

**Evaluation of
GambleAware's
Harm Minimisation
Programme:
Demos and Fast Forward
Projects**

Final Report, September 2018

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The typeface used in this report is Gill Sans MT.

Evaluation of GambleAware's Harm Minimisation Programme Projects:

Demos and Fast Forward

Final Report

Summary

The projects

GambleAware commissioned two educational projects – in England and in Scotland – to find out if young people could be successfully educated about gambling and the harms it can cause, and whether such education would have a preventive effect.

In England the focus was on pupils in secondary schools, Demos wrote a resource containing four lessons for the school PSHE curriculum, plus a teacher booklet and a set of slides; teachers in four schools tried out the lessons with about 650 14-year-old (KS4) pupils. The pupils completed a questionnaire before they had the lessons, and again one year later with the same questions. The questionnaire contained some demographic data, as well as questions about their gambling behaviour and their attitudes and beliefs about it; some gambling-related skills relevant to the content of the lessons were also asked about.

In Scotland, as well as focusing on teachers, informal educators were targeted: Fast Forward, a youth organisation, developed a 'toolkit' containing gambling education activities as well as sample session plans and background information about gambling, and trained professionals who worked with young people in Scotland, (such as teachers, youth workers and the police) to understand gambling-related issues and to use the activities with young people.

The activities

The two resources appropriately addressed relevant gambling-related issues and were suitable for the target groups. Implementation was effectively managed by the two contractors and relevant targets were reached.

The two project implementers conducted internal evaluations. In the Demos project, lesson observation revealed good implementation, although with some challenges, such as some difficult pupil behaviour, some teachers perhaps lacking confidence to teach the lessons, and the constraints of curriculum time. Pupil feedback was mixed: although mainly positive, some pupils could not see the relevance of learning about an issue that they did not feel affected them, but most seemed to enjoy the lessons and some gambling-related knowledge, skills and attitudes seem to have improved.

Using 'before' and 'after' questionnaires with both the 'intervention' group and the 'comparison' group, Demos was able to compare the pupils' reported knowledge, skills, attitudes and behaviour before and after the lessons; it could also compare them with the responses of pupils in four other schools ('control' or 'comparison' schools) who did not receive the lessons. Demos found some differences before and after and between the

groups. Although the findings were not statistically robust, they were indicative of some positive changes in the intervention group, especially in relation to the learning objectives of the lessons. For example, pupils who had received the lessons were more likely than those who had not been taught to be able to describe ways of helping someone with a gambling problem and to know where to go to for gambling help.

It is difficult to show that educating pupils changes their behaviour so, unsurprisingly, *Demos* couldn't show that the behaviours of the pupils who had the lessons had changed as a result, nor whether they had changed more than the pupils who hadn't had the gambling lessons.

Fast Forward had a total of 300 practitioners from 26 of Scotland's 32 local authorities attending their training events; teachers / trainee teachers were the most common profession (83; 28%) followed by youth workers (56; 19%) and a range of other practitioners. An assessment form was administered before the training and a course evaluation questionnaire was administered after each of their training events and followed up with a request for the completion of an on-line survey at three and six months after the training.

The initial assessment showed that most respondents had little knowledge about gambling issues and little confidence in addressing it with young people. The professionals in Scotland found Fast Forward's training useful; almost all (93%) the trainees reported satisfaction with the training and many of them said they intended to implement gambling education; some of those who were enthusiastic about the work used the activities with young people successfully; for example, one trainee adapted the 'toolkit', trained 12 colleagues, and they used it with 16 young people. It is not known if this changed the young people's behaviour, but it probably increased knowledge, developed skills and altered attitudes in relation to gambling.

The external evaluation supported and extended the internal evaluations to provide GambleAware with an independent view of the projects in the context of an understanding of education and prevention of gambling-related harm. This evaluation found that the two projects were well-conducted; they were useful tests of different ways of promoting and supporting gambling education for young people. The resources that were produced will be useful to educators – they are free to download from the *GambleAware* website.

The limitations and complexities

This report of the external evaluation discusses the complexities of gambling education and prevention. Systematic reviews of gambling education and of education about related topics, such as substance misuse or healthy eating, report limited evidence of impact; this is partly because of the unclear aims of many interventions, the delay in the expected outcomes anticipated, and the difficulties of measuring changes in behaviour, or behaviours expected in the future, and attributing them to the intervention. Furthermore, given the many other factors affecting young people's lives, it is unrealistic to expect that short-term school curriculum-based interventions aimed at all pupils will significantly influence behaviour; and unanticipated adverse effects must be guarded against. Such interventions can raise

awareness, improve knowledge, help to change attitudes, and develop relevant skills but may not have a measureable impact on behaviour.

The future

The pointers from these two projects are sufficiently positive to suggest that additional investment in gambling education for young people would be worthwhile. The lessons developed by Demos could be piloted on a larger scale (for example, over some local education authority areas) with this curriculum intervention supplemented with whole-school and community activities (such as work with parents). Fast Forward's toolkit could continue to be promoted in Scotland with more training and additional support for practitioners to develop good practice.

However, the evidence from prevention research in other fields strongly suggests that a multi-dimensional approach to prevention is likely to be more effective than such 'stand-alone', topic-specific interventions. Working with those who are concerned with other risky behaviours (such as bullying, knife crime, etc.) could help young people develop the relevant generic skills (such as identifying risky situations, delaying gratification, and understanding the media) and appropriate attitudes (such as understanding one's own attitude to risk) which are widely applicable to a range of challenges facing them. This could help young people to avoid harm that can result from many different activities, products and situations.

Perhaps as part of a multi-dimensional school-based approach, parents could be targeted, and helped to address gambling, alongside other potentially problematic issues, with their children.

In addition, as well as approaches addressing all young people ('universal prevention') those young people who might be especially at risk of gambling-related harm, or from a range of harms including gambling, could also be focused on.

Since some children start gambling young, primary school interventions which focus on classroom group behaviour could be effective – evaluations show that these not only improve behaviour but have positive effects on a range of risky behaviours.

Planned mass prevention campaigns should link in with, and reinforce, other prevention activities. 'Environmental prevention', targeting regulatory, physical and economic factors, should also be a part of the prevention mix.

A summary of recommendations is now given.

Summary of recommendations

Key recommendations are summarised below, for further details, see later in the report.

1. The projects and the commissioning process

GambleAware should commission external evaluations as early as possible to enable evaluators to have more input into project design.

To aid evaluation, project proposals should be required to present a 'theory of change' and to specify intended project outcomes more precisely.

2. The future of the Resources: sustainability and experimentation

GambleAware should continue to make the two Resources available and promote them. It should support appropriate actions to sustain and develop their use; for example, associated training; sharing and promoting best practice; and promoting the use of the Demos resource in schools in a particular local education authority area (or in an Academy grouping), along with other elements, such as school policy development and work with families.

3. Other work in schools and informal education

The challenges of implementing gambling education within PSHE/CfE must be addressed at the policy level: in schools, with local authorities, and nationally. There may be scope for working with relevant organisations to raise the profile of gambling education.

Continued experimentation is needed. GambleAware could consider developing generic, non-gambling focused interventions; such interventions could be implemented at a younger age (before the start of gambling). Intervention with younger children might involve classroom group behaviour approaches; it might also involve whole families.

In addition, a generic approach, working with at-risk young people, which tackles gambling alongside other risky behaviours, is indicated. GambleAware could also experiment with targeting specific groups which might be at more risk of gambling-related harm.

4. Other prevention activities focused on young people

GambleAware should consider funding projects that address parents and families, most probably as part of addressing other risky behaviours and positive parenting. The upcoming prevention campaign that GambleAware will be leading might provide an opportunity to raise awareness of gambling among parents and help them to have conversations with their children about it.

'Plain English' Summary

What was the question

GambleAware commissioned two projects – in England and in Scotland – to find out if young people could be successfully educated about gambling and the harms it can cause.

What was already known

Some young people gamble and a few suffer harm. They are often ignorant of the risks and they don't know where to get help if they need it. Educators don't know enough about how to educate them: doing it wrongly could be harmful. School curriculum time is limited. Teachers, pupils, and parents generally don't see gambling education as a priority.

What was done

In England, *Demos* wrote some lessons for the school PSHE curriculum; teachers in four schools tried them out with 14-year-old pupils. The pupils completed a questionnaire before they had the lessons, and again one year later. *Demos* compared the pupils' reported knowledge, skills, attitudes and behaviour before and after the lessons; it also compared them with the responses of pupils in four other schools who did not receive the lessons. Some pupils couldn't see the relevance of gambling lessons, but most seemed to enjoy the lessons and some gambling-related knowledge, skills and attitudes seem to have improved. It's difficult to show that educating pupils changes their behaviour so, unsurprisingly, *Demos* couldn't show that the behaviour of the pupils who had the lessons had changed as a result, nor whether it had changed more than the pupils who hadn't had the gambling lessons.

Fast Forward, a youth organisation, created gambling education activities and trained professionals who worked with young people in Scotland, (such as teachers and youth workers) in using these activities with young people. Those professionals found the training useful, and some of them used the activities with young people successfully. We don't know if this changed the young people's behaviour, but it probably increased knowledge, developed skills and altered attitudes in relation to gambling.

What could happen next

The two projects were externally evaluated; they were well-conducted. The resources will be useful to educators – they are free to download from the *GambleAware* website.

This evaluation recommends that *GambleAware* considers commissioning additional education activities to reach more young people. Young people who might be especially at risk could also be focused on. Parents could be targeted, and helped to address gambling with their children. Working with those who are concerned with other risky behaviours (such as bullying, knife crime, etc.) might be more effective in developing those skills and attitudes (such as identifying risky situations, understanding the media, and knowing where to go for help) which could be useful in helping young people to avoid harm that can result from many different activities, products and situations (including gambling). Since some children start gambling young, primary school interventions which focus on classroom behaviour could be effective.

Introduction

This Report is in three main sections.

- The Summary and Summary of Recommendations (above) is for the busy reader who just wants an overview; the 'Plain English' Summary uses simpler language for the same purpose.
- The principal section, starting here, gives the details – but does not repeat the interim report analyses and commentary. Two annexes give further details of the work of the two projects.
- Annex III reproduces the evaluation's interim report of 2017. That report has considerable detail about approaches to gambling education and prevention, including assessments of systematic reviews of gambling education as well as relevant reviews of drug and alcohol education. It should be consulted for those details, although the main section often refers to this annex to indicate where supporting information is to be found.

This external evaluation, for GambleAware, of two gambling education projects produced an interim report in 2017 (see Annex III) which, as well as presenting interim findings, provided a detailed account of approaches to gambling education and prevention and outlined the difficulties and limitations of such interventions. It also gave an analysis of the approach that the two projects were taking, gave an assessment of the content of the materials that the projects were piloting, and made some interim recommendations.

The two projects were supported by the external evaluation in conducting their internal evaluations. This report takes account of the final reports of the two projects as well as work carried out as part of the external evaluation.

The implementation of these two projects took place in the wider context of a suite of harm minimisation projects which GambleAware commissioned. As well as providing 'an independent assessment', of the work of the two projects, the external evaluation was to provide for: 'a better informed and improved understanding of the nature and characteristics of gambling-related harm and the scope for its measurement'; develop 'evidenced approaches to reduce the impact of gambling-related harm, particularly on vulnerable populations'; and assess 'the likely scalability ... including any implications for the measurement of impact for wider harm minimisation initiatives.'¹

¹ RGT Evaluation Tender document section 4.4

Why have an external evaluator?

The two projects both conducted their own evaluations, so why was there a need for this external evaluation? Part of the reason is summarised by the *Findings* project in a piece titled 'Advocate and Examiner':

'... [there is a] conflict of interest between the developer of a programme whose motivation may be to show it works and promote its dissemination – perhaps for laudable reasons to do with advancing public health – and those of an evaluator, whose motivation should be to 'stress-test' the intervention by subjecting effectiveness findings to rigorous scrutiny – also for the laudable reason of not wasting resources on unproven interventions. If it survives this scrutiny, then the intervention has a strong claim to evidence-based status. Claims which emerge from an attempt to prove rather than disprove effectiveness risk being based on a less rigorous examination more friendly to the intervention being tested.

'... researchers with an interest in a programme's success [may] record more positive findings than fully independent researchers. Possible reasons include implementation quality unachievable without the developer's inputs, transmission of optimistic expectations to the interventionists and in turn to their pupils or clients, and the relaxing of accepted research practices intended to prevent bias and minimise the risk of falsely declaring an intervention a success.'²

The job in this external evaluation was to help to improve the internal evaluations and to cast a critical and independent eye over their findings. The interim report (see Annex III) details a number of the 'formative' evaluation interventions (i.e. evaluation while the projects were active) as well as detailed analysis of the projects' 'products' (the draft educational resources). This Final Report also considers the outcomes of the projects: that is, a 'summative' evaluation.

The projects

The two projects aimed to find out if young people could be successfully educated about gambling and the harms it can cause, and whether these harms could be prevented.

In England, the organisation, Demos, created a booklet of four lessons suitable for the school PSHE curriculum; they were tested by teachers with more than 600 Key Stage 4 (14-year-old) pupils in classes in four schools ('experimental' or 'intervention' schools) selected (non-randomly) by Demos to be at least partly representative of different types of schools in the UK,³ although they did not include any inner-city schools.⁴ The pupils completed a

² Side panel in *Findings* http://findings.org.uk/PHP/dl.php?file=Spoth_R_25.txt&s=dy (accessed 11-1-18)

³ It was therefore a cluster sample; in other words, it was not individual pupils who were sampled, but individual schools (forming 'clusters' of pupils).

⁴ they were in the counties of Cheshire, Gloucestershire, Hampshire and Wiltshire

questionnaire before they had the lessons, and again one year later with the same questions. The questionnaire contained some demographic data, as well as questions about their gambling behaviour and their attitudes and beliefs about it; some gambling-related skills relevant to the content of the lessons were also asked about. Demos was thus able to compare the pupils' reported knowledge, skills, attitudes and behaviour before and after the lessons; it also compared them with the responses of more than 600 pupils in four other schools selected to have similarities ('control' or 'comparison' schools) who did completed both questionnaires but did not receive the lessons.

In Scotland, as well as focusing on teachers,⁵ informal educators working with young people were targeted: Fast Forward, a national youth organisation, developed a booklet of 24 gambling education activities,⁶ and it trained professionals who worked with young people in Scotland, (such as teachers, youth workers and the police) about gambling-related issues and how to use these activities with young people. Three hundred practitioners were reached, in 26 of Scotland's 32 local authorities; teachers / trainee teachers were the most common profession (N=83; 28%) followed by youth workers (N=56; 19%) and a range of other practitioners. An assessment form was administered before the training and a course evaluation questionnaire was administered after each of their training events and followed up with a request for the completion of an on-line survey at three and six months after the training. The initial assessment showed that most respondents had little knowledge about gambling issues and little confidence in addressing it with young people. Almost all (93%) the trainees reported satisfaction with the training and many of them said they intended to implement gambling education.

The two resources appropriately addressed relevant gambling-related issues and were suitable for the target groups. Implementation was managed effectively by the two contractors and relevant targets were reached.

The interim report contained details and critical commentary on the two resources and the projects' implementation; the reader is referred to Annex III for further details.⁷ The following section focuses on the results.

The results: Demos

Demos' internal evaluation was ambitious; the quasi-experimental intervention had before and after (around 12 months later) questionnaires for both the 'intervention' group and the 'comparison' group (for the topics covered, see box). There were also five lesson observations (at least one class in the four intervention schools was observed) and focus groups took place with some of the teachers and some of the pupils in each of the four schools.

⁵ The school curriculum in Scotland (the 'Curriculum for Excellence') is rather different to the English system – for details, see Annex III (ppA39-40)

⁶ The revised version can be accessed for free at: <http://fastforward.org.uk/gamblingtoolkit/> ; Fast Forward are monitoring web traffic to this link.

⁷ see especially pp A33-46

Demos had hoped to undertake a longitudinal analysis looking at changes in individual pupils by matching their before and after questionnaires. This would have given greater statistical power which, it was hoped, would thereby be able to demonstrate change in this relatively large sample of pupils. Unfortunately, the matching process did not work too well so the main analyses that Demos carried out were based on the group comparisons before and after the intervention, and compared with the before and after results of the pupils in the comparison group who did not receive the intervention.

The Demos questionnaire

Cover sheet: from which the pupils created a code which was intended to enable before and after questionnaires to be matched.

Section 1: Questions about the pupils (gender, age, ethnicity, household composition, smoking and drinking).

Section 2: Questions about their experiences of 16 different gambling types (lotto, bingo, etc.), plus questions about attitudes to gambling (such as 'gambling is an easy way to make money') with a five-point agree-disagree scale.

Section 3: Ten agree-disagree statements about their perceived possession of gambling-related skills (such as 'I have techniques to manage impulsive behaviour').

Section 4: Two questions about gambling by other people: their parents or grandparents and the proportion in the population who gamble (the 'normative' question).

Section 5: Eight questions making up the DSM-IV-MR-J⁸ measure of 'problem gambling'.

The method of comparison used was 'difference in differences'.⁹ This means that, for relevant questions on which one might expect changes in the answers before and after the intervention, Demos looked at the differences in the responses of the intervention and the comparison group and subtracted one from another.¹⁰ For example, Demos' report states

⁸ A standard gambling harm clinical screen adapted for use with young people

⁹ 'Difference in differences (DID...) is a statistical technique used in ... the social sciences that attempts to mimic an experimental research design using observational study data, by studying the differential effect of a treatment on a 'treatment group' versus a 'control group' in a natural experiment. It calculates the effect of a treatment (i.e., an explanatory variable or an independent variable) on an outcome (i.e., a response variable or dependent variable) by comparing the average change over time in the outcome variable for the treatment group, compared to the average change over time for the control group.' *Wikipedia* (accessed 19-02-18)

¹⁰ In the analyses using the cross-sectional data, an 'intention to treat' approach was used; i.e., it included all young people in the treatment schools (whether they received the 'treatment' (the lessons) or not – some pupils would have been absent for some lessons, for example). This pragmatic approach – treatment effect is averaged over both 'treated' and 'non-treated' pupils in the intervention schools (it would have been complex to identify just those pupils who received all the lessons) – is a conservative way of analysing the data, which

that: 'For knowing where to go to talk about gambling problems there was a net 18 per cent increase.'¹¹ The table on page 57 of the Demos report shows how this figure was obtained; the extract in the table below gives the figures. About a third (36%) of the participant group, when asked in the questionnaire administered before the intervention, agreed that they 'would know where to go to talk about problems to do with gambling'; a similar proportion of the comparison group (34%) agreed. Post-intervention, the comparison group (who, it will be recalled, had not received any intervention) reported roughly the same level of confidence as previously (it had declined by 0.67%), while the participant group reported much greater confidence – 55 per cent: a difference, compared to their pre-intervention report, of almost 18 per cent. Subtracting this from the -0.67 per cent difference found in the comparison group, gives 18.48 per cent – that figure is the difference in differences. Since one of the aims of the intervention was to help the pupils to 'know where to go to talk about problems to do with gambling' and this was explicitly taught to the intervention group (and it is unlikely that the intervention group had any other intervention that would lead to this change), it is reasonable to attribute the difference to the intervention. Demos reports this as a statistically significant result.

Table I Extract from Demos report: table on learning objectives

Learning objectives	Comparison			Participants			Difference in difference
	Pre	Post	Difference	Pre	Post	Difference	DiD
I would know where to go to talk about problems to do with gambling	33.87%	33.21%	-0.67%	36.81%	54.62%	17.81%	18.48%

Of course, this would only be a correct inference if the two groups were reasonably similar, that the change being looked was an expected outcome of the intervention, and that the statistics were carried out correctly. There are also other considerations, for example the expectations of the subjects, who know that they have received gambling education and, after it, may be more likely to report that they know things related to it.¹² If this was the case, one could expect that they would report greater knowledge, etc. on all the learning objectives, but of the ten items asked about only four are reported statistically significant.¹³ Such data provide some confidence that the statistically significant findings are *actual* changes, and not artefacts.

may underestimate the changes over time between the intervention and comparison schools, Item-level non-responses had these cases dropped from those analyses relating to those items.

¹¹ Demos Report to GambleAware page 33

¹² respondents to questionnaires like to please and tend to give answers that they think are favourable.

¹³ the other three are: 'I can describe what delayed gratification is'; 'I can describe ways to help someone if their gambling behaviour worried me'; 'I understand the techniques used by the gambling industry to persuade people to gamble'.

However, there are considerable limitations to the data that Demos present, which are acknowledged in its report. As a consequence, the findings are indicative rather than conclusive. Demos acknowledges this, and writes:

'Where our survey results show promise, our intention is not to over-claim. It is worth reiterating that there is a severe limit on what can be attributed to any short intervention (especially when its success may rest on being part of a larger curriculum); there are multiple and complex intervening variables at play in education interventions, making any school-based evaluation essentially different from clinical experimental settings; and there are specific challenges for our own evaluation approach – particularly the lack of randomisation and the observed differences at baseline between participating and comparison group pupils.'¹⁴

Annex I to this report contains further detailed comments on the quantitative parts of Demos' report. These comments raise some detailed questions about the data which underscore the need for caution in interpreting these findings.

As well as the quantitative data, the Demos report contains detail about the qualitative findings from their internal evaluation. Lesson observation revealed good implementation, although with some challenges such as difficult pupil behaviour in some cases. Some teachers lacked confidence in delivering the material, and there was (as always with PSHE) limited time available in the curriculum. Partly for this reason, the four lessons included in the pilot have been reduced to three lessons in the published resource.

Pupil feedback was mixed: but most seemed to enjoy the lessons. Some pupils said they were better informed, and remembered key concepts from the lessons; they reported improved gambling-related knowledge, skills and attitudes as well as knowing how to help a friend or family member with gambling-related problems. The interactive aspects of the lessons were engaging for many pupils.

Although some pupils could not see the relevance of learning about gambling and felt that it did not apply to them, many liked the broad approach to risk-taking and not focusing on gambling alone. Those teachers who were able to develop these aspects of the lessons gave more successful lessons using the materials. In revising the materials following the pilot, Demos has included examples (such as from social media and gambling) that may be more familiar to pupils and will therefore perhaps feel more relevant to them.

The results: Fast Forward

Fast Forward's internal evaluation was simpler, as was appropriate for an intervention that sought to encourage practitioners to address gambling through the provision of resources and associated training, but which did not prescribe how it should be carried out.

¹⁴ Demos Report page 32

Fast Forward's draft resource contained 24 activities forming a pick-and-mix collection appropriate for different learning contexts. To access the resource, practitioners had to attend a free training event.¹⁵ During the two years of the project, 300 practitioners from 26 of the 32 Scotland's local authorities attended. A needs assessment completed by the trainees prior to the training found that few had confidence in their knowledge of gambling, or of how to address it with young people.

A post-training evaluation questionnaire produced very positive feedback on the course. Data provided by Fast Forward have been analysed and some results are at Annex II. Satisfaction with the training was very high. For example, more than two-thirds (70%) of respondents, when asked what else could be done to make the session better, said that they wouldn't change anything – despite being presented with a list of possibilities. Participants in the training reported learning about gambling and its potential effects on young people: almost four-fifths (79%) agreed they knew 'loads more', and three-fifths (60%) felt they had 'enough information to be better able to recognise the signs of problem gambling'. Almost three-quarters (74%) reported being 'confident' or 'fully confident' in their ability to provide gambling education to young people.

Follow-up at three and at six months gained feedback on how the resources had been used; Annex II has details of the responses. Some of those who were enthusiastic about the work used the activities with young people successfully; for example, one trainee adapted the 'toolkit', trained 12 colleagues, and they used it with 16 young people. In summary, 48 attendees gave feedback at three months and 21 at six months. Of the 21 at six months, nine reported using the resources (five of these in a secondary school setting). They had been used predominately with young people over the age of 11 years; between a half and two-thirds of contexts involved young people over 16 years.

The resource includes some suggestions for putting together sessions (of differing length and for different audiences) using selected activities in the toolkit. Some practitioners who used the resources made their own adjustments. For example, one of the Fast Forward respondents reported:

'I have changed session plans to suit the environment I deliver in as some of the sessions would be a little bit lengthy. Some of our young people do not have the capacity to sit for a long period of time but we also have certain time slots we can deliver within so I have adapted the session plans to suit our needs.'¹⁶

About two-thirds of the reasons given for not using the resource were that although they intended to use it they had not yet had a chance. One must take this response 'with a pinch of salt' and anticipate that most of those respondents will not 'get around to' using it.

¹⁵ '...half-day CPD sessions, available for free to practitioners who worked in Scotland supporting young people's health and wellbeing; teachers' training sessions, delivered to individual schools and lasting on average 45 min.' (Fast Forward final report page 1)

¹⁶ three-month follow-up survey

These responses were predominately from the trainees who attended the 'standard' course. But because of the low recruitment of teachers to those courses (despite considerable efforts by Fast Forward), towards the latter part of the project Fast Forward modified its approach in order to recruit more teachers by offering short 'twilight' sessions for teachers (delivered, mainly, in individual schools). Ultimately, this strategy was successful: of the total of 300 practitioners attending the teachers / trainee teachers were the most common profession (83; 28%) attending (followed by youth workers (56; 19%) and a range of other practitioners).

However, the course offered to teachers was considerably shorter – only 45 minutes in length, so there was not time to include all the elements of the training: most of the missing post-training evaluation forms are ones from teachers; so, unfortunately, less is known about their experiences of the training and what they did subsequently.

But it can be concluded that the professionals in Scotland found the training useful; some of those who were enthusiastic about the work used the activities with young people successfully. It is not known if this changed the young people's behaviour, but it probably increased knowledge, developed skills and altered attitudes in relation to gambling.

Fast Forward's three- and six-month follow-up on-line questionnaire requested respondents to provide their contact details if they were willing to be contacted by the external evaluator; 20 did so and ten telephone interviews were achieved. See the second part of Annex II for full details of these interviews, with extensive quotations from respondents, which are now briefly summarised.

All respondents were very positive about the resource and almost all of them had used it. One of the two people who had not used it said their job did not put them in contact with young people but they had alerted other members of their team to its existence and it had been used by some of them; others had also disseminated information about the resource to other staff in their organisation. Another respondent trained their staff to use the resource; and one teacher not only used the resource in two different workplaces, but told their partner, also a teacher, who then used it in their school.

The toolkit had been used mainly with groups, but also, in a couple of cases, on a one-to-one basis. It had been used with teenagers of different ages, from 12 to 13-year-olds to 16 to 18-year-olds. In many cases the gambling intervention was a 'one-off' (although often part of an overall programme covering other topics such as drugs and alcohol), but some used it more intensively, for example one respondent reported using it with two groups of 16 to 18-year-olds in eight one-hour sessions, and another used it within a once-a-week afternoon programme covering a variety of topics. Some respondents adapted it to the needs of their group. It was successful in raising young people's awareness of the issues around gambling:

'When first I mentioned it, it was "no, no, no, we don't have a gambling problem" but later on it's "alright, OK" [they would realise and agreed]...' (Youth Worker in prison)

Respondents found the material appropriate and easy to use; several different parts of the toolkit were noted as being helpful, for example:

'One of the best things for getting the message over to young people is the case studies; the young people we are working with here all love a story, that's a good way of getting the message across...' (Resource Worker)

Although there was an indication that the activities were perhaps more appropriate for younger teenagers:

'For an older group, I found some of the activities were a bit repetitive and the young people switched off.' (Community Education Worker)

One respondent pointed out how it had enabled them to get the information out to a wide group of colleagues distributed over a large rural area:

'I cannot myself cover gambling in a huge area, you need partners on board and so for me enabling them to get that toolkit to be able to use the resources with their ... groups it enables them to bring that subject in their arenas, where I wouldn't be able to.' (Health Improvement Officer)

Several people mentioned that the training had raised their awareness of gambling-related issues; 'shocking findings', was one response. Another said:

'It gave me an insight into some of the issues and into some of the causes ... I have to say that it was eye-opening; it wasn't an area I'd delved into very much until this came up and I was quite surprised by a lot of the content.' (Health Improvement Officer, NHS)

It was thought to have been an excellent training that raised their awareness about gambling harm issues as well as helping them to use the resource:

'...if it weren't for the fact that I attended that training workshop, I probably wouldn't have tackled gambling because it is not something, you know, I personally indulge in and have a lot of personal experience of, but with having those resources it has given me the opportunity to improve my knowledge and also, I suppose, think about it in the wider aspects...' (Community Education Worker)

So there was a lot of support for the usefulness of the training as a way of raising awareness of the issue of gambling and for creating motivation to use it. One respondent pointed out the necessity of keeping it in people's minds:

'I've forwarded it to a couple of schools and send the links on... just to remind people that here is a tool; and school staff do move around a fair bit ... we had two schools participate in the training session we did but even then if they move on, on to other schools the schools often forget that they have got that resource to hand; they need reminding that they have got that resource to hand. And now that it's

available online as well without having to undertake the training that's really helpful, so, yeah, we got out in the schools' newsletter just last month.' (Health and Wellbeing Specialist, NHS)

Most respondents saw gambling as fitting in with other aspects of their work with young people as part of a generic approach to, for example, health and well-being or keeping safe:

'One of the things we have always been encouraged to do is to be generic in our approach; the days of health improvement, going in and giving a wee talk about washing your hands, those days are getting well behind us and certainly it is more about what are the issues in our community because obviously that impacts on people. ... I think gambling fits very comfortably, it needs to be incorporated, it is not an added extra.' (Health Improvement Officer, NHS)

Several people felt that gambling prevention should be focused not just on young people but on their parents and on others in the community. One respondent was doing something to reach and inform parents:

'...there is a plan to have a parents' evening to let parents know what it is that we deliver in the programme that we call "Big World" which is a programme we deliver about risks and consequence.' (Health Improvement Officer, NHS)

Was there a role for gambling harm prevention in their programmes in future? The answer was 'yes', although (perhaps realistically) not as a 'major issue':

'I think, absolutely, there definitely is a place, for me, for gambling and if we are looking ... at some of the repetitive behaviours ... then gambling is something that definitely needs to remain on the list of things that are covered; it might be just be as a one-off PSE session in formal education or a short workshop ... outside the formal curriculum. I definitely think we should continue to champion it being broached with young people but staff tell us it is not a major issue; we can do a little bit on it...' (Health Improvement Specialist, NHS)

The interviewees were asked about what support would be helpful to them in the future, and specifically whether a network or good practice support would be welcomed. They generally thought that it would be, although most emphasised the limited time they had available for such professional development, and most favoured on-line support, perhaps with additional but infrequent face-to-face support. To continue the work, the resource would need to be kept up-to-date, and revised to include new and emerging issues.

It was clear that the training and the availability of the toolkit had led to some interesting gambling harm reduction / prevention interventions with young people in various contexts. To a degree, it appeared to be sustainable, in that one could expect that some of those practitioners who had used it were sufficiently enthusiastic to continue to use it, and to introduce it to their colleagues; but some nudges to do that would be helpful, as well as ongoing supportive professional development to further improve the responses. Keeping it

on the agenda was difficult and needed attention. There was also the need to develop the evidence base that gambling harm was occurring in the client group. As one respondent put it:

‘Because people keep telling us that there’s a problem with gambling but we don’t actually know that, we really need to get that information before we can act, and we don’t have that information, it is purely anecdotal at this moment in time and certainly the people that are on our risky behaviours group are no [sic] aware of any particular issues.’ (Health Improvement Officer, NHS)

Commentary on the results

The two projects were well-executed, and did what they said they would do. The two draft resources (which for the interim evaluation report were looked at in detail and reported on¹⁷) were suitable for their purposes. Both draft resources were modified as a result of feedback during the project (the Demos resource was reduced from four lessons to three).

Taken together, the two projects provided interesting contrasting approaches. Demos focused on having teachers educate pupils within the PSHE curriculum, embedding a small set of four gambling-related lessons – ideally conceived as a ‘programme’ where all four one-hour lessons would be taught¹⁸ – into the existing curriculum, making the material compatible with other PSHE topics by addressing broad issues (such as media literacy, and delaying gratification). The resource was seen as ‘stand alone’ with no teacher training necessary, although a teacher booklet gave extensive help with delivery.

Fast Forward’s approach was rather different. It aimed at the informal education sector as well as schools. Its resource was a pick-and-mix collection of activities of various lengths with some suggested sessions plans utilising some of the activities. The activities, while taking account of Scotland’s Curriculum for Excellence and its youth work outcomes, were mostly gambling-focused. To obtain the resource required attendance at a half-day training (or, later in the project, a 45-minute session for teachers).

Demos’ internal evaluation was designed to measure changes in pupils’ knowledge, skills, attitudes and behaviour compared with pupils who did not receive the intervention, while Fast Forward’s evaluation was less ambitious and focused on participant reports of satisfaction and their accounts of their implementation action after attending the training.

As discussed in detail in the interim report (see Annex III¹⁹) prevention efforts through the school curriculum aimed at all young people show promise if the lesson content and delivery method is appropriate and other factors are in place, such as school policies. It is also

¹⁷ see Annex III – Demos’: A35-37; Fast Forward’s: pp A39-42

¹⁸ the final version has reduced the number of lessons to three

¹⁹ see the section ‘The evidence about ‘universal’ interventions’, starting on p A8

important that educational interventions do not have a negative impact – there have been examples of this in the substance misuse prevention field (for example, ex-drugs users lecturing pupils); the two resources have avoided this risk. Therefore, the Demos and Fast Forward interventions had a good chance of having an impact. But measuring that impact is not easy – see Box.

Measuring Impact

Measuring the impact of gambling prevention interventions is not easy. The usual reasons apply, such as the minor nature of the intervention compared with everything else going on in a young person's life and the long follow-up period necessary to measure impact at a later age when the problematic behaviour might occur. In addition, with gambling prevention, it is especially difficult because, as Keen *et al* put it: '...relatively small numbers of youth gamble at problematic levels and therefore large sample sizes are needed to detect small but significant reductions in gambling problems'²⁰ – something that the Demos evaluation demonstrated.

Surrogate outcomes are therefore generally used as a proxy for impact. These might include increased knowledge about gambling, improvement in relevant skills thought to be connected with gambling (such as risk assessment), and attitudes towards gambling and gambling-related issues (such as appetite for risk, or one's approach to money). But the links between these outcomes and any behavioural impacts may be tenuous.

There are also conceptual difficulties. For example, it is difficult to disentangle the contributions of the different components of an intervention to the outcome. And what would be an appropriate behavioural outcome? For example, some studies have measured gambling expenditure as a proxy for gambling harm, but this is problematic.

Measurement difficulties can perhaps be more easily overcome, but should not be overlooked; for example, the Demos questionnaire asked pupils about engagement in 14 different gambling activities (plus 'any other gambling'): on these questionnaire items, around two-thirds of the sample reported that they hadn't gambled in the past 12 months; but, later in the questionnaire, on the DSM IV MR-J questions asking about gambling,²¹ more than four-fifths reported not gambling in the same time period. This is a large discrepancy: question wording, item order and context can make a huge difference to respondents' answers.

Then there are the analyses and the use of statistics, which can also hold traps for the unwary.

²⁰ Keen B Blaszczynski I A and Anjoul F 2016 'Systematic Review of Empirically Evaluated School-Based Gambling Education Programs' *Journal of Gambling Studies* DOI 10.1007/s10899-016-9641-7 (Online in 2016, published in journal 2017)

²¹ The DSM IV MR-J measures 'problem gambling'. Only a very small proportion of young people would score as problem gamblers on this screen: Gambling Commission surveys estimate that around 0.9 per cent of children aged 11 to 15 are problem gamblers (Wardle H (forthcoming) 'Trends in children's gambling').

Effective gambling harm prevention

As discussed at length in the interim report, there is good evidence from the substance misuse field about those interventions that show promise – and those that could be counterproductive. Some of these are school-based, but school-based prevention interventions raises some difficult issues – see Box.

School Education

It seems reasonable to assert that children have a right to information about issues that affect them. Gambling is one of those activities in society which, although mainstream and enjoyed by many, carry risks and therefore, children need to be informed about. Is it a job for schools? Some would argue that the curriculum is already too burdensome. But if schools are to tackle the topic should they go beyond information-giving?

It's clear from experience with other potentially risky activities that information alone is insufficient to have impact; young people need opportunities to explore their attitudes and develop their skills as well as improving their knowledge. There is no guarantee that such education will help them to handle real-life situations, and it is unlikely that an inevitably small and time-limited intervention will have a lasting impact, but at least schools will have tried to equip them with a 'tool-kit'.

Given the pressure that schools are under, is there room in the curriculum for an effective gambling intervention? A conclusion from the review of the research included in the interim report was that addressing issues such as these in the classroom requires sufficient time and follow-up, and, given the competing (and higher profile) issues clamouring for attention, probably more time than would ever be available.

This indicates that generic interventions addressing a range of problematic issues might be more realistic – because the time available for them collectively would be greater and thereby the education more likely to have an impact. The evidence also suggests that this might be more effective because the issues addressed (for example, risk reduction skills) are applicable to a wide range of tricky situations, and are more appropriate (since at-risk individuals often exhibit more than one problematic behaviour).

The latter point is a good argument for *selective interventions* aimed at young people identified as being at risk of gambling-related harm. Since most young people will not gamble – and most of those who do so come to no harm – why address all young people? Part of the answer is that we do not know in advance who might develop problems; furthermore, targeted interventions risk labelling and stigmatising their subjects.

There should be room in schools for both *universal* (for all young people) and *selective interventions* that address a range of problems. But school curriculum interventions need to be supported by school policies, and by pastoral care. Work with parents and families is also an important part of the 'mix' of prevention interventions.

Figure 1 has details on the effectiveness of different types of prevention in different contexts.

As well as schools, there are many other contexts in which prevention activities can occur. How effective are these and how do they compare with school-based prevention? In recent years, there has been a developing consensus on what works and what doesn't work in substance misuse prevention. While this information does not 'read across' directly to gambling harm prevention, there are many similarities; this issue was discussed in detail in the interim report where some of the systematic reviews on drug and alcohol education were looked at (Annex III pp A8 ff).

The interim report also included much detail about the evidence for different kinds of approaches to gambling education and their effectiveness.²² This evidence is neither extensive nor conclusive. The interim report was critical of some of the conclusions of the (only) two systematic reviews of gambling education initiatives.

As the interim report discussed, there is a great deal of evidence from other fields – especially the nearest-comparable area of alcohol education and prevention, and other areas, such as substance misuse prevention and the prevention of obesity and promoting healthy eating.

On the latter, there is some recent²³ evidence from the WAVES study ('West Midlands ActiVe lifestyle and healthy Eating in School'): a 12-month intervention which encouraged healthy eating and physical activity.²⁴ This included daily additional 30-minute school-time physical activity, a six-week interactive skill based programme, and school-led family cooking. Systematic reviews had suggested that there was evidence of effectiveness of school-based interventions in preventing childhood obesity. But this RCT²⁵ within the Medical Research Council framework for complex intervention development and evaluation using a large sample, found no statistically significant differences between experimental and control groups in their mean BMI z score,²⁶ or on anthropometric, dietary, physical activity, or psychological measurements. The authors report that another recent study, AFLY5 ('Active for Life Year 5'), was more curriculum-focused but also found no evidence of an intervention effect on behavioural or weight outcomes at 12 months.

The authors' interpretation of their findings is worth quoting:

'Although fidelity of implementation for the WAVES study intervention programme was reasonably high overall, no school delivered all components completely per protocol, and a few schools failed to deliver some or all of the components. This may have attenuated any effect. In addition, owing to competing demands on teachers, components that required greater teacher input tended to be less well

²² see especially the section 'The evidence from gambling education initiatives: two systematic reviews' ppA23ff
²³ (since the submission of the interim report of this evaluation)

²⁴ Adab P et al 2018 'Effectiveness of a childhood obesity prevention programme delivered through schools, targeting 6 and 7 year olds: cluster randomised controlled trial (WAVES study)' BMJ 2018; 360 doi: <https://doi.org/10.1136/bmj.k211> | <http://www.bmj.com/content/360/bmj.k211> (accessed 12-02-18)
 for a journalistic account see: https://www.theguardian.com/society/2018/feb/08/schools-are-not-the-answer-to-childhood-obesity-epidemic-study-shows?CMP=Share_AndroidApp_Gmail (accessed 12-02-18)

²⁵ cluster randomised controlled trial

²⁶ Body mass index z-scores are measures of relative weight adjusted for child age and sex.

implemented and this was the main explanation for differences in fidelity between components. This suggests that delivery of a more intensive teacher led intervention in a school setting would not be feasible without additional resources. Educational and experiential interventions of longer duration that are embedded within a whole school setting are likely to be prohibitively costly and complex to evaluate using clinical trial methods. ...While school is an important setting for influencing children's health behaviour, and delivery of knowledge and skills to support healthy lifestyles is one of its mandatory functions, wider influences from the family, community, media, and the food industry must also be considered. The qualitative data from teachers and parents, collected as part of our process evaluation, support the possibility that these wider influences have a greater effect than any school based intervention. A metasynthesis of qualitative studies exploring the role of primary schools in preventing childhood obesity highlighted the need for schools, parents, and government to work together to promote healthy lifestyles in children and to support activities in the school setting.²⁷

These are important points – to summarise:

- programme fidelity is difficult to achieve, even in an experimental setting
- the more one demands of teachers, the less programme fidelity will be achieved
- intensive interventions require significant additional resources
- while school have a role in prevention, wider influences are crucial and may have a greater effect
- therefore, schools and other bodies need to co-operate more effectively.

The implications for gambling education are clear. Modest interventions such as the two projects evaluated here are unlikely to achieve significant changes in pupils' risk of gambling harm, but a more intensive intervention would be unlikely to be implemented with fidelity without significant extra resources. A future intervention programme should test approaches which integrate non-school elements.

One helpful overview of the effectiveness of a range of substance misuse prevention approaches is a document from Public Health England,²⁸ which includes a chart from a UNODC²⁹ document³⁰ – this is adapted here as Figure 1. It shows the strength of evidence (more stars are better) for different kinds of prevention approaches through the lifecourse over three domains: Family, School, and Community, distinguishing between universal and selective prevention. As can be seen, PSHE-style school education is considered effective; but other components have similar or greater effectiveness.

²⁷ Adab P et al 2018 *op cit*

²⁸ PHE 2015 *The international evidence on the prevention of drug and alcohol use: summary and examples of implementation in England* Public Health England

²⁹ United Nations Office on Drugs and Crime

³⁰ UNODC 2015 *International Standards on Drug Use Prevention* United Nations

Figure I UNODC Prevention Standards for substance misuse across the lifecourse³¹

Indication of efficacy: * Limited ** Adequate *** Good **** Very Good ***** Excellent

	Prenatal & infancy	Early childhood	Middle childhood	Early adolescence	Adolescence	Adulthood
Family	Prenatal & infancy visitation (Selective) **		Parenting skills (Universal & selective) ****			
	Interventions targeting pregnant women with substance abuse disorders (Selective) *					
School		Early childhood education (Selective) ****	Personal & social skills (Universal) ***	Prevention education based on personal & social skills & social influences (Universal & selective) ***		
			Classroom management (Universal) ***	School policies and culture (Universal) ***		
			Policies to keep children in school (Selective) **			
			Addressing individual vulnerabilities (Indicated) **			
Community				Alcohol & tobacco policies (Universal) *****		
	Community-based multi-component initiatives (Universal & selective) ***					
				Media campaigns (Universal & selective) *		
				Mentoring (Selective) *		
					Entertainment venues (Universal) **	
					Workplace prevention (Universal, selective & indicated) **	
				Brief intervention (Indicated) ****		

It is worth adding that there is a risk of negative unintended consequences from ill-thought-out, non-evidence-based interventions. In the field of substance misuse, a well-documented

³¹ Adapted from: UNODC; reproduced in PHE 2015 *The international evidence on the prevention of drug and alcohol use: summary and examples of implementation in England* Public Health England

'boomerang effect' can occur where the intended message is rejected by the target audience, who react in an opposite way to that intended.³²

Another piece of recent evidence highlighting the importance of carefully assessing what actions have the most preventive effect is in the analogous field of alcohol harm reduction. A report by the Institute of Alcohol Studies (IAS) examined various reasons suggested for the observed reduction in young people's drinking in recent years. It concluded that only two of the seven possible reasons examined were supported by evidence; these were: the declining affordability of alcohol, and better parenting. In relation to the latter, the *Economist* is quoted: 'A combination of government initiatives, technology, social pressure and reaction against the follies of the past has improved parenting dramatically'.³³ The IAS comments: 'Parents are older, have fewer children, devote more time to childcare and face more exacting social expectations of their parenting. ... There has been a consistent long-term increase in the level of parental monitoring in the UK since the 1980s.'³⁴

This is further evidence in favour of a multi-faceted approach to prevention in which schools have a role, but in combination with other 'actors' – and especially parents.

As described in the interim report,³⁵ the Strengthening Families Programme encourages enjoyable parent-child interaction (e.g. through play), setting limits and discipline; it shows promising results.³⁶ The advantage of generic approaches addressing a range of issues and having multiple outcomes is that rather than focusing just on gambling harm, or alcohol misuse or some other single problem, they deal with the coexistence of different problems; this is more realistic, as such problems are often intertwined. Furthermore, it should be more cost-effective.

Two main reasons why such programmes have not been more widely carried out are:

- (i) that funders of prevention programmes – like GambleAware – are focused on specific topics, and it takes a bold step to pool resources with others and address factors not directly connected with the topic;

³²Ringold D 2002 'Boomerang effects in response to public health interventions: some unintended consequences in the alcoholic beverage market' *Journal of Consumer Policy* 25: 27–63
<https://link.springer.com/article/10.1023/A:1014588126336> (accessed 3-3-18)

³³ quoted in IAS Report

³⁴ Bhattacharya A 2016 *Youthful Abandon: Why are young people drinking less?* IAS 30th page

³⁵ see Annex III pp A19-20

³⁶ The ACMD Report describes and comments: '... family skills programme that, in different forms, is suitable for high-risk and universal populations. The programme consists of weekly sessions, lasting two to three hours. For the first hour, parallel groups of children and parents develop their understandings and skills led by two parent and two child trainers. In the second hour parents and children come together as individual family units to practise the principles they have learned. The remaining time is spent on family logistics, meals, and other family activities. There is good evidence that participation leads to improved family, parental and child functioning and of a reduction in substance use initiation and associated problems and a reduction in its severity.' ACMD 2015 op cit p20

(ii) a higher standard of evidence of effectiveness is needed to convince funders of the value of multi-dimensional approaches but the evidence is difficult to amass because outcome evaluation of such approaches is especially difficult.

It would be good if these barriers could be overcome. It is therefore helpful to look briefly at the evidence and some current practice around multi-component approaches.

An increasingly influential approach focuses on addressing 'adverse childhood experiences' – and is therefore called 'ACE'. ACEs are traumatic experiences occurring before age 18 years; they include verbal, mental and physical abuse, parental alcoholism, drug use and domestic violence. A study in Wales asked about 11 different ACEs and found that half of the adults surveyed had experienced at least one ACE; 14 per cent had experienced four or more.³⁷ These experiences lead to an increased risk of health-harming behaviours, poor mental well-being, and early development of chronic disease. It may be that susceptibility to gambling-related harm is also increased – although this has not been researched, it is known that harmful gambling can be part of a constellation of harmful behaviours that may be engaged in by people experiencing difficulties.

Reducing ACEs is a long-term preventive aspiration, but ameliorating their effects is an urgent current task. Protection from the effects of ACEs can come from resilience – in this sense, the ability to overcome serious hardships. Developing resilience in young people has many facets, but having at least one positive and stable relationship with a supportive parent, caregiver or other adult is a key factor. Resilience can also be built by, for example, cultural connections, skills development and improving self-belief.

The work on ACEs gives further support to the idea that tackling issues early in childhood and supporting parents in raising their children is likely to have positive outcomes across a range of behaviours. The prevention of gambling-related harm should arguably start early because some children start gambling early in life – earlier than they commence other potentially harmful activities such as alcohol or illicit drug use – and adult problem gamblers are more likely than other gamblers to have started gambling early in life (however, see the box on page 29 for a different perspective). Such a view would suggest that in addition to supporting parents, any school-based education should start young. But direct gambling-related education would be inappropriate for young children. A generic intervention would be more appropriate. And a group behavioural approach – perhaps surprisingly, but with a good evidence base (as detailed in the interim report³⁸) – shows promise. Primary-school interventions such as 'the good behaviour game' address group behaviour in the classroom, leading to positive behavioural and academic outcomes; and, at long-term follow-up, lower levels of undesired behaviours such as substance misuse.

³⁷ Hughes K et al 2018 *Sources of resilience and their moderating relationships with harms from adverse childhood experiences: Report 1: Mental Illness* (Welsh Adverse Childhood Experience (ACE) and Resilience Study) Public Health Wales / Bangor University

³⁸ See Annex III pp A17-18

Conclusions

These two projects, commissioned by GambleAware as part of its harm minimisation programme, sought to test out different approaches to gambling harm prevention with young people in schools and informal education settings in England and Scotland. The approaches taken by the two projects nicely complemented one another. The projects demonstrated that it was possible to enable teachers and other youth practitioners to address gambling issues in the classroom and in other settings, and that the materials developed to do this were appropriate, practical and generally well-received. The Demos internal evaluation indicated some impact on pupils' knowledge, skills and attitudes in relation to gambling. The Fast Forward evaluation, for good reasons, did not measure these, but reported positive responses from practitioners and, via them, from the young people.

An expected difficulty was that gambling was not on the agendas of those working with young people. As the Fast Forward final report put it:

‘... the uptake from schools was lower than expected. The responses seemed to highlight that gambling education and prevention was often not an issue that schools felt needed addressing. In other cases, staff didn't have the capacity to include it in the already full curriculum.’ (page 4)

One way of raising the profile of gambling was to have the resources endorsed by a high-profile educational organisation. Demos has done this through including the PSHE Association in their project consortium – the Association has a quality mark procedure.³⁹ Fast Forward attempted to get endorsement from Education Scotland but the burden of proof required was unachievable.

To sustain the momentum of the work and to spread its effects more widely, other steps have been undertaken by the two projects. Demos hosted a high-profile launch of their Resource on 15th March 2018.⁴⁰ Fast Forward is building (funding permitting) on their work to provide further support and training to practitioners across Scotland and to promote best practice in gambling education.

GambleAware has a significant role in supporting further developments; the two resources could be used in other implementations. Experimentation, such as using them in conjunction with other elements, would be worthwhile. Other curriculum interventions, such as taking a broad risk-based approach, and working with younger children using group behavioural approaches could also be tried. Non-curriculum interventions are also indicated. Prevention activities involving other target groups, especially particular at-risk groups, and reaching young people via parents and families, would complement ‘universal’ approaches.

³⁹ A [page on the GambleAware website](#) links to both the Demos and Fast Forward materials which are available for download. The Demos resource is also available on the [website of the PSHE Association](#), which has ‘kite-marked’ the resource. Fast Forward’s toolkit is also downloadable from its website at: <http://gamblingtoolkit.fastforward.org.uk>

⁴⁰ (this launch was included as an action in their contract with GambleAware)

Recommendations

Listed below are key recommendations arising from this evaluation. Others were made in the interim report which are still applicable – see Annex III pp A49-53.

1. The projects and the commissioning process

GambleAware should commission external evaluations as early as possible to enable evaluators to have more input into project design.

To aid evaluation, project proposals should be required to present a 'theory of change' and to specify intended project outcomes more precisely.

2. The future of the Resources: sustainability and experimentation

GambleAware should continue to make the two Resources available and promote their use. It should support appropriate actions to sustain and develop their use; for example:

- (i) Fast Forward's work has shown that training for practitioners who work with young people is helpful in raising awareness and in developing practitioners' confidence in their ability to educate young people about gambling; therefore this work should continue. It should, as far as possible, be integrated with other health and wellbeing issues, and taught alongside them. Such training could also include early identification of gambling harm and referral pathways.
- (ii) Sharing and promoting best practice would help to improve the quality of education and prevention: GambleAware could consider commissioning work that does this, perhaps along the lines of the Mentor's Alcohol and Drug Education and Prevention Information Service, or Fast Forward's Scottish Peer Education Network.
- (iii) GambleAware could commission a project that promoted the use of the Demos resource in schools in a particular local education authority area (or in an Academy grouping), along with other elements, such as school policy development and work with families.

3. Other work in schools and informal education

The challenges of implementing gambling education within PSHE/CfE must be addressed at other levels. The responsibilities and strengths of relevant institutions should be harnessed to encourage schools and non-formal establishments to implement gambling education. Work is needed at the policy level: in schools, with local authorities, and nationally. It also

required 'political' action – there may be scope for working with relevant organisations such as Mentor, the PSHE Association, and organisations concerned with teaching about money management to raise the profile of gambling education.

Continued experimentation is needed. GambleAware could consider developing, probably in conjunction with other organisations, generic, non-gambling focused interventions which, as has been here described, have advantages over gambling-focused interventions. A further advantage is that, not being focused on a 'difficult' topic, such interventions could be implemented at a younger age – and early intervention before most young people have gambled seems sensible and allows the topic to be returned to in later school years, reinforcing the learning. Intervention with younger children might involve classroom group behaviour approaches (such as the 'Good Behaviour Game'); it might also involve whole families (such as the 'Strengthening Families Programme').

Universal education is necessary. But it is not sufficient. Vulnerability to problem gambling is not divorced from vulnerability to other problems. A generic approach to work with at-risk young people that tackles gambling alongside other risky behaviours (such as drug and alcohol use) is therefore indicated. GambleAware could also experiment with targeting specific groups which might be at more risk of gambling-related harm. Scoping work would help to identify these groups in particular communities. Those working with vulnerable young people should be encouraged to tackle gambling issues.

4. Other prevention activities focused on young people

Although the history of prevention efforts involving parents is not a promising one there are some encouraging recent examples in the substance misuse field that have effectively involved parents: there is learning for the gambling field from these (see interim report in Annex III A19-21 for details); GambleAware should consider funding projects that address parents and families, most probably as part of addressing other risky behaviours and positive parenting. The upcoming prevention campaign that GambleAware will be leading might provide an opportunity to raise awareness of gambling among parents and help them to have conversations with their children about it.

Finally, a pause for thought
Are young people the most important group to focus on in gambling harm prevention?

By analogy with some medical conditions, it is often argued that early age onset of a condition leads to poorer outcomes and, furthermore, that early intervention is an effective way of reducing harm; with cancer, for example, this seems obvious.⁴¹ But does the analogy hold for gambling harm reduction?

Do teenage gambling problems predict adult gambling problems? Is there evidence that young people who gambling harmfully continue to do so and thereby continue to experience harm? And that therefore we should intervene early?

Young gamblers mostly 'grow out of' the habit, and although the prevalence of gambling among young adult males is high, these gamblers aren't necessarily those who gambled when they were young.

Some evidence for this comes from secondary analysis of the ALSPAC longitudinal study. This study has data on parents' gambling when the participants were six years old,⁴² as well as data on the gambling of the participants themselves at age 17 years and nine months, and also at age 20. Those study subjects who were problem gamblers at 17-and-three-quarters (there weren't very many of them) were, mostly, no longer problem gamblers at age 20. Although, at age 20 there were three to four times as many problem gamblers as at the earlier age, they were mostly not the people who were problem gamblers earlier. While the incidence of problem gambling in the early adult years is high, those who started gambling in childhood don't tend to continue: there is a great deal of 'natural recovery'.⁴³

This does not mean that they did not suffer harm; furthermore, it might be harm that endures, especially because the teenage years are a key time in life (e.g. for passing examinations.) And what is not known is whether those young people who gambled problematically and 'grew out of it' return to gambling later in life and are then more likely than others to suffer harm.

So, of course, prevention focused on young people continues to be important; but perhaps gambling prevention aimed at young adults (especially males) is as important.

But young adult males are much harder to reach, and perhaps harder to influence.

⁴¹ (although isn't necessarily the case for all cancers)

⁴² When the child was age six, mothers and fathers, in separate 'lifestyle questionnaires', provided information on their own participation in named gambling activities, and completed a problem gambling screen

⁴³ Forrest, D personal communication January 2018

Annex I Comments on the quantitative aspects of Demos' Report

This text was included in the external evaluator's monthly report, Dec-Jan '18. It has been slightly amended in places to make the meaning clearer.

Introduction

This note discusses the findings from Demos' internal evaluation, based on their version 2 (final) report. It comments only on the quantitative findings. There will be further exploration of the more discursive parts of the Report.⁴⁴

The Report presents rather limited quantitative data. The absence of more breakdown and the lack of Ns makes it hard to undertake further analysis of the data.

The samples, demographics, and the questionnaires

The participants in the study were schoolchildren at Key Stage 4 (almost all aged between 14 and 15 years) from eight different schools, of which, four schools delivered an education intervention to around 600 pupils, and a similar number of children in the other four schools formed a comparison group and did not receive the educational intervention. The sample was thus a cluster sample – i.e., schools (and within the schools, particular classes,⁴⁵ rather than individual pupils, were selected). Schools were selected non-randomly – in fact, a considerable amount of effort was put in by Demos and its partners to have schools with appropriate characteristics participate.

Each group completed a questionnaire prior to the intervention and again after the intervention (just over 12 months later). The questionnaire asked for some demographic information; experience of gambling activities; questions about other people's gambling; some Likert-scale-type questions on attitudes relevant to gambling (such as attitudes to risk); and DSM IV MR-J questions that allowed a 'problem gambling' score to be constructed.

The two groups of schools, and the pupils in the two groups were similar in many ways, as can be seen from the limited amount of demographic data presented in the Report, some of which is reworked in Table I below. Unfortunately, the Report does not give Ns here, only percentages. Furthermore, only data from the baseline (2016) questionnaire is given so it isn't possible to compare the reported demographics with those from the 2017 questionnaire. This shouldn't matter (they should be almost all the same students) but given the problem with the matching (see below) such information would have been reassuring.

⁴⁴ (These comments are now in the main text of this final report)

⁴⁵ is this correct, or was it *all* KS4 classes in *all* schools – I think not

Table 1 The demographics of the two groups from the baseline questionnaire

(Data from Pre-questionnaire)	Comparison Group	Intervention Group
Age 14	93%	91%
Age 15	6%	9%
Female Gender	50%	53%
Male Gender:	50%	47%
Ethnicity: white British	88%	91%
Ethnicity: Other	12%	9%
Household: Two-parent	85%	83%
Household: one-parent	15%	17%
FSM -yes	8%	8%
N=100%	622	642

'Risky behaviours'

The two groups were quite similar in the extent of 'risky behaviours' they reported – see table 2. But there was a curious difference in the proportion of those reporting having been taught about gambling previously – while only seven per cent in the comparison group said they had, twice as many (14%) in the intervention group reported having been previously taught about gambling. This is not mentioned in the Demos report but could, of course, have had an impact on the findings.

Table 2 'Risky behaviours'

(Data from Pre-questionnaire)	Comparison Group	Intervention Group
ever smoked cigarettes	14%	11%
ever tried alcohol	61%	61%
'frequent' alcohol user	5%	7%
Parents/ grandparents regular gambling participation	22%	27%
Parents/ grandparents 'problem gambling'	5%	2%
N=100%	622	642

Problems with matching

The questionnaires had a method that allowed the before and after questionnaires to be anonymously matched. Using this method, it was possible to match 226 pairs of questionnaires from pupils in the intervention schools and 266 matched pairs from pupils in the comparison schools.⁴⁶ Since this was a disappointing result – only 35 per cent (226/642) of questionnaires from pupils in the intervention schools and only 43 per cent (266/622) from pupils in the comparison schools – the researchers decided not to report these

⁴⁶ Looked at in aggregate, Demos administered 1308 questionnaires to the intervention and comparison schools before the intervention and 1128 after the intervention. They managed to match before and after questionnaire for 226 pupils in the intervention schools and 266 in the comparison schools; i. e. ((226+266) / 1128 =) just over 40%

'longitudinal' results – i.e., results that could look at the changes in individual pupils' pre- and post- intervention. Instead, they relied on conventional pre-and post- group comparisons.

It is unclear why the matching process was ineffective. It has been used by Mentor and had been recommended by them. Demos wondered if there had been big changes in the composition of the classes (for example, through pupils leaving – this seems unlikely to have had a big effect); but it is possible that classes were reformed with different pupils in a new academic year (perhaps because they were setted – but this seems unlikely for PSHE). We considered a number of other possible explanations; we asked Demos if it was possible that some the follow-up questionnaires were administered to the wrong classes (perhaps because of changes in teaching staff, or staff being allocated to different classes), this is a possibility but, if so, it is strange that this seems to have happened in similar proportions in both sets of schools.

We think that Demos should have been more curious about the reasons for this failure and explored it (and reported on it) in more detail. But, as it is, the Report focuses on pre- and post- comparisons for the two groups, while providing some tables of matched data.

Presentation of data on gambling activities

There is some confusion over the Ns reported in the table on question 8, 'Have you spent any of your money on any of the following in the past 12 months? We want to know about games you played yourself. Please tick all that apply'. The question asks about fourteen gambling activities plus 'any other gambling', and is a 'tick all that apply' question, but we are not told how many multiple answers there were (e. g., the mean number of types of gambling mentioned is not reported). So it isn't clear how percentages were calculated. Although the N for this table is given as 602 (presumably, a subset of the 622 in the comparison group who answered the initial questionnaire (presumably, the missing 20 are missing data – that is, people who completed the questionnaire but didn't answer that question)), the percentages in the 16 rows (from 'Lotto' to 'No, none of the above'), which, conventionally, should sum to 100 per cent, but actually sum to 129.90 per cent. This implies that the percentages are of total number of activities, not number of people.⁴⁷ This wouldn't be a sensible way of doing it, so it is reassuring to hear from the statistician who assisted Demos in the analysis that:

'...each response within the multiple choice set is reported separately, with the base as the number of people who answered yes/no. There were some cases who answered none of the multi-response options and these were excluded from the analysis for all questions in that section.' (email 5-2-18)

So the given 'N' is not relevant to the percentages here. The percentages are based on the N reporting doing each individual activity, for example, in the table in Annex D, 8.31 per cent of the comparison group said they had played cards for money with friends.

⁴⁷ There is the same problem with the matched data where the N is 258 and the percentages sum to 122.48.

Making comparisons between the two groups

Comparisons between the two groups are demonstrated using the 'difference of differences' approach. In other words, the difference in aggregate responses pre- and post- are calculated for both the comparison and the intervention group and then these two difference values are subtracted one from the other to demonstrate the difference of the difference. For example, one item asked about in the question on gambling behaviour was about 'playing cards for money with friends'. In the comparison group in the initial questionnaire, 8.31 per cent said they had, and at the follow-up questionnaire 12.75 said so; thus, there was an increase on this measure, the difference between the two figures being 4.44 per cent. For the intervention group, the comparable figures were 14.31 per cent and 11.64 per cent: a decrease of 2.67 per cent. Subtracting one figure from the other gives a difference of difference of 7.11 per cent. A significance test was carried out on this outcome, and a significance at $p > 0.01$ reported – that is, there was a real (as opposed to chance)⁴⁸ difference between the two groups on this variable.

Participation in gambling

As discussed above, one set of questions was about the pupils' participation in different gambling activities. The majority had not participated in any gambling activities: the Report states that, at baseline, '... 41 per cent had participated in at least one of the gambling activities listed within the last year.' (p25). This percentage is based on the whole sample at pre-intervention. The following table (Table 3) is extracted from the two relevant tables in Annex D of the Report. The first rows shows the reported figures for no gambling in the past 12 months, and the second rows (our additions) have these figures subtracted from 100 to give the proportions who *have* gambled in the past 12 months.

Table 3 Gambling in past 12 months (percentages)

	Comparison			Participants			Difference in difference	
	Pre	Post	Difference	Pre	Post	Difference	DiD	P value
Whole Sample								
No, none of the above	64.45	65.94	1.48	55.47	61.73	6.26	4.78	0.31
Gambled in past 12 months	35.55	34.06		44.53	38.27			
Matched Sample								

⁴⁸ But see later comments about the statistical testing

No, none of the above Gamble d in past 12 months	68.99	72.66	3.66	53.78	61.36%	7.59	3.92	0.58
	31.01	27.34		46.22	38.64			

Although the comparison group was chosen to be broadly similar to the participant group, there were differences in their pre-intervention gambling participation: the comparison group was less likely to report having taken part in gambling activities compared with the participant group. After the intervention, the proportion reporting not having gambled had increased by three per cent in the comparison group but by six per cent in the participant group. So the increase in the proportion not gambling was greater in the participant group (although, as in the pre-intervention state, more of them were gambling compared to those in the comparison group: 38% compared to 34%⁴⁹). The differences between the groups are not statistically significant.

A reduction in gambling in both groups over one year may seem surprising. With other 'risky behaviours', such as drinking alcohol, one would expect prevalence to increase with increasing age. However, gambling is an exception – as David Forrest has pointed out:

'...the youngest children have the highest propensity to be gamblers and are at particular risk of being problem gamblers. Gambling participation falls between Year 8 and Year 10.'⁵⁰

Among these gambling activities, which were statistically significant? The Report states:

'Over the 12 months between surveys, the following changes were observed in participating schools relative to comparison schools:

- There was a small statistically significant decline in the proportion of pupils at participating schools playing cards for money in the past year – with a net decline of 7 percentage points relative to the comparison group. There were no other statistically significant changes relative to the comparison group on individual gambling behaviours.'

This relative decline was also found in the matched dataset. Here there were reported:

'three other statistically significant changes in participants relative to comparison pupils: a small net decline in playing Lottery scratchcards; a small net decline in using 'other' gambling machines; but a small net increase in fruit machine use, having seen a smaller decline than the comparison....'

⁴⁹ the difference in the matched sample is bigger: 27 versus 39 per cent.

⁵⁰ A finding from his analysis of the IPSOS Mori 2008-09 survey of 8,958 children aged 11 to 15 years from 201 different schools (commissioned by the National Lottery Commission). Personal communication 2011

How to interpret these results? Do they have any meaning? It was good to have data on gambling activities⁵¹ as a way of comparing the two samples, but why would we expect – or desire – change in gambling behaviour as a result of the intervention? The subtitle of the Report is 'An education pilot to prevent gambling harms', and as there are no obvious direct harms in 12-month gambling participation, any changes in participation are not directly relevant to the effectiveness of the intervention.

'Problem Gambling'

A more relevant outcome would be a reduction in reported gambling problems, although arguably, this is a matter for treatment rather than school-based education. A set of eight gambling-related questions in the questionnaire replicated the 'junior' version of a standard screen for 'problem gambling' applied in clinical assessment of adults: the DSM IV MR-J. This screen is widely used in adolescent gambling prevalence surveys. It covers areas such as preoccupation with gambling, using gambling as 'an escape', and tolerance. These are the same criteria as in the adult DSM-IV screen; but a few of the questions are adapted for teenagers, e.g. 'illegal acts' in the adult screen becomes, in the junior version, 'taken money without permission from family members, or anywhere else'. Scores are simply summed, and having four positive answers indicates 'problem gambling'.

We had earlier in the project advised Demos that, because of the sample size and the very low proportions of 'problem gamblers' in the population at this age, it was very unlikely that the sample would have enough 'statistical power' to show any significant changes. This was the case.

Table 4 shows the DSM IV MR-J score results. There is a strange discrepancy with the figures for gambling participation from the earlier question, where, as we saw, around two-thirds of the samples said that they hadn't gambled in the past 12 months; whereas here more than four-fifths report not gambling. The Report comments on this point:

'Interestingly, the proportion of pupils who said they had not gambled in the last 12 months was much higher on these screening questions than in the Ipsos participation question above – it is possible that pupils' interpretation of what constitutes gambling may have narrowed in the more formal screening questions.' (p 26)

This hardly addresses this issue – the difference is a very large one and needs consideration. The earlier question is:

Have you spent any of your money on any of the following in the past 12 months?

The several questions on the screen have tick-boxes and in most cases have as the first option 'I have not gambled in the past 12 months'. It would have been helpful to look at each item in the screen to see if there were any differences in responses. It is possible that

⁵¹ and helpfully the question on gambling behaviour was the same as the Ipsos-Mori questions in their 2016 survey (although ages are different so the results are not directly comparable).

part of the discrepancy is due to response ordering, as it is known that item order is a factor in response – the earlier options being more likely to be selected. Another factor probably relates to how people define 'gambling' – if asked if they have gambled there are inclined to say 'no', but faced with a 15-item list of gambling activities where they have to consider if they have participated in each one they are probably more likely to report participation in one or more.

Table 4 DSM IV MR-J Scores pre- and post-intervention – participation and comparison groups compared (matched sample data)

DSM IV MR-J Classification	Comparison			Participant		
	Pre-	Post-	Change	Pre-	Post-	Change
	%	%		%	%	
Has not gambled in the last 12 months	89.7	88.7	-1.0	80.5	84.0	3.5
Social gambler	9.5	8.6	-0.9	17.3	14.2	-3.0
At risk gambler	0.4	1.9	1.5	1.8	0.9	-0.9
Problem gambler	0.4	0.8	0.4	0.4	0.9	0.4
Total (N=100%)	262	266	-	226	225	-

Perceptions about gambling

Pupils were asked about their perceptions of gambling in four different question items, to which they could agree or disagree.⁵² The results are in Table 5. The only item on which there seemed to be a difference was a nine per cent increase among the intervention group saying that 'gambling is dangerous'; this compared with a four per cent increase in the comparison group. It is noticeable that a large proportion of both samples – greater than four-fifths, at both time intervals, agreed with the statement that 'gambling is dangerous'. This highlights a difficulty gambling-related education – if a large proportion of the target group already have the sorts of attitudes that one might want to try to inculcate, it is going to be difficult to increase this proportion. For example, if you were trying to teach children that the earth is round you would not see a great deal of change pre and post-intervention – they already know it, so your intervention doesn't – can't – make much difference.

This point is relevant to the findings on the item, 'Most people my age gamble', which, perhaps surprisingly, few pupils agreed with. One of the objectives of some PSHE education seeks to 'challenge normative beliefs', based on the idea that young people are believed to

⁵² The question items had five possible responses: 'Agree strongly, Agree, Neither agree nor disagree, Disagree, Disagree strongly'.

think that more of their peers are engaged in behaviours such as drinking, drug-taking, sexual activity, etc., but it seems that, in the case of gambling they are aware that it is a minority activity for their peers. The implication is that 'normative education' is not appropriate for gambling.

Table 5 Perceptions of gambling pre- and post- intervention (based on match sample table (rounded percentages))

Statements:	Comparison (n=266)			Participants (n=226)			Difference (P-C)
	% Agree pre-	% Agree post-	Change C	% Agree pre-	% Agree post-	Change P	
Gambling is an easy way to make money	8	9	2	8	8	0	-1
The more you gamble, the better your chances of winning	8	7	0	8	7	-1	0
Gambling is safer if you practice it first	17	15	-3	15	13	-2	1
Most people my age gamble	1	1	0	2	3	0	0
Gambling is dangerous	67	71	4	63	72	10	6

'Learning objectives'

Pupils were asked 10 questions about their attitudes to risk and other questions related to the learning objectives of the gambling educational intervention.⁵³ Five of the items related to knowledge,⁵⁴ and most of these showed considerably larger increases in the intervention group – who had been through the curriculum intervention teaching them about these things – compared to smaller increases in the comparison group.

The exception was the statement, 'I understand how the gambling industry calculates odds', which showed a small decrease in the participant group compared to a small increase in the comparison group. This may be an example of an educational intervention causing the

⁵³ All items except one are presented as positive; the exception is 'When I am really excited, I tend **not** to think of the consequences of my actions' (emphasis in the original). This may have affected the responses – it would have been better to have half the items positive and half negative.

⁵⁴ The report does not separate the items in this way, but I regard five items as about knowledge ('I can describe...' (2 items) 'I would know...' 'I understand...' (2 items), and the following five items as skills – 'When presented with a risky situation I think carefully before acting'; 'I always keep my feelings under control'; 'When I am really excited, I tend not to think of the consequences of my actions'; 'I have good techniques for managing peer pressure' and 'I have techniques to manage impulsive behaviour'.

learners to question what they thought they knew and lowering their reported understanding as they come to realise that they didn't know as much as they thought they knew. This is 'a good thing' from an educational point of view – we want young people to question their knowledge – but it adds a further level of complexity to evaluation!

There were fewer differences on the measures of skills, and the small positive differences in the intervention group compared to the comparison group are due more to *declines* in their confidence with these skills reported by the comparison group, rather than due to increases in reported confidence in the participation group; see Table 6. For example, the seven per cent difference between the two groups in the change in responses to the statement, 'When presented with a risky situation I think carefully before acting' is largely due to a decrease in the responses of the comparison group – only 77 per cent agreed with this statement in the post-intervention questionnaire compared to 83 per cent in the pre-intervention questionnaire, but the change from pre- to post- in the participation group was only one per cent (75% to 76%). This result again raises the issue of how to separate secular change – change that is already happening without the intervention – from change that might be due to the intervention.

Table 6 Questions related to the intervention's learning objectives

KSA		Comparison (n=266)			Participants (n=226)			Differ- ence (P-C)
		Agree pre-	Agree post-	Change C	Agree pre-	Agree post-	Change P	
	<i>Learning objectives</i>	%	%		%	%		
S K I L L S	When presented with a risky situation I think carefully before acting	83	77	-6	75	76	1	7
	I always keep my feelings under control	50	42	-8	46	43	-3	5
	When I am really excited, I tend not to think of the consequences of my actions	40	39	-1	41	43	2	3
	I have good techniques for managing peer pressure	52	57	5	54	57	3	-2
	I have techniques to manage impulsive behaviour	41	33	-8	41	37	-4	4
K N	I can describe what delayed gratification is	8	11	2	8	28	20	18
	I can describe ways to help someone if their gambling behaviour worried me	34	32	-2	33	57	23	25

O W L E D G E	I would know where to go to talk about problems to do with gambling	34	30	-4	37	56	20	24
	I understand how the gambling industry calculates odds	25	28	4	34	32	-1	-5
	I understand the techniques used by the gambling industry to persuade people to gamble	48	52	4	54	70	16	12

What is a change?

As mentioned above, the comparison group was intended to be broadly similar to the participant group, but there were some differences and in particular the comparison group was less likely to report having taken part in gambling activities compared with the participant group. On the DSM IV item, nearly nine-tenths (89%) of the comparison group pre-intervention, compared to four-fifths (80% of the intervention group pre-intervention) reported that they hadn't gambled; and this was consistent, although (as we have seen) much lower, with their answers to the item on gambling participation, where 69 per cent of the comparison group reported not gambling compared to 54 per cent of the intervention group (pre-intervention). This difference may have worked against the possibility of observing change due to the intervention. This is because in any group there is 'regression to the mean'.⁵⁵ This has possibly happened here, as change (increase in proportion not gambling) is greater in the participant group (a nearly eight per cent increase in gambling non-participation) compared to only a 3.66 per cent increase in gambling non-participation in the comparison group. So one cannot conclude that the intervention might have had an impact⁵⁶ because after the intervention more people in the intervention group are not gambling, as this result is partly due to the phenomenon of regression to the mean.

Statistical significance

What findings in this study are 'real' and what might have happened by chance? This is a tricky question in any research and it is answered, in part, by the use of statistical tests. These tests measure whether or not a result had likely occurred by chance or might be representative of an underlying reality. But statistical tests must be carefully applied and described. Looking at this Report raises some questions about their application.

⁵⁵ '...if a variable is extreme on its first measurement, it will tend to be closer to the average on its second measurement—and if it is extreme on its second measurement, it will tend to have been closer to the average on its first' *Wikipedia*

⁵⁶ the result is, anyway, not statistically significant

The Report explains carefully the problem of conducting too many statistical tests. If you do enough tests some will give a positive result by chance. This phenomenon is colloquially described as 'if you torture the data enough it will say anything'. The draft Report states:

'Statistical significance testing was restricted only to those outcomes that appeared worthy of further investigation after visual inspection of the results. ... NA indicates a significance test was not carried out. Multiple tests increase the risk of detecting a false positive across the set of all results, therefore we chose to restrict significance testing only to a subset of variables deemed more likely to be significantly different. However, we have not formally adjusted significance levels to account for multiple testing so advise caution when considering results that are only just below the five percent significance level.' (p54)

So the investigators looked at the 'difference of differences' on the variables and then conducted statistical tests only on the bigger ones, thinking that they thereby had not carried out too many tests. But this is a wrong way of thinking about it. There is no difference between conducting statistical tests on every one of a whole lot of outcomes, or looking at all these outcomes and saying to oneself – 'oh, this one and this one look like they will be significant if we test for it' and then only testing those. To restrict the number of tests one does, one should decide *in advance* which outcomes will be tested. By looking at the *results* and making choices about what to test one has, in a sense, carried out a (rough-and-ready) test in one's head on *all* the variables, and therefore haven't really 'selected' particular variables for testing their significance.

This means that the selected significance level of 5% should probably have been 1%; which would probably mean that fewer items would have come out as 'significant.'

The statistician who analysed the Demos data responded:

I see your point and agree that if the results were to be presented as conclusive rather than indicative it would be most appropriate to decide upon those outcomes to test in advance and to adjust for multiple testing as appropriate. However, as Demos did not have a-priori outcomes, we decided to keep some significance testing in, albeit as indicators of prominence for future work rather than as conclusive results. We chose not to adjust for multiple significance given the indicative nature of the findings but also did not test those outcomes which were obviously close to zero difference between treatment and control. (email 5-2-18)

This is an interesting answer, but a rather worrying one since most non-statisticians are not confident in questioning statistical results and such readers might assume that if results are stated as 'significant' (and highlighted in bold text in tables) then this means something 'significant' and not simply an indication.

Note: In some places in the report the term 'incidence' is used when 'prevalence' is meant. (Incidence refers to occurrence in a specified time-period (the rate of occurrence of new cases), while prevalence is the proportion of cases in the population at a given time.)

Annex II Fast Forward data

Part I Training evaluation & on-line follow-up

Fast Forward asked trainees to complete a needs assessment prior to undertaking the training, and after the training they completed a training evaluation questionnaire. Online follow-up three and six months after the training requested, *inter alia*, information about what they had done (if anything) in relation to gambling prevention. The first part of this Annex selects some pertinent questions from the evaluation and the follow-up, tabulates the data and comments on them. The second part briefly reports on the telephone interviews.

Training evaluation

Satisfaction with the training was very high. More than two-thirds (70%) of respondents, when asked what else could be done to make the session better, said that they wouldn't change anything – despite being presented with a list of possibilities – see table All.1 below.

Table All.1: What else could we do to make the session better?

Answer choices (One only)	Responses	
	Number	Percentage
More group discussion	12	6.7
Shorter session	9	5.1
Longer session	10	5.6
Fewer facts and figures	3	1.7
More facts and figures	4	2.2
More quizzes	4	2.2
More group activities	6	3.4
I would not change anything	124	69.7
Other	6	3.4
TOTAL	178	100%

(N=178) (only one response was permitted)

Participants in the training reported learning about gambling and its potential effects on young people: almost four-fifths (79%) agreed they knew 'loads more' (table All.2), and three-fifths (60%) felt they had 'enough information to be better able to recognise the signs of problem gambling' (table All.3).

Table All.2: Do you think you know more about how problem gambling affects young people than you did before?

Answer choices	Responses	
	Number	Percentage
Yes, loads more	144	78.7
I know a little more	37	20.2
No more, no less	2	1.1
TOTAL	183	100%

(N=183)

Table All.3: Do you feel you now have enough information to be better able to recognise the signs of problem gambling than before the training?

Answer choices	Responses	
	Number	Percentage
Definitely not	1	0.5
Probably not	2	1.1
Perhaps	14	7.6
Probably	56	30.4
Yes	111	60.3
TOTAL	184	100%

(N=184)

Most participants reported confidence in their ability to provide gambling education to young people: more than half (55%) the respondents reported being 'confident' and a further fifth (19%) felt 'fully confident' (table All.4); while 86 per cent felt the training had increased their skills in doing so (table All.5).

Table All.4: How would you rate your level of confidence in providing gambling education to young people, after this training?

Answer choices	Responses	
	Number	Percentage
Not confident	1	0.6
Reasonably confident	46	25.6
Confident	99	55.0
Fully confident	34	18.9
TOTAL	180	100%

(N=180)

Table All.5: Do you think you have more of the skills required to deliver problem gambling prevention / support activities with young people than before the training?

Answer choices	Responses	
	Number	Percentage
Yes	157	85.8
Yes, but I'd need further support	24	13.1
No	2	1.1
TOTAL	183	100%

(N=183)

Three- and six-month follow-up

Approximately three and six months after they had received the training, trainees were sent an email with a link to an on-line survey. Such surveys typically have a relatively low response rate; in this case, after three months there were 48 respondents and after six months there were 21: a very reasonable response rate.

Table All.6 shows the reasons given (at three- and six-month follow-up) for not being able to read or to use the toolkit;⁵⁷ at both times more than two-thirds of the responses from

⁵⁷ The questionnaire did not include an item asking specifically whether or not respondents had read or used the toolkit (nor was there any item to determine how many respondents had only read (but not used) the toolkit). At three month follow-up, 19 (36%) respondents said what had prevented them reading or using it, while 27 (56%) responded to an item asking which sections of the toolkit they had used. This leaves two (8%) of the 48 respondents who did not respond to either item. After six months, 12 (57%) respondents said what

the respondents (they could give more than one) reported that they were intending to use it but had not had a chance.

Table All.6: Respondents reasons for being prevented from reading or using the toolkit

Answer choices (can be more than one)	Responses after 3 months		Responses after 6 months	
	Number of responses	Percentage	Number of responses	Percentage
I have not had time to read it	3	16.0	0	0.0
I have not had time to include gambling lessons in the programme	3	15.8	1	8.3
I do not have a situation where I can use it	5	26.3	3	25.0
I intend to use it in the future but haven't had a chance so far	13	68.4	8	66.7
Other	7	36.8	4	33.3

(N₃=19; N₆=12)

Of those who had used the toolkit, at three-month follow-up, most use was in informal youth settings, but at six-month follow-up most use was in school (table All.7). This probably reflects the fact that, because of curriculum constraints, teachers take longer to implement new curriculum innovations. Most people who had used the toolkit had used most parts of it (table All.8) and it had been predominantly used with young people over the age of 11 (Table All.9⁵⁸); between a half and two-thirds of contexts were with young people over 16 years, which reflects the preponderance of practitioners attending the training who working with the 16 to 25-year age group – a group that is more likely to be involved in gambling than the under-16s.

Table All.7: Description of the setting or settings in which respondents used the toolkit with young people

Answer choices (can be more than one)	Responses after 3 months		Responses after 6 months	
	Number of responses	Percentage	Number of responses	Percentage
In school	4	23.5	5	55.6
In an informal youth setting	10	58.8	2	22.2
Somewhere else	6	35.3	3	33.3

(N₃=17; N₆=9)

had prevented them reading or using the toolkit and 10 (47.6%) responded to the item asking which sections of the toolkit they had used; these numbers suggest that one person has responded to both (conflicting) items. Thus, some of the percentages shown in the following tables are approximate.

⁵⁸ Because the sum of respondents reporting no contact or to contact add up to less than the Ns at three- and six-month follow-up, the percentages do not give a clear indication of the proportion of respondents with contact with young people in the different age-ranges. The question also asked about the size of the various groups of young people but there are too little data to show meaningful results.

Table All.8: Of those reporting having used the toolkit, those using each section

Answer choices	Responses after 3 months			Responses after 6 months		
	Number of responses	%	Weighted average number of times used*	Number of responses	%	Weighted average number of times used
General information and facts on gambling and youth problem gambling	19 out of 26	73.1	2.4	9 out of 10	90.0	3.1
Some of the activities and resources	17 out of 26	65.4	2.1	9 out of 10	90.0	2.9
Some of the session plans	15 out of 26	57.7	2.1	8 out of 10	80.0	2.5
The websites and links for further information	13 out of 25	52.0	1.8	7 out of 9	77.8	1.9

(N₃=27; N₆=10) (not all respondents responded to all four sections of this item although there was a 'never used' category)

* takes account of the number of people who have used each one, and the number of times of their use.

Table All.9: Number of young people involved in respondents' work using toolkit information and/or resources

Answer choices	Responses after 3 months			Responses after 6 months		
	No contact	With contact	% respondents with contact	No contact	With contact	% respondents with contact
YP younger than 11 years	16	2	11.1	3	0	0.0
YP between 11 and 15 years	14	8	36.4	3	5	62.5
YP between 16 and 25 years	12	12	50.0	2	4	66.7

(N₃=27; N₆=9)

Respondents were offered a selection of reasons why they had used the toolkit – they could select more than one reason. Table All.10 shows that the most commonly-selected reason was 'to help young people understand more about chances and odds'. The two second most commonly-selected reasons were: 'some of the young people I work with have been gambling', and 'to address gambling within a wider discussion/programme on risk-taking behaviours'. These responses are encouraging because they show that practitioners were responding to young people's needs while addressing gambling as part of their work in addressing other risky behaviours.

Table All.10: Reasons reported by respondents for using the toolkit

Reasons for using the toolkit (can be more than one)	Responses after 3 months		Responses after 6 months	
	Number of responses	Percentage	Number of responses	Percentage
the young people I work with asked me to discuss about gambling	0	0.0	0	0.0
some of the young people I work with have been gambling	6	54.6	4	44.4
I wanted to use the toolkit and implement what I had learned at the training	4	36.4	6	66.7
to help young people understand more about chances and odds	8	72.7	3	33.3
to address gambling within a wider discussion/programme on risk-taking behaviours	6	54.6	6	66.7
to raise young people's awareness	5	45.5	4	44.4

about how the industry and advertising affect their choices				
to support young people in developing their problem-solving skills and in making informed choices for themselves	5	45.5	6	66.7
to enable young people to stay safer if they gamble	5	45.5	6	66.7
to address the gambling habits of the young people I work with	4	36.4	3	33.3
to challenge the attitudes and beliefs that young people have towards gambling	5	45.5	6	66.7
to inform young people about what kind of support is available if they have gambling-related concerns	3	27.3	3	33.3
Other	2	18.2	1	11.1

(N₃=11; N₆=9)

Part 2 Telephone interviews

The sample

Fast Forward's three- and six-month follow-up on-line questionnaire requested respondents to provide their contact details if they were willing to be contacted by the external evaluator. Nineteen people did so on the three-month follow up and four on the six-month follow-up. This gave a total of 22 (because one at six-months was a duplicate), but two of those at six-month follow-up did not actually provide contact details, giving a contactable sample size of 20. (As reported earlier, response rates (for the complete on-line questionnaires) at three- and six- month-follow-up respectively were 48 and 21.)

The question in the on-line survey

We would like to ask a few follow-up questions to some of the people who respond to this questionnaire. If you would be willing to speak to our evaluator on the phone about your work, please write down your name, the best phone number to contact you on, and suggest some good times to contact you.

Your name:

The best phone number to contact you on:

Some suitable times to contact you (day or evening):

The methodology and the sample achieved

After sending an introductory email, up to three attempts at various times of day were made to contact by telephone these 20 people. Ten interviews were achieved: a response rate of 50 per cent. The respondents had different professions and held a range of positions: teacher, youth worker (2), youth worker in prison, community worker, community education worker, mentor, resource worker, family support worker, social worker, health improvement officer, and health and wellbeing specialist, and worked in a variety of organisations, including the NHS, local councils, and the voluntary sector, across Scotland. Eight were female and four male.

The interview was semi-structured, with the main aim being to have the respondents describe, in their own words, what they had done with the toolkit and the contexts in which they had used it; what they thought of it; what they saw as the value of the training, how it might be improved, and what might happen in future. Interviews were transcribed and analysed to identify themes and key points using a modified grounded theory approach suitable for the analysis of relatively unstructured qualitative data.

Opinions about the Toolkit

All respondents were very positive about the resource and almost all of them had used it. Although it should be borne in mind that this sample was an enthusiastic group (willing to be followed-up for interview) *within* an enthusiastic group (those attending the Fast Forward's training), nevertheless, the positivity was notable.

They were aware of the need for the toolkit to respond to issues of gambling-related harm:

'They [the young people] don't have any hopes, dreams or ambitions. "I bet you a tenner that you can't do this, or that" [i.e. there is a betting culture]. Some of these kids come from difficult backgrounds. ... They feel [that if they can] get something that they lack in the home environment; [it will] make them popular. They will dare each other and get a wee buzz from the excitement of gambling; a win makes you popular: they have a few quid and they're able to buy a pair of trainers'. (Youth Worker)

One of the two people who had not used it said their job did not put them in contact with young people but they had alerted other members of their team to its existence and it had been used by some of them:

'What happened was that we have got ... a "risky behaviour group" so within that we have the drugs services, police, sexual health, LGBT youth and other kinds of organisation like that that are involved in young people and risky behaviour so what I did was to circulate the toolkit to them and at that point the toolkit was available to be shared and they were able to use some of those resources. They were used, I know that they have used it with groups, in that case an LGBT group, I know that

some of the police were looking at specific things [within the toolkit]' (Health Improvement Officer, NHS)

Others had also disseminated information about the resource to other staff in their organisation. One respondent reported:

'One of the things that we have done as a result of undertaking the training is to deliver a training session ourselves for a group of staff across two different organisations; we did that in December 2016.' (Health and Wellbeing Specialist, NHS)

Another respondent trained 12 of their staff to use the resource; and a teacher not only used the resource in two different workplaces, but told their partner, also a teacher, who then used it in their school.

The toolkit had been used mainly with groups, but also, in a couple of cases, on a one-to-one basis. It had been used with teenagers of different ages, from 12 to 13-year-olds to 16 to 18-year-olds. In many cases the gambling intervention was a 'one-off' (although often part of an overall programme covering other topics such as drugs and alcohol), but some used it more intensively, for example one respondent reported using it with two groups of 16 to 18-year-olds in eight one-hour sessions, and another used it within a once-a-week afternoon programme covering a variety of topics. Some respondents adapted it to the needs of their group: for example, one respondent reported: 'it worked for us because it is inclusive and interactive there is something for everyone'.

It was successful in raising young people's awareness of the issues around gambling:

'When first I mentioned it, it was "no, no, no, we don't have a gambling problem" but later on it's "alright, OK" [they would realise and agreed]...' (Youth Worker in prison)

Respondents found the material appropriate and easy to use:

'I just think the toolkit is really well thought-out, I think the activities are engaging, I think the thing about collaborative team-working, I think there is a lot of skills development, a lot of thought-provoking stuff; yeah, I liked the whole structure, the flexibility.' (Teacher)

Several different parts of the toolkit were noted as being helpful, for example:

'One of the best things for getting the message over to young people is the case studies; the young people we are working with here all love a story, that's a good way of getting the message across...' (Resource Worker)

Although there was an indication that the activities were perhaps more appropriate for younger teenagers:

'For an older group, I found some of the activities were a bit repetitive and the young people switched off.' (Community Education Worker)

However, they reported a good response from their client groups, for example:

'...they found the activities really engaging, it was really good ... I think the activities within it are, you can use the ones that you think will fit the group you are working with, they certainly got a lot out of that.' (Teacher working with 12 to 16-year-olds)

And one respondent pointed out how it had enabled them to get the information out to a wide group of colleagues distributed over a large rural area:

'I cannot myself cover gambling in a huge area, you need partners on board and so for me enabling them to get that toolkit to be able to use the resources with their ... groups it enables them to bring that subject in their arenas, where I wouldn't be able to.' (Health Improvement Officer)

The training

Several people mentioned that the training had raised their awareness of gambling-related issues; 'shocking findings', was one response. Another said:

'It gave me an insight into some of the issues and into some of the causes ... I have to say that it was eye-opening; it wasn't an area I'd delved into very much until this came up and I was quite surprised by a lot of the content.' (Health Improvement Officer, NHS)

It was thought to have been an excellent training that raised their awareness about gambling harm issues as well as helping them to use the resource:

'...if it weren't for the fact that I attended that training workshop, I probably wouldn't have tackled gambling because it is not something, you know, I personally indulge in and have a lot of personal experience of, but with having those resources it has given me the opportunity to improve my knowledge and also, I suppose, think about it in the wider aspects...' (Community Education Worker)

Another said:

'It made you focus and you could try them [the activities] out for yourself, it gives you that time which you might not have. ... it is there for people to access but you have got someone there who is more familiar with it [because they have been on the training course].' (Teacher)

And another respondent pointed to how it '...got you thinking about things you'd never thought about in that way'; they mentioned how gambling advertising was ubiquitous and how young people recognised the gambling companies' logos.

It was noted that their knowledge improved:

'I liked the training, to be perfectly honest, because I maybe wouldn't have, not that I've got vast knowledge now, I've got a bit more knowledge with attending that than I might have had if you had just fired through some information.' (Mentor)

Most said that the training wasn't strictly necessary to enable practitioners to use the resource – many thought that professionals such as teachers and group workers were skilled enough to take a toolkit and work out for themselves how best to use it with the young people they worked with – although there were some concerns about the possible future absence of training, with the resource being freely available on-line:

You can't go wrong with training to back up a resource. It's OK taking something off the shelf and trying to run with it but unless you [have had a lot of experience] you could be doing some damage, you know, rather than it properly utilising it to best effect. I've got an educational background so I'm used to training materials and delivering them anyway, so if someone said to me "here's a pack I want you to get on with it", I wouldn't have a problem with that, but not everybody's got that sort of skill.' (Community Worker)

Another respondent made a similar point, but emphasised the importance of staff having time to build their knowledge, skills and confidence, whether through training or in some other way:

'For me, we are talking about youth workers, we're talking about school staff, people who have got skills to work with young people ... the toolkit gives them knowledge that I feel they need [to have] to be able to include problematic gambling within the range of issues that they might interact with young people around. So we have quite a lot of topic-specific training on wider young people's health and wellbeing and we feel that staff have the skills and confidence, the attributes; they just need that opportunity to build their own knowledge base and then they can share that with the young people that they work with. So training does help but quite often a toolkit like this, and one that has been tested and refined, I think it is not a bad thing for them to just pull it off the shelf or off the internet, for some of the activities because even if it is going to be a stand-alone activity or is part of a one-off session ... if that is all we can get staff to do – particularly with the issues now of getting the finance and the resources to cover staff to come out of their day jobs... Because problem gambling does affect them but nowhere near on the same scale as some of the much more pertinent issues to them so therefore releasing someone to come and do a full-day's course just wasn't an option, but being able to have a conversation with me to know that they were going to be using the resource with the interests of the young people at the heart of what they were doing, I felt really comfortable, actually, just giving them the link and leave them to go on and do the parts they thought would work best for the young people they were working with.' (Health and Wellbeing Specialist, NHS)

So there was a lot of support for the usefulness of the training as a way of raising awareness of the issue of gambling and for creating motivation to use it. The same respondent pointed out the necessity of keeping it in people's minds:

'I've forwarded it to a couple of schools and send the links on... just to remind people that here is a tool; and school staff do move around a fair bit ... we had two schools participate in the training session we did but even then if they move on, on to other schools the schools often forget that they have got that resource to hand; they need reminding that they have got that resource to hand. And now that it's available online as well without having to undertake the training that's really helpful, so, yeah, we got out in the schools' newsletter just last month.' (Health and Wellbeing Specialist, NHS)

How to approach gambling harm prevention

As noted, the toolkit was used in a variety of ways but often in the context of work on other topics, so respondents were asked specifically about this. Vulnerability to gambling-related harm was seen as part of a constellation of behaviours that needed addressing simultaneously:

'One of our services locally works with young people with problematic behaviour and gambling is part of one of those behaviours' (Health and Well-being Specialist, NHS)

Most respondents saw gambling as fitting in with other aspects of their work with young people as part of a generic approach to, for example, health and well-being or keeping safe:

'One of the things we have always been encouraged to do is to be generic in our approach; the days of health improvement, going in and giving a wee talk about washing your hands, those days are getting well behind us and certainly it is more about what are the issues in our community because obviously that impacts on people. ... I think gambling fits very comfortably it needs to be incorporated, it is not an added extra.' (Health Improvement Officer, NHS)

This approach was clearly well-embedded in the NHS in Scotland; the other NHS worker in this sample made a similar point just as eloquently:

'You are not really looking at the topics in silos ... you're taking a much more holistic approach to health and wellbeing in general; as part of that you are looking at at-risk behaviours and problem gambling is one of those. It is about making sure it is integrated with everything else that is happening. .And that way of not focusing it on something stand-alone, I think that helps people to understand the impact that it can be having just making a short input or learning opportunity.' (Health Improvement Specialist, NHS)

Several people felt that gambling prevention should be focused not just on young people but on their parents and on others in the community. One said there should be:

'More education about the dangers and the effect it can have on your children; they don't realise the long term [effects]' (Youth Worker)

And some people pointed to the role of parents in introducing their children to gambling and in maintaining their participation:

'One of the key things I remember is how normalised they [young people] think that type of behaviour [is]: it was a parent who had set them up an on-line gambling account' (Community Education Worker)

One respondent was doing something to reach and inform parents:

'...there is a plan to have a parents' evening to let parents know what it is that we deliver in the programme that we call "Big World" which is a programme we deliver about risks and consequence.' (Health Improvement Officer, NHS)

The Future

Was there a role for gambling harm prevention in their programmes in future? The answer was 'yes', although (perhaps realistically) not as a 'major issue':

'I think, absolutely, there definitely is a place, for me, for gambling and if we are looking ... at some of the repetitive behaviours ... then gambling is something that definitely needs to remain on the list of things that are covered; it might be just be as a one-off PSE session in formal education or a short workshop ... outside the formal curriculum. I definitely think we should continue to champion it being broached with young people but staff tell us it is not a major issue we can do a little bit on it...'
(Health Improvement Specialist, NHS)

The interviewees were asked about what support would be helpful to them in the future, and specifically whether a network or good practice support would be welcomed. They generally thought that it would be, although most emphasised the limited time they had available for such professional development, and most favoured on-line support, perhaps with additional but infrequent face-to-face support.

'A working group definitely, also I would like to see a broad cross-section of people involved as well not just for young people: intergenerational, shall we say.'
(Community Worker)

To continue the work, the resource would need to be kept up-to-date, and revised to include new and emerging issues:

'I suppose it is like any resource that we develop ... it is really important that it is reviewed and revised at points ... just within a short space of time you can be talking about an app or social media opportunities and the impact of those offers so yeah, it something that is worth keeping an eye on...' (Health and Wellbeing Specialist, NHS)

And some people wanted additional resources, such as leaflets – which, for them, performed a specific and useful purpose:

'...one of the things that we found is that, especially when it comes to alcohol and especially when it comes to drugs, people will take a leaflet away and they will have a look at the leaflet but they'll no [sic] tell you anything while they're with you, they don't want to identify themselves. So taking a leaflet is a way of getting information that can be quite difficult [to discuss].' (Health Improvement Officer, NHS)

Conclusions

It was clear that the training and the availability of the toolkit had led to some interesting gambling harm reduction/ prevention interventions with young people in various contexts. To a degree, it appeared to be sustainable, in that one could expect that some of those practitioners who had used it were sufficiently enthusiastic to continue to use it, and to introduce it to their colleagues; but some nudges to do that would be helpful, as well as ongoing supportive professional development to further improve the responses. Keeping it on the agenda was difficult and needed attention. There was also the need to develop the evidence base that gambling harm was occurring in the client group. As one respondent put it:

'Because people keep telling us that there's a problem with gambling but we don't actually know that, we really need to get that information before we can act, and we don't have that information, it is purely anecdotal at this moment in time and certainly the people that are on our risky behaviours group are no [sic] aware of any particular issues.' (Health Improvement Officer, NHS)

Interim Report, May 2017

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Note

This version of the Interim Report is the one submitted to GambleAware on 15th May 2017 but with some minor corrections to amend typographic errors, etc.

For ease of reference, the page numbers have been set to be the same as in the original interim report (with an 'A' in front to refer to 'Annex').

Evaluation of GambleAware's Harm Minimisation Programme Projects:

Demos and Fast Forward

Interim Report

Summary

Two educational projects funded by GambleAware have developed and are testing manualised educational interventions in England and in Scotland. In England, the focus is on schools; in Scotland, it is on informal education. The schools' implementation is in four schools (with four 'control' schools which are not delivering the intervention); in Scotland, the range of potential users is very broad. Both projects have produced educators' manuals, and have trained educators in their use.

The two manuals appropriately address relevant gambling-related issues and are suitable for the target groups. Implementation has been managed effectively by the two contractors and relevant targets have been reached.

The two project implementers are conducting internal evaluations. The external evaluation is supporting and extending the internal evaluations and providing GambleAware with an independent view of the projects in the context of an understanding of education and prevention of gambling-related harm.

A final evaluation report will be produced in early 2018; that report will draw on, and add to, the internal evaluations of the projects.

This interim Report focuses on the evidential basis for the approaches of the two interventions and sets out the evidence and the arguments about the efficacy of 'universal' (school-based) interventions; alternatives and other approaches to prevention are discussed in the context of learning from other fields: in particular, prevention of substance misuse.

Using these findings, this Report appraises and critically analyses the draft resources produced by the two projects and presents, and comments on, progress so far.

Based on this evidence and analysis, a number of recommendations are proposed; these are summarised below. These recommendations are for further consideration and discussion. Further details of the recommendations are given under these headings in the 'interim recommendations' section of this Report.

Summary of interim recommendations

1. Commission evaluation as early as possible
2. Ensure that different groups of professionals are approached appropriately
3. Recognise the issues in evaluating disparate interventions; don't expect definitive answers to evaluation questions
4. Universal school-based education is the best located within PSHE/CfE context
5. [But] there are other curriculum opportunities for gambling education
6. The needs of informal educators should be further explored and appropriately-targeted materials developed
7. Consider further the most appropriate time to make an educational intervention and how to intervene
8. GambleAware should continue to promote gambling education:
9. gambling education should continue to be actively promoted to a wide audience
10. resources need regular updating: it might be helpful for GambleAware to establish and support a group of educators whose task would be to monitor the use of the resources and to advise on updating and further development
11. resources should be supported by professional development activities and advice that assists educators in implementation
12. resources should include a more systematic set of lesson plans/activities that fit even better with the various PSHE curricula, as well as links to other curriculum areas – especially mathematics and personal finance / financial capability
13. in developing resources, it would be useful to look at educational resources available in other jurisdictions.
14. Universal education is necessary. But it is not sufficient. GambleAware should experiment with targeting specific groups which might be at more risk of gambling-related harm.
15. Continued experimentation and innovation is needed and different models of interventions should be tested.
16. The difficulties of implementation must be addressed at other levels: the responsibilities and strengths of relevant institutions should be harnessed to encourage schools and non-formal establishments to implement gambling education.
17. Those most at risk should also be targeted: renewed efforts are needed to reach professionals and others working with vulnerable young people to encourage them to tackle gambling education.
18. Integrate the actions: vulnerability to problem gambling is not divorced from vulnerability to other problems. A generic approach to work with at-risk young people that tackles gambling alongside other risky behaviours (such as drug and alcohol use) is therefore indicated.
19. GambleAware should thoroughly consider funding projects that address parents, probably as part of addressing other risky behaviours and positive parenting.

Introduction

Gambling, young people and education & prevention

While gambling has always been a part of human culture, legislative alterations to the regulatory environment, technological developments, and changing social attitudes give emphasis to the need to educate children and young people about gambling. Gambling options have increased and are available in different forms – ‘remote’ gambling may be particularly appealing to ‘internet-savvy’ young people. While most gambling is legally unavailable to young people, an understanding of gambling, and the skills to deal with gambling-related issues, is part of the young people’s preparation for adult life.

Some forms of gambling are close to types of video gaming, etc. that are familiar to young people; and some forms of gaming shade into gambling-like activities: this blurring of the boundaries between gaming and gambling is important for young people to understand.

Some young people, if they gamble, may be particularly prone to gambling-related problems, and adult problem gamblers are more likely than other gamblers to have started gambling early in life.

For all these reasons, it is important that young people are educated effectively about gambling, helping them to avoid its potential harms.

But the potential preventive effect of education is difficult to assess: a person can be ‘educated’ about a topic, but it might not prevent them from engaging riskily with it – the example of smoking illustrates this – smokers know the dangers but continue to smoke.

And, as this Report will show, evidence from other areas of education demonstrates that the impact of educational interventions is difficult to measure and, where it has been measured, the effect, if any, is quite small.

Thus, observing change is difficult and is rendered even more difficult by the low proportion of young people experiencing gambling harm – and if one starts with a small ‘at risk’ population and an intervention makes only a small difference, without very large samples it is hard to produce statistically significant results.

To put some numerical ‘flesh’ on this, the RGSB position paper on young people and gambling-related harm states:

‘Fifteen per cent of 11 to 15-year-olds report having gambled in the past week. Problem gambling rates are higher among young gamblers than among adult gamblers. It is estimated that 2% of 11 to 15-year-olds are problem gamblers.

Another study shows that almost 17% of men and 5% of women aged 16 to 24 years were identified as at risk from their gambling behaviour in the last twelve months'.⁵⁹

The paper, in a footnote, also reports:

'Among men aged 16-24, 11.7% were classified as low risk gamblers and a further 3.2% as moderate risk gamblers. When combined with problem gambling rates, 16.6% experienced some type of difficulty with their gambling behaviour. Among women of the same age group, 3.2% were classified as low risk gamblers and a further 1.7% as moderate risk gamblers. When combined with problem gambling rates, 5% showed at least some risk in their gambling behaviour. *Health Survey for England 2012*, Health and Social Care Information Centre ... pp12-13'

Thus, a rough estimate of the proportion of gamblers experiencing harm in the age group older than the target group for these projects would be around 17 per cent males and five per cent females – i.e. approximately 11 per cent for both sexes combined. In a younger age group, it will be lower: let us guesstimate a five per cent prevalence of harm.

The Projects

GambleAware's Harm Minimisation Programme is funding projects that: '...aim to reduce demonstrably the impact of gambling-related harm, particularly on vulnerable populations such as young people.'⁶⁰ Two of the currently- funded projects focus on young people and are aimed at intervening with young people in schools and informal educational settings. This Interim Report evaluates these two: one, being carried out by Demos,⁶¹ is focused on England and is focused on school-based interventions; the other, being conducted by Fast Forward, covers Scotland and is aimed at both teachers and informal educators. Both involve the production and testing of new resources for gambling education. Both are curriculum-linked – for PSHE in England, and, in Scotland, for Health and Well-being in the Curriculum for Excellence framework, and the National Youth Work Strategy. Demos is creating a resource (plus providing some training for teachers) for use in its four pilot secondary schools; there are four comparison schools that will not receive the intervention. Fast Forward is offering training in using its resource to teachers and informal educators across Scotland.

Both projects are being carried out by experienced contractors, with good track records in delivering education projects. Both have some experience of gambling-related and educational work. Both projects are well-put together. Both organisations have in place internal monitoring and evaluation of their work.

⁵⁹ RGSB 2014 *Young People and gambling-related harm* www.rgsb.org.uk/publications.html (accessed 21-03-16)

⁶⁰ RGT 2015 *Harm Minimisation ITT*

⁶¹ The PSHE Association and Mentor are partners in the work, and Dr H Bowden-Jones is a consultant

The approach to this evaluation

This external evaluation therefore does not seek unnecessarily to duplicate their work, but supports it, builds on it and adds to it – especially by giving it an independent dimension and by providing a more detailed understanding of the educational and social contexts in which these interventions are taking place.

The internal evaluations conducted by the two contractors are contributing to the knowledge of the process and outputs (and, to some degree, outcomes and impacts) of the projects, so the role of the external evaluator is less that of a 'primary investigator' and more that of a 'critical friend'. This implies more of a 'partnership' relationship, albeit a rather 'arms-length' one, between the project implementers and the evaluator. Within this relationship a suitable 'distance' has been maintained: analysing and scrutinising the work, while understanding that the primary responsibility of this evaluation is to the funders – to report findings and evidence-informed opinions accurately and dispassionately.

This external evaluation is providing GambleAware with pointers for developing projects of this type, along with some recommendations for future work in the area of harm minimisation in relation to young people, especially through school- and youth work-based education, and the education and training of professionals who work with them.

The evaluation is partly formative in nature and has assisted, and is assisting, the two delivering organisations in improving the work that they are doing, especially in relation to their internal evaluations. The details of this aspect of the evaluation are not reported here, they have been documented in the monthly reports that this evaluation has produced.

Evaluation in the context of PSHE & gambling education in different settings

As outlined in the evaluation proposal,⁶² this evaluation starts from a theoretical and practical grounding in knowledge and experience of personal, social and health education in schools and in informal settings, and from an understanding of the issues in gambling education. It is also important to identify the features of the two resources and their dissemination and implementation that – from an educational perspective – are likely to lead to successful educational outcomes. These features include the development of gambling-relevant knowledge, skills and attitudes and behaviour change. The publications (lesson materials; 'toolkit') are 'tools' for teachers and other educators, and it is therefore necessary to distinguish between the different types of settings in which the resources are used.

⁶² Ives 2016 'Proposed Evaluation of the Responsible Gambling Trust's Harm Minimisation Programme Projects: Demos and Fast Forward'

Outcomes from the evaluation

The evaluation ITT⁶³ document states that, by the end of the evaluation, GambleAware should have:

... a clearer picture across the projects of the effectiveness and consequences of the actions taken. We will better understand aspects of gambling-related harm and how this can be addressed in specific contexts, and we will have a clearer idea of the scalability of these actions and implications for other harm minimisation actions.

The ITT suggested that the aim of the evaluation is:

‘to provide an independent assessment ... More specifically the objectives of evaluation(s) will be to independently assess the extent to which the funded activity has:

- Provided for a better informed and improved understanding of the nature and characteristics of gambling-related harm and the scope for its measurement.
- Established effective monitoring and evaluating of the effectiveness and impact of the funded harm minimisation initiatives.
- Developed evidenced approaches to reduce the impact of gambling-related harm, particularly on vulnerable populations.
- Assessed the likely scalability of this experience, including any implications for the measurement of impact for wider harm minimisation initiatives.’⁶⁴

These issues are being addressed, alongside others, in the evaluation and are discussed in the ‘Conclusion’ section of this Report.

The two projects commenced in early 2016.⁶⁵ This evaluation formally commenced at the beginning of June, 2016. This Interim Report gives an account of the progress of the projects up to April 2017. But, first, it looks at the evidence on ‘universal’ prevention interventions to provide a basis for assessing the two projects’ potential effects.

The evidence about ‘universal’ interventions

An important question to ask, before looking at the ways that the two projects operated and at their results, is to consider what is known about approaches to gambling education and prevention. But since there is not a great deal of evidence about such interventions, it is helpful to look first at what is known about interventions in other, comparable, areas. This section considers the evidence for school-based, ‘universal’ preventive interventions in the substance misuse field, and then looks at initiatives in gambling education and prevention.

⁶³ Invitation To Tender

⁶⁴ RGT Evaluation Tender document section 4.4

⁶⁵ Fast Forward’s contract commenced on 01-01-16

There are considerable bodies of research in other areas of education which have clearly demonstrated that certain educational approaches show more promise than others. For example, a review of research on school-based health education for Life Education Centres⁶⁶ reached conclusions including the ideas that knowledge is necessary but not sufficient; that skills development is an important component of education; that the formation of positive attitudes is a key area, and that protective factors can be enhanced by appropriate education.

But the area where most research is available is substance misuse education, and there are some systematic reviews that provide an evidence base for assessing the effectiveness of different approaches.

Systematic reviews of drug education

Systematic reviews of substance misuse education and analysis based on such reviews tend to be quite downbeat about its effects. They find that many interventions do not have preventive effects and that any effect sizes are small. Iatrogenic effects may be a risk: that is, an intervention may have counter-productive effects; one study reported:

'Evidence of negative program effects was found in 17 evaluation studies for which 43 negative outcomes were documented. The most common type of negative outcome resulting from prevention programs was behavioral effects consisting primarily of increases in consumption, especially alcohol use.'⁶⁷

Foxcroft and Tsertsvadze reviewed universal school-based prevention programmes aimed at preventing alcohol misuse by school-aged children which had been evaluated by an RCT and which reported outcomes for alcohol use.⁶⁸ While 53 studies were included, for most the reporting quality was poor (only 3.8% of them reported an adequate method of randomisation and programme allocation concealment) and incomplete data was adequately addressed in only a quarter (23%); most studies were cluster randomised. Because of the differences between the studies, meta-analysis was not undertaken. Eleven were alcohol-specific and 39 were 'generic' interventions; the remaining three targeted other specific substances as well as alcohol.

The programmes, which had durations ranging from a single 50-minute session to three years, generally aimed at promoting awareness (such as alcohol-related benefits, and understanding consequences and risks), developing resilient behaviour, changing normative beliefs or attitudes, promoting self-esteem; addressing social networking, and increasing

⁶⁶ Ives R et al 2004 *Children, Young People and Health-Related Decisions: A review of the research literature and discussion of the implications for health education of children and young people* Life Education Centres & Roehampton, University of Surrey

⁶⁷ Werch C Owen D 2002 'Iatrogenic effects of alcohol and drug prevention programs' *Journal of Studies on Alcohol* 63: 581-590 [can only get abstract – didn't say how many studies included]

⁶⁸ Foxcroft D & Tsertsvadze A 2011 'Universal school-based prevention programs for alcohol misuse in young people (Review)' *The Cochrane Library* 2011, Issue 5 <http://www.thecochranelibrary.com>

peer resistance; as well as the development of problem solving, refusal, or decision-making skills.

The effectiveness of prevention programmes, in most of trials (85%), was compared to the standard curriculum. The outcome measures used were various,⁶⁹ as were the scales of measurement and the period used. No blinding was used, and the reviewers point out: 'It is difficult to see how blinding of students or teachers or program deliverers could be achieved and this is a methodological limitation of such social and preventive intervention studies'.⁷⁰ Attrition rates were high, most studies falling below the standard 80% expected – which could bias the results. A further difficulty was the limited information about the content of the interventions, which, the authors comment, '... is a general problem for the prevention field'. Effect sizes could not be calculated for use in funnel plots, nor was it possible to assess risk of publication bias.

Twenty of the studies showed some reduction in alcohol use (mainly drunkenness and binge drinking). However, the authors conclude that it is difficult to see any 'easily discernible pattern in characteristics that would distinguish trials with positive results from those with no effects.' In other words, it was difficult to see what methods 'worked'. However, since:

'Generic programs offer the additional advantage of potentially impacting on a broader set of problem behaviours ... Overall, we conclude that the evidence supports certain generic prevention programs over alcohol-specific prevention programs.'⁷¹

And, specifically:

'...certain generic psychosocial and developmental prevention programs can be effective and could be considered as policy and practice options. These include the Life Skills Training Program, the Unplugged program, and the Good Behaviour Game.'⁷²

This point will be explored in more detail later in this Report.

The authors make the important point that although effect sizes may be small in universal programmes, because they are reaching so many pupils at relatively low cost, even small effects may be cost-effective. But effects may vary by subgroup, so it is important to look at effects by, for example, ethnicities, gender, and levels of alcohol use.

However, it may be that the *content* of programmes is less important than the *context*:

⁶⁹ They included '...alcohol use, frequency of use, mean number of drinks, proportion of alcohol non-users, weekly drinking, hard liquor use frequency of drunkenness, drunkenness in the last month, incidence of drinking and driving, binge drinking'. (pp 9-10)

⁷⁰ p10

⁷¹ p 14

⁷² p 14

'... characteristics of program delivery, including program setting, key personnel, or target age are important moderators of program effects. For example, a prevention program which has been shown to be effective in a low prevalence adolescent alcohol misuse setting or country may be ineffective where adolescent drinking is the norm and social and cultural pressures to drink are more powerful.'⁷³

The Scottish Executive published a literature review of school-based drug education⁷⁴ that looks at systematic reviews and meta-analyses as well as some 'high-quality' reviews. This review is helpful especially because of the commentary addressed to the Education Department about the findings.

One of the points they consider is why drug education seems less successful at influencing alcohol use and more successful at influencing tobacco use. They suggest:

'It may be that the message tends to be less ambiguous, and also more credible, for tobacco than for other drugs. It is possible that more is known about smoking behaviour acquisition and change, through decades of research, with the result that prevention programmes are more effective at targeting the appropriate mediators.

'Another possible explanation lies in how success is defined for each drug. For tobacco and illicit drugs, the desired outcome (on which programme effects are calculated) is usually a reduction in prevalence. However, it is not clear in many of the reviews whether the desired effect in the alcohol programmes reviewed was total abstinence or safer use (e.g. reduced frequency of drinking or a change in context). It may be that the apparent poorer performance of alcohol programmes reflects their adoption of unrealistic abstinence goals, or the failure of reviewers to measure harm reduction as well as prevalence outcomes.'⁷⁵

This is an important point that could be applied to gambling education – it is necessary to be clear about what the goal is, and with activities, such as gambling and alcohol, that give some people enjoyment and no harm (unlike tobacco consumption, which is always harmful), abstinence is probably not the aim.

A helpful aspect of this review is that it considers 'what approaches, methods, content areas, delivery styles and so forth are associated with more successful programmes'. The programmes may have: '...some sort of conceptual model which explains how drug behaviour is mediated (e.g. Social Norms) ... [or the] process or teaching and learning style (e.g. Interactive, Peer) ... [or the] content (e.g. Information); ... [or] the setting or context of the programme (e.g. Environmental, System-wide).' (p32)

⁷³ p 15

⁷⁴ Stead M & Angus K 2004 'Literature Review into the Effectiveness of School Drug Education' Scottish Executive (a report on classroom observations of drug education is in Stead M MacKintosh A McDermott L Eadie D Macneil M Stradling R and Minty S 2005 'Evaluation of the Effectiveness of Drug Education in Scottish Schools' Scottish Executive)

⁷⁵ page 29. The authors also point out: 'the majority of studies are conducted in the USA, where abstinence tends to be the desired outcome, as opposed to sensible drinking, which is a more acceptable goal in other countries.'

However:

'... drawing conclusions from these comparisons is not easy. There is no universal agreed categorisation scheme for describing programmes or analysing their components and features. Some typologies focus on theoretical basis, some on content, some on delivery method; many combine all three dimensions'⁷⁶

Nevertheless, the report suggests some features of effective approaches:

- Information and affective approaches are generally *ineffective or less effective* than other approaches
- Interactive drug education programmes are *nearly always more effective* than non-interactive programmes
- Life skills, social influences, resistance skills or normative approaches are *more effective* than other approaches
- Multi-component and environmentally-focussed programmes are *more effective* than single-component and individually-focussed programmes⁷⁷

This is a helpful list and is included in the table, later in this Report, which sets out a range of criteria for assessing gambling-related interventions.

Other relevant factors

The review also considers who is best to deliver drug education in schools. While peer-led approaches tend to perform well, this may be because of the increased opportunities for interactivity that working in small groups with peer leaders provide – i.e., it may not be the peer aspects *per se* that lead to good outcomes but the effect of having the chance to discuss things, not just listen: in other words, *interaction with peers*, rather than *delivery by peers*, is more important.

But some commentators disagree with this conclusion.⁷⁸ Credibility of the 'messenger' may be a factor – and perhaps peers (especially slightly older peers) are seen as more knowledgeable than teachers.

One might therefore suppose that external contributors with specialist knowledge would be more effective than teachers, but these are not always seen as credible (for example, police officers might over-stress the legal aspects; drug workers might focus on extreme examples of drug misuse), and many lack the necessary pedagogical skills to work with young people on such sensitive issues. Furthermore, they do not know the pupils so cannot tailor their

⁷⁶ p 31

⁷⁷ see p 34 ff

⁷⁸ '... Gottfredson & Wilson (2003) found that peer-alone programmes were superior to those in which peers and teachers taught together – the involvement of teachers cancelled out the peer benefit. This suggests that the opportunity to interact with peers may not in and of itself explain the apparent superiority of peer delivery.' p 50

contributions to individual needs. And of course, an external contributor can add significantly to the global⁷⁹ cost of the intervention.⁸⁰

This might lead to conclusion that teachers would benefit from additional training in this area; the review reports that the evidence on the impact of training is inconsistent, but evaluations of some individual programmes have found that training teachers enhances their knowledge, confidence and skills; and training can reduce variability between individual teachers in how they interpret written instructions.⁸¹

What is the best duration for interventions? The evidence from the review is unclear. And although many educators have suggested (on good theoretical grounds based on learning theory and memory studies) that booster sessions are helpful, the reviewers report that the evidence on this point is not consistent. They conclude:

‘It is likely that programme design and implementation quality are as or more important than length of programme or number of lessons: a very intensive but theoretically unsound or badly taught programme is unlikely to be effective. Nevertheless, reviews agree that programmes should be of ‘sufficient’ length and intensity to achieve change; no reviews recommend ad hoc single sessions, for example. On average, evaluated drug education programmes have comprised around ten sessions, often with follow-up sessions the following year.’⁸²

What is the best age for delivering drug education programmes? The reviewers found no clear evidence that drug education is more effective at particular ages but they note that desired effects are likely to vary at different ages, as is the ability of a study to detect an impact,⁸³ age-appropriate effects should be achievable at any age.

Should programmes be adapted to meet specific local and cultural needs? There is little direct evidence on this point, but it is likely that a relevant and meaningful programme will be better received.

In summary:

- interactive programmes are more effective than non-interactive programmes
- information and affective approaches are less effective

⁷⁹ It might be cheaper for the school, which is not paying for the external deliverer’s time, but someone is paying (unless it is carried out by volunteers (probably a bad idea)) and the opportunity cost of, for example, a drugs worker going into school and doing prevention work could be less help for drug users.

⁸⁰ For this reason, it is difficult to believe that GamCare’s ‘FREE, one-hour interactive awareness workshops for young people aged 11-18, delivered by our BigDeal Youth Outreach Team. Workshops are ideal for school lessons and youth club sessions’ (quotation from GamCare’s flyer advertising these workshops downloaded from <http://www.gamcare.org.uk/education-and-awareness/youth> on 28-04-17) are likely to be cost-effective. For many other reasons (short duration, focus on information, etc.) they are unlikely to be effective prevention.

⁸¹ p 51

⁸² p 52

⁸³ because ‘it is difficult, for example, to assess behaviour change in a cohort of young people who are too young to have started experimenting in sizeable numbers’ (p56)

- life skills, social influences, resistance skills and normative education approaches are effective
- multi-component and environmental/system-wide approaches are promising
- no clear consensus on who should deliver drug education, but evidence that peer involvement is desirable
- no clear consensus on duration and intensity of drug education
- no clear consensus on whether drug education is more effective if substances are addresses singly or in a generic programme
- evidence that drug education can be effective at both primary and secondary ages
- drug education is likely to be more effective where programmes are relevant to students and culturally appropriate.⁸⁴

Following its review of the research, the review next explores the policy and practice on drug education in Scotland. There have been extensive changes in the Scottish curriculum since the review was published; nevertheless some general principles are relevant. Guidance emphasises the importance of continuity and progression and that topics are returned to as pupils progress through the school. Drug education should be located in the context of a whole-school approach to health, and involve all staff as well as pupils and their parents. The concept of a whole-school approach is supported by an ACMD report on prevention – discussed below.

Is an outcomes-based approach appropriate for assessing programmes?

A report by the ACMD (discussed in more detail later in this Report) points to the difficulties of outcome measures in this field:

‘...most prevention interventions are justified on the basis of potential impact upon simple indicators of drug use such as age of initiation, cessation or de-escalation of use, problematic use or dependence. ... [but] most prevention research focuses on surrogate indicators, such as period prevalence of substance use (e.g. use in the previous month) or a diagnostic classification (e.g. ‘harmful’ patterns of use). However, the *predictability* of such surrogate measures has been called into question. Predictability is defined as the extent to which study outcome measures relate to *meaningful* health or social outcomes; for example, injury, morbidity, mortality, quality of life, educational and economic achievements. Subsequently, it is difficult to relate a surrogate indicator of substance use, such as use in the previous year or month to meaningful outcomes. It has been argued that many prevention interventions have been evaluated with regards to their success at changing surrogate outcomes rather than policy- and practice-relevant health and social outcomes.’ (p16) (italics in original)

⁸⁴ extracted from ‘Table 4.1, pp64-5 in Stead & Angus 2004 *op cit*

This is a practical point about measurement, but it is difficult to see how it could be overcome, as more relevant outcomes would generally only be apparent after some time, and would be difficult to capture.

A more 'philosophical' issue about outcomes, which is raised by the authors of the Scottish Executive review, concerns the:

'fundamental inherent tension in any drugs education which emphasises informed choice and personal responsibility for decision making but which is predicated on the notion that the choice not to take drugs is more desirable than the choice to take drugs' (p70)

In discussing this point, the review authors reference a thoughtful paper by Hastings and colleagues, which reports on an evaluation of a well-considered and high-profile North-East England community-based, multi-component drug education programme called 'NE Choices' (which can be heard as 'any choices'). The evaluation did not report positive results, but:

'...NE Choices got a lot right, and raise serious questions about the value of judging it on the basis of narrow, behavioural outcomes. They also reveal a basic contradiction in the programme, and indeed at the heart of much health promotion.

'On the one hand, as noted above, it was built on concepts of free choice, reflecting the view that health promotion – on drugs, or any other topic – should enable people to make informed and empowered decisions about the various risks and opportunities that life throws at them, not proscribe or prescribe specific behaviours. On the other hand the programme had very clear behavioural objectives and a sophisticated research programme to establish whether the young people did as they were supposed to do – a case of freedom of choice, provided you make the right choice.'⁸⁵

Since most evaluations and all systematic reviews judge interventions based on behavioural outcomes this is a challenge to the current ways of assessing the efficacy of interventions. Measuring behavioural objectives is important but, as Hasting *et al* put it, we need to move beyond the 'intervention mentality' and think more about building long-term relationships – as do marketing people in the commercial world. This implies:

- longer time-frames (they suggest 'a minimum of five years')
- trust our judgement and back programmes based on well-established principles
- place more value on intermediate measures such as 'customer satisfaction'.

They conclude:

'Recent thinking in social marketing ... puts the emphasis on building long-term relationships with consumers, rather than treating them like subjects in a time-

⁸⁵ Hastings G Stead M and MacKintosh A 2002 'Rethinking drugs prevention: Radical thoughts from social marketing' *Health Education Journal*, 61(4): 347-364, p14

limited experiment. Consumers and stakeholders are seen as partners rather than targets, whose intellectual, emotional and physical needs have to be continually gauged and met. This is done with a combination of programme flexibility, branding and innovative database marketing.

...

'Consumer satisfaction – and especially levels of trust and commitment – is given as much emphasis as behaviour modification in assessing effectiveness...

'This is not a soft option for drugs prevention. Relationship marketing is driving the thinking of the high street's most successful companies. It does not ignore behaviour, but sees it as a longterm goal alongside the more immediate need to build satisfying relationships. Relationship marketing is also a reality. Young people are now used to getting responsive service, customised communications and subtly branded offerings. Drugs prevention has to at least match these standards.'⁸⁶

Programmes and interventions

Much of the research into substance misuse education comes from the USA, where programmatic interventions are more widely used than in the UK. Programme developers place great emphasis on programme fidelity; that is, the programme should be delivered as planned and in its entirety.⁸⁷ UK teachers of PSHE are not so used to this approach and tend to develop their own unique approach, often picking content from different sources in a mix-n-match approach. For example, Tacade once produced a comprehensive health education programme called 'Skills for Life' which was based on a programme from the USA. It was evaluated in a UK context and, while teachers were impressed by the comprehensive package, they picked out particular lessons that suited them – none implemented the whole package as was intended (and was strongly recommended).⁸⁸

There are good reasons for this. Often, programmes demand too much time and have to be truncated to fit a crowded curriculum. Teachers know their classes and will select – and reject – lessons as appropriate to their group. Some activities will not be relevant to their group or will need adjustment. An example comes from the Fast Forward evaluation, where one of the respondents to the three-month follow-up survey reported:

'I have changed session plans to suit the environment I deliver in as some of the sessions would be a little bit lengthy. Some of our young people do not have the capacity to sit for a long period of time but we also have certain time slots we can deliver within so I have adapted the session plans to suit our needs.'⁸⁹

⁸⁶ pp21-2

⁸⁷ But they might not be appropriate to a UK context: as Public Health England point out: 'Manualised and highly structured programmes will not always transfer well from one geographic or cultural setting to another, and the structures for delivering prevention programmes might not always be in place.' PHE 2015 op cit p7

⁸⁸ Ives R and Wyvill B 1998 'Skills for Life Evaluation' *educari*

⁸⁹ see Annex D for the question context

Although this is good pedagogy, it is difficult to evaluate. If the interventions vary (and the nature of the variation is not available to the evaluation) then even if outcomes can be measured it is not clear what parts of the programme contribute to those outcomes.

The Demos and Fast Forward materials are not designed as 'programmes' but are intended for teacher and other educators to implement using their professional judgement within the curriculum context and other constraints.

Not focusing on 'topics' can be an effective way of reducing gambling-related harm

A significant challenge to the widely-held notion that topic-specific education is the only way to reduce harm from substance misuse or other issues that face young people comes from evaluations of approaches that do not address the issues directly. A seminal Dutch study from the 1970s compared conventional drug education interventions with a programme that applied a person-centred approach: '...led by their usual teachers, pupils were given the opportunity to discuss problems of adolescence (rather than drugs specifically) over 10 weekly one-hour classes.'⁹⁰ This approach was effective in reducing drug use.

Another approach addresses group behaviour; the theory of change that lies behind it is that early and continuing bad behaviour is a precursor to the development of later problematic behaviour, such as substance misuse, so tackling this early will reduce later problems. Making school culture more supportive, engaging and inclusive, developing participation in school decision-making and extracurricular activities and reducing bullying can also be part of this approach.

A widely-used and well-evaluated programme in this vein is the 'Good Behaviour Game'.⁹¹ This intervention uses behavioural techniques – such as group micro-rewards for good classroom behaviour – to develop pro-social attitudes and create a positive learning environment; this drives short-term improvements in children's behaviour and educational engagement and longer-term improvements in educational attainment and resilience. The programme is well-liked by teachers partly because improved classroom discipline is helpful across the board, and because it does not take up curriculum time, as it is a way of managing a class while teaching the usual curriculum. And, as the *Findings* summary points out, in

⁹⁰ Findings 2016 'It's magic: prevent substance use problems without mentioning drugs' Findings 'Hot Topic'

⁹¹ The ACMD describes it, and comments on it, as follows: 'The Game is played several times a week and rewards children for displaying appropriate behaviours during lessons (e.g. not talking out of turn or leaving a seat without permission) and is thought to work by improving socialisation skills in the classroom. The class is divided into two teams and a point is given to a team for rule breaking by one of its members. The team with the fewest number of points at the Game's conclusion each day wins a group reward. If both teams keep their points below a threshold, then both teams share in the reward. In one long-term trial conducted in the USA, participation in the Game in primary school was associated at age 19-21 with significantly lower rates of drug and alcohol use disorders, regular smoking, antisocial personality disorder, delinquency and imprisonment for violent crimes, suicide ideation, and use of school-based services. This intervention is particularly notable not only because of its apparent longevity of effect but also because it is one of several interventions that have an impact on substance use without directly mentioning drugs.' ACMD 2015 op cit p 21

addressing multiple issues it could be especially useful to those children experiencing co-occurrence of problems:

'... partly because there is no "subject" content, the intervention intercedes at the level of how the pupil relates to the social world around them and vice versa. The result is a range of beneficial effects. These are most easily documented for the minority of youngsters most likely to develop unhealthy relationships, but the benefits should extend to their friends, families, neighbours and colleagues, and to the broader society which is relieved of responding to proscribed and/or antisocial behaviour. The strategy is consistent with the observation that typically children develop a constellation of mutually aggravating problems, related the further back one looks to a shared set of factors affecting children's mental and physical well-being. Among these is a positive school environment, found in other studies to be strongly related to substance use..⁹²

Addressing 'social norms'

Another, very different, approach involves addressing 'social norms'. It aims, for example, to correct young people's overestimations of how much their peers drink, and how many approve of heavy drinking. Research has shown that young people overestimate the 'transgressive' activities that their peers are engaged in (be it drinking, drug-taking or under-age sex), and therefore approaches which try to correct these false perceptions have become popular. Unfortunately, they have not evaluated very well. When, for example, the social norms approach was tested with University of Liverpool students, there was little to no impact from disseminating norms about responsible drinking. Although there was evidence that participants overestimated how much the majority of their peers drank, and there was a link between believing others followed the norm and students' usual drinking behaviour, norms did not appear to be the 'driver' for drinking. Norms messages *did* affect drinking perceptions, but only reinforced the normative beliefs of the participants who accurately perceived the social norm. But, amongst participants that overestimated the norm, norms messages were ineffective in changing their beliefs about how much their peers drank.⁹³

Furthermore, the messages used lacked credibility – and other research has shown that credibility, as one might expect, is an important factor in how people act on information received.

A wide-ranging critique of the norms approach has questioned the validity of the social norms approach – the critique⁹⁴ looked at the research and questioned many of its

⁹² see Findings 2012 'The Good Behavior Game and the future of prevention and treatment' Findings

⁹³ Findings report of Robinson E. Jones A Christiansen P et al 2014 'Perceived peer drinking norms and responsible drinking in UK university settings' *Substance Use and Misuse*, 2014(49), p. 1376– 1384 http://findings.org.uk/PHP/dl.php?file=Robinson_E_4.cab&s=eb (accessed 20-04-17)

⁹⁴ Pape H 2012 'Young people's overestimation of peer substance use: an exaggerated phenomenon?' *Addiction*, 107: 878–884. doi:10.1111/j.1360-0443.2011.03680.x

assumptions, such as whether students *did* hold erroneous beliefs about their peers' behaviour, or even whether they actually had a notion of the quantity of others' consumption unless it was suggested by researchers.

It might therefore seem that this approach would not be worth pursuing in a gambling context. However, *Findings* point out: 'Normative education has not turned out to be a preventive 'silver bullet', but neither is it a dud – just more complicated and more limited than at first it seemed.'

Beyond the curriculum, beyond the school

The focus of intervention has been on curriculum programmes and materials, but, as we have seen, there is some evidence that, in addition to curriculum content, developing appropriate school policies can help to reduce problematic behaviours. Mentor (one of Demos' partners in the current work) runs the DfE-funded ADEPIS project,⁹⁵ which supports effective alcohol and drug education; their quality standards for alcohol and drug education include a section on 'school context' which states:

'A school's approach to alcohol and drugs is most effective when:

- It is addressed by the whole school community – staff, parents/carers, pupils, governors and the wider community
- It is consistent with the school's values and ethos, developed by all members of the school community ...
- Pupils' needs and views are taken into account when developing programmes and policies
- Staff have access to training and support
- It is supported by consistent messages from the family and community.⁹⁶

This means that policies should be created in consultation with the school members and the wider community and that the policy supports and extends the offering within the curriculum.

Generic family- and community-based approaches

Much prevention efforts have been focused on schools, but there are other locations that may have potential to induce behaviour change. An American programme that has been adapted for the UK is the Strengthening Families Programme, aimed at families with children aged 10 to 14 years (SFP10-14) which encourages enjoyable parent-child interaction (e.g.

⁹⁵ 'Alcohol and Drug Education and Prevention Information Service'

⁹⁶ Mentor 2014 *Quality standards for effective alcohol and drug education* Mentor p14

through play), setting limits and discipline.⁹⁷ Although early promising results in the USA have not been replicated in European context, an exploratory study in the UK found that:

'Parents/caregivers and young people reported that the SFPI0-14 (UK) had played a part in improving family functioning through: strengthening the family unit, improving parent/caregiver communication, using a more consistent approach, increasing the repertoire for dealing with situations, developing better positive and negative feedback, working more together as a team, identifying family strengths, strengthening family bonds, receiving group support, working more closely with mum and dad, learning to listen more, learning to get along with each other better, helping parents/caregivers more, better understanding of what parents / caregivers / young people are saying, changing the code of behaviour and developing more interaction among the family.'⁹⁸

The big advantage of these generic programmes and approaches is that they have multiple outcomes, so they should be more cost-effective; the downside is that most potential funders of prevention programmes are focused on specific topics – such as alcohol, illicit drugs, sexual behaviour, knife crime, gangs, or gambling. So these approaches are difficult to fund. This may be a particular problem for gambling funding as funds for prevention interventions come, albeit indirectly, from the gambling industry via the voluntary levy and it is reasonable for funders to require a high standard of evidence for positive effects on gambling behaviour before committing funds to generic, non-gambling-specific approaches. But piloting such approaches in concert with other topic-specific funders would help to generate such evidence.

One lesson from these programmes is the importance of involving the family: this is something that school-based programmes might include to increase effectiveness. But it is not easy; the *Blueprint* drug education programme made considerable efforts to involve the whole school, parents, and the local community but found it difficult;⁹⁹ and an evaluation for RGF of Tacade's efforts to involve parents in gambling education found that it achieved little engagement – however, this was a poorly-executed project: a better one might show more promise.¹⁰⁰

⁹⁷ The ACMD Report describes and comments: '... family skills programme that, in different forms, is suitable for high-risk and universal populations. The programme consists of weekly sessions, lasting two to three hours. For the first hour, parallel groups of children and parents develop their understandings and skills led by two parent and two child trainers. In the second hour parents and children come together as individual family units to practise the principles they have learned. The remaining time is spent on family logistics, meals, and other family activities. There is good evidence that participation leads to improved family, parental and child functioning and of a reduction in substance use initiation and associated problems and a reduction in its severity.' ACMD 2015 op cit p20

⁹⁸ Allen D Coombes L, & Foxcroft D (no date) *Preventing Alcohol and Drug Misuse in Young People: Adaptation and Testing of the Strengthening Families Programme 10-14 (SFP10-14) for use in the United Kingdom* Oxford Brooks University pp8-9

⁹⁹ http://findings.org.uk/PHP/dl.php?file=Blueprint_I.txt (accessed 24-02-17)

¹⁰⁰ Ives R 2011 'Evaluation of Tacade's "A Bit of a Gamble" Project' Responsible Gambling Fund

For gambling harm prevention, parental education might be particularly important in view of gambling's normative character – i.e. similarly to alcohol, gambling is an accepted social activity and therefore one which some parents do not mind (and may even encourage) their underage children's participation.¹⁰¹ There is also evidence that having a higher disposable income is associated with an increased risk of gambling harm in young people¹⁰² – since some of this money comes from parents it might be important to make parents more aware of this risk.

Policy advice

How has all this research evidence influenced policy advice? This section of the Report concludes with a look at two policy documents. Firstly, the Advisory Council on the Misuse of Drugs reported to the Home Office in 2015 on its findings on prevention. Some of the summary points are:

'There are a number of promising approaches that are likely to be beneficial if correctly implemented. These include pre-school family programmes; multi-sectoral programmes with multiple components (including the school and community) and some skills-development-based school programmes. However, there are a number of challenges in implementing these well-organised programmes in routine practice, with fidelity, and on a large scale. These difficulties are more pronounced as robust national and local prevention systems are not well established.

'... As the benefits of prevention are often long term, and are sometimes difficult to relate to policy priorities, additional considerations may be seen as more important than questions of (cost) effectiveness. These include politics, public demand for action, and media pressure.

'... there is strong evidence of [those] prevention approaches that have consistently been shown to be ineffective at improving drug use outcomes. These include information provision (standalone school-based curricula designed only to increase knowledge about illegal drugs), fear arousal approaches (including 'scared straight' approaches), and stand-alone mass media campaigns.'¹⁰³

And the recommendations include:

'Commissioners of prevention activities should be mindful that drug and substance use prevention is likely to have only limited effects as a standalone activity. Prevention activities should be embedded in general strategies that support development across multiple life domains.

¹⁰¹ such as allowing them to buy lottery tickets online with a card in the parent's name

¹⁰² Forrest D 2011 personal communication

¹⁰³ ACMD 2015 'Prevention of drug and alcohol dependence: Briefing by the Recovery Committee' ACMD p6

'...The challenges and complexities of prevention need to be more widely recognised across the range of stakeholders who have responsibility for prevention, particularly at a local level. Although some small benefits of prevention may be seen shortly after intervention, the majority will not manifest for several years. This means that prevention actions may be susceptible to short-term financial, political, and public-opinion pressures, and these may be reflected in commissioning plans.'

(p7)

But perhaps the most important aspect of the ACMD report is the emphasis that it places on prevention being:

'...part of a "complex system" of policies, interventions and activities and ... the greatest preventative benefits may be obtained through policies and actions that target multiple risk behaviours, of which substance use is just one.'¹⁰⁴

Also in 2015, Public Health England (PHE) published an overview of the international evidence of drug and alcohol prevention and applied to an England context.¹⁰⁵ It draws on UNODC's work on drug prevention standards. The PHE document is very useful in clarifying some of the issues that have led to confused substance misuse prevention activities, such as the distinction between imparting information and it having a preventive effect:

'It's vital that people have access to accurate, relevant information about health harm. Although there is little to no evidence that information alone changes behaviour, it can help reduce harm and inform choice. ...

'Accurate and consistent information about the health and social impacts of alcohol and drug use is only effective when delivered alongside interventions that develop the skills and personal resources people need to avoid early initiation to drug taking and developing harmful use.' (p 4 and p19)

The document contains a useful table of a range of preventive approaches. It concludes:

'Consistent and coordinated prevention activities delivered through a range of programmes and in a variety of settings (e.g., at home; in school; among peers; in the workplace; throughout the local community and in the media) seem most likely to lead to positive outcomes.

¹⁰⁴ Elsewhere, the ACMD report explains that: 'A complex system is one that is "adaptive to changes in its local environment, is composed of other complex systems (for example, the human body), and behaves in a non-linear fashion (change in outcome is not proportional to change in input)". Complex systems have properties that are a feature of the *system as a whole*, therefore while individual activities may not produce directly identifiable benefits for health, there may be knock-on effects and interactions with other activities until a tipping point is reached. Examples of complex systems include primary care, communities, and schools. Interventions delivered in these settings may themselves be simple or complicated, but the complex systems approach suggests that interaction occurs between components of an intervention as well as between the intervention and the context in which it is implemented.' (p7)

¹⁰⁵ PHE 2015 'The international evidence on the prevention of drug and alcohol use: Summary and examples of implementation in England' PHE

Evidence also suggests that modifying the environment where risky behaviour takes place can reduce harmful outcomes – e.g., controlling alcohol sales, density of outlets, and alcohol price, or by imposing bans on smoking of tobacco in public places.’ (p19)

The next section of this Report considers findings from evaluations of gambling interventions; following this, the findings from both substance misuse and gambling are brought together in a summary table.

The evidence from gambling education initiatives: two systematic reviews

There is much less to go on here, and the evidence available is weaker. Valentine, in a wide-ranging review of children and young people and gambling states:

‘There is relatively little provision of information about problem gambling in educational contexts. School based prevention programmes are relatively rare although preliminary evaluations suggest that the results of such programmes are encouraging. ... there is some evidence that the majority of young people are aware of the potential dangers gambling poses in terms of addiction and debt. However, the evidence from the wider social studies of childhood literature suggests that young people often ignore public health messages (e.g. about alcohol, obesity, sex etc.) despite being aware of the risks they run with their own behaviour.’¹⁰⁶

A systematic review and meta-analysis of ‘early intervention and prevention for problem gambling’ prepared for Gambling Research Australia was published in 2007.¹⁰⁷ This is perhaps the first such review, as authors were unable to find any previous systematic reviews on primary prevention for problem gambling. Thirteen studies were included; of these four studies were RCTs and nine were randomised cluster controlled trials – all of the latter involved school-aged participants. Eleven were from Canada, and one each from the USA and Australia. The interventions evaluated used a variety of formats.

Seven studies found ‘improved gambling attitudes and reduced misconceptions’; six found improved gambling knowledge. Six studies assessed gambling behaviours (but could not be included in the meta-analysis because of ‘variability in measurement tools and lack of data reported’). Two studies report positive impacts on coping and problem resolution skills. The review authors conclude: ‘Interventions seemed to work well in reducing gambling misconceptions and improving gambling knowledge, but not so well in improving gambling behaviours or coping and problem resolution skills.’¹⁰⁸ But this has to be a rather speculative conclusion as gambling behaviours were not always measured, and, when they were, various and sometimes inappropriate measures were used.

¹⁰⁶ Valentine 2016 *Children and Young People's Gambling: Research Review* RGT, pages 3-4

¹⁰⁷ Gray K Oakley Browne M and Radha Prabhu V 2007 *Systematic review and meta-analysis of studies on early intervention and prevention for problem gambling* (‘Grey Literature’ downloadable from <http://www.academia.edu/download/45684536/DozIol.pdf> (last accessed 21-04-17)

¹⁰⁸ Gray et al p53

There were several limitations to the studies reviewed, in particular, none of the nine cluster randomised controlled trials¹⁰⁹ took the clustering into account in their analyses. The follow-up periods were short. The reviewers often lacked sufficient data from the studies, and they report that: 'the methodological quality of many of the studies was poor and the estimates of effects obtained are likely to be biased in favour of the experimental intervention compared to the control intervention'.¹¹⁰ A particular concern is that:

'Many of the studies were conducted by the same group of researchers and were the same or very similar interventions, conducted at different age groups. All but one of the studies was carried out in Canada, which made it difficult to determine any differences between countries. Many of these studies were all funded by the same company, Lotto Quebec. Previous reviews have shown that studies funded by pharmaceutical companies are more likely to show large effect sizes and outcomes that favour the sponsor ...'¹¹¹

Despite these limitations, the review suggests some 'guiding principles' for primary prevention – interventions should:

- happen prior to the start of gambling; since gambling starts early so must gambling interventions – from age 12
- be school-based – for ease of access to young people
- should be 'psycho-educational' (this seems to mean addressing risks and developing skills)
- be in the form of a video, activity and lecture combination
- be implemented by appropriately trained personnel.

However, these five 'principles' are questionable – they are not strongly supported by the paper's analysis. For example, the 'principle' that a video, activity lecture combination is more effective is qualified by: 'This combination of interventions has shown promising results, although only two studies used this combination. One study showed positive benefits and the other showed inconclusive results',¹¹² which is hardly a good basis for action!

The Grey *et al* review appears to be rigorous and to follow Cochrane review guidelines, but it is rather uncritical and makes claims that are unsubstantiated or only weakly supported by the findings.

A more recent systematic review by Keen *et al*¹¹³ helpfully summarises the evidence from empirical evaluations of school-based 'universal' gambling programmes around the world.

¹⁰⁹ 'A cluster randomised controlled trial is a type of randomised controlled trial in which groups of subjects (as opposed to individual subjects) are randomised' (https://en.wikipedia.org/wiki/Cluster_randomised_controlled_trial)

¹¹⁰ Gray *et al* p 54

¹¹¹ Gray *et al* p 54

¹¹² Gray *op cit* page 3

¹¹³ Keen B Blaszczynski I A and Anjoul F 2016 'Systematic Review of Empirically Evaluated School-Based Gambling Education Programs' *Journal of Gambling Studies* DOI 10.1007/s10899-016-9641-7 (Online in 2016, published in journal 2017)

After screening and exclusion criteria were applied, the review identified 19 studies, only nine of which attempted to measure intervention effects on behavioural outcomes; of those, only five reported statistically significant changes in gambling behaviour – but all five had methodological inadequacies. This is a familiar difficulty; the authors refer to an earlier paper by Ladouceur *et al* reviewing prevention programmes for youth gambling who found that: ‘... a lack of long-term follow-ups and of behavioural measures makes it difficult to draw any clear conclusions about the effectiveness of such programmes’.¹¹⁴ There are good reasons why behavioural outcomes are often not measured; the authors point out:

‘One of the difficulties in measuring behavioural change in adolescent gambling is that relatively small numbers of youth gamble at problematic levels, and therefore, large sample sizes are needed to detect small but significant reductions in gambling problems. Additionally, many programs are not designed to promote abstinence, so large reductions in gambling frequency are not necessarily anticipated.’¹¹⁵

In the absence of behavioural measures, cognitive variables (such as ‘reducing common misconceptions and fallacies about gambling, increasing knowledge of gambling forms, odds, highlighting differences between chance and skill, and creating more negative attitudes toward gambling.’), and skills (‘such as coping, awareness and self-monitoring, attitudes toward and dialogue about peer and familial gambling, problem solving and decision-making.’) were measured; but as the authors point out: ‘from these results it is not possible to determine if such cognitive improvements prevent the development of future gambling problems.’ In fact, the Review finds evidence to the contrary: ‘Although four studies that measured behavioural outcomes observed improvements in knowledge, attitudes, and cognitive errors ... they did not detect consequent behavioural changes.’¹¹⁶ In other words, although cognitive changes in the predicted direction occurred they did not result in behavioural changes.¹¹⁷

The authors of the review point out major methodological and statistical flaws in the studies. They also discuss the many difficulties of measuring behaviour. A key issue is how to measure gambling harm – five of the nine studies used problem gambling measures (such as the DSM-IV-MR-J) as the main outcome variable. But this is problematic; as the authors point out: ‘The SOGS-RA and DSM-IV were developed as measures of gambling problems over the last 12 months, as such it is not adequate to simply adjust the timeframe of these measures to suit shorter assessment timeframes’. Furthermore, these were designed as diagnostic tools to identify problem gambling, so gambling-related harm might not be captured by these measures. Other studies used gambling behaviour variables such as

¹¹⁴ Ladouceur R Goulet A, and Vitaro F 2013 ‘Prevention programmes for youth gambling: a review of the empirical evidence’ *International Gambling Studies*, 13(2), 141–159. doi:10.1080/14459795.2012.740496.

¹¹⁵ Keen *et al* 20th page (pages are not numbered in my pre-publication copy)

¹¹⁶ Keen *et al op cit*, 17th page

¹¹⁷ One explanation for this may be that gambling knowledge, being measured close to the time of the intervention, increases due to rehearsal effects rather than genuine understanding

expenditure,¹¹⁸ but, as the review authors point out, '... gambling expenditure is considerably low among adolescents, and abstinence is not necessarily an adequate or realistic outcome, such measures by themselves may not be appropriate indicators of efficacy.'¹¹⁹

There are also conceptual problems. Keen *et al* point out that the mechanisms of change were not clear. This is a particular problem in multicomponent interventions – while these are probably justified as good pedagogy, it is difficult to disentangle the contributions of the different components to the outcome. The reviewers give the example of an intervention that involved both online training modules and personalised feedback to the students. While the study evaluators had attributed the intervention's success to the feedback, the reviewers question this, even suggesting that the findings possibly point to a detrimental effect of the personalised feedback in that regular gamblers in the sample had more unrealistic attitudes to gambling following the intervention!

The reviewers discuss the content of the 19 studies. All targeted cognitive aspects such as gambling fallacies: 13 dealt with the 'unprofitability' of gambling (for the punter), covering topics such as house edge and odds; 11 addressed randomness in gambling; 11 aimed to raise awareness of the signs, symptoms, and consequences of problem gambling. Skills development was found in only six of these programmes.

An important consideration is the length of the programme and the timeframe in which it is delivered: nine of the programmes lasted for only one session, which is almost certainly not sufficient to achieve any lasting behavioural change.

How programmes are delivered is also significant: 'almost all ... were delivered to class cohorts' and: 'Most programs comprised a combination of multi-media tools (videos, online modules) and classroom discussions and activities. Only three programs did not involve some form of multi-media ... and only five were solely multi-media programs (no teacher intervention)'. While some studies found that 'gambling specialists' (presumably, external to the school and brought in for the session(s)) were more effective at reducing cognitive errors than were teachers, it was not thought practical to expect this as part of a programme. A compromise was online modules, which could embed the knowledge and skills of 'experts'.

The review concludes with some recommendations. These include the suggestion that universal programme should be implemented from an early age (10+); oriented toward preventing gambling problems rather than preventing gambling; the programmes 'should focus primarily on teaching mathematical principles that account for the long-term unprofitability experienced by users, such as expected value'. They should be delivered over several sessions; have content 'relevant to youth'; and use multi-media.

¹¹⁸ But this raised additional issues of how to deal with self-reported gambling expenditure data – for example only four of the nine studies explicitly asked if the reported gambling behaviour involved money.

¹¹⁹ *ibid*, 18th page

However, it is difficult to see how these recommendations have a secure basis in the evidence from the review. Given the finding that cognitive understanding does not necessarily result in changed behaviour, it is strange to recommend the teaching of 'mathematical principles' as a way of reducing gambling harm. The authors, apparently lacking understanding of pedagogy, ignore the importance of helping young people to explore their attitudes and develop relevant skills in the comparative safety of the classroom. They have not taken account of the extensive evidence base available from related fields (especially, as we have seen, substance misuse).

This review, published in 2016, is comprehensive in its coverage of gambling harm prevention programmes across many jurisdictions, but the authors have taken a very narrow view of what an educational intervention is, or could be – while evaluations focus on programmatic delivery of gambling interventions, there are other ways of educating about gambling. In the next section, some gambling-specific resources are examined.

Some gambling education resources

There have been very few gambling-specific school education resources in the UK. Prior to Tacade's development, with RIGT funding, of two gambling resources (one for schools and one for informal education¹²⁰), only GamCare's *A Certain Bet?*,¹²¹ GamCare's *A Dead Cert?* – a resource for youth work,¹²² and a video, *Under Starter's Orders*, could be identified.¹²³ educari conducted the evaluation of the Tacade materials, finding that:

The two Resources have been widely distributed and well-received. Participants in the Events were enthusiastic. The Resources fit with Tacade's existing educational publications and will be familiar to many educators. They have many good points: they are attractively produced in a style familiar to educationalists, have relevant educational activities, and locate gambling within the PSHE Education curriculum. They provide information about gambling and help young people to explore their attitudes to it. Some of the weaker points include insufficient attention to cross-curricular links (especially to 'financial capability'); the poor quality of stated aims,

¹²⁰ *You Bet* – primarily for schools; and *Just Another Game* – primarily for non-school settings. Almost all of the initial print run of 5,000 copies of each Resource were distributed (free), and a reprint (1,500 of each Resource) was made. However, the extent of their use in classrooms and youth settings was probably quite limited. (They are still available for sale by *Lions Lifeskills* at:

<http://lionslifefskills.co.uk/lionslifefskills/index.php/resources-for-11-19-s/you-bet-is-aimed-at-11-16> and <http://lionslifefskills.co.uk/lionslifefskills/index.php/resources-for-11-19-s/just-another-game> (accessed 28-11-17)

¹²¹ GamCare *A Certain Bet? Exploring Gambling* 1997, published in an updated edition in 1999, which was produced with National Lottery funding. It is a ring-bound A4 folder of around 40 pages. It aims to increase awareness of gambling and the dangers of excessive and uncontrolled gambling among 12- to 15-year-olds, and to help young people to understand the place of gambling in society and the notion of responsible gambling. Its five sections cover: 'Why do we Gamble?'; 'Gambling in Society'; 'Social Gambling'; 'Psychology of Gambling'; and 'Problem gambling'. Lessons include participative techniques and the development of knowledge, skills and attitudes.

¹²² GamCare *A Dead Cert?* 1998. Production was sponsored by Camelot. This is an A4 slip-case publication containing seven activity cards, a contact and resources card, and four 'trigger' photo-cards

¹²³ *Under Starter's Orders* (video and unpaginated booklet) GamCare (undated)

learning objectives, and outcomes; and the weakness of needs assessment elements. The educational content is sometimes pedestrian and does not make effective use of new technologies. ...

We conclude that a good start has been made but that more will need to be done, on a sustained and continuing basis, to embed gambling education and to modify and develop content and approaches.¹²⁴

Our evaluation report recommended:

...more resources that build on the Tacade material will be needed ... They should offer:

- more help with planning
- greater alignment with best practice in schools and other contexts (using experience from other areas such as alcohol and drug education)
- improved curriculum integration and links to curricula (especially mathematics and personal finance / financial capability)
- more focus on gambling-related safety skills
- more imaginative, creative and innovative activities and delivery methods¹²⁵

There was evidence from our evaluation that educators found it difficult to fit gambling lessons into an already over-crowded curriculum. RIGT was already aware of the problem: ‘...ensuring that gambling is addressed within PSHE or Citizenship would be difficult, given that it competes with drugs and alcohol, sexual health and much else.’¹²⁶ We reported that:

‘Tacade hoped that PSHE teachers would choose lessons with a gambling element so that gambling education became ‘naturally embedded’ within the PSHE curriculum. This was a sensible aim, but needed more backup to make it effective – for example, in advice on curriculum planning’.

Beyond the UK, there are examples of comparable resources. For example, in The Netherlands, gambling issues have long been addressed within a similar framework to that of drugs; while there are lessons from the field of drug education, such an approach has limitations. In New Zealand, the Problem Gambling Foundation have produced resources such as *When is it not a game?: A Health Education Resource for Secondary Schools*,¹²⁷ a booklet and video covering attitudes, values and beliefs, and skills, as well as the concept of risk. This is an excellent resource, focusing on risk reduction, closely linked to the New Zealand Health Education curriculum, and clearly educational in its approach. Fast Forward, in its proposal, mentions ‘Stacked Deck’, a Canadian programme.¹²⁸

¹²⁴ from educari's Evaluation Report Summary 2008

¹²⁵ educari 2008 ‘Final Report’ (Summary of Recommendations, page 4)

¹²⁶ RIGT Education Strategy discussion paper 2005

¹²⁷ Dickinson P and Sinkinson M 2003 *When is it not a game? a Health Education Resource for Secondary Schools* Problem Gaming Foundation of New Zealand. A 55-page A4 spiral bound booklet and video funded by the Problem Gambling Committee

¹²⁸ ‘Stacked Deck is a set of 5–6 interactive lessons that teach about the history of gambling; the true odds and “house edge”; gambling fallacies; signs, risk factors, and causes of problem gambling; and skills for good decision

It can be difficult for schools to fit new subject areas into an already full curriculum. While teachers might recognise the importance of gambling education, many may be reluctant to tackle yet another topic of which they feel that they know little. This means that a school resource should:

- be easy for teachers to use
- fit with other topics within PSHE&C
- add value to the PSHE&C curriculum
- hold the interest of young people.

It is also difficult – for different reasons – to encourage youth workers and other informal educators to tackle new areas. Qualitative research undertaken for the National Youth Agency and DrugScope¹²⁹ (some time ago when drugs issues were not so routinely addressed), found that, while most youth workers recognised the importance of tackling drugs and alcohol issues through their work with young people, of more importance to many was to address issues that were identified by young people themselves. In other words, it is hard to develop new curriculum areas in informal education that are not recognised as important by young people. This implies that there will be a big job to do in convincing youth workers that gambling is an important area to address, and to encourage them to do so.

Targeted, indicated and environmental prevention

The focus of the foregoing has been on universal prevention – since this is the aim of the Demos and Fast Forward interventions. However, to put these interventions in context a few words about the other prevention targets will be helpful.

It may be that universal programmes are not the most effective when compared to **interventions that target people at risk**. If such people could be reliably identified, then they could receive a more intensive intervention and those not at risk would not be exposed to an intervention that could potentially raise their interest in gambling – a worry that some parents express.

However, reliable identification is very difficult and produces false positives (people who are not at risk but which the identification process incorrectly selects),¹³⁰ there are risks of stigmatisation of those selected for an intervention, and of the ‘self-fulfilling prophecy’ effect of people who have been selected seeing themselves as ‘problems’ and playing out that belief.

A review by *Findings* explains:

making and problem solving’. From the Abstract of: Williams, R *et al* 2010 ‘Stacked deck: A program to prevent problem gambling’ *The Journal of Primary Prevention*, 3, 3 pp 109-125

¹²⁹ Ives R 2003 ‘Report for DrugScope of research on the responses of the youth service to drugs issues’

educari

¹³⁰ As well as, of course, ‘false negatives’ – missing people who would benefit

'Selective interventions, like those tested in the Preventure and Adventure trials, appeal not only to the sense that they are targeting those most in need (or at-risk), but that they are a smart way of spending limited resources. But, as one well-informed and clear analysis concluded, we may not yet be able to predict future substance use well enough to risk leaving some people out. Data from 940 studies tracking the development of cohorts of young people was used to test the extent to which standard risk and protective factors were related to alcohol, tobacco, and cannabis use. Most of the factors were indeed related to substance use, some fairly strongly, but on average relationships were weak. Some factors were not related to use, and a few were related in the 'wrong' direction. This predictive weakness was fundamental to why the paper advocated for persisting with universal prevention efforts.'¹³¹

But some groups are relatively easy to define – for example, males are much more at risk of gambling-related harm than females and so might be targeted as a group (albeit a rather large group!). Specific gambling harm prevention initiatives could be targeted at particular defined groups that are known to be more at risk of gambling harm, such as some Chinese communities. And young people with gambling-connected co-morbidities could also be specifically addressed.

Blaszczynski has further suggested that different educational approaches might be appropriate for different types of gamblers: he suggested a theoretical model of three different sub-groups:

- 'behaviourally conditioned problem gamblers' – those who gamble initially for entertainment and socialisation
- 'emotionally vulnerable problem gamblers' – those who gamble to escape from and elevate their mood due to negative emotional and physical life factors
- 'anti-social impulsivist problem gamblers' – those who gamble because of a predisposition to addictive behaviour due to psychological and biological dysfunctions.¹³²

From this typography he suggests different kinds of education. For 'behaviourally conditioned problem gamblers', education addressing incorrect ideas of luck, chance and superstition and to educate to the notions of randomness, odd of winning and probability; for 'emotionally vulnerable problem gamblers', as well as correcting faulty gambling-related cognitions, include stress management and problem-solving; for 'anti-social impulsivist problem gamblers', school peer support-groups. This is thought-provoking idea and,

¹³¹ Findings 2017 on the 'Adventure' trial: 'Can cannabis use be prevented by targeting personality risk in schools? Twenty-four-month outcome of the adventure trial on cannabis use: a cluster-randomized controlled trial' *Addiction*: 2015, 110, p. 1625–1633

¹³² Blaszczynski A and Nower L 2002 'A pathways model of problem and pathological gambling' *Addiction*, 97, 487–499, quoted in Gray et al p13.

although his categories are not helpful,¹³³ it is a reminder that in targeted prevention different approaches are needed for different groups.

For those experiencing gambling-related harm, '**indicated prevention**' may be part of the treatment process. This might include strategies for harm reduction as well as, as Valentine puts it:

'to develop more understanding of young problem gamblers help-seeking strategies (on-line and off-line); and the barriers which prevent some young people from seeking help.' (p5)

The fourth type of prevention generally recognised in the literature is **environmental prevention** which encompasses the wide range of public health approaches that focus not on the individual gambler but on the product and the environment in which gambling takes place. These approaches are very significant and show promise but are not directly relevant to this evaluation.

The Projects

We can now examine the two projects, armed with an understanding of the broad range of evidence about universal prevention for substance misuse and the more limited evidence for gambling harm.

Neither of the projects has produced a 'programme' of gambling education; rather, they have created a flexible resource that can be used in a range of situations. This is appropriate: there is little appetite among UK educators for delivering a gambling education programme. Both organisations have (sensibly) produced lessons / activities / 'templates' that address gambling in the context of other relevant issues that society is concerned about, and have addressed issues generic to young people such as risk-taking.

Neither projects have articulated a 'theory of change', that is, they have not set out how they expect the intervention that they are making to make a difference through achieving the desired outcomes. In the absence of this, the evaluation is taking the view that, in both implementations, the simple theory of change is as follows:

¹³³ the typography seems not to be not evidence-based, and his use of the term 'problem gambler' is archaic



There are some key differences between the two approaches:

- Demos' Resource is intended to fit with the school curriculum in England and Wales, Fast Forward's Resource fits with Scotland's 'Curriculum for Excellence', which covers both school and informal education
- Demos' Resource is solely for secondary schools, while Fast Forward's is intended for use in both schools and informal educational settings
- Demos' Resource offers four lessons that are progressive and fit together as a sequence – and it hoped will *all* be delivered (and in the evaluated implementation in four schools this is a condition); while Fast Forward's Resource offers a number of activities / templates that can be used in whatever way the professionals choose (although there are some suggestions about how this might be done)
- Fast Forward is offering training in using their Resource to all who desire it, while Demos is offering training limited to those teachers who will be implementing it in

their four experimental schools. Whether training will be an ongoing part of the Resources implementation is as yet not clear.

Demos

The Demos project is the more straightforward of the two; it aimed to create a physical resource ('lesson plans / materials') that teachers can use to educate Year 10 young people (aged 14 to 15 years) in schools in England and Wales. The materials are quite modest in scope and quantity, and the testing is in a quite limited number of schools; but the proposed reporting to GambleAware is extensive, and the proposed launch event planned for later in 2017 could be very useful in disseminating the materials to a wider audience. Demos has worked with Mentor and the PSHE Association in developing the materials, adding their subject expertise to the work, as well as with a problem gambling expert.

The materials are being tested in four schools (Demos estimates that this will involve around 500 pupils), with four 'control' schools for comparison. The schools have opted in to the intervention (or the 'control') in response to requests from Demos and its associate, the PSHE Association. They are being paid a small amount of money for their involvement.¹³⁴ While the pupil sample size is quite large, given the low prevalence of at-risk gambling in this population, the sample size probably lacks sufficient power to detect changes in at risk gambling behaviour.

As described earlier, a rough estimate of the proportion of at-risk gamblers in the age-group is around five per cent; in the sample of 500, this might give around 25 at-risk gamblers. Given the modesty and limited duration of the proposed intervention, and the evidence that universal prevention approaches of this type have relatively small impacts, it is likely that Demos will struggle to identify changes in risky gambling behaviour in their experimental group, especially over a short-term follow-up period – the pre-intervention questionnaire was administered and the intervention was implemented over the course of the autumn term 2016 and the follow-up evaluation will take place during the autumn 2017 school term. Therefore, their proposed outcome measure –

'The intervention will have a measurable impact on the incidence [they probably mean 'prevalence'] of at-risk gambling behaviours among pupils subject to the intervention'.¹³⁵

– is unlikely to show a statistically significant change. Indeed, since in the 'control' schools there will be no gambling-related intervention, it is possible that the intervention will differentially raise awareness of gambling and may *increase* gambling-related behaviours among pupils in the intervention schools during the short period of the project and its evaluation.

¹³⁴ it is therefore a non-randomised cluster sample

¹³⁵ Response to GambleAware's ITT 'A Demos proposal for a gambling intervention in secondary schools' p2

There are rather a small number of intervention schools: only four in the experimental group. Given the variability among schools in England and Wales, it is unlikely to be able to be a representative sample. The schools were recruited through the PSHE Association; they may therefore be schools that are particularly engaged in PSHE, and therefore atypical in this respect; however, during the evaluation interview, the PSHE Association subject specialist countered that the opposite was true – because schools that were having difficulty with the PSHE curriculum, or had been told by inspectors to improve it were likely to join the Association.¹³⁶

Demos provided some training in the use of these materials to the PSHE teachers, who have delivered all four lessons contained in the Resource in the four 'intervention' schools. As described earlier, training teachers enhances their knowledge, confidence and skills; and training can reduce variability between individual teachers in how they interpret written instructions in programmes, so the inclusion of teacher training is a positive step. However, while it is good to test a new intervention with professionals most likely to implement it appropriately and enthusiastically, it is a well-known problem that new innovations can be successfully implemented by the pilot group, only to fail when more-widely implemented by less keen, less skilled, less experienced colleagues:

'There's a great desire to find out what works in teaching, but one of the problems with schools and teaching is that almost anything works somewhere. There's a long history of education innovations, which have the power to transform. ...What you typically find is that at the pilot stage, when you have well-trained and enthusiastic pioneers, you get very good results. But when you take it mainstream, you get a wash-out of the effect. Replicating a formula across the whole education system is difficult to sustain, because of the multiple competing goals of education, and the complexity of students and classrooms.'¹³⁷

While this effect cannot be entirely avoided, developers of new resources need to take account of how their materials will 'degrade gracefully', that is, are they effective when used by professionals who are not trained (and many teachers delivering PSHE are untrained or have little training) or who are not very engaged with their delivery. Thus, if and when the materials are made available to all who would like to use them, this effect will need to be considered; perhaps monitoring would help in assessing this.

Our external evaluation focuses on the processes of the work, since Demos' internal evaluation of this project is potentially quite sophisticated, involving a control group of schools and the collection of both quantitative and qualitative data. It represents more than a quarter of the overall budget. This will involve a considerable amount of data collection and analysis. We will keep in regular contact with the Demos team and contribute to developing the quality of the evaluation. For example, it was noted that there was little qualitative data proposed to be collected but, following our suggestion, focus groups have

¹³⁶ in an interview with Jeremy Scott, 26-08-16

¹³⁷ Chris Husbands, professor of education at the Institute of Education, *Education Guardian* 3-9-08

been conducted with both teachers and students.¹³⁸ The final Report of this evaluation will include an assessment of Demos' evaluation and analysis.

The Resource

The Demos resource was critically examined by a member of our team (Adrian King) who is an experienced PSHE educator in both schools and informal educational settings. His comments are incorporated in the following commentary / analysis; Annex D gives his thoughts in more detail.

The draft Resource¹³⁹ used in the piloting in the four schools has four lessons (each has a proposed duration of one hour), created to fit within the PSHE curriculum, which together make up a gambling education intervention for secondary school pupils. It consists of two A4-size *Word* documents – a Teachers Manual (35 pp) and a Pupil Booklet (23 pp); both are clearly laid-out in a style familiar to educationalists; plus a set of 6 *PowerPoint* slides which can be used to display relevant material, such as the case studies, and include a link to a video for use in the 'marshmallow' section of lesson 2. When finalised, the resources will be freely available as a web download.

The lessons have relevant educational activities, and locate gambling within the PSHE Education curriculum. They provide information about gambling and help young people to explore their attitudes to it.

Demos aimed to create cross-curricular materials. This was a good idea, but the Teachers Guide lesson descriptions has few suggestions for connections; there are only two brief suggestions: to Maths ('understanding of probability and odds', Lesson 1) and English ('persuasive writing', Lesson 4), plus a note in Lesson 4 that there are (unspecified) links to be made with 'media studies, art and design, and business studies' (Teacher Booklet p31).

Each lesson has the headings: 'context and overview'; 'learning objectives'; 'learning outcomes'; 'climate for learning'; 'links'; 'lesson episodes' (this is, in all four lessons, by far the lengthiest section); 'signposting; and 'possible extensions'. The 'lesson episodes' give teachers detailed guidance on how to progress the lesson activities.

¹³⁸ We had the opportunity to comment on the draft focus group schedules for both teachers and students before Demos conducted these groups. One significant comment was to ask the focus group researcher to develop her draft question to teachers: 'Do you think pupils are now more informed about risk, and more capable of managing risky situations?' We commented: – I would like to know separately: about knowledge – are the students better informed? about skills: are they more able to manage gambling-related situations such as setting limits; and about attitudes – do they appear to have changed their attitudes towards gambling in the direction of being more cautious, more aware of its risks., etc. Also, if there is any evidence on behaviour that students have reported that'd be great (such as: 'I have stopped getting a lottery ticket because I now understand that the odds of winning are very low'). We also asked her to attempt to get an idea of the level of the students' abilities. (see our Monthly Report #6)

¹³⁹ references are to version of the draft Resource that was received on 04-07-16

Table I summaries the contents and gives critical comment on the components. In general, the draft Resource is an excellent and helpful addition to the materials available to teachers in schools in England and Wales.

Table I Comments on the components of Demos draft Resource (teachers' booklet & PP)

<i>component</i>	<i>positives</i>	<i>room for improvement</i>
Table of Contents	-	absent – would be useful to have one
Introduction: 'Why gambling education?'	justifies teaching about gambling;	could have included links for teachers who wanted a more in-depth understanding of gambling;
Introduction: 'Key aims'	provides one high-level aim for the intervention: 'to promote the wellbeing of pupils by helping them understand how to prevent harmful behaviours and have the skills to be resilient in the face of difficult and risky situations – with a particular focus on developing healthy attitudes and norms around gambling'; emphasises the usefulness of the skills for other aspects of PSHE; lists four key learning objectives and outcomes: to help pupils to: 'Identify risks and understand how to make good decisions in risky situations'; 'Develop strategies to recognise and manage 'impulsive' behaviour'; 'Recognise unhealthy behaviours in others and develop strategies to help them: 'Understand the role and influence of advertising and develop socially responsible messages around gambling.' The four lessons each cover one of these objectives.	-
Introduction 'Guidance on using the resource'	helpfully describes the Resource's components and points to the adaptability and extendibility of the lessons	while the pilot intervention is being delivered by experienced PSHE teachers, when the Resource is rolled out this will not always be the case – more teaching points (for example how to manage group-working and the sort of questions to ask) would be helpful.
Introduction 'Establishing a safe learning environment'	important and helpful	-
The Resource's four lessons form a coherent package covering topics relevant to gambling and with cross-over to other PSHE Curriculum areas		
Lesson 1 How can we manage risk?	addresses the first key learning objective through looking at risk assessment and introducing the 'ABC' model –which potentially is very useful	includes a link to the PSHE Association Programme of Study: the role peers can play in supporting one another' which seems relevant only to lesson 3; Suggests that the lesson 'could help to develop pupils' understanding of probability and odds' but no further advice on this; 'Risk' is undoubtedly a difficult concept to pin down: here, there is a risk of over-simplification: while the risk example cover a range of risk behaviours, the risk for each is one-dimensional – e.g., drug use is

		presented as posing only health risks; the risk of illegality is not mentioned.
Lesson 2: 'How can we manage impulsive behaviour?'	uses 'marshmallow test' as a way of exploring how to reduce impulsivity / risk.	-
Lesson 3 How can we help people who have developed problems with gambling ?	Uses a case study to explore the problems some people have with gambling and how they can be helped.	While this is a well-put-together lesson, few people in this age group have gambling problems so should one-quarter of the package of four lessons be spent on this? It might be better to focus on other aspects of gambling, e.g., gambling-specific skills, such as limit-setting, budgeting, etc. The binary distinction between 'recreational;' and 'problem' gambling is misleading.
Lesson 4: 'How can we challenge the hype of the gambling industry?'	Helpfully explores this topic, focusing on: 'improving pupils' understanding of industry agendas, and how the ways in which risks are presented (e.g. as glamorous) can affect decision-making'	
PowerPoint Slides	The 61 Slides display relevant points for use in the lessons	(On Slide 54 it would be better to have 'Gambling (Licensing and Advertising) Act 2014' – the (big-change) 'Gambling Act' was passed in 2005 (it came into force in 2007))

Fast Forward

Fast Forward, a national organisation in Scotland, has considerable experience of project conception and delivery in Scotland and is embedded in both the formal and informal education landscape in the country.

Prior to the current project, Fast Forward had developed, with local funding, a 'youth problem gambling initiative' that commenced in April 2014. This project, for Edinburgh and the Lothians, '...aimed to prevent the onset of 'at-risk' gambling behaviour among young people.' As the Fast Forward Resource Booklet describes it:

'Between April 2014 and December 2015, Fast Forward provided awareness-raising sessions in local high schools and engaged with existing service providers to increase access to, and availability of, support and treatment for young people experiencing gambling-related problems.'¹⁴⁰

Thus, the organisation was well-placed to build on this experience to develop current work.

An objective of the previous project included: 'Strengthen[ing] the role of services, schools and youth agencies in addressing gambling-related issues'; as well as addressing youth work staff.

¹⁴⁰ in the Foreword

In their previous project, they have gathered evidence of need for gambling-related training for professionals, and they have reported¹⁴¹ that the training they have offered has been well-received.

The original proposal for this project was revised to limit the geographical focus to Scotland, and extend the training to cover more areas of Scotland.¹⁴² This has played to their strengths as a Scottish-based organisation with a great deal of experience across that country.¹⁴³

Fast Forward has developed an educational Resource for youth practitioners, and has provided free, open-access training in its use for practitioners across Scotland. Fast Forward's 2016 report of the project states that 20 training events were run in 2016, reaching 193 practitioners from 26 (out of the 32) Scottish local authorities.¹⁴⁴ A wide range of professionals have attended the training.

Fast Forward has carried out pre-and post-training assessments via an on-line participant evaluation form. These have been shared with us as the external evaluators and will be fully reported on in the final evaluation Report.

The external evaluation's focus has been on supporting the contractor in developing the quality of the evaluation, ensuring that the monitoring data that is collected is as detailed and useful as possible and that it includes some outcome measures appropriate to the intervention.

The external evaluation took advantage of several opportunities to comment on the on-line survey questions and the suggestions made were actioned by Fast Forward. In December 2016, the evaluation reported (in the monthly report) on Fast Forward's three-month follow-up of those attending the training. This is reproduced here as Annex D. Data came from 31 respondents of whom more than three-quarters (N=24, 77%) had read or implemented the toolkit; of the 12 of these who described the setting where they used the toolkit, three had used it in school and seven in an informal youth setting while four described other settings.¹⁴⁵ One task of the external evaluation has been to conduct semi-structured follow-up telephone interviews with some of the on-line respondents.

¹⁴¹ (in their project proposal to GambleAware)

¹⁴² in Fast Forward's 'Addendum', October 2015

¹⁴³ Levels of gambling-related harm among young people may be higher in Scotland (and especially in Greater Glasgow and Clyde), compared to the UK as a whole (a phenomenon which may be connected to multiple deprivation).

¹⁴⁴ 15/4 in Edinburgh (8 participants); 19/4 in Lanarkshire (12 participants); 21/4 in Dundee (7 participants); 10/5 in Paisley (5 participants); 12/5 in Glasgow (22 participants); 17/5 in Stirling (11 participants); 30/5 in Edinburgh, short refresher session (only 3 participants out of 6 who registered); 01/06 in Stranraer (16 participants); 02/06 in Dumfries (15 participants); 7/6 in Edinburgh (6 participants); 8/6 in Aberdeen (7 participants); 22/6 in Fife (5 participants); 23/6 in Airdrie (7 participants); 28/6 in Glasgow (13 participants); 30/08 in Glasgow (12 participants); 12/10 in Glasgow (10 participants); 24/11 in Perth (5 participants); 29/11 in Kilmarnock (13 participants); 13/12 in Edinburgh (6 participants); 14/12 in Glasgow (6 participants)

¹⁴⁵ The alert reader will have noticed that the number of settings is 14: two respondents had used it in two different settings.

Since the Advisory Group is an important part of this project, having an oversight role, the evaluator has attended the Advisory Group Meetings, partly as a way for the evaluator to keep well-informed about the project, and partly to give additional chances for the evaluator to act as a 'critical friend' to the project. We have attended a training event in Glasgow. We have worked closely with Fast Forward to develop their on-line surveys following up those who attended their training course. And, as sustainability is an important consideration both for GambleAware and for Fast Forward, as one of Scotland's national agencies, and, furthermore, in the Scotland context, there are perhaps more possibilities than in England and Wales for NHS buy-in,¹⁴⁶ we have discussed this issue with the contractors and made some suggestions for sustaining and developing the work.

The Resource

First, a note for readers not familiar with the Scottish curriculum. The Curriculum for Excellence (CfE) first came on the scene in 2004, but was formally implemented in the 2010-11 school year. As Priestly and Minty describe it:

'CfE has been widely hailed in Scotland as a radical departure from existing ways of both defining the curriculum and from prevailing practices in Scottish schools. CfE certainly represents a shift from the prescriptive culture of the previous 5-14 curriculum, towards a more developmental approach which positions teachers as agents of change and professional developers of the curriculum. It espouses more overtly student-centred practices than previously, based around the development of Four Capacities in young people - confident individuals, successful learners, responsible citizens and effective contributors.' (p39)¹⁴⁷

It can therefore be challenging for those teachers used to a more traditional curriculum; as Priestley and Minty put it:

'While many teachers expressed support for the notion of developing of children's skills for life, it was evident that some ... mainly saw their role as imparting knowledge and raising attainment...' (p48)

This raises the question about the potential mismatch between the teachers' view and the expectation of the curriculum:

'...one should question whether the assumptions within CfE about learning and knowledge are congruent with teachers' own implicit theories of learning and knowledge. CfE advocates a broadly constructivist view of learning, at least implicitly. Thus, there are notions that students learn best through active engagement and experience, and through dialogue with other learners. Our research suggests,

¹⁴⁶ As Fast Forward's proposal pointed out: 'NHS Health Promotion departments often have a youth health and wellbeing officer within whose remit this work can be promoted'.

¹⁴⁷ Priestly M and Minty S 2013 'Curriculum for Excellence: "a brilliant idea, but..."' *Scottish Educational Review* 45 (1) 39-52

conversely, that many teachers, particularly in secondary schools, harbour implicit transmissionist views of knowledge and learning, viewing it as delivery of content, whether or not organised into discrete subjects.¹⁴⁸(p47)

They point out that this may lead to tension; although it may be that this tension is less marked in the curriculum area (one of eight), 'health and wellbeing', because teachers in this area are perhaps more used to participative learning.

The CfE is intended to cover not only schools but also informal education through 'community learning and development' (CLD), which includes local authority and voluntary section provision delivered by a range of practitioners, including youth work staff, and which makes a particularly important contribution to the 'health and wellbeing' curriculum area. The Fast Forward draft Resource is therefore designed to fit with this curriculum and to have the potential for being used by a wide range of practitioners both in schools and in other settings. This is a challenge, as the settings and the organisational contexts vary widely, as do the assumptions, values, experience and practise of the professionals involved. The Resource also takes account of the outcomes in the National Youth Work Strategy, 2014-19.¹⁴⁹

The draft Resource¹⁵⁰ is in the form of a spiral-bound, 89pp, A4 booklet printed in black on white paper. At the time of writing, Fast Forward is working on the on-line version, which will be freely available as a download from their website. The current draft has 24 activities or templates from which educators can select to create their learning 'session', or sessions. The resource contains suggestions for two sessions: a one-hour 'introduction to gambling' and one-hour 'young people and problem gambling' session, as well as a two-and-a-half-hour 'one-off session', 'introduction to youth problem gambling'. These sessions use some of the activities. The booklet also contains an overview of gambling, some information about the CfE and youth work outcomes, and some 'useful links and further information'.

Table 2 summaries the contents and gives critical comment on the components. As with the Demos Resource, the Fast Forward Resource was critically examined by Adrian King. His comments are incorporated in the following commentary / analysis, and a fuller summary of his comments is at Annex D.

The Resource is well-thought-out and there are many activities from which educators can select those most appropriate to their group; it is a flexible and adaptable resource which aims to meet the needs of a very wide range of professionals working with young people.

Since the Resource is for a wide range of professionals, it would be helpful to 'spell this out' a bit more, and perhaps give examples of how different professional groups might use different activities within the Resource with different target groups of young people. As well

¹⁴⁸ Priestly M and Minty S *op cit*

¹⁴⁹ downloadable from: <https://www.education.gov.scot/Documents/youth-work-strategy-181214.pdf> (last accessed 07-05-17)

¹⁵⁰ The November 2016 draft has been looked at, and the page references are of that version.

as the existing references to the CfE, it would be helpful to add a reference to the only mention in the CfE of gambling.¹⁵¹

The background information on gambling is helpfully aimed at practitioners, but it would also be good to describe the knowledge that young people might be expected to acquire; this would also mean sharpening up the learning outcomes, and also make sure that these learning outcomes are, in all activities, clearly supported by the activity content.

As with the Demos resource¹⁵² it is important to have the correct form of address, and not to make implicit assumptions that young people are gambling or are engaged in other the risky behaviours mentioned (most will not be). For example, in the exercise, 'Decisional Balance' (p37), educators are told to: 'ask participants to write on the bottom half the pros and cons of not changing their current gambling habits: what could happen if they were to maintain the same behaviour?' it would be better to write something like: 'the pros and cons of someone with a gambling problem [or: 'the people in the case studies'] not changing their current gambling habits'. This exercise, in its original form, came for the RCA Trust who were presumably using it with young people who had problems with gambling (one of the two learning outcomes is that 'young gamblers will gain better awareness and decision-making skills regarding reducing their gambling') – so while the language would be appropriate for use with young people who had problems with gambling, it needs adjustment for the broader audience of this resource.

Table 2 Comments on the components of Fast Forward's draft Resource

<i>component</i>	<i>positives</i>	<i>room for improvement</i>
Table of Contents	Helpful ToC with all the activities indexed	(none)
Foreword	Explains the project clearly.	Use of term 'problem gambling' rather than focusing on risks and harms; however, this terminology gives continuity with the previous (Edinburgh and the Lothians) project.
Gambling an overview	Useful overview, including risk factors, debunking fallacies, and providing 'gambling safety rules'. Also includes prevalence information.	Use of term 'problem gambling' rather than focusing on risks and harms. A plethora of bullet points will not suit all readers.
Support Available	Helpful list of support and counselling services in Scotland.	Could include GamCare's bigdeal.org.uk website.
Curriculum for Excellence	Helpful summary of the relevant aspects of the CfE The Resource fits within the CfE.	The CfE has one reference to gambling (in 'Substance Misuse, HWB 3-4 1a'): 'Weighs up risk and identifies potential safe and unsafe behaviours and actions, for example, the impact of gambling.' This is not referenced in the draft Resource. It would be good to suggest links to other aspects of 'health and wellbeing' identified in the CfE.
Youth Work	This page lists youth work outcomes and	Lists all seven of the youth work

¹⁵¹ 'Weighs up risk and identifies potential safe and unsafe behaviours and actions, for example, the impact of gambling.' This is within the element headed 'Substance Misuse, HWB 3-4 1a'

¹⁵² e.g. page 9 'if you are involved in a fight' (our emphasis)

Outcomes	the relevant outcomes from the National Youth Work Strategy. It links the resource to 'the purposes of youth work', in particular highlighting three: 'building self-esteem and self-confidence; creating learning and developing new skills; building the capacity of young people to consider risk, make reasoned decisions and take control'.	outcomes and doesn't indicate any that are more relevant in this context – probably the most significant potential outcome is: 'young people consider risk, make reasoned decisions and take control'.
Sample Session Plans	Practical guidance on building a session from the activities / templates provided.	No guidance on the context or age group for the sample sessions.
Activities and Templates	See comments in Annex	
Useful links and Further Information	Links to three online items about gambling, plus two academic papers, two Scottish education websites and GamCare and GambleAware.	Would be more helpful to include GambleAware's 'Infohub'. (http://infohub.gambleaware.org/) for professionals who want more in-depth information, and to delete the two specific papers mentioned. The Channel 4 link gives a 'page not found'. The football link is not a video, it is audio from Radio 5.

How do the Demos and Fast Forward resources measure up?

Based on the evidence from substance misuse education and the (rather more limited) evidence from gambling education that has been presented in this Report, how do the Demos and Fast Forward gambling education materials measure up? Table 3 sums up the findings from substance misuse education and gambling education. The left-hand columns list the criteria that have been identified and the strength of evidence; following a 'comment' column, the next columns rate the two resources on these criteria.

Table 3 The resources assessed again effective educational criteria

<i>Criteria</i>	<i>Strength of evidence</i>	<i>comment</i>	<i>Demos materials</i>	<i>Fast Forward materials</i>
<i>1. Scottish Executive review of evidence</i>				
interactive programmes	more effective than non-interactive programmes	interactive activities engage young people and help them to construct their own meanings	the lesson plans involve pupils working in groups	follows the CfE in taking a constructivist approach in some activities
information and affective approaches	good evidence of lesser effectiveness	knowledge does not translate directly to behaviour, so if behavioural measures are used information approaches will not come out well; however, it could	includes knowledge about gambling but also gambling – relevant skills and exploration of attitudes	includes knowledge about gambling but also gambling – relevant skills and exploration of attitudes

		be argued that information about gambling is of itself an important educational objective		
<ul style="list-style-type: none"> • life skills • social influences • resistance skills • normative education 	Good evidence of effectiveness for these four approaches	(perhaps less evidence for normative approaches)	includes all these	includes the first three of these, and a little normative education
multi-component and environmental/system-wide	'promising'		classroom only – no policy guidance	focus on sessions and activities
who should deliver drug education	no clear consensus, but evidence that peer involvement is desirable (evidence is lacking on the use of external contributors)		Teacher-led lessons, no external contributors	teacher or youth professional-led lessons, no external contributors; however, some trainees may subsequently deliver sessions in schools
duration and intensity	no clear consensus	a minimum period of intervention is needed to have an impact	with four lessons, the intervention may be enough to have an impact	Deliverers can choose from a number of activities
should substances be addressed singly or in a generic programme?	no clear consensus	gambling education is best addressed in the context of other issues otherwise it is likely to be left out altogether	the lessons connect gambling to broader PSHE issues	the activities connect gambling to broader PSHE issues
delivery at primary and secondary ages	evidence that it can be effective at both	the Demos and Fast forward interventions were aimed at older young people	older secondary age range; probably not suitable for younger secondary-age pupils	secondary age range, but some trainees may be using the resource with primary-age children ¹⁵³
relevance and cultural appropriateness	likely to be more effective	it is difficult to achieve this in resources intended for a wider audience	these are national resources, so they are unable to refer to particular subgroups; they could both have gone further in suggesting customisation for local needs	
<u>2. Scottish Executive assessment of work in school</u>	<i>this might be considered lower-quality evidence than that from the review</i>			
continuity and progression – topics are returned to as pupils progress through the school.	likely to be more effective from a theory-of-change perspective	a point emphasised by Adrian King in his comments	A one-off intervention	the resource is not prescriptive about the means of delivery
drug education should be in located in the context of a whole-	likely to be more effective from a theory-of-change	a point emphasised by Adrian King in his comments	lessons only; no discussion of whole-institution	no discussion of whole-institution approaches; no

¹⁵³ some indirect evidence for this comes from the Fast Forward on-line survey

school approach to health, and involve all staff as well as pupils and their parents.	perspective		approaches; no parental involvement	parental involvement
<u>3. Criteria suggested by Valentine</u>	<u>based on a non-systematic review</u>			
'simple, non-judgemental, and based on real-life stories'	weak evidence	stories can be very engaging for learners	realistic stories are often used	realistic stories are often used
'Critical 'don't do it' style messages ... are not likely to be successful'	the evidence from substance misuse campaigns support this assertion	teenagers are often resistant to being told what they should and shouldn't do	'just say no' messages are <i>not</i> part of the approach	'just say no' messages are <i>not</i> part of the approach
'Greater emphasis needs to be put on raising teachers' awareness of gambling'	In general, awareness of gambling-related harm is low among teachers, parents and others	making teachers more aware of the issue might help	guidance for teachers about gambling is rather limited; it would, for example, have helped to have discussion points for use during group work	the widespread publicity for the availability of free training across Scotland probably raised awareness among professionals of gambling issues
<u>4. Gray's review</u>	<i>all the suggestions are poorly supported by the evidence that Gray presents</i>	<i>therefore, the piloted materials should not necessarily include these elements</i>		
happen prior to the start of gambling – from age 12	this contradicts evidence from the Scottish Executive review	more generic life-skills based approaches might be more appropriate for younger pupils as a basis for later, more topic focused PSHE	both the piloted interventions are aimed at older young people	
be school-based – for ease of access to young people	Gray lacks evidence for this assertion	there is room for gambling education in both schools and other contexts	school-based	not all school-based
should be 'psycho-educational' (addressing risks and developing skills)	supported by other evidence	the development of relevant skills appears logical	addresses risks and skills	address risks and skills
be in the form of a video, activity and lecture combination	Gray lacks sufficient evidence for this assertion	Keen's review, also based on weak evidence, suggests the use of multi-media	not in this form (PowerPoint slides are used in the lessons)	not in this form; no multi-media component
<u>5. Keen's review</u>	<i>It is difficult to see how these recommendations have a secure basis in the evidence from the Review</i>	<i>therefore, the piloted materials should not necessarily include these elements</i>		
oriented toward		a reasonable point,	addresses gambling-	addresses gambling-

preventing gambling problems rather than preventing gambling		although 'harm' would be a better way of expressing it	related problems, especially in Lesson 3	related harm
'should focus primarily on teaching mathematical principles that account for the long-term unprofitability experienced by users, such as expected value'	from a theory-of-change perspective, this is very unlikely on its own to lead to behaviour change – although it might be a worthwhile aim from an informational perspective	there may be opportunities to work with mathematical educators and those working on financial capability (especially pfeg) in developing this area.	Does not teach these, but does have links to maths curriculum – but these are not specific.	Does not include these
should, have content 'relevant to youth'	relevance may promote topic engagement	however, what is relevant to one section of youth may be off-putting to another section	content is relevant to the targeted young people	content is relevant to young people (and to the Scottish context)
<u>6. educari's evaluation of the RIGT-funded Tacade work¹⁵⁴</u>	<i>these points arise from the evaluation of one specific gambling resource and on professional judgement</i>			
teachers need more help with planning	evidence is that many teachers tend to 'pick 'n' mix' rather than delivering a coherent programme	It is understandable that teachers do this, especially as curriculum time is very limited and gambling issues are not a priority	Gives help with lesson planning but little help with how to put gambling in a PSHE context, nor in a whole-school context	Give help with using the activities to form a session
improved curriculum integration and links to curricula (especially mathematics and personal finance / financial capability)	if gambling-related material could be included in other parts of the curriculum, young people would get more exposure to education about gambling	it is difficult to engage teachers in these 'tricky' topics	fits the PSHE curriculum; attempts to make cross-curricular links but the intervention is too short for this to be effectively realised	fits with the Curriculum for Excellence; no cross-curricular links, but this would not perhaps be appropriate in a resource aimed at a very wide group of practitioners working in different contexts
more focus on gambling-related safety skills	the evidence is in favour of generic lifeskills, many of which are relevant to gambling	generic lifeskills may perhaps be helpfully supplemented with some gambling-specific skills	relevant generic lifeskills are covered, and the ABC concept is appropriate to some gambling situations, but does not include gambling-specific skills, such as limit-	some activities cover gambling-related skills, such as probability

¹⁵⁴ See Annex A for the recommendations from that report

			setting, budgeting, etc.	
more imaginative, creative and innovative activities and delivery methods			the resources are not especially innovative	
<i>7. Other criteria discussed in this report</i>				
additional training for teachers	teachers confident with the materials are likely to teach more effectively	since teachers are reluctant to tackle topics on which their knowledge is limited, this seems sensible	in-school training for teaching staff who deliver the programme – but is this a sustainable model for roll-out?	training in using the materials from the pilot phase but the resources will be made available on-line and are expected to stand alone without training
unrealistic abstinence goals	harm reduction goals likely to be more effective from a theory-of-change perspective		the goals are realistic	the goals are realistic
be easy for teachers to use		an essential feature of optional teaching material	positive feedback from teachers in the pilot	positive feedback from those who have used it
fit with other topics within PSHE		necessary for topics of lower priority to schools, such as gambling	the materials were designed with this in mind	links with the CfE
add value to the PSHE curriculum		more likely to lead to adoption	the lessons are well-designed to fit with other aspects of the PSHE curriculum	some activities are well-designed to fit with other aspects of the PSHE curriculum
hold the interest of young people		easier for teachers to engage pupils; more likely to be remembered	likely to be engaging: active learning and group work methods are used.	likely to be engaging: active learning and group work methods are used

Conclusions

As stated earlier in this Report, the Evaluation ITT had the aims of the evaluation as:

‘to provide an independent assessment ... More specifically the objectives of evaluation(s) will be to independently assess the extent to which the funded activity has:

1. Provided for a better informed and improved understanding of the nature and characteristics of gambling-related harm and the scope for its measurement.
2. Established effective monitoring and evaluating of the effectiveness and impact of the funded harm minimisation initiatives.
3. Developed evidenced approaches to reduce the impact of gambling-related harm, particularly on vulnerable populations.

4. Assessed the likely scalability of this experience, including any implications for the measurement of impact for wider harm minimisation initiatives.¹⁵⁵

Each of these four objectives will now be looked at.

I. The nature and characteristics of gambling-related harm and ... its measurement

Gambling-related harm for young people is rather different to the harm experienced by adults because of young people's different social position (less financial responsibility, for example) and because they engage in gambling in different ways – their involvement often being more short-term and 'acute' rather than long-term and 'chronic'.

In the interviews with professionals who had attended the Fast Forward training a number of suggested harms of gambling to young people were identified by the respondents; but none of these were unexpected and all have been previously identified. The Demos assessment tool (a pupil self-completion pre- and post-intervention questionnaire) includes the DSM-IV-J which will provide some measure of harm among the respondents.

The final evaluation report will have more comment on this point.

2. Monitoring and evaluating effectiveness and impact

The initiatives have so far been effectively *monitored* by the two organisations and the evaluation is overseeing this process. The delivery of the initiatives has been professionally carried out, and in accordance with the proposals.

The *outputs* of the interventions are that, in the case of the Demos work, an effective pilot has been carried out in four schools, and there are data on the comparison schools. In the case of the Fast Forward work, a large number of professionals have been trained in the use of the resource, and their feedback has been received, showing evidence of the use of the Resource with young people.

The *outcomes* of the interventions are that young people who have experienced the interventions can be said to be better informed about gambling and its potential harms, and may have developed some skills relevant to reducing gambling-related harm – although the direct evidence for this assertion is limited, the conformity of the interventions with evidence and with best practice makes it likely. The final evaluation report will have more evidence available to test this assertion.

More generally, the outcomes of the two pieces of work are likely to be that:

two well-thought-out teaching manuals have been developed which are freely available to all

¹⁵⁵ RGT Evaluation Tender document section 4.4 (original bullets changed to numbers)

GambleAware has developed its understanding of the possibilities and of the limitations of educational interventions of these kinds

GambleAware has a 'springboard' to develop additional educational work.

As discussed earlier, an evaluation of this type can make only a limited assessment of the *impact* of the initiatives. This is largely because of the relatively limited intervention and the short-term nature of the evaluation: Demos' internal evaluation may produce evidence suggestive of short-term impact following their intervention. A more intensive intervention over a longer period might produce a measurable change, but, even then, that change would need to be assessed over several years. For example, while some young people might be better informed about gambling, have changed attitudes to gambling, and have acquired (or developed) relevant skills, this does not necessarily mean that they will change their gambling behaviour, or be less likely to engage in harmful gambling in future.

But perhaps this is to be too cautious: given the weight of evidence (especially from substance misuse education and prevention), it seems likely that educational interventions using either of these two resources are likely to have *some* impact on *some* young people at the time of the intervention, which, *for some*, may persist.

And, of course, there is great difficulty in measuring small changes over long periods and further difficulty in correctly attributing any changes to particular interventions. This problem is probably unsolvable.

The final evaluation report will have more comment on these points.

3. Approaches to reduce the impact of gambling-related harm

If the interventions are effective it is likely that, overall, gambling-related harm is reduced.

The two projects evaluated under this contract have not addressed reducing harm in vulnerable groups – as discussed earlier, these interventions are 'universal' approaches; future projects could usefully be targeted on the vulnerable.

4. Scalability

Since the experimental implementation of the two resources developed during these projects has broadly been successful, the work is scalable. In principle, the Demos educational materials could readily be rolled out to many more schools. The project's association with the PSHE Association ensures that the material has their imprimatur will be accessible from their website. The Fast Forward material will be accessible from their website: since Fast Forward is a national agency with a high profile among youth agencies it is likely to be known about and will be continued to be used.

However, it is clear that without some external 'push' school and other educational agencies are unlikely to address gambling issues spontaneously. When it is brought to their

attention, when they are offered training and support, and when an easy route into addressing it with young people is made available, then many professionals are willing – even eager – to tackle the topic. But without these factors it is likely that gambling education will continue to languish, neglected.

Thus, ongoing support is needed to maintain the momentum; such support might involve publicity, and maintaining and refreshing the two resources. Supporting implementation through training non-teaching youth professionals would probably be relatively easy in the case of Fast Forward in Scotland, simply by further funding to continue the existing free training. However, this training is not reaching many teachers in Scotland: a different approach may be necessary to achieve this. To reach teachers in individual schools and train them in using the Demos Resource would probably enhance its effectiveness, but is likely to be expensive and time-consuming – there may be more cost-effective ways to reach teachers (such as through initial teacher training – a method tried by Fast Forward) which Gamble Aware could explore further. It would be very good to reach non-teacher professionals in the rest of Great Britain: although this would require the Fast Forward Resource to be modified, that material provides a good basis.

Interim recommendations

The following interim recommendations are included here for further consideration and discussion – they are not ‘set in stone’, and will be developed as the evaluation progresses. The Final Report will contain definitive recommendations arising from this evaluation.

Commission evaluation as early as possible

Project sequencing is always difficult. Evaluation reports often recommend that the evaluation would have been better for commencing earlier. This would enable evaluators to have more input into project design. This project is no exception – however, there were good operational reasons for the way that this work was commissioned.

Ensure that different groups of professionals are approached appropriately

Engaging teachers needs a specific approach such as *Demos* used. *Fast Forward* focused on the informal educational sector and was successful in engaging informal educators in Scotland; it tried to reach teachers in addition – this was difficult, and to try to achieve success, the organisation adjusted its approach and made a different offer to teachers, but few teachers were reached. Therefore, in order effectively to reach teachers in Scotland a different approach, and a different kind of package of resources, may be required.

Recognise the issues in evaluating disparate interventions; don't expect definitive answers to evaluation questions

While the Demos Resource was relatively prescriptive and required participating teachers to implement a package of four lessons, the implementations of the Fast Forward Resource was very varied – which was expected, given the range of professionals engaged. This was potentially positive, perhaps implying that the professionals were adapting the material to

suit their particular situations; however, the disparate range of interventions makes evaluation difficult. It is worth noting that (as described earlier), outside of the experimental situation that Demos has constructed, teachers will use the Resource in different ways and often will not implement it as a 'programme' of four lessons.

Universal school-based education is the best located within PSHE/CfE context

Gambling education embedded in a PSHE / CfE context, where gambling examples are used partly in order to develop or illustrate general principles of PSHE / CfE health and wellbeing education – such as being aware of risk, keeping safe, being alert to pressures to 'do the wrong thing', etc. – is the best route for school-based education. Although the interventions did not actually test this – there was no non-PSHE / CfE comparator – it is hard to see how else appropriate and sufficient gambling education could be fitted into the school curriculum.

There are other curriculum opportunities for gambling education which should be explored

Notwithstanding the above recommendation, it is also worth considering how far relevant gambling-related content could be included in other curriculum areas, in particular mathematics. In principle, maths should provide plenty of opportunities for developing pupils' understanding of relevant topics such as probability. In practice, maths teachers are – like most teachers – focused on examination success for their pupils and the relevant topics form a small part of the curriculum, leaving no time to explore the broader, societal, aspects of the mathematical topics. Even were this possible, without a framing of a context, such as PHSE, where children are being taught to 'stay safe' it might be difficult to challenge the objection that 'children are being taught how to gamble'. However, there may be opportunities for working with organisations that promote financial education – in particular, pfeg (personal finance education group) which has some (limited) gambling-related educational resources for use in schools.¹⁵⁶

Further explore the needs of informal educators and develop appropriately targeted materials

In informal education, the variety of contexts, the range of professionals involved, and the different groups of young people addressed means that educational materials must be much less 'programmatic' than would be suitable in the more-contained school environment. The approach to training needs to be permissive rather than prescriptive. This was achieved by Fast Forward. However, it may be that an even wider range of activities, exercises and approaches need to be included or (alternatively, or in addition) that specific materials are needed for specific groups (for example, the police may need rather different materials to staff in care homes).

¹⁵⁶ A 2011 activity is at: <https://www.pfeg.org/resources/details/gambling-activity> (last accessed 12-05-17); this year's 'My Money Week' (12th-18th June 2017) materials for secondary pupils includes an article about young people's gambling in the 'My Money Weekly' magazine (materials downloadable from: <https://www.pfeg.org/resources/mymoneyweek?t=2552090&m=2552092#section3>)

Consider further the most appropriate time to make an educational intervention and how to intervene

School-based interventions are generally aimed at reaching all young people in a particular age-group. They have the advantage of universality. But this approach has drawbacks. Most young people do not gamble, and parents may worry about introducing their children to the topic – this is a common problem with any ‘controversial’ subject, such as sex education.

Generic, non-gambling focused interventions could help to overcome this problem. They have the further advantage that they could be implemented at a younger age – and early intervention before most young people have gambled seems to be sensible and allows the topic to be returned to in later school years, reinforcing the learning.¹⁵⁷

GambleAware should continue to promote gambling education

Gambling education should continue to be actively promoted to a wide audience, including teachers and other educators and policy level staff in schools, local authorities and nationally.

Resources need regular updating: it might be helpful for GambleAware to establish and support a group of educators whose task would be to monitor the use of the resources and to advise on updating and further development.

Resources should be supported by professional development activities and advice that assists educators in implementation.

Resources should include a more systematic set of lesson plans /activities that fit even better with the various PSHE /CfE curricula, as well as links to other curriculum areas – especially mathematics and personal finance / financial capability.

In developing resources, it would be useful to look at educational resources available in other jurisdictions. For example, Derevensky gives a table which lists some prevention programmes; this is reproduced in Annex C of this report. The Victorian Responsible Gambling Foundation produces a range of resources for use in schools and with parents.¹⁵⁸

Universal education is necessary. But it is not sufficient. GambleAware should experiment with targeting specific groups which might be at more risk of gambling-related harm. Scoping work would help to identify these groups in particular communities.

¹⁵⁷ ‘Despite inconsistent findings that risk factors in adolescents and children predict adult gambling problems, the available evidence indicates that exposure to multiple factors and experiences in the formative stages of adolescent development can shape subsequent attitudes, cognitions and behaviours in adulthood Although the mechanism of impact remains unclear, there is a basis for arguments favouring the implementation of early intervention preventative educational programs in schools.’ Keen B Blaszczynski I A and Anjoul F 2016 ‘Systematic Review of Empirically Evaluated School-Based Gambling Education Programs’ *Journal of Gambling Studies* DOI 10.1007/s10899-016-9641-7

¹⁵⁸ see www.lovethegame.vic.gov.au/schools (accessed 29-04-17)

Continued experimentation and continued monitoring is needed

GambleAware takes the view that in areas of gambling harm prevention where knowledge is lacking, experimentation is called for. In gambling education for young people, we do not know enough – especially about how implementation takes place. Pilots in selected areas could explore different ways of implementing gambling education and could develop models for dissemination.

Innovation is needed and different models of interventions should be tested. There is much to learn from substance misuse education. However, just because something shows promise in those fields doesn't mean that it will work in the context of gambling – and of course the reverse is true: what doesn't work so well in substance misuse education might be more effective in relation to gambling – these are empirical questions that can be tested. However since it is expensive and time-consuming to test any possibility it is necessary to be selective and analyse proposed interventions to see what their potential in relation to gambling might be.

Continued monitoring, research and evaluation is required to assess progress, to help to build a case for gambling education, and to inform future developments.

The difficulties of implementation must be addressed at other levels

The responsibilities and strengths of relevant institutions should be harnessed to encourage schools and non-formal establishments to implement gambling education. This involves work at the policy level: in schools, with local authorities, and nationally.

Those most at risk should be targeted

Renewed efforts are needed to reach professionals and others working with vulnerable young people to encourage them to tackle gambling education (especially gambling harm reduction). This may require: needs assessment; additional resources; training; and support.

Integrate the actions

Vulnerability to problem gambling is not divorced from vulnerability to other problems. A generic approach to work with at-risk young people that tackles gambling alongside other risky behaviours (such as drug and alcohol use) is therefore indicated.

Consider developing work that involves parents

The history of prevention efforts involving parents is not a promising one. In 2010, RIGT funded Tacade to conduct a project seeking to involve parents in gambling education. It was not successful. The evaluation report considered that Tacade has not been sufficiently innovative in attempting to engage parents.

This lack of innovation is also true of interventions with parents on substance misuse. Often, the engagement of parents is an add-on to a curriculum intervention or an afterthought to a project. It is therefore set up for failure. The costly Home Office Blueprint Programme was

an example of this.¹⁵⁹ There are, however, some encouraging recent examples that have effectively involve parents: there is learning for the gambling field from these.¹⁶⁰

GambleAware should thoroughly consider funding projects that address parents, probably as part of addressing other risky behaviours and positive parenting.

Next steps

The evaluation will continue to engage with the two contractors to assess their work and to focus on the outcomes from the two projects. This will include, among other tasks, scrutinising the data from Demos' trial, and providing a fuller analysis of the data from the training courses that Fast Forward has collected; it will also include results from telephone interviews of Fast Forward trainees. A Final Report of the evaluation will be produced next year.

¹⁵⁹ A more recent example is the RCT of STAMPP ('Steps Towards Alcohol Misuse Prevention Programme') – a programmatic classroom intervention (the classroom component was the School Health and Alcohol Harm Reduction Project (SHAHRP)). The authors report:

'A major limitation of the work was the failure to attract parents/carers to the brief intervention evening (9% in NI and 2.5% in Scotland), despite the support of many of the schools. Relatively low rates of return of the parental questionnaire (31% and 18%, respectively) also suggested that only a minority may have read the mailed information. ... In practical terms, this means that although the analyses presumed delivery of the combined intervention, discussions with stakeholders about research findings and future delivery are likely to focus on the classroom component (i.e. SHAHRP).

'Failure to engage parents/carers in school-based substance use prevention is a consistent finding. ...' (Sumnall H Agus A Cole J Doherty P Foxcroft D Harvey S *et al* 2017 'Steps Towards Alcohol Misuse Prevention Programme (STAMPP): a school- and community-based cluster randomised controlled trial' *Public Health Res 2017*;5(2) p85)

¹⁶⁰ The Sumnall *et al* research continues:

'... However, other trials have reported success at engaging family members. For example, in a recent feasibility study of the Welsh family-based alcohol prevention intervention Kids, Adults Together programme 50% of pupils (n = 158 intervention pupils in total) reported that at least one family member who was invited to a family event attended (although only 6.5% of eligible parents/carers returned a study questionnaire), suggesting that acceptable participation rates in the UK are achievable. *These authors identified two key processes that they believe supported engagement. First, pupils were keen to attend the event with their parents/carers and, second, the family event was not marketed as an alcohol education event and was positioned around parents/carers wanting to attend the event to see their children's school work and what activities they had been involved in.* Similarly, in the Dutch PAS study there was a high level of parental retention in the parent only (75.9%) and combined parent and student (72.4%) intervention arms. In keeping with the Kids, Adults Together programme, PAS parental events were part of regular school parents' evenings, which a large number would have attended anyway. Future implementers of STAMPP should therefore consider such engagement approaches, which were not feasible in the current trial because of the timing of intervention delivery, the large number of schools involved which made co-ordination difficult, a lack of time within regularly planned parents evenings (which primarily focus on pupil progress) and education policy initiatives in one trial site that necessitated using parental evening time to introduce a new curriculum.' (Sumnall H Agus A Cole J Doherty P Foxcroft D Harvey S *et al* 2017 'Steps Towards Alcohol Misuse Prevention Programme (STAMPP): a school- and community-based cluster randomised controlled trial' *Public Health Res 2017*;5(2) p85) (*our emphasis*)

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Annex A educari's evaluation of the Tacade gambling education materials

*The following list of recommendations is reproduced from educari's 2008 evaluation report for RIGT, GambleAware's predecessor body, of its commission to the educational charity, Tacade, for the production of gambling education resources for schools and informal educational settings.*¹⁶¹

Build on these foundations

This work has been a first step in the attempt to educate young people about gambling. It was clear from the start that it would not be sufficient, but that this phase would generate a great deal of learning, which could inform future work.

We recommend that RIGT should commission work that builds on the secure foundations that Tacade has laid. Additional, innovative, resources will be required. Our analysis of the Tacade Resources suggests that the following points need to be addressed when developing any future resources, which will need to have:

- more help with planning – both longer and shorter-term
- much clearer aims, objectives and learning outcomes
- material assisting with assessment of learning, so that educators can identify starting points and measure progress
- improved curriculum integration and links to curricula in addition to PSHE Education, linking especially to the personal finance aspects of the school curriculum.
- more material for use within mathematics curricula
- more easily-digested guidance on the topic of gambling – and 'selling' its importance to the audience (Tacade's Seminars and 'Twilights' did this job well)
- more focus on gambling-related skills
- more imaginative, creative and innovative activities, including use of computer and information technology (utilising classroom technology such as whiteboards)
- greater alignment with best practice in schools and other contexts.

...

Address programme fidelity in implementation

It is well-known that practitioners tend not to implement educational programmes as the programme creators intended. Because implementation can be done in many different ways, educators need clear guidance on implementation, which should be differentiated to suit the variety of their situations. Therefore, programmes should be designed to give educators maximum flexibility to suit their individual circumstances.

¹⁶¹ Ives 2008 'Evaluation of Tacade youth education programme: A Report for Responsibility in Gambling Trust' educari

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While this approach can attenuate the effectiveness of a well-thought-out programme (and make it difficult to measure programme success), it can mean the difference between implementing a programme in some form, and not implementing it at all.

This approach also allows different implementation to be compared – which provides useful information on the effectiveness of different approaches. Flexible guidance on implementation also gives more credence to practitioners' good sense and understanding of the young people with whom they work.

There are different ways of doing this: for example, programmes tailored for particular institutions (e.g. secondary schools) can address institutional policies and give comprehensive guidance on how programme implementation is expected to occur.

We therefore recommend that in future resource development more attention is paid to aspects of implementation and more guidance is given. RIGT might also consider producing additional implementation guidance to supplement the Tacade resources.

Experimentation necessary to address the difficulties of implementation

'...ensuring that gambling is addressed within PSHE or Citizenship would be difficult, given that it competes with drugs and alcohol, sexual health and much else.' (RIGT Education Strategy discussion paper 2005)

Perhaps experience will show that there is no room in the school curriculum for gambling education. It may also be that in informal educational settings there is insufficient demand from young people for gambling education. But this is not a certainty and needs further investigation. We do not know enough about how gambling education might be implemented in schools and in informal education, and therefore some pilot schemes are necessary.

We recommend that this be done through some piloting work in selected areas. Such piloting could explore different implementations of gambling education and develop models which could be compared, and suitable versions adopted by other areas.

For example, in some schools or local education authority areas gambling education might be tackled by external organisations supporting the teaching staff, and in others, the PSHE Education staff might teach it, or trained class teachers might tackle the topic with their classes or tutor groups.

Describing the different approaches and their implementation in practice would be useful to identify the problems and possibilities associated with different types of intervention, although relative effectiveness would be difficult to assess, and a variety of approaches suiting different local settings are likely to be needed.

But we should bear in mind that pilot schemes cannot give definitive results. Chris Husbands, professor of education at the Institute of Education, points out:

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"There's a great desire to find out what works in teaching, but one of the problems with schools and teaching is that almost anything works somewhere. There's a long history of education innovations, which have the power to transform. ...

What you typically find is that at the pilot stage, when you have well-trained and enthusiastic pioneers, you get very good results. But when you take it mainstream, you get a wash-out of the effect. Replicating a formula across the whole education system is difficult to sustain, because of the multiple competing goals of education, and the complexity of students and classrooms. (*Education Guardian* 3-9-08)

The difficulties of implementation must be addressed at other levels

Complexity and competing goals makes it difficult to get schools to 'line up' behind an innovation unless there are powerful forces behind it to counter these problems and those of conservatism and inertia. Certainly, schools are understandably reluctant to take on new work without high-level support. Implementation must therefore harness the power of relevant institutions.

'Education will not happen within the curriculum unless it is a legal requirement to place it there. ... there may be a case for RIGT seeking to raise the profile of gambling amongst DFES to enable this issue to rise in priority amongst educationalists.'

(RIGT Education Strategy discussion paper 2005)

We therefore recommend that a next stage of implementation of gambling education for young people should involve work at the level of policy. For example, work around curriculum development and planning so that senior managers in schools can understand and make a case for including gambling education in their school curriculum. At the local authority level, advisory staff such as PSHE Education Coordinators, Healthy School Consultants, etc need to be apprised of the issue and helped to 'sell' the idea to schools in their area. And at the national level, gambling education must get recognition from the QCA and from the DCSF.¹⁶²

'... the PFEG¹⁶³ model of intensive work with LEAs to run teacher training sessions has much to recommend it. In this approach, they train advisors to work with LEA specialists on PSHE to organise events where teachers can learn the best approaches and road test resources.'

(RIGT Education Strategy discussion paper 2005)

RIGT's role in this should be to:

- help in the development of school policy and implementation guidance. This could be done as part of the piloting work suggested above
- work with staff in some selected local education authorities to develop authority-wide guidance on the implementation of gambling education. Again, this could form part of the piloting work

¹⁶² QCA = Qualifications and Curriculum Authority
DCSF = Department of Children, Schools and Families

¹⁶³ PFEG = Personal Finance Education Group

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- develop the strategy for influencing the national agenda through, for example, policy documents that provide evidence of the need for gambling education and suitable models for implementation.

Examples of where this approach was effective are Alcohol Concern's *Alcohol Education Guidance*, and DrugScope's *The Right Approach*,¹⁶⁴ both of which were published before DfES¹⁶⁵ *Drug Education Guidance* was written, and which (alongside dissemination and implementation activities associated with these publications) helped maintain pressure on the government to produce it.

Those most at risk should be targeted

Beyond the school curriculum are many opportunities for gambling education. These can be within schools (in non-curriculum time, and in school-based activities such as drama groups). Opportunities also exist out of school, as RIGT recognised when commissioning a Resource for use in non-formal educational settings. These informal approaches may be effective in reaching vulnerable young people where schools have not managed to.

Recent developments stemming from the 'Every Child Matters' agenda¹⁶⁶ mean that local areas now have more 'joined up' policies and practice related to young people. Schools remain important, but should work more closely with other agencies. These agencies may be more receptive to gambling education, not only because they will not have the constraints of the school curriculum, but also because they are more likely to be dealing with youth at risk.

With the Tacade Resources, RIGT has addressed 'primary' prevention – attempting to get the prevention message to *all* young people. But this is only a part – albeit an important part – of prevention. Particular efforts need to be made to reach those most at risk – so-called 'secondary prevention' aimed at the vulnerable.

¹⁶⁴ Alcohol Concern and DrugScope are the two national charities dealing, respectively, with alcohol and with illicit drugs.

¹⁶⁵ DfES = Department for Education and Skills (now forming part of the DCFS (Department for Children, Schools and Families)

¹⁶⁶ Every Child Matters (ECM) '...is a new approach to the well-being of children and young people. ... The Government's aim is for every child, whatever their background or their circumstances, to have the support they need to:

- Be healthy
- Stay safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being.

This means that the organisations involved with providing services to children - from hospitals and schools, to police and voluntary groups - will be teaming up in new ways, sharing information and working together, to protect children and young people from harm and help them achieve what they want in life.'

(www.everychildmatters.gov.uk/aims/ accessed 29-09-08). The *Children Act 2004* provides the legal underpinning for ECM.

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Such prevention can take place in various settings, but locations where vulnerable young people are concentrated – such as PRUs, YOTs,¹⁶⁷ youth prisons, and gambling locations such as arcades – are likely to reach higher proportions of the vulnerable.

We therefore recommend renewed efforts to reach professionals and others working with vulnerable young people to encourage them to undertake gambling education (and especially to communicate gambling harm reduction messages). Such efforts could include: needs assessment of what these professionals require to undertake gambling education; and support in implementation through, for example, resources, training, advice and support.

Integrate the action

Research has helped to improve understanding about at-risk young people. A robust finding is that those more vulnerable to one sort of risky behaviour (drug problems, for example) are also more vulnerable to others (for example, teenage pregnancy). In other words, risks 'cluster'; perhaps an obvious point, because at-risk individuals have underlying attributes – 'risk factors' – such as poor parenting, low school achievement and living in a disadvantaged neighbourhood – that increase their vulnerability to a range of problems of which problem gambling may be one.

Addressing their risk factors and improving their life situations may reduce this vulnerability. And there is evidence that a 'holistic' approach to risk reduction is more effective than a 'problem-by-problem' approach.

We therefore recommend a generic approach to work with at-risk young people that tackles gambling alongside other risky behaviours.

Continue monitoring, research and evaluation

Because implementation is ongoing and more experimentation is needed, continued monitoring, research and evaluation is required to assess progress, help to build a case for gambling education, and inform future developments. **We recommend** an approach which, *inter alia* identifies good practice and presents it in a form that can be usefully disseminated to contribute to developments in gambling education.

¹⁶⁷ PRUs= Pupil Referral Units
YOTs = Youth Offending Teams

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Annex B 'What works' in substance use prevention for young people?

The ACMD Report¹⁶⁸ includes a table 'What works' in substance use prevention for young people – which is a summary of Brotherhood *et al.*, 2013. It is reproduced below.

The ACMD note: '... prevention approaches not included in this table had not been included in a systematic review, even though high-quality primary studies may exist.'

<p>Beneficial</p> <p>Interventions and approaches that showed robust evidence for positive effects on addictive behaviours. Research evidence for the intervention or approach is likely to be transferable to young people in other geographies.</p>	<ul style="list-style-type: none"> • No evidence identified
<p>Likely to be beneficial</p> <p>Interventions and approaches for which there was some, but limited, evidence for positive effects on addictive behaviours. Research evidence for the intervention or approach was likely to be transferable to young people in other geographies but caution is warranted and adaptation studies are recommended.</p>	<ul style="list-style-type: none"> • Universal programmes such as the <i>Good Behavior Game</i>; <i>Life Skills Training</i>; and <i>Unplugged</i> in reducing alcohol misuse • Universal family-based programmes in producing small/medium to long-term reductions in alcohol misuse • Web-based and individual face-to-face feedback in reducing alcohol misuse up to three months after intervention • Brief motivational interviewing in producing short- and medium-term reductions in tobacco use • Multi-sectoral (including the school) and community-based interventions at preventing tobacco use, particularly when delivered with high intensity and based on theory • Addition of media-based components (supporting the core curriculum) to school-based education at preventing tobacco use • Pre-school, family-based programmes in producing long-term reductions in the prevalence of lifetime or current tobacco use, and lifetime cannabis use • Multi-sectoral programmes with multiple components (including the school and community) in reducing illegal drug use • Motivational interviewing in producing short-term reductions in multiple substance use • Some skills-development-based school programmes in preventing early stage illegal drug use.

¹⁶⁸ AMCD 2015 op cit Table I p20

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<p>Mixed evidence</p> <p>Interventions and approaches for which there was some evidence of positive effects in favour of the intervention, but that also showed some limitations or unintended effects that would need to be assessed before implementing them further.</p>	<ul style="list-style-type: none"> • Whole school approaches that aim to change the school environment on use of multiple substances • Pre-school, family-based programmes showed mixed effects on alcohol use in later adult life • Manualised universal community-based multi-component programme targeting alcohol misuse • Universal school-based tobacco prevention programmes • Community-based tobacco prevention programmes when delivered in combination with a school-based programme • Mass media approaches to tobacco prevention, or the addition of mass media components to community activities • Some social influence programmes can produce short-term reductions in cannabis use, particularly in low-risk populations • Parental programmes for parents designed to reduce use of multiple substances by young people. Where effective, programmes included active parental involvement, or aimed to develop skills in social competence, self-regulation, and parenting skills.
<p>Unknown effectiveness</p> <p>Interventions and approaches for which there were not enough studies to demonstrate positive effects on addictive behaviours, or where available studies were of low quality (with few participants or with uncertain methodological rigour), making it difficult to assess if they were effective or not.</p>	<ul style="list-style-type: none"> • Universal family-based programmes for the prevention of illegal drug use.
<p>Ineffective</p> <p>Interventions and approaches which produced negative effects on addictive behaviours when compared to a standard intervention or no intervention. For ethical reasons, it must be considered whether such interventions and approaches should be discontinued as they may sometimes have iatrogenic effects (i.e. they increase a behaviour that is trying to be prevented).</p>	<ul style="list-style-type: none"> • Mailed, group feedback, and social-marketing-based approaches to reduce alcohol misuse • Web and computer-based interventions to prevent tobacco use • Universal family-based programmes to prevent tobacco use • Use of competition incentives to prevent tobacco use in school children • Ethnically tailored tobacco prevention is ineffective in indigenous youth (NB evidence is from North American communities, we do not have equivalent data for the UK) • Standalone school-based curricula designed only to increase knowledge about illegal drugs • Recreational/diversionary activities, and theatre/drama based education to prevent illegal drug use • Individual programmes that have combined school and community-based interventions to prevent illegal drug use • Mentoring programmes have no short- or long-term preventative effects on illegal drug use • Mass media programmes targeting illegal drug use.

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Annex C Prevention programmes in other countries

The following table is taken from Derevensky.¹⁶⁹ It lists a number of prevention programmes and gives website addresses so that interested readers can find out more.

<i>Prevention Program</i>	<i>School Level</i>	<i>Developer</i>	<i>Website</i>
Amazing Chateau	Grades 4-6	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com
Clean Break	Grades 8-12	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com
Don't Bet on It	Grades 10-12	Responsible Gambling Council	http://curriculum.org/resources/dont-bet-on-it-8211-a-youth-problem-gambling-prevention-program
Facing the Odds	Grades 5-8	Harvard Medical School – Division of Addictions	http://www.divisiononaddictions.org/curr/facing_the_odds.htm
Hooked city	Grades 6-8	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com
Know Limits	Grades 7-12	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com
Stacked Deck	Grades 9-12	Robert Williams and Robert Wood	http://www.uleth.ca/research/alberta-gambling-research-institute-agri
Wanna bet?	Grades 3-8	Minnesota Council on Compulsive Gambling	http://www.nati.org/prevention_tools/youth.aspx
Youth Gambling: An awareness and prevention workshop - Level I	Grades 4-6	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com

¹⁶⁹ Personal Communication 04-2017(Derevensky J and Gilbeau L (undated draft) 'Preventing Adolescent Gambling Problems')

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Youth Gambling: An awareness and prevention workshop - Level II	Grades 7-10	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com
Youth Making Choices: A Curriculum-Based Gambling Prevention Program	Grades 10-12	Centre for Addiction and Mental Health (CAMH)	http://www.problemgambling.ca/EN/ResourcesForProfessionals/Pages/CurriculumYouthMakingChoices.aspx
Youth Gambling Problems: Practical Information for Health Practitioners	Physicians	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com
Youth Gambling Problems - Practical Information for Professional in the Criminal Justice System	Judges, Attorneys	International Centre for Youth Gambling problems and High-Risk behaviors – McGill University	www.youthgambling.com

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Annex D The Demos draft Resource – critical comments

This Annex is an edited version of Adrian King's comments (plus some from Barbara Wyvill and Richard Ives), key points of which are included in the body of this Report.

General Comments

My general view is that this is a good effort. The length (four one-hour lessons) seems realistic: more would not be possible given the limited time available for PSHE; and fewer lessons would not do justice to a complex area.

Although it cites 'prevention' as an aim (since this is the funder's purpose), it takes a developmental approach – which is educational, but maybe not preventive.

I think teachers will like it: I do. And they could use it pretty much 'out of the box' – although, inexperienced teachers, and teachers inexperienced in PSHE, might struggle to work in engaging pupils and helping them to develop their views rather than to taking a more didactic approach – some more help with this in the teacher's booklet would be useful.

Does it work educationally? There are two answers: the content seems to me to adhere well to the principles of PSHE Education. The question 'Does it achieve its aims?' (my interpretation of 'work') is, of course, harder to answer.

Comments on the Lessons

(Lesson 1) While the notion of 'risk' is pivotal, it needs to be seen as multi-dimensional. And should the notion of 'risk-free' be explored somewhere?

'10m jump off a cliff' should surely be '10m jump off a cliff into the sea' in order to distinguish it from attempted suicide!

There is an error (missing digit?) in the figure given for winning the lottery.

(page 12) Pupils might think: 'I don't gamble so why do I have to learn about this? What's it got to do with me?' So should there be some overarching aim shared with pupils: e. g., 'We really want you to stay safe. We know not everyone gambles or takes other risks. But we want you to know *how* to stay safe, and *how* to look after yourselves whatever decisions you make in the future, and whatever situations you may find yourselves in.' Here there could be opportunities for pupils to explore the potential risks of their *own* examples, those they feel safe enough to suggest openly that the class could consider, or those they feel safe enough to suggest in a pair or small group.

In general, pupils will be more ready to engage with material if they feel it is relevant to them. Some of this material clearly is: In lesson 3, I liked the legal reference to coin-pushers and teddy-grabbers (legal at all ages) but would have liked to see reference to these in the pupils' text, as they are commonly used by young people.

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(Lesson 2 page 16 – ‘Context’ opening sentence) “This is the second of four lessons promoting the wellbeing of pupils by helping them understand how to prevent harmful behaviours.” It would be better to use the word ‘avoid’ rather than ‘prevent’. *Prevention* may be seen as what teachers sometimes try fruitlessly to do when they are not empowering pupils. *Avoidance* is what teachers can help pupils learn how to do (in some situations) when taking control of their own decisions, in order to remove or reduce the chances of harm. The same points apply to the first sentence of lesson 3, on page 23 and the first sentence of lesson 4, on page 30.

A point that should be noted is that marshmallows are seldom vegetarian!

Delayed gratification is only more beneficial than immediate gratification when it is healthy! Get the pupils to suggest other examples. e. g. having to *earn* the reward; deciding to use it as a self-directed carrot for some other action, like homework; spending money later when more has been saved; etc.

(page 20, second paragraph) It is hard to over-emphasise how pleased I was to see teachers being encouraged first to take responsibility for suitability of material and second, and more important, to feel empowered to address themes and learning at another time where necessary. The idea that a class may not follow exactly a pre-ordained learning path, and that teachers should feel it is entirely OK to deviate from a printed (or otherwise-pre-planned) lesson, or revisit material that warrants it, is one that could be emphasised more strongly, and earlier.

(Pupils’ booklet point 1.5.5) This point is a little esoteric. Answering it constructively does not of itself change anything for the pupils. It may be better to ask, ‘A person who is well informed and thoughtful may make more sensible decisions around gambling; can you write down some sensible decisions someone might make before they gamble?’

(Pupils’ booklet page 21) ‘Self-directed speech’ is referred to on pages 19 and 26 as ‘self-talk’ it would be sensible to use a single term consistently. A more constructive self-talk for James might be: ‘There may be other ways to make myself feel better than to call Sarah. What is making my day ‘bad’? What can I do about that, and might Jamil help me?’

(Pupils’ booklet page 27) What have been described as ‘problems’ and now ‘addiction’ (final paragraph) don’t chime well with the earlier use of the official term ‘gambling disorder’. Great care is needed not to confuse or label unhelpfully. All terms should be carefully defined and judiciously and consistently used.

(Pupils’ booklet page 28) After the heading ‘Suggested responses could include:’ there is a missed opportunity for using the ABC Model of Resilience, to explore both Daniel’s and Angelo’s situations, feelings and options. If this final section of point 3.4 were to be rejigged to include the ABC model, that heading would also need attention (although the 20 minutes allowed might be pushing it!)

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(Lesson 3 'Context') In this paragraph, again the word 'prevent' is misused. Angelo's situation has not been prevented by him nor by Daniel. It would be more appropriate to say 'avoided or addressed'. This would be more realistic, too, as evidenced by the very existence of Angelo's problem!

(Lesson 4 page 29) 'How can we challenge the hype of the gambling industry?' Is this best described as 'hype' or would 'lure' be a better term?

What could usefully be additionally included?

It would be helpful, in my view, to strengthen the exploration of pay-offs, to accompany unwanted outcomes, of perceived risky behaviours. Nobody wants unwanted outcomes – by definition. So exploring pay-offs is vital – it's why people do what they do, even when risky!

There could be more references to school policy and its importance.

I think the information for teachers is well-chosen; the links are useful for more info. But there could be more guidance about what and how, this internet information could be shared with those pupils that teachers think are ready for it.

I was surprised not to see a reference to target age group(s). If this were added, it would provide an opportunity to help teachers understand the importance of building on what young people may already have explored in earlier PSHE lessons about (say) risk, fun, responsibility, safety, excitement, pocket money, rules, laws, adults spoiling our fun, etc.

The importance of revisiting the topic

Useful as the material is, and just as with drug education programmes, it would, of course, be a mistake for teachers to conduct these lessons, tick the gambling box, and think 'job done'. The whole point of links (both ways!) with other PSHE topics is that reinforcement over time, and outside these four lessons, is both possible and vital. I think this material should say so.

To emphasise this: if these four lessons are well and sympathetically taught, they will be memorable. Sadly, though, the memories may not last longer than the duration of the term they are taught in. Such is the nature of PSHE – it needs to be spiral, revisiting ideas with changing, age-appropriate emphasis as children gradually develop the responsibility and autonomy with which they will leave school. To be clear, this is not a fault of this material, it is an intrinsic flaw in *all* PSHE material unless teachers, and the PSHE timetable, allow for ongoing attention to issues; teachers need to be aware of this – and so may need reminding.

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Annex E The Fast Forward draft Resource – critical comments

This Annex is an edited version of Adrian King's comments (plus some from Barbara Wyvill and Richard Ives), some points from which are included in the body of this report.

General Comments

This Resource has great potential for good effect, I feel, though it needs some further attention. These comments are made in the spirit of support and professional engagement – the draft Resource is good – it could be even better.

I could find little guidance of *who* this resource was for: is it aimed at those deemed to be at higher risk of problem gambling or already experiencing gambling-related problems? The Foreword on page 5 suggests the latter group, but if so, the resource offers no guidance on how the young people who might benefit from it will be engaged in this programme, nor how they will be identified.

The Resource fits within the CfE. I could find just one reference in the CfE to gambling: 'Weighs up risk and identifies potential safe and unsafe behaviours and actions, for example, the impact of gambling.' This is within the element headed 'Substance Misuse, HWB 3-41a' which widens the notions of risk and safety beyond drugs and into other areas of potential harm: 'After assessing options and the consequences of my decisions, I can identify safe and unsafe behaviours and actions.' However, this is not referenced page 15 of the draft Resource.

Furthermore, it is odd that the draft Resource offers little help on how to link in with other aspects of health or wellbeing that the 'Health and Wellbeing '(PSE) section of CfE addresses. This should be rectified.

Suggested structural improvements

To improve the structure of the draft before final publication, I would suggest the following:

1. The background information about gambling is aimed firmly at practitioners – good! But there needs to be another section detailing the knowledge that it is reasonable to expect young people will attain, though this will vary according to session content that the practitioners determine, and the group they are working with. Such a section could consist of sentences of the form: 'I know that ... (e.g. when I gamble, the house edge means that I am always more likely to lose than to win)'; 'I know that ... (e.g. the longer a gambling session lasts, the more likely I am to walk away with less money than I had when I started.)'

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2. This background information might be better located in an annex; early in the Resource, practitioners would benefit more from an introduction to the Resource, its content and a 'how to use it' guide.
3. Fuller guidance is needed make the task of compiling sessions manageable for practitioners, enabling them to match 'learning objectives' to the needs of the young people, and to know *how* their sessions will further the aims of Curriculum for Excellence (page 15) and/or help to reach Youth Work Outcomes from the National Youth Work Strategy (page 17). In general, add considerably more support for practitioners – to include:
 - the importance of ground rules and how they are most constructively set by an entire group
 - the importance of agreement about confidentiality wherever there may be personal opinions expressed, and wherever there may be a possibility that personal experience will be divulged
 - who the resource is aimed at, or (better) which groups of young people it *could* be aimed at, how to decide, and how to locate/recruit
 - how to set realistic aims that place the emphasis on *empowering* the young people rather than claiming responsibility for changing their behaviour, (which is not in the practitioners' control!)
 - how to determine, or try to determine, whether or not the aims have been met
 - how to choose from the available activities to create a session that will address the needs of the groups they propose it for, and one that will assist in meeting the aims they set for these groups.
4. The learning outcomes need further thought. For example, Some of the Learning Outcomes are a little esoteric, and others somewhat vague - It may be that the attempt at setting Learning Outcomes for every activity, while laudable, is perhaps overkill; it might be better to specify Learning Outcomes for an entire session, and then select activities that will assist in ensuring those outcomes.
5. More attention needs to be paid to the risk of a transition between rational/ occasional/ fun gambling that is for entertainment, is controlled, and with manageable losses if any, and risky or potentially problematic gambling. What are the signs of this transition? How can it be spotted – in me? in my friends? What can be done at that stage? How can I maintain the fun and entertainment in my life without the possibly disastrous rising cost? What alternatives are there locally? (Brainstorm!) How can I enlist the support of friends to ensure I, and they, take advantage of these safer sources of fun and excitement? What might be done in the case of debt or damaged relationships to put things right? (Such questions may not all be relevant for every age group or group-profile. And these are just examples of questions that could be useful.)

Comments on the Sessions and some of the individual activities in the draft Resource

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- The Learning Objectives for Session 1 (page 21) include 'be introduced to the concept of risk taking', yet there is nothing in the Session that introduces this concept – it doesn't appear until Session 2. When it does (page 23), all the risk-related situations in the "Risky Behaviour Ladder" are pre-determined. There seems no room for young people to present their own situations.
- 'A-Z of Gambling (page 26) To make this activity clearer, I suggest extending point 2 of the 'Method' to say - 'Ask the group to brainstorm, and to write down next to each letter, as many words related to gambling as they can think of that begin with that letter. Encourage them to think widely about words that could be relevant to gambling.' I suggest amending point 3 of the 'Method' to say - 'Once they have finished, help them to discuss what they have written and clarify any terminology they haven't met before. This should give you an overview of their knowledge and thoughts about gambling. Encourage them to say what they think of gambling - some may be keener than others who, perhaps, think it's rather a waste of money. Be ready to introduce terms they haven't thought of, and that you judge relevant to their needs and stage of understanding, explaining each. And perhaps add a 4th point: 'Have they identified any local gambling venues? Do some in the group seem more familiar with these than others?'
- Agree/Disagree (page 27) Why stop at Agree and Disagree? Why not have: Agree strongly / Agree a bit / It depends / Disagree a bit / Disagree strongly? There is then much more material for discussion, and less likely to be mere polarisation. It could also be more involving if, after explaining the session's structure, the young people were to be split into groups to generate statements they would like explored. The maxim 'start where young people are' seems pertinent here. The statements as printed, or as created by the session leader, may or may not coincide with the young people's perceptions/fears/concerns/interests.
- Bingo Game (page 29) Is this game about winning the Bingo game, or learning new facts? The game may get in the way of the learning.
- Coin Game (page 32) There may be difficulties here for young people unskilled at Maths.
- Community Map (page 34) It is not clear how the activity (which is entirely valid and may be very useful in pointing out the questionable location of some gambling establishments) promotes the "critical thinking" in the stated learning outcome.
- Consequences of Problem Gambling (page 35) The outcomes may not all be bad; what if the person in a problem scenario has a significant win and decides to pay off debts and stop while they're ahead? What if someone realises their problem is out of control and seeks help? What if a friend helps point out some of the signs that fun-gambling is now in danger of becoming problem-gambling and supports them to stop - and maybe seek help, too? Care needed to avoid too much doom and gloom - this has been shown to be counter-productive in drug education; avoid too many situations and scenarios where a young person can simply assert, 'That's not like me!'
- Dice Game (page 41) Point 10, 'detract' should be 'subtract'.
- Do's and Don'ts (page 44) I suggest changing the verb forms to present continuous. At the moment, they read like commands. But although there are good commands (the Dos) and bad commands (the Don'ts), none is labelled. A young person might

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read a card in isolation (for example): 'Try to win back lost money' as a command, but not remember it as a Don't. The commands would appear more neutral if they read: 'Trying to win back lost money', 'Borrowing money to gamble', and so on.

- Events' Odds Game (page 54) 'Dying from a snake bite' needs to differentiate between 'being bitten by a snake' and 'being bitten by a snake whose bite is fatal'.
- Gambling Crossword Puzzle (page 67) There is probably little correlation between doing crossword puzzles and developing competence to gamble sensibly, or not at all. To include a complex word game after having listed among vulnerabilities to problem gambling 'Having lower educational qualifications' (page 7) seems a little insensitive and inappropriate.
- Gambling Quiz (page 70) Quizzes can be good fun, and may be learning aids, too. However, they can be more useful if young people work in groups, each with detailed information on certain aspects of gambling and related issues, each group generating questions that the other groups answer. It is then scrutinising the information that leads to the generation of questions that promotes learning. The quiz that follows is more fun-focused.
- Gambling Tree (page 74) This is potentially a very powerful activity. I'm not a great fan of the tree analogy, but if handled well, the discussion could be very fruitful (!). I would have liked to see mention of 'critical moments', moments where there was a fork in the pathway, so to speak, each moment representing a point where a decision one way or another could make a big difference to what happened subsequently. Also, the difference between what can't be changed, (such as some of the Risk factors linked to problem gambling listed on page 7: the first three and the last), and what can be changed – knowledge, attitude, behaviour, resolve, seeking help and support, etc. – which may help tackle the remaining four on the list, and support the person in taking a different path (or fork).
- Last Man Standing (page 76) I think some explanation is needed for the phrase "stay safe" in Method, point 2. The timing is probably right for this one. It could actually be used as an energiser at a point in the session where sufficient information had been learned to make the task realistic.
- Logo Game (page 77) A useful activity. I would like to see what impact the group thinks the existence of these high-viz (and expensively designed!) logos have on their communities.

Suggestions for developing the draft Resource

To improve the present content of the draft, I would:

1. Revisit the activities in the light of these comments, strengthening the guidance in the Method section in some instances.
2. Remove the gambling crossword altogether.
3. Give careful consideration to how the information could be made clearer, bearing in mind the profile of the young people the practitioners are likely to be most concerned about, and their possibly limited writing and mathematical skills. Simplicity, accuracy and clarity are all vital.

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4. On page 15, add the additional link to CfE I have identified.
5. Make clearer where these links 'bite' in the sessions.
6. Make more distinct the similarities between problem gambling and other high-risk activities, not only for the obviously negative aspects of such a comparison, but also taking account of the pay-offs of risk-taking for those who experience them. Emphasise that taking care of oneself in high-risk situations isn't *always* about avoiding them, but can also be about a sound knowledge base, good preparation, putting safeguards in place, rational decision-making, keeping your wits about you, support from others, etc. The pay-offs need attention - it's the reason why young people take risks!
7. Link the content more clearly to the Personal and Social Education section of CfE, into which this Resource should aim to be much more clearly integrated. Bearing in mind the second level policy expectation from the new CfE, it would be helpful to include in the guidance to practitioners that I advise be crafted, a clear message to encourage them to feel free to create their own activities, or to deviate from the suggested format at any time they judge it would be helpful. This might be about timings, or revisiting the same activity *format* again at a point when newly acquired learning may widen its *content*. Or it may be about altering the structure or emphasis of an existing activity to help it address a particular need or focus. Or it may be using an idea from the resource's content to fashion a completely different activity, (perhaps involving more input at the outset from young people's *ideas* rather than just their *knowledge*).
8. Specifically, there are various points in the resource where there would be benefit in getting the young people to generate their own scenarios, and inviting them to craft the next chapter(s), leading to a range of possible conclusions, some positive, others less so, for each. How might the principal character(s) feel at each point? What might help them manage the situation more competently?, etc.. Activities that on the surface ensure movement and involvement, but are simply a framework for informing, should be limited – young people generally don't like be told stuff. However, there does need to be input, and opportunities for this need to be clear, together with clearer guidance as to its content at each point.

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Annex F Some analysis of Fast Forward's three-month follow-up data

This report was included in the evaluation's monthly report for November 2016.

Introduction

Fast Forward provided a spreadsheet with data from 31 respondents to the 'Survey Monkey' three-month follow-up questionnaire relating to their training events for the toolkit.

Use of the toolkit

Of these 31, 24 (77%) had read or implemented the toolkit. Twelve respondents described the setting or settings in which they had used the toolkit (including two who had used it in two different settings). Three had used it in school:

- PSE and S3. A group of young people who are at risk of leaving school early attended a 3 week block. There were 9 young people.
- Numeracy S3 - s6
- 12 years -18 year old

Seven respondents had used it in an informal youth setting:

- with the 16 -25 age group & offending background
- VIP monthly group/forum to get feedback if this would be of interest to pws
- drop in service
- In both a Junior Youth Group and Senior Youth Group setting
- LANDED Volunteer Wednesday Night Meeting/Training
- as part of a group activity within a youth facility
- Informal discussion about how gambling is promoted

Four respondents described other settings:

- I have used the toolkit with a group of teenage boys within the Quarriers office. It was an open space with a circle of chairs and wall charts for group writing.
- Young Offenders Institute
- Within a classroom setting in Polmont Prison each time we have delivered
- At youth worker training session

Table I shows the parts of the toolkit that respondents had used. More than two-thirds (68%) had used the general information and almost three-fifths (59%) had used some of the activities and resources, while more than half (55%) had used some of the session plans.

Table I Parts of Toolkit used and number of times used

<i>Part of Toolkit</i>	<i>Never</i>	<i>Once</i>	<i>2-5</i>	<i>< 5</i>	<i>N</i>
General information and facts on gambling and youth problem gambling	7	4	8	3	22
Some of the activities and resources	9	6	6	1	22
Some of the session plans	10	4	6	2	22
The websites and links for further	12	6	3	1	22

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Who the toolkit was used with

Eighteen groups of young people had been reached by the respondents. Table 2 shows that two larger groups (>20) of under-11s (presumably, primary school classes) had been reached, while two larger groups and four smaller groups of 11 to 15-year-olds, and three larger groups and seven smaller groups of people aged 16 to 15 years, had been reached. Those using the toolkit with quite small numbers of young people may work in specialist situations (such as in prison or with people with special needs) and therefore work with small groups.

Table 2 Young people involved by respondents when using the toolkit

Age	None	<5	5-10	10-20*	>20	N**	
< 11 years	14	0	0	2	0	16	
11 to 15	12	2	1	1	2	18	
16 to 25	10	4	2	1	3	20	
All ages		6	3	4	5		18

* age range in the question overlapped with previous category

** Ns vary: respondents were asked about each age group separately and some didn't answer

Reasons for using the toolkit

For some unknown reason, the question 'Please tell us why you used the toolkit, particularly which aspects of gambling you are interested in addressing with young people' was only answered by five people; multiple answers to the reasons suggested were possible so that there were 32 responses. The most common response (checked by all five respondents) was 'to help young people understand more about chances and odds', while the second-most common (N=4) was 'because some of the young people I work with have been gambling'. No-one said it was 'because the young people I work with asked me to discuss about gambling'. Table 3 has the details.

Table 3 Reasons for using the toolkit (ordered by rank)

Reasons	N=5
to help young people understand more about chances and odds	5
because some of the young people I work with have been gambling	4
to challenge the attitudes and beliefs that young people have towards gambling	4
to address gambling within a wider discussion/programme on risk-taking behaviours	3
to raise young people's awareness about how the industry and advertising affect their choices	3
to support young people in developing their problem-solving skills and in making informed choices for themselves	3
to address the gambling habits of the young people I work with	3
to enable young people to stay safer if they gamble	2
to inform young people about what kind of support is available if they have gambling-related concerns	2
because I wanted to use the toolkit and implement what I had learned at the training	2
because the young people I work with asked me to discuss about gambling	0
Other (please specify)	1*

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total answers	32
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* **reason given:** We always consult with people we support to ensure we are discussing topical issues that matter to them

Responses to different sections of the toolkit

The next few questions in the survey asked about the different sections of the toolkit. In each case people were asked to respond either 'No'; 'Yes, a little'; 'Yes, a lot' to four questions about each section: 'Did you read this chapter?'; 'Did you use it?'; 'Did you find it useful?'; and 'Would you change something?'. In Table 4, the responses, 'Yes, a little' and 'Yes, a lot', have been combined. It can be seen that most people claimed to have read all sections except the 'Useful Links and Information' section. Fewer, but still large proportions, had used all the sections (except 'Useful Links...'), and almost everyone who had read it had found it useful. Few reported that they wanted to make changes, although it was notable that three people wanted to make changes to the 'Sample session plans' and two to the 'Activities and Templates'. One of the 'little' changes suggested to the Session Plans was:

I have changed session plans to suit the environment I deliver in as some of the sessions would be a little bit lengthy. Some of our young people do not have the capacity to sit for a long period of time but we also have certain time slots we can deliver within so I have adapted the session plans to suit our needs.

A change suggested by one person to the Activities was:

Empathy map – I don't think this really works in conjunction with the case studies. I would probably just use the case studies for discussion, or the empathy map as a general discussion about a young gambler. I don't feel they match up well together. I also think there should be a wee bit more of a reference to Jason's adult gambling in the case study the participant gets. Also in the practitioners' version it mentions FOBT but doesn't explain what this stands for. **Gambling Quiz** – It is a bit wordy, and nearly all the answers are number or percentage-related. [I] think it requires too much reading. [I] think the Final Quiz is easier to read and understand – maybe that should be called 'the Gambling Quiz', and just have a facts-and-figures information sheet for practitioners with the info from the current gambling quiz instead. [spelling and punctuation corrected]

Table 4 Use of different sections of the toolkit: those reading it, using it, finding it useful and wanting to change it 'a little or a 'a lot', *

Multiple choices	Sections of the Toolkit							
	Foreword	'overview'	support	Curric.	Youth Work	Plans	Acts.	Info
Did you read this chapter?	27	26	22	22	20	26	28	0
Did you use it?	15	21	17	14	14	20	21	0
Did you find it useful?	25	26	22	19	19	25	27	0
Would you change something?	1	1	1	1	2	3	2	1

* various Ns

Interim Conclusion

These data show that those respondents who completed the on-line questionnaire were generally enthusiastic about the toolkit and had used it. This is a positive result, and their additional comments reinforce the positive view of the resource. Although it must be

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remembered that those who were motivated to answer the questionnaire are probably more likely to be positive about the resource and to have used it, it is clear that practitioners are finding the resource useful.