challenges contained within them, and the small amount of writing required were also viewed positively.

I think it's better when you're, like, writing out in a book because you take it in more, as opposed to sitting there and, like, reading it

Female, Scotland

The participants successfully identified the embedded similarities and differences between the workbooks. For example, the participants recognised that both workbooks addressed topics such as ‘units of alcohol’ and the ‘consequences’ of alcohol use. On the other hand, the participants recognised that the workbook for phase one contained basic information and facts about alcohol; while the workbook for phase two contained greater detail and examination of specific drinking contexts and experiences. This resulted in the second

workbook being regarded as more relevant to the participants' own drinking behaviour and experiences. The participants believed that the workbooks were delivered at the appropriate age and in the correct order, with the workbook for phase one providing information and facts about alcohol that could then be applied when real-life drinking situations were addressed in the workbook for phase two.

> *Yeah, because in the first book, it was all about units and stuff, and the second one, it was more about the dangers and what could happen to you if you were drinking, the scenarios that you could be in …*
>
> *Male, Scotland*

A small number of criticisms were raised. The requirement for written work led to negative comparisons between the adapted version of SHAHRP and other school lessons; and some participants would have preferred more discussion and activities.

> *Well, in a way, you know, there could have been, like, more physical activities instead of, like, always doing it in the book*
>
> *Male, Northern Ireland*

However, criticism was relatively limited and the workbooks were well regarded. In contrast to the utilisation of the workbooks, the use of the accompanying CD-ROMs appears to have been sporadic. Use of the CD-ROMs as intended was evident in few schools, with partial use (at specific stages, for example to show media adverts) more common. This may have been due to inadequate school infrastructure (the lack of availability of equipment) or the lack of motivation among individual teachers.

> *We only used the CD to watch videos*

Female, Scotland

Where they were used, however, the CD-ROMs received participant approval. They were considered useful and enjoyable; and the videos and interactive games were preferred to reading and writing in the workbooks.

> *I think it's not as, like, I don't want to say boring but, you know, you're not constantly looking at the book and listening to the teacher, you can do it for yourself on the computer*

Male, Northern Ireland

The precise nature of the alcohol education material that Control participants received differed from school to school. In general, participants received workbooks or other written materials, and passively viewed videos. Written materials such as hand-outs were viewed particularly negatively and failed to engage the participants. The participants who received these expressed a desire to receive more interactive materials such as videos and games.

> *It's more books and, like, what we already know, rather than stuff we can ask about and, like, videos and stuff. We're so used to books, you, kind of, just ignore them now*

Female, Northern Ireland

Videos were still widely used and included educational videos produced by organisations such as the NHS and the Police. Some participants indicated that they believed that the videos effectively delivered a message of abstinence, and that they preferred watching these in comparison to completing workbooks. However, the majority of participants indicated that they thought these videos were repetitive and overly negative in their objectives, were age-inappropriate (e.g. young adults going to nightclubs), and presented unrealistic and inaccurate information about adolescent alcohol use, anti-social behaviour and violence. Some videos

were also several years old, and participants raised the possibility that they might present out of date information.

> *Yeah, they're all pretty old, so, you know, the messages back then would have been, kind of, different because obviously people can learn different things, so the curricular could change or something. And they could base it on different facts that have been discovered since then, like, this amount of alcohol won't hurt you if you're this old*
>
> *Female, Scotland*

In contrast to the Intervention materials, overall, the materials that Control participants received during alcohol education as usual received a negative appraisal.

Mode of Delivery

Participants were asked to comment on the ease with which they could discuss the issue of alcohol with their teachers. An interesting difference emerged between the Intervention and Control groups, with participants in the Intervention groups reporting that they were more likely to hold a positive attitude towards teacher-facilitated alcohol education, particularly if the discussions focussed on alcohol-related facts. However, they also indicated some reservations about discussing personal drinking behaviour and experiences (or that of their peers) with teachers. They would be more likely to do this if they believed that teachers had certain personality traits and characteristics. It was regarded as fundamental that teachers possess a "good" personality (i.e. friendly and welcoming), are younger and therefore understand the complexities of adolescent drinking, are empathetic, are knowledgeable about and have experience of alcohol use, maintain confidentiality, and are able to develop a trusting relationship with their students.

... if a teacher's young, then I think they remember what it is like to be a teenager and that they did the stuff that we're doing. I think it makes it easier to talk to them than an older teacher

Female, Scotland

It depends how much you respect your teacher. If you respect them, you're going to listen to them more, like, if you sort of favoured them ...

Male, Northern Ireland

In contrast, teachers who do not possess these traits or characteristics were regarded less favourably. The ideal profile of the alcohol educator was also shared by Control groups. However, participants in the Control groups were far more likely to hold negative beliefs about teachers as deliverers of alcohol education in general. These participants generally believed that teachers make alcohol education 'boring', that they are judgemental and fail to maintain confidentiality, that they only present a negative view of alcohol and make a "big deal" out of it.

The teachers can be, kind of, judgemental and, say, like, you said something about drinking, they can, kind of, like, make a name for you and, like, they could go around ... like, they could tell other people, they can go to the staff room, like, did you hear about this student. They can do things like that and just not really trustworthy

Female, Northern Ireland

In some cases, Control participants would have preferred to have had alcohol education delivered by external facilitators instead, due to their perceived greater level of knowledge about alcohol; this was also beneficial because in contrast to teachers they would not have to see external facilitators everyday, and so there would be a greater level of anonymity if

opinions or personal experiences were disclosed, and there would be no need to fear judgement from teachers.

> *... sometimes you might be worried about to tell the teacher, but then other things you can just get off your chest with other people* [external facilitator], *and nothing's going to be said about it because it's anonymous*
>
> *Female, Scotland*

Delivery Style

The adapted version of SHAHRP is interactive in nature and discussion about alcohol between classroom peers is a fundamental element of the programme. The participants indicated that they enjoyed these opportunities to share their own and others' opinions about and experiences of alcohol.

> *Well, firstly, we used to do, like, our whole class did a class discussion of it. So it was helpful that everyone got to share their opinions and views, and everyone gets to see where they're coming from. So that kind of learns you another aspect of other people's views of the book*
>
> *Male, Northern Ireland*

In contrast, participants in the Control group indicated that they would be more reluctant to engage in such a discussion with, or in the presence of their classmates. The participants in both Intervention and Control groups highlighted some issues which affected the likelihood to which they would do this, including their own drinking behaviour and the friendship networks within the classroom. Some participants reported that they might not discuss alcohol use and disclose their own drinking behaviour, or alcohol abstention, because they

fear judgement or ridicule from others, or becoming the subject of gossip by others if they deviate from the classroom norm.

> *I think there always is, like, that fear that you're going to be judged in the group discussions when you know all the people and you see them every day. If you say something like if you did drink, you think some people might be really scared to actually say that because they could get really badly judged for it and they could be teased about it*
>
> *Female, Northern Ireland*

Control participants also indicated that if they decided to discuss alcohol, their expressed opinions and experiences might be affected by the presence of their classmates (i.e., a perceived pressure to impress classmates either by falsely reporting drinking or abstaining, depending on the overall norms established in the room) and consequently would not accurately represent their true opinions and experiences.

> *... if it's somebody that you quite like, you'll obviously try and impress them, so you'll try and say the right things*
>
> *Male, Scotland*

On the other hand, some Control participants suggested that because alcohol use among adolescents was, in their view, a normalised behaviour, they would feel comfortable discussing the issue and disclose their experiences without any fear of judgement from others.

> *I would say it's not as much as a negative thing amongst pupils sometimes. Like, it's obvious because we're at that teenage age that it's more popular amongst us, so it's not as if it's all very, like…it's not…it's quite a lot of people are open about it*

Male, Scotland

Both Intervention and Control participants indicated that discussion may be easier in a setting where friendship and trust already exists among classmates, thus suggesting that interactive alcohol education would be more successful in a form class rather than a class where pupils come together only for specialised subjects. Furthermore, those in the Intervention groups suggested that allowing participants to engage in discussions in small groups (as required by the adapted version of SHAHRP) of their choosing (i.e., groups of friends) could promote more meaningful discussion and interaction.

> *No, it's not difficult to speak with your friends around you, because they're people you can trust, even if the form teacher's in the room, you still have friends who you'd hang around with just in the school*
>
> *Male, Northern Ireland*

Discussion

The aim of the current study was to compare and contrast the Intervention and Control participants' experiences of alcohol education, the adapted version of SHAHRP versus education as usual. Analysis of focus group discussions was conducted to examine the participants' engagement with and enjoyment of the different alcohol education that they had received.

Overall, pupils viewed the adapted version of SHAHRP positively, while alcohol education as usual was viewed negatively. Intervention participants regarded their alcohol education as enjoyable, worthwhile and engaging, and all thought it age-appropriate and relevant to their experiences of alcohol consumption. Even though the adapted version of SHAHRP includes

lessons about real-life drinking situations that abstainers would not yet have experienced, abstaining pupils still found it relevant due to the inclusion of information on harm resulting from other people's drinking, and the inclusion of this type of information was also considered useful for potential future alcohol use. Adolescent drinking behaviour is a heterogeneous phenomenon, and using a universal intervention with participants at various stages of drinking experience (e.g. abstainers, experimental drinkers, and established drinkers) is potentially problematic. However, from these results, it appears that the adapted version of SHAHRP was salient and meaningful in its content and approach across drinking experiences. In contrast, the majority of Control participants regarded their alcohol education as unstructured, boring and repetitive, unrealistic and age-inappropriate, and delivered without much enthusiasm; echoing earlier findings with students who received alcohol education as usual in a region of Northern Ireland not included in the trial (*[name deleted to maintain the integrity of the review process]* 2014).

Clear differences emerged between the Intervention and Control groups in terms of perceived learning outcomes. Intervention participants indicated that they enjoyed and appreciated learning about a variety of alcohol specific topics; while Control participants felt that they did not learn anything new, indicating that some schools may not be adequately meeting their legal obligation to deliver alcohol education (Northern Irish Council for the Curriculum, Education and Assessment 2004). Intervention participants were able to discuss alcohol-related topics such as 'units of alcohol' and 'real-life situations' in detail and to describe the benefits of learning about them; while those in the Control group merely mentioned that alcohol education as usual addressed the 'consequences' and 'effects' of alcohol consumption, without discussing the issue in detail or describing the benefits of knowing this information.

The adapted version of SHAHRP contained 10 lessons, during which 20 alcohol-specific topics were addressed. These topics were all mentioned and in some cases discussed in depth by Intervention participants, with 'units of alcohol' featuring most prominently. Participants highlighted this as a topic that they found both enjoyable and useful (i.e. knowledge of this topic allows current or future drinkers to monitor their alcohol consumption levels). Increasing awareness of units of alcohol has been a key component of many young people and adult alcohol health campaigns (and forms the basis of national drinking guidelines) but studies consistently find that the general population overestimate how much alcohol a unit represents and thus consume a greater volume of alcohol than recommended (Cabinet Office, Prime Minister's Strategy Unit 2004; Kerr and Stockwell 2012). These findings suggest that when presented in an engaging way, discussion of units of alcohol is a good means of teaching people about alcohol.

Other topics regularly mentioned by the participants included 'real-life situations' and the 'effects' and 'consequences' of alcohol consumption. The topic 'real-life situations' enhanced the relevancy of the education for the participants. They could relate to the information presented because it corresponded with their own experiences and/or stories that they had heard from others. They also learned about how to deal with potentially harmful drinking situations and ensure their own and other peoples' safety in a drinking context. It was also apparent that the interactive delivery style of the adapted version of SHAHRP and the included activities made it easier for Intervention pupils to examine and reflect on real life drinking situations that they might find themselves in, or had found themselves in outside of the classroom; unlike Control participants who reported that their education was age inappropriate and presented real-life situations that were considered unrealistic.

When discussing the 'effects' and 'consequences' of alcohol consumption, Intervention participants predominantly focussed on negative health outcomes. This is to be expected

since in the adapted SHAHRP lessons which deal with this topic, the majority of consequences presented are health related. However, in order to help participants develop a more complete understanding of the 'effects' and 'consequences' of alcohol consumption, education programmes such as the adapted version of SHAHRP should ensure that social and other non-health related consequences of alcohol consumption (e.g. interpersonal relationships, family, finances, studying, public disorder and violence) are also included (Babor et al. 2010). It is also important to consider how programmes such as SHAHRP present the (perceived) positive aspects of alcohol use (e.g. Britton et al. 2004; Peele and Brodsky et al. 2000). Young people report that both positive and negative effects of alcohol are part of the drinking experience, and to some extent both are compatible with pleasurable drinking experiences (Szimigin et al. 2008), particularly considering young drinkers' bias towards immediate outcomes of behaviour (*[name deleted to maintain the integrity of the review process]* 2012). A challenge to programmes such as SHAHRP that are based on a harm reduction philosophy, is to ensure that the risks associated with alcohol use are rationalised, whilst still reflecting the strong motivations of use, such as pleasure, in order to increase the relevance of the programme content to young people's own experiences (Bell 2013; Race 2008). Although acknowledging positively perceived aspects of substance use is an accepted principle in adult harm reduction initiatives, this is often contested with respect to young people's education (Tupper 2008). However, SHAHRP includes skills training components which aim to improve self-efficacy to avoid unhealthy behaviours, but without the consequence of social disadvantage for the young person with their peers. As part of this process, participants may discuss positive aspects of alcohol use, but in the context of recognising and avoiding risky situations. Hence, the curriculum is consistent with traditional prevention objectives (*[name deleted to maintain the integrity of the review process]* 2012), whilst still reflecting the perceived utility and value of alcohol for some young people.

The classroom materials supplied as part of the adapted SHAHRP curriculum helped participants to develop alcohol-related knowledge and received praise for presenting information in an engaging and acceptable way. However, whilst the CD-ROMs were regarded by participants as preferable to the workbooks, their use was sporadic due to differences in school IT provision and teacher motivation. In contrast, Control participants held particularly negative views about materials that accompanied their usual alcohol education. Written materials such as hand-outs did not engage them and were considered to be unstructured and lacking in internal consistency. Although some participants praised the videos they had seen in school for delivering a message of abstinence, they were generally regarded by most as conveying inaccurate and dated information.

During the focus groups, Intervention and Control participants were asked to comment on the ease with which they could discuss the issue of alcohol with their teachers. Intervention participants generally held a more positive attitude towards teacher-facilitated alcohol education than Control participants. Reasons for this difference may be related to the positive views of the adapted SHAHRP curriculum and materials expressed by students, but also the confidence of teachers in discussing alcohol gained through the training they received in order to deliver the programme. As discussed elsewhere (e.g. Fletcher, Bonell, and Sorhaindo 2010; Scottish Youth Commission on Alcohol 2010; Van Hout et al. 2012) teachers who deliver alcohol education as usual report that they lack confidence in their abilities to effectively deliver substance related education, due to inadequate training and support . Participants in the current study indicated that the ease with which they could discuss the issue of alcohol with teachers would be influenced by the characteristics of the teacher, particularly if the discussions involve the disclosure of personal drinking behaviour and experiences, rather than just alcohol-related knowledge. It was considered important that teachers were younger, empathetic, and knowledgeable about alcohol and were able to talk

about personal experience of its use, and could ensure confidentiality. Whilst it is clear that only some of these factors can be developed through formal training, the choice of alcohol educator should be based, at least in part, on the basis of student-teacher relationship (Franklin et al. 2012).

In general, alcohol education as usual was delivered by teachers, although students also occasionally received talks or education from external agencies such as the police and local youth services. Although outside of the current study areas, the English Office for Standards in Education, Children's Services and Skills (Ofsted) reported that 80% of inspected schools had used external agencies to deliver personal and health education, which includes alcohol education (PSHE; Ofsted 2013). Whilst such contributors are valued by pupils, in the majority of schools inspected there was no formal evaluation of the impact on pupils' learning. In the wider literature, evidence is too sparse to draw conclusions on the effectiveness of the use of external providers of school-based alcohol education (Buckley and White 2006). However, review of process evaluation data suggests that such providers may be useful, where their contribution is integrated into broader school health policies, is responsive to pupils' actual rather than perceived needs, and where the quality of delivery is monitored by the school (Buckley and White 2006). External contributors to alcohol education may be valued for their specialist knowledge and novelty, leading to high engagement with pupils, but considering the potential for iatrogenic effects this is not a substitute for delivery of activities of known effectiveness and in concordance with a comprehensive school health policy (Stead et al. 2007; Fletcher et al. 2009; Werch and Owen 2002).

It was clear that despite the supportive and interactive nature of the adapted version of SHAHRP, some pupils were uncomfortable with discussing alcohol in the classroom; a finding in keeping with comments from Control pupils. A classroom in the second and third

year of post primary school education will contain a mixture of abstainers, experimental drinkers, and regular users. In general, considering alcohol use prevalence, regular drinkers would be in the minority, thus making open discussion about personal drinking behaviour particularly more difficult for them. In order to resolve this issue, the participants suggested that the stigma of being a drinker (or indeed of being a non-drinker) could be minimised if the programme were delivered to more integrated class groups (i.e., form group) where closer friendship networks are formed, and also if within the integrated class group, individuals were able to choose their own smaller working groups.

Conclusion

It is clear that Intervention participants regarded the adapted version of SHAHRP as enjoyable and worthwhile. From this perspective, the delivery of the adapted version of SHAHRP should be considered a success. On the other hand, Control participants had an extremely negative view of alcohol education as usual and considered it to be insufficient in content, unstructured, boring, unrealistic and repetitive. This evaluation highlights the poor quality and provision of much alcohol education in some schools and suggests that subject-specific interventions such as the adapted version of SHAHRP could be a viable and effective alternative.

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