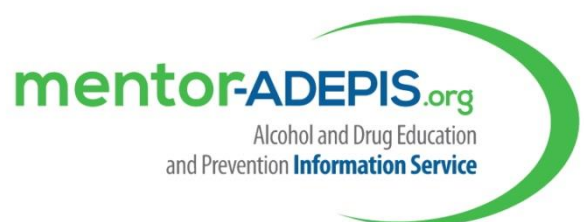


Unplugged in England:

A feasibility study of a secondary school prevention programme

Femke Dewulf, Jamila Boughelaf,
Annemie Coone and Peer van der Kreeft

August 2017



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Final Report – August 2017

Authors: Femke Dewulf, Jamila Boughelaf, Annemie Coone and Peer van der Kreeft

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This report is an internal document, which is not meant for wide public distribution. It is part of a pilot intervention, known as “LEAF,” undertaken by Mentor UK and University College Ghent (HoGent).

Abstract

The aim of this study was to evaluate the process of the European school-based intervention programme 'Unplugged' among young people, and to contribute to the reduction of tobacco, alcohol and drug initiation by measuring the impact of mediating factors. The Unplugged intervention, from the EU-Dap Drug Abuse Prevention network, is based on a social influence approach to young people's substance use and has already been trialled extensively across European countries, Latin-American, African and the Middle East.

Schools in three areas of the UK with an identified acute problem of alcohol and drug misuse (n= 214 pupils from 10 schools) were selected. Data were collected before and three months after the training. This study was designed as a one group pre-test post-test design without a control group. The impact of the training was analysed using descriptive statistics and a paired t-test. Fidelity and satisfaction forms were used to evaluate the process of the programme.

Upon completion of the programme, participants demonstrated increased knowledge and risk perception about all substances. The number of girls declaring to have behavioural problems due to alcohol use was lower during post-test, which could indicate that the impact of the intervention was greater for girls than for boys. The process evaluation indicated that the programme can be feasibly implemented in UK schools; however, it should be further adapted for special schools such as Pupil Referral Units.

The very small number (214) of matching records imply that databased statements are always relative; since prevalence at age 12 to 14 is low, many findings concern only a limited number of individuals. Nevertheless, these findings contribute to the need to systematically evaluate school-based interventions, although more research is needed to ensure reliable and valid results on the effectiveness of the Unplugged school-based prevention programme for young people in the UK.

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Key findings

Based on quantitative and qualitative data analysis, the following are key findings of the Unplugged intervention in this UK pilot study:

- A total of 214 matched questionnaires were analysed, which indicated a high matching ratio of 96%.
- The average age of students was recorded as 13.3 years.
- A high proportion of classes implemented all the units into the curriculum. A constant rate of implementation was observed, which strengthens the fidelity of this project and is comparable to curricula administered in European settings.
- Overall, teachers' confidence in teaching each unit was high, except for units 3, 6 and 8. Teachers' remarks were also related to the type of school: those at special schools specifically mentioned taking into account vulnerability of the pupils attending these schools. Teachers mentioned students' overall interest and interactivity was moderate. Higher levels of interests were observed in units 5 and 9.
- In comparison to studies on the implementation of Unplugged in other countries, the Leaf study showed students' interest and interactivity at a moderate level. Teachers' satisfaction with the programme was not good overall, whereas in other studies there was generally a high level of teacher satisfaction. This might indicate that the intervention did not work as expected at class level.
- Only 31% of the students lived with both parents. The majority (57%) lived with just one parent.
- There was strong statistical evidence that Unplugged improved overall knowledge on substances; however, when compared to baseline results, the rate of correct answers on knowledge on substances remained low for the duration of the programme. In the satisfaction forms a high percentage of both teachers (75%) and students (76%) reported an improvement of their knowledge and skills about drug prevention.
- There was no statistical evidence that Unplugged increased students' negative beliefs or decreased positive beliefs about drug use. Overall, positive beliefs indicated a low perception of benefits following substance use.
- Regarding attitudes towards drugs, we observed good perceptions of positive and negative attitudes towards drug use among students at follow-up.
- Observing risk perceptions, pupils were better informed after the programme; however, there remained a need to be correctly informed about drugs.
- Students generally reported positive self-esteem, but at follow-up we observed a borderline level of poor self-esteem. On the other hand, students' capacity for good decision-making remained positive. According to the satisfaction forms, 60% of the students said they found Unplugged useful in answering questions they had about themselves and making choices. Follow-up surveys still indicated a high level of bad decision-making.
- Questions about refusal skills showed a low proportion of pupils accepting the use of cannabis and tobacco exhibited by friends. The percentage of pupils accepting the use of alcohol increased at follow-up, but this could be influenced by many factors, such as age.
- The impact of the UK intervention for girls seemed higher than for boys, whereas in the EU-Dap European study (Vigna-Taglianti et al, 2009) the impact was greater among boys. More males than females declared having behavioural problems due to alcohol or drug use at follow-up. The number of girls declaring to have behavioural problems due to alcohol use at follow-up was lower than during baseline, while the number of boys declaring to have behavioural problems due to drug use at follow-up was higher.
- The overall scores for communication skills at follow-up indicated a better score than during baseline. This confirmed good communication skills among pupils, but there was no strong evidence the intervention improved these skills.
- At follow-up, scores indicating a good family climate and a better class climate remained positive. Satisfaction forms indicated that more teachers (42%) than students (33%) reported an improvement in the relationship between teachers and students. None of the teachers reported no improvement.

- Overall, teachers were neither satisfied or dissatisfied with the programme. However, 59% of the students were highly satisfied and a similar percentage responded positively when asked if they would like to have a programme like Unplugged next year.

The implementation of Unplugged overall met the participants' expectations and their satisfaction with the programme. The context and the operational processes involved in the programme were achievable within the given setting, although it is important to adapt the programme for special schools and to evaluate time, planning and some working methods. The Unplugged intervention had a significant impact on the targeted mediating variable (knowledge) and for other mediators we observed interesting findings, although additional research is needed to collect more statistical evidence on the effectiveness of the Unplugged programme for young people in the UK. This pilot study suggests that the European evidence-based school prevention programme Unplugged could improve the drug use prevention efforts of UK public schools. The results can help policy makers to understand what elements are essential for a successful adaptation of Unplugged in UK contexts.

Recommendations

- Feasibility and cost-effectiveness dictated decisions on the type of this study design. This pilot study, being a non-random, one group pre-test post-test design without a control group, has multiple limitations related to the chosen approach.
- The sample was smaller than expected, which increases the risks of a non-representative sample. A non-random sample without a control group has less evidential value and less information to evaluate the impact of interfering with environmental factors such as age. To achieve statistically significant and reliable results, a sample of 1500-2500 pupils per group were needed. Therefore, even the limited effects we detected could be due to chance.
- Analysing the differences between types of schools of pre- and post-data could give statistical evidence that some mediators have more impact in special schools. Monitoring and satisfaction forms in this pilot study highlighted some impressions and interesting perspectives to adapt the intervention programme taking into account the context and the individual character of these special schools.
- Overall, teachers' satisfaction with the programme was not good, unlike other studies of the Unplugged implementation which indicate high levels of teacher satisfaction. This might indicate that the intervention did not work as expected at class level. It is worth exploring further whether this is related to implementation factors, cultural influence or other reasons.
- Focus groups, where groups of people are involved in different stages of the programme implementation process, could be added to reinforce and refine the conclusions of the Unplugged implementation and current analysis of monitoring and satisfaction forms.
- For some mediating variables, we observed interesting findings; however, it remains unclear whether Unplugged can be effective in the UK because of the context, characteristics and cultural acceptance of alcohol use in the UK. Large studies are needed to clarify the effectiveness of Unplugged in the UK.

Introduction

Adolescent substance misuse has significant consequences on education outcomes, sexual health and a range of other risks (Hale D, Viner R, 2013; Royal College of Physicians, 2011; Green, R. and Ross, A, 2010). In the UK, the government's strategy for reducing and preventing drug use among young people focuses on treatment and recovery from drug dependence, and enabling schools to have a stronger role in detecting and disciplining drug-related problems (and behaviour), as well as delivering quality drug education. However, in practice, schools experience difficulties taking on this role and delivering quality drug education (Thurman, B., Boughelaf, J., 2015).

Universal prevention in a school setting is one of the most feasible and appropriate strategies to tackle substance use among youth (UNICRI, 2003). Evidence of inconsistent and low-quality practice encouraged Mentor to address this gap and pilot an evidence-based prevention programme that offers resources and training to teachers in selected areas in the UK.

'Unplugged' is a European Drug Addiction Prevention (EU-Dap) prevention programme that was initiated as a pilot project during 2003-2005 in seven European countries (Mentor Unplugged, 2011). The aim of this project was to contribute to the evidence concerning the effectiveness of drug prevention programmes in Europe. Unplugged is an evidence-based programme designed to prevent the use of tobacco, alcohol and other drugs among young people. This classroom-based programme is based on a comprehensive social influence methodology that represents an appropriate and effective approach to exercising behaviours that strengthen the attitudes and skills required to build resilience towards tobacco, alcohol and drug use. The programme consists of 12 units, one hour each, delivered by class teachers to adolescents aged 12-14.

In 2015-2016, Mentor delivered Unplugged across 10 secondary schools in Salford, Cannock Chase and Greater Manchester, areas identified as having an acute problem with alcohol and drug misuse among children and young people. They were selected based on specific recommendations from the Life Skills and Education in Alcohol Foundation (LEAF), which identified 10 localities of particularly high need due to the high proportion of under-18s admitted to hospital with alcohol-specific conditions.

The aim of this study was to evaluate the programme implementation process of Unplugged in three areas in the UK among young people aged 12 to 14 and to contribute to the reduction of tobacco, alcohol and drug initiation by measuring the impact of Unplugged on mediating factors. This pilot study was designed as a one group pre-test post-test design without a control group (J. Billiet and H. Waege, 2003). Feasibility and cost-effectiveness dictated decisions on the type of this study design. Considering the multiple limitations related to the chosen approach, the results should be taken in line with these. More research is needed to evaluate the process of the programme implementation and to collect evidence on the effectiveness of the Unplugged school-based prevention programme for young people in the UK.

Background – English context

National statistics on smoking, drinking and drug use

The national 'Smoking, drinking and drug use among young people 2014' survey report (HSCIC, 2014) was consulted to gather national statistics on prevalence and attitudes towards substance use. The survey includes responses from over 6,000 secondary school students aged 11 to 15.

According to the report, less than one in five 11-15 year olds (18%) said that they had smoked at least once. This shows considerable decline since 2003, when 42% of pupils had tried smoking. In relation to attitudes towards smoking, the survey found that young people are less likely to condone smoking by someone of their age than in 2003. In 2014, 26% thought that it was acceptable to try smoking to see what it was like, compared with 48% in 2003.

The survey also addressed normative beliefs; 85% of students believed that their peers most likely smoked to look cool in front of their friends. Young people who smoked were more likely to believe that people of their age smoked because of its effects (e.g. to cope with stress or because it gave them a good feeling). On the other hand, non-smokers mentioned social pressure as a key (perceived) determinant for their peers' smoking behaviours.

The report also highlighted an overall decline in alcohol and illicit drug consumption. In relation to alcohol use, 38% of 11-15 year olds had tried alcohol at least once in their lifetime, while 8% of students said they had drunk alcohol in the last week (with no gender differences). The proportion of pupils who had drunk alcohol in the last week increased with age from 1% of 11 year olds to 18% of 15 year olds. Pupils with low wellbeing were more likely to have drunk alcohol in the last week.

In relation to drug use, the report shows that 15% of students claimed to have ever taken drugs (in their lifetime), 10% to have taken drugs in the last year, and 6% to have taken drugs in the last month. The prevalence of drug use increased with age, with 6% of 11 year olds saying they had tried drugs at least once, compared with 24% of 15 year olds. A similar pattern was seen for drug use in the last year and the last month.

This survey highlights the importance to reduce substance use among youngsters. Studies have shown that the health of young people has remained moderately stable over time, despite the health of infants and older people improving. Young people's general health has therefore been an area of concern for the government over a number of years (Mori, I., HSCIC, 2015).

Policy around drug use

Smoking is an addiction that is largely developed in childhood and adolescence, and young people in particular can quickly develop a dependence on nicotine. Therefore, the coalition government focused their efforts on reducing and preventing smoking among teenagers. By the end of 2015, they were aiming to reduce regular smoking rates to 12% or less for 15 year olds in England, compared to 15% in 2009 (Health and Social Care Information Centre, 2014). However, there are considerable challenges in maintaining this decline, particularly as smoking has become increasingly concentrated among disadvantaged young people (A. Amos, 2012).

In order to tackle the problems of excessive drinking, the government published their Alcohol Strategy in 2012 (The Government's Alcohol Strategy, 2012). This set out proposals aimed at tackling the UK's 'binge drinking' culture and its associated impacts, as well as to reduce the number of people who drink to damaging levels. The Department of Health subsequently published a policy paper outlining plans to reduce alcohol misuse between 2010 and 2015. This paper laid out a number of plans to reduce excessive alcohol consumption and minimise the damage alcohol misuse can cause to individuals and society.

The use of drugs by young people is associated with risks to their health, including mental health problems. In December 2010, the coalition government published its Drug Strategy and focusing on reducing and preventing drug use among young people and treating those with dependency.

School-based drug education and prevention in England

Since the publication of the first drug strategy in 1995, there has been a variety of national guidance around school-based drug education (Dusenbury & Falco, 1995; Butcher, 2004; DfES, 2004; McWhirter, 2009; DfE, 2012; DfE, 2013b; Boddington et al., 2014). However, this has not led to the provision of consistent and high quality education.

Currently, science is the only statutory subject that delivers drug education in schools in England, and this is largely confined to the physical and biological effects of drugs (DfE, 2013a). Schools are expected to cover other cardinal components of drug education – social norms, resilience to risk, social and emotional skills – within Personal, Social, Health and Economic (PSHE) education (DfES, 2004; DfE, 2012) (Thurman, B., Boughelaf, J., 2015). However, the recent decentralisation of education authority (Clark, 2012) allowed for the increasing independence of state schools, especially academies, resulting in a very fragmented and ad hoc delivery of PSHE education and, consequently, drug education.

Recent investigations by Ofsted suggested inconsistent practice (Ofsted, 2010). In 2010, Ofsted reported that a quarter of schools 'required improvement' in PSHE, with drug education in particular suffering on account of variable teaching, poorly-planned lessons and a lack of curriculum time. Subsequently, 'Not Yet Good Enough' (Ofsted, 2013) found that PSHE is failing in 40% of schools. Ofsted's conclusion that students largely had good knowledge about the effects of drugs but deficiencies regarding broader skills suggests that many schools deliver information in isolation (Thurman, B., Boughelaf, J., 2015, We don't get taught enough).

Moreover, a review led by Mentor in partnership with the PSHE Association, aimed at understanding the status of drug education across England in order to inform the provision of services through the Alcohol and Drug Education and Prevention Information Service (ADEPIS), also revealed major gaps in relation to drug education provision (N. Boddington, J. McWhirter and A. Stonehouse, 2013). The survey of almost 300 schools highlighted key constraints in providing quality drug education, these being: lack of curriculum time, lack of financial capacity and lack of specialist training which results in varying levels of confidence in delivering drug education, especially when dealing with sensitive issues.

Evidence of inconsistent and low-quality practice prompted Mentor to explore opportunities to pilot an evidence-based prevention programme that offers resources and training to teachers, also leaving the flexibility of being adapted to curriculum time and various delivery methods within PSHE education.

Mentor is the UK's authoritative voice in the field of prevention, working to protect children and young people from the harms caused by risky behaviours, especially alcohol and drug misuse. They do this by bringing together the best international scientific evidence, academic research, policy and practical experience. Since 1998, Mentor has supported and empowered young people to make informed decisions that ensure their physical, mental and social wellbeing and build resilience to a range of risks. They have extensive experience in commissioning, managing and evaluating evidence-based practice, working directly with young people, teachers and practitioners across the education and prevention fields. They have also developed specific expertise in education programmes that develop life skills and resilience among young people, particularly in deprived communities.

Universal prevention in school settings is one of the most feasible and appropriate strategies to tackle substance use among youth (UNICRI, 2003). Implementing an evidence-based prevention programme like Unplugged in some areas in the UK, while offering resources and training to teachers, could increase the quality of school-based drug education and prevention.

Unplugged

Unplugged is an evidence-based programme to prevent use of tobacco, alcohol and other drugs among young people. The programme consists of 12 units, one hour each, delivered by class teachers to 12–14 year old adolescents. It is a highly interactive curriculum which includes training on personal and social skills and a specific focus on normative education. Social Learning, Problem Behaviour, Health Belief, Reasoned Action-Attitude, and Social Norms are the main theories at the centre of Unplugged. The theories are integrated into a complex model, which allows the inclusion of Unplugged among Comprehensive Social Influence programmes (Vadrucci, et al., 2015).

Every core theory contributes to the developments of the units' contents, with specific weights. The Social Learning theory informs six units (50%), Social Norms informs six (50%), Health Belief informs four (33%), Reasoned Action-Attitude informs six (50%), and Problem Behaviour applies to all units (100%). The Problem Behaviour theory appears as the most influential theory: overall 50.8% of the Unplugged contents can be referred back to it. The other theories contribute to a lower extent (Health Belief 17.5%, Social Learning 10%, Social Norms and Reasoned Action-Attitude 10.8%), though the contribution of the Social Learning theory could actually be higher, since it is a macro-theory influencing the others (Vadrucci, et al., 2015).

In seven European countries, the effectiveness of the Unplugged programme was evaluated through a Randomised Controlled Trial. In the study, 170 schools (7079 pupils 12–14 years of age) were randomly assigned to one of three experimental conditions or to a control condition during the school year 2004/2005 (Faggiano, et al., 2009). A pre-test survey assessing past and current substance use was conducted before the implementation of the programme, while a post-test survey was carried out about 18 months after the pre-test. The association between programme condition and change in substance use at post-test was expressed as adjusted prevalence odds ratio (POR), estimated by multilevel regression models. The results show persisting beneficial programme effects for episodes of drunkenness (any, POR = 0.80; 0.67–0.97; frequent, POR = 0.62; 0.47–0.81) and for frequent cannabis use in the past 30 days (POR = 0.74; 0.53–1.00), whereas daily cigarette smoking was not affected by the programme as it was at the short-term follow-up (Faggiano, et al., 2009). Baseline non-smokers that participated in the programme progressed in tobacco consumption to a lower extent than those in the control condition, but no difference was detected in the proportion of quitters or reducers among baseline daily smokers (Faggiano, et al., 2009).

A study (Giannotta, Vigna-Taglianti, Rosaria Galanti, Scatigna, & Faggiano, 2014) investigating factors mediating the effects of Unplugged suggests that positive attitudes toward drugs, normative perceptions of use among peers and refusal skills, might explain most of the effectiveness of interventions based on social influence. On the other hand, targeting other mediators, such as beliefs or knowledge, may not contribute to the effectiveness of such programmes (Giannotta, Vigna-Taglianti, Rosaria Galanti, Scatigna, & Faggiano, 2014).

Mentor delivered Unplugged across 10 secondary schools in Salford, Cannock Chase and Greater Manchester, areas identified as having an acute problem with alcohol and drug misuse among children and young people. These areas were selected on the basis of specific recommendations from the Life Skills and Education in Alcohol Foundation (LEAF), which identified 10 localities as of particularly high need due to the highest proportion of under-18s admitted to hospital with alcohol-specific conditions.

The Unplugged programme is designed to equip adolescents with knowledge about the health consequences of drugs and to promote the specific skills that are needed to resist potentially damaging social influences. The programme focuses on the development of core life skills: critical thinking, decision-making, creative thinking, effective communication, relationship skills, self-awareness, empathy and coping with emotions. In addition, the programme aims to correct perceived social norms about the prevalence and acceptability of drug use among young people. Unplugged has already been trialled extensively: across seven European countries in the EU; through privately financed projects, including one in Sweden delivered by Mentor Sweden and funded by the IKEA Foundation (Van der Kreeft et al, 2009); and through national grants in Latin American, African and Middle Eastern countries through UNODC advocacy.

Methodology

Summary of methods

Purpose

The purpose was to analyse short-term mediating factors across 10 UK schools of a European school-based curriculum intervention (Unplugged) based on a social influence approach to youths' substance use. School-based interventions may affect alcohol, tobacco and cannabis use in adolescence through modification of attitudes, development of refusal skills and reappraisal of normative perceptions (Vadrucci S. et al, 2014). As this pilot study had a limited sample size and no control group, the prevalence questions were excluded from the baseline surveys. Therefore, the purpose of this study was twofold: firstly, to evaluate the feasibility and acceptability of the Unplugged programme for drug use prevention in UK schools; and secondly, to measure the impact of the intervention on targeted mediators like knowledge on drugs, risk perception, attitudes towards drugs, normative beliefs and personal skills.

The Unplugged programme was evaluated using both quantitative and qualitative research tools to obtain a more holistic understanding (Patton MQ, 2002). The quantitative data was analysed based on data collected from baseline, follow-up and process monitoring forms. The qualitative analysis was based on open questions asked in monitoring forms. The following is the detailed methodology adopted for the programme implementation and its evaluation in the United Kingdom.

Standardised instruments/products

Standardised questionnaires and monitoring forms

To evaluate the impact of the Unplugged curriculum on attitudes and behaviour on young people in relation to the use of alcohol, tobacco and other drugs, the Unplugged programme had **baseline questionnaires** to measure changes after the implementation. The questionnaires were a modified version of the EU-DAP questionnaire. From December 2015 to January 2016 the questionnaires were adapted and translated to the cultural and educational context of the UK by the project team. Due to a lack of control group the prevalence questions were excluded from the baseline. Unique anonymous codes, being a combination of selected letters and numbers of the participants' information, were used to match pre- and post-test results using an auto-generation sheet to ensure the complete anonymity of the questionnaire and to protect the participants' confidentiality.

For the **evaluation of the process** the details on the forms to be used and the procedures to be followed were described in the EU-Dap protocol. The forms were adapted and translated. From October to December 2015 Mentor reviewed, adapted and proof-read all relevant materials, which may have contained typos or grammatical errors, also ensuring content and examples included in the workbook were relevant to the cultural and educational context. This ensured all materials to be easily accessible, understandable and usable by teachers in England. The monitoring forms assessed the implementation of Unplugged at the class level, the satisfaction of the teachers and the satisfaction of the pupils with the programme. The parents' seminars were not implemented in this brief study because of the limited timeframe and budget of this pilot.

Due to the limited timescale, the adapted materials could not be tested. However, Mentor consulted schools and collected relevant feedback from teachers that were attending the awareness days organised to recruit schools for the pilot.

The baseline questionnaires were administered to the pupils starting in January 2016, and after the end of the programme in July 2016. The programme started for each region on different times. Teachers did not have much time between completing and collecting monitoring forms and administering the

questionnaires to the pupils. Because of the summer holidays starting in mid-July, the project team collected the forms with some delays which also delayed the process of completing the data.

The questionnaires collected at baseline and follow-up were entered by HoGent in an online database provided by OED (Osservatorio Epidemiologico delle Dipendenze, University of Turin, Italy), the coordinator of EU-Dap. Data entered were checked and analysed following strategies and methods already used in the data analysis of other EU-Dap trials. The process evaluation forms were locally entered in the online database provided by OED. Data were analysed by OED, Mentor and HoGent.

Data sample and study design

Non-experimental research

This pilot study was designed as a one group pre-test post-test design (J. Billiet and H. Waege, 2003). The original aim of this study was to assess the feasibility, adaptability and accessibility of implementing EU-Dap Unplugged, a prevention programme originally trailed in seven European countries excluding the UK.

While feasibility and cost-effectiveness dictated decisions on the type of study design, following agreement from funders it was decided to deliver a pre-test and post-test evaluation to monitor related impact. This was done taking into account the multiple limitations related to the chosen approach, therefore related results should be considered with these limitations in mind. The effectiveness of preventive interventions without a control group has less evidential value, because it is impossible to say if the effects are based on the intervention or on coincidence. However, this non-experimental study is used often in practice to measure criteria before and after an intervention. The difference between the pre- and the post-test can give us a first indication of the impact of this intervention.

Recruitment process

Mentor delivered Unplugged in secondary schools in Salford, Manchester and Staffordshire. Schools were selected based on a voluntary response sampling, which means that a number of schools were asked to participate in the pilot and those that volunteered were selected. The only inclusion criteria were: being located in a specific area (taking into account the actual drug problems) and not being part of other studies or delivering similar drug education and prevention programmes. During the recruitment phase, Mentor made sure that none of the schools taking part in the pilot were involved in other studies or receiving other prevention interventions. This meant that some schools that originally expressed an interest for the programme had to be excluded at this stage. This was to decrease the level of bias during the evaluation phase. Any additional prevention activity that may have been delivered in the school was strictly part of the curriculum planning (for instance we were aware that one school decided to commission a local drug education provider to deliver one session specifically on drugs). Similar cases were monitored through process monitoring forms. There were no other prevention activities implemented in classes during the intervention period. Two schools in Manchester had to be excluded from the programme due to them being part of a randomised control trial of a prevention intervention.

Some schools were contacted following an open day in Salford, which lead to word of mouth. The presentation of an award in health education helped promote the programme in Manchester. Just before the baseline surveys were conducted, two high schools in Staffordshire joined the programme, which meant that Unplugged was delivered in three regions including four types of schools: Pupil Referral Units, high schools, Special Educational Needs schools and Academies. The selection of such a variety of schools was due to Mentor's interest in exploring the feasibility of implementing Unplugged (a universal intervention) in different educational settings, including establishments supporting most vulnerable young people, such as Pupil Referral Units (PRUs) and Special Education Needs (SEN) schools.

Results

In this section of the report we present our results based on the baseline and follow-up questionnaires. In the subsection titled 'Follow-up' we will match the results of pre- and post-test which will provide insight on the impact of the programme. Most of the tables you will find attached.

Participation of schools, classes and pupils

A total of nine schools, including three SEN schools and two PRUs delivered Unplugged (though 10 were originally recruited), reaching a total of 350 year 8 and 9 students. A total of 14 teachers and learning mentors received training to deliver Unplugged.

The administration of the participants was based on school and class codes: survey administration baseline. The decision to not take part in the pilot (either by schools or specific classes) was due to a variety of factors. The main reasons were: lack of curriculum time, or curriculum plan not fitting with the programme timeline; lack of support from the head teacher; change of staff (due to interested individuals leaving the post temporarily or permanently). One PRU dropped out following attendance of the training due to an inability to engage the pupils with limited resources.

Indicators:

- Nine schools delivered Unplugged
- 350 Y8 and Y9 students reached by the programme
- 308 pre-test baseline questionnaires were completed by pupils
- 225 post-test follow-up questionnaires were completed by pupils
- 384 of monitoring forms were filled and completed in the database
- 893 (528 baseline + 365 follow-up) questionnaires were printed according to estimation before recruitment process and 14 sets of monitoring forms were sent

Baseline

12 schools volunteered to participate in the programme. Two schools (one PRU and one high school) dropped out before the baseline survey and declined participation because they were unable to schedule the intervention on time. In total, 10 schools and 22 classes (84,6%) participated in the Unplugged programme; there was no control group, meaning all participating schools were exposed to the intervention (Unplugged programme).

A certain level of drop-out was observed in the participation of pupils: of a minimum of 381 expected questionnaires, 308 questionnaires (80.8%) were collected. The drop-out rate was very high for some schools (table 1). Among the participants there were four types of schools registered; the participation rate for each type of school was the following: PRU (11%), SEN (19%), HS (38%), ADM (32%).

12 questionnaires were excluded from the analysis because of unavailable student code, for a total of 296 questionnaires analysed, corresponding to 77.7% of those expected.

Follow-up

Two schools and four classes did not participate in the follow-up surveys. From (N=225) the questionnaires administered all were available for survey analysis.

An anonymous code (adapted to the country context) made it possible to match pre- and post-tests. When matching these questionnaires with the baseline, a total of 214 questionnaires could be matched, which means a matching ratio of about 96%.

Table 1: Participants, schools and classes in baseline and follow-up surveys

	baseline survey					follow-up survey				
	HS	PRU	SEN	ADM	Total	HS	PRU	SEN	ADM	Total
n= students	113	31	57	95	296	81	17	36	80	214
n = classes	6	4	7	5	22	5	3	5	5	18
n = schools	2	3	3	2	10	2	2	2	2	8

When looking at the age categories (table 2), participants were mainly 13 or 14 years old. Younger students were mainly observed in Special Educational Needs schools and Academies. Only four students seemed to be older than 14. The students participating from the Pupil Referral Units were more diverse in age.

Table 2: age categories per type of school

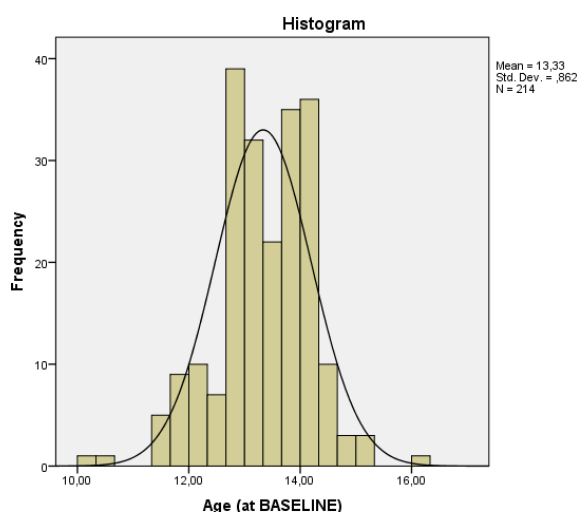
		Age categories			Total
		< 13	13 - 14	> 14	
		Count	Count	Count	
Type of school	HS	1	80	0	81
	PRU	6	8	3	17
	SEN	30	5	1	36
	ADM	35	45	0	80
Total		72	138	4	214

From all the matched questionnaires, boys and girls were almost equally divided. In high schools more girls than boys were participating; in Academies and especially in Special Educational Needs schools more boys participated in the programme (table 3).

Report on baseline survey

Typical characteristics of pupils participating in the survey

Most pupils were 13 or 14 years old when filling the baseline questionnaire (see histogram below). Only 31% of them lived with both parents; the majority (57%) lived with just one parent (table 4).



About half of the participants did not know the level of education of fathers, and this proportion was higher among girls than boys, while the level of education of mothers was unknown to about 45% of pupils, with no differences among males and females. According to the answers of pupils knowing the level of education of parents, 19% of fathers and mothers completed college or university, whilst 18% of fathers vs 26% of mothers completed secondary school or attended some college/university.

About 24% of families did not have a car. A higher proportion of boys (76.6%) than girls (65.2%) had a bedroom for him/herself. 16% of pupils did not go on holiday with their families during the last year. More than 90% of families had more than two computers at home.

More males (26.6%) than females (20.7%) had high grades at school in the previous year, but more males (7.8%) than females (5.2%) also had low grades. Overall, a higher proportion of females (88.1%) had medium or high grades vs males (84.4%). More males (68.8%) than females (55.6%) reported to like school at present.

Knowledge of substances

With regards to **knowledge of substances**, the rate of correct answers was quite low, especially on the question on the relationship between nicotine and lung cancer (only 12% of males and 6% of females answered correctly). About 45% of males and only 37% of females answered the question on addiction to tobacco correctly. With regards to alcohol, again the proportion of pupils answering correctly was quite low: 32% for the question on gender differences on tolerance and 22% for the question on permanence of alcohol in the body. About 20% of pupils answered the questions on cannabis correctly. **The scores of exact answers appeared to be quite low, and for all the substances girls appeared to be less informed than boys** (table 5).

Beliefs, attitudes and risk perceptions

The score on negative beliefs about **smoking** cigarettes had a mean level just under 2.5, indicating a **mid-level perception of negative consequences of use**; there were similar results for the score on negative beliefs about **drinking** alcohol (table 6). This is consistent with the results for the individual statements: for tobacco, about half of the pupils perceived risk with most of the statements, and only the statements “get into trouble with parents” and “become an addict”, and for alcohol only “get into trouble with police”, “do badly in school” and “get into trouble with parents” showed a proportion of pupils perceiving that risk higher than 60%.

The scores on both negative beliefs about **marijuana use and negative attitudes towards drugs** had a mean level lower than 2, indicating **good perceptions of the negative aspects related to use** (table 7). When looking at the individual statements, the majority of pupils demonstrated high levels of risk perception. The scores for statements on positive attitudes towards drugs indicated a low level of risk (a low level of positive attitudes).

When looking at the **perception of positive consequences** of use, the scores for cigarettes, alcohol and marijuana approximate a value of 2, indicating a **low perception of benefits following the use**. With tobacco, the proportion of pupils perceiving positive consequences of use was lower than 30% for all statements; for alcohol the proportion was a little higher but still lower than 30%, with the exception of the statements “have more fun” and “forget my troubles”; for marijuana only the statements “feel more relaxed”, “have more fun” and “forget my troubles” had a proportion of positive answers higher than 30%.

Pupils’ **risk perceptions** for cigarettes, alcohol and drug use are described in table 8. It should be noted that a proportion between 9% and 18% of pupils answered “I don’t know” to these questions. Furthermore, 20% of pupils declared no risk or slight risk if one smokes one or more packs of cigarettes

per day, 15% declared no risk or slight risk if one drinks alcohol every day, 18% if one smokes marijuana regularly, and 24% if one uses other drugs occasionally. This identifies **a need to be correctly informed**.

Overall the risk perception of daily alcohol use (74%) and daily smoking (66%) was higher than for drug use (56%) and marijuana (64.5%).

Personal skills

The scores on **positive self-esteem** indicated a **good level of self-esteem**: in fact, a large proportion of pupils answered positively to all questions (table 9). However, the **negative self-esteem** score had a mean of 2.5, indicating a **borderline level of poor self-esteem**: when looking at the single statements, in fact, about 50% of pupils answered “agree” on almost all negative statements. Overall, males seemed to be more positive about themselves than females.

The positive indicators for decision-making skills showed a **good level of ability to make decisions**, with a high proportion of pupils showing rationality in making decisions based on the individual statements. However, the negative indicators for decision-making skills was higher than 2.5, indicating a **high level of poor decision-making ability**: a high proportion of pupils answered positively to the negative statements. Only the statement “When I decide on something it doesn't matter what my parents think” had a lower score. Parents seem to have a significant influence on the pupils, which is also noted in table 4 (Beliefs on consequences of tobacco, alcohol use, marijuana and other drugs).

The three statements measuring refusal skills, as well as the overall score, showed a very low proportion of pupils accepting to use cannabis, tobacco and alcohol offered by friends (only 12.5% for cannabis, 11.5% for tobacco and 15.9% for alcohol). The overall score indicated **good refusal abilities**.

The items measuring communication skills and the overall score showed **good communication skills**. Only showing someone that you like him or her seemed more difficult especially for females (31%).

Family, friends and school behaviours and influences

About 43% of pupils said at least one parent smokes cigarettes, and 49% said at least one parent drinks alcohol (table 10). A large majority of pupils said their parents set clear rules and monitored pupils' activities, and provide a good level of **support and esteem**.

With some differences between males and females, only 3% of parents allowed their children to smoke cigarettes; 7% did not allow it at home and 81% did not allow it at all. 9% of parents allowed their children to drink alcohol; 11% didn't allow it at home and 59% did not allow it at all.

About 20% of pupils said their **siblings** smoked cigarettes and 29% said their siblings drank alcohol.

Most pupils answered positively to all positive statements on family climate, and a very low proportion answered positively to the negative family climate statements. Both family climate scores (positive and negative) indicated a good overall **family climate**.

Few pupils said more than half of all their **friends** smoked cigarettes (4.7%), drank alcohol (8.5%), got drunk (5.7%), and used marijuana or other drugs (3.4%) (table 11). The proportion of pupils who said they had no friends at all exhibiting those behaviours was higher in case of marijuana or other drugs (66.6%; 71.1% of females and 62.3% of males), followed by cigarettes (59.5%), drunkenness (55.7%) and drinking alcohol (50.7%).

With regards to the perception of friends' approval, gender differences must be noted. A higher proportion of females than males declared their friends would disapprove but remain friends if they found out that the pupil exhibited the following behaviours: smoking cigarettes (64.4% vs 38.3%), drinking alcohol (54.8% vs 37.0%), and marijuana use (34.8% vs 24.0%).

Only 20% of pupils declared that none of their **peers** (others of their age) smoked cigarettes, drank alcohol or got drunk, and about 33% reported that none of their peers used marijuana (table 11). These proportions are very different from those declared with regards to their friends. Pupils' perceptions of drug use among their peers were stronger than their perceptions of drug use among their friends with whom they spend most of their leisure time. This indicates that 'friends' and 'peers' have different meanings as indicators of 'peer pressure'.

More boys than girls said their friends **liked school** (33.3% vs 21.0%), but more girls than boys (53.3% vs 48.7%) said their friends did well at school.

A large majority of pupils answered positively to the items measuring class climate, with the overall score indicating a good **class climate**.

Few pupils declared they had **behavioural problems** due to alcohol or drugs (table 12): in all cases the proportion was higher among boys, except 'quarrels related to alcohol' and 'accidents or fights related to drugs'. From the proportion of problems related to alcohol or drug use, the problems related to drug use were higher but still low (mean of 1.3). Pupils had a higher risk having behavioural problems for other reasons than drugs.

Report on matched data: impact of Unplugged on mediating factors for reduction of tobacco, alcohol and drug initiation

To evaluate the impact of the Unplugged intervention on attitudes and behaviour of adolescents in relation to the use of alcohol, tobacco and other drugs, the Unplugged pilot used matched data from baseline and follow-up questionnaires to measure changes after the intervention. This research analysed differences between the pre- and the post-test, comparing means of data from two related samples, matched by an anonymous code. Looking for differences in scores following a prevention programme (intervention) gave us statistical evidence of the impact of Unplugged in this pilot study.

Knowledge of substances

With regards to **knowledge of substances**, the rate of correct answers in the follow-up questionnaire remained low. On the relationship between nicotine and lung cancer, only 16% of males and females answered correctly. But more females answered correctly, going from 6% during baseline to 16% at follow-up, an increase of 66%. On addiction to tobacco, pupils' knowledge remained more or less the same (45% answered correctly). With regards to alcohol, the knowledge on gender differences on tolerance the knowledge increased from 32% during baseline to 52% at follow-up. Looking at gender differences, both males and females increased their knowledge, but females had better scores. Pupils' knowledge of the permanence of alcohol in the body remained the same: more than half didn't know the answer to this question. On the questions about cannabis, knowledge again increased more for girls than for boys. We can conclude that girls appeared to be much more informed about alcohol and nicotine at follow-up than at baseline (table 13).

Compared to the baseline, the rate of correct answers for knowledge of substances remains quite low (mean increases from 1.43 to 1.99 on a scale from 0 to 6). **But the overall increase in knowledge seems to be significant** ($t=4.892$, $p=0.000$) (table 14). This means there is strong evidence that the Unplugged programme improves overall knowledge about substances.

Table 14: Paired t-test overall knowledge

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	FOLLOW-UP CORRECT KNOWLEDGE: OVERALL	1,9904	208	1,53223	,10624
	BASELINE CORRECT KNOWLEDGE: OVERALL	1,4279	208	1,24124	,08606

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	FOLLOW-UP CORRECT KNOWLEDGE ON: OVERALL - BASELINE [Q24] CORRECT KNOWLEDGE ON: OVERALL	,56250	1,65822	,11498	,33582	,78918	4,892	207	,000

Looking at specific substances, increased knowledge about alcohol ($t=3.872$, $p=0.000$) and cannabis ($t=4.020$, $p=0.000$) are both significant, but increased knowledge about cigarettes is not ($t=1.757$, $p=0.080$). This tells us there is stronger evidence that Unplugged improves knowledge about alcohol and cannabis than cigarettes.

Beliefs, attitudes and risk perceptions

Comparing baseline scores with follow-up, we observed that the mean level of **negative beliefs** about smoking cigarettes decreased slightly (mean=2.20), still indicating a mid-level perception of negative consequences of use (table 15).

The score of negative beliefs of alcohol and marijuana use remained more or less the same. Comparing the mean scores from the baseline and follow-up questionnaires, none of the negative beliefs about drug use were significantly affected. This means there is no strong evidence that the Unplugged programme increased negative beliefs about drug use in general.

Table 15: Paired t-test negative beliefs on smoking

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Follow-up [Q13] BELIEFS ON CIGARETTES: COSTS	2,2026	202	,72315	,05088
	Baseline [Q13] BELIEFS ON CIGARETTES: COSTS	2,3063	202	,66511	,04680

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Follow-up [Q13] BELIEFS ON CIGARETTES: COSTS - Baseline [Q13] BELIEFS ON CIGARETTES: COSTS	-,10367	,76271	,05366	-,20948	,00215	-1,932	201	,055

When looking at perceptions of positive consequences of substance use at follow-up questionnaires, the scores for cigarettes, alcohol and marijuana remained at the value of 2, indicating a low perception of benefits following use (table 16). Observing the data from baseline and follow-up surveys regarding positive beliefs about any type of drugs, a comparison of measurements showed no significant change, indicating there is no strong evidence that the Unplugged intervention decreased positive beliefs about drugs.

Looking at variables of positive and negative **attitudes** towards drugs, we compared the mean levels from baseline and follow-up surveys. The scores of both negative and positive attitudes remained more or less the same, observing a mean around 1.8, still indicating good perception of positive and negative attitudes towards drug use.

Table 16: Paired t-test negative attitudes on drug use

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	[Q23] FOLLOW UP: NEGATIVE ATTITUDES VS DRUG USE	1,8283	207	,56428	,03922
	[Q23] BASELINE: NEGATIVE ATTITUDES VS DRUG USE	1,7988	207	,54937	,03818

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	[Q23] FOLLOW-UP: POSITIVE ATTITUDES VS DRUG USE	1,8316	204	,62996	,04411
	[Q23] BASELINE: POSITIVE ATTITUDES VS DRUG USE	1,8413	204	,64628	,04525

Risk perceptions of cigarettes, alcohol and drug use are described in table 17; at follow-up, 9% and 14.6% of pupils answered “I don’t know” to these questions. This means pupils are better informed, but there is still a need for young people to be correctly informed about drugs.

At follow-up, 24% of pupils (compared with 20% at baseline) declared no risk or slight risk if ‘one smokes one or more packs of cigarettes per day’, mainly due to the fact that more females (10%) said at follow-up there was only a slight risk. If we look at the risk perceptions of alcohol at follow-up, 14.6% declared no risk or slight risk if ‘one drinks alcohol every day’, more or less the same as during baseline. Females seemed to be more informed about alcohol, with 84.3% answering during follow-up that ‘drinking alcohol every day’ has a greater risk (compared with 76.3% at baseline).

For drug use, 17.5% of pupils declared no or slight risk if one smokes marijuana regularly, the same result at follow-up as during baseline. At follow-up, more males than females said there was no risk or only a slight risk if one ‘uses other drugs occasionally’. Again, these are incorrect risk perceptions that need to be corrected. Overall pupils’ risk perception of daily alcohol intake (74%) and daily smoking (65%) was higher than on other drug use (56%), though risk perceptions seemed to be better for marijuana (70%).

Personal skills

If we look at the scores on **positive self-esteem**, the mean during follow-up remained the same (mean=1.89), indicating a large proportion of pupils answering positively.

Regarding the negative self-esteem score, the overall mean at follow-up also remained the same (mean= 2.5) still indicating a borderline level of poor self-esteem. When looking at single items (table 18), the total percentage of pupils that agreed with these statements remained high, but only two items (in red) had a higher score comparing to baseline. Comparing differences between males and females to baseline scores indicates that females seemed to be less negative about themselves at follow-up, but is not significant ($t=1.510$, $p=0.133$).

The scores for good **decision-making skills** remained positive, with high proportions of pupils declaring rationality in making decisions on the single items. Bad decision-making skills still indicated a high level of a bad decision-making ability at the follow-up (mean > 2.5). But when looking at single items all of the items scored better at the follow-up, except for the last item indicating that ‘it still matters a lot what parents think when pupils decide on something’ (table 19).

The three statements measuring **refusal skills** during the follow-up showed a low proportion of pupils accepting the use of cannabis and tobacco offered by friends. Only the percentage of pupils accepting the use of alcohol by friends increased significantly, from 15.9% to 22%, but this increase should be put into perspective and could be influenced by many factors, such as age (table 20). The overall score during follow-up still indicates good refusal abilities (mean 1.69 at follow-up vs 1.54 at baseline).

	Sex		
	Male	Female	Total
	Mean (1-4: higher scale core higher risk)	Mean (1-4: higher scale core higher risk)	Mean (1-4: higher scale core higher risk)
[Q40] REFUSAL SKILLS ON OVERALL USE	1,74	1,63	1,69

Looking at the scores measuring **communication skills** and the overall scores during follow-up, the results confirmed pupils’ good communication skills (table 21). The overall score was better than during baseline (mean=1.89), which could indicate the Unplugged programme improved pupils’ communication skills. However, as table 22 shows below, comparing means between baseline and follow-up gave no strong evidence that the intervention improved communication skills ($t=-0.593$, $p=0.554$).

Table 22: Paired t-test communication skills

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Follow-up [Q42] COMMUNICATION SKILLS (score 1-4)	1,8933	181	,58175	,04324
	Baseline [Q42] COMMUNICATION SKILLS (score 1-4)	1,9190	181	,55932	,04157

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	[Q42] COMMUNICATION SKILLS (score 1-4) - [Q42] COMMUNICATION SKILLS (score 1-4)	-,02569	,58296	,04333	-,11119	,05981	-,593	180	,554

Family, friends and school behaviours and influences

At follow-up a large majority of pupils said they were getting support from their parents and friends and their parents were still monitoring their activities. Considering the brevity of the programme, no significant changes were expected regarding this topic.

A large majority of pupils still answered positively to positive statements on **family climate** (table 24). No remarkable differences in means were observed between baseline and follow-up. The percentage of pupils answering positively to the negative family climate statements remained low. Both positive and negative family climate scores indicated a good family climate at follow-up.

A small difference in mean was observed in **class climate** between the baseline (mean= 2.12) and follow-up (mean=2.01), indicating a better class climate at follow-up. Comparing means between baseline and follow-up were not statistically significant regarding class climate ($t=-1.872$, $p=0.063$). But the overall score indicated a good class climate. If we look at differences in means of the overall class climate between types of schools, a better relation within class was observed in High Schools, Special Educational Needs schools and Academies but was not significant ($t=-1.303$, $p=0.194$). The class climate for Pupil Referral Units remained more or less the same.

Table 24: Class climate by type of school baseline vs follow-up

		BASELINE [Q37] SCHOOL EXP: CLIMATE IN CLASS		FOLLOW-UP [Q37] SCHOOL EXP: CLIMATE IN CLASS	
		Mean (1-4: higher score higher risk)	N	Mean (1-4: higher score higher risk)	N
Type of school	HS	2,18	81	2,10	81
	PRU	2,00	17	2,02	17
	SEN	2,00	36	1,88	36
	ADM	2,13	80	1,96	80
Total		2,12	214	2,01	214

At follow-up, the proportions of **peers** using particular substances (see table 25 in the Annexes) remain more or less the same and are still very different from those declared with regards to their **friends**. Pupils' perception of peers using drugs remains stronger than their perception of friends using drugs, indicating that friends and peers are different as indicators of peer pressure to use. Regarding **school climate**, the proportion of girls declaring that their friends did not like school was higher, but 10% less than during baseline (23,5% during follow-up vs 33,3% during baseline) (table 25). The number of girls declaring their friends getting good grades was still higher than boys (61,7% vs 50%).

At the follow-up, one in five pupils declared **behavioural problems** due to alcohol, 5% less than during baseline (table 26). But these results were not significant ($t=0.200$, $p=0.874$). In all cases, reporting behavioural problems was higher among boys. Notably, the number of girls declaring behavioural problems due to alcohol use was lower at follow-up than during baseline, while the number of boys declaring to have behavioural problems due to drug use was higher. This implies that the impact of the intervention on girls seemed higher than for boys, whereas the EU-Dap European study (Vigna-Taglianti et al, 2009) showed a higher impact for boys than for girls.

Results on process implementation

Background

Despite the programme's proven effectiveness in other contexts, it is essential to evaluate the implementation process of a programme that has been culturally adapted (Medeiros et al., 2016). Many studies mentioned the importance of evaluating the implementation of preventive interventions in a school environment (Rohrbach LA et al., 2007). Evaluating the process enables the development of adaptations to enhance the fidelity, feasibility and acceptability of the programme (Rossi, P.H., Lipsey, M.W., & Freeman, H.E., 2004). Fidelity of the programme's implementation was assessed through the process monitoring protocol (see annexes). The feasibility was measured using monitoring forms and satisfactions forms, to see whether the context and the operational processes involved in the programme were achieved within the given setting. Finally, acceptability was evaluated using satisfaction forms, to see how the implementation of the programme met the participants' expectations, as well as their satisfaction with the programme.

The curriculum consisted of 12 one-hour units taught by class teachers who had previously attended a two-day training course. Although the original Unplugged programme design envisaged two and a half days' training, within the scope of this pilot Mentor had to adapt it to fit the English context and ensure teachers' attendance. This meant reducing the training to two days, the maximum allowance teachers appeared to receive for training outside school.

Participating schools used many diverse ways to deliver the programme, including: 20 minutes twice a week in form time; three consecutive days in one month; and some within their PSHE lessons, one hour per week. Considering feedback received from schools that took part in the programme, it appears that delivery in one SEN school proved much harder than in others. One PRU and one SEN school in Manchester struggled to administer all evaluation forms (resulting in one PRU only sending students' follow-up questionnaires and one SEN school failing to send Mentor any monitoring and evaluation forms, other than the baseline questionnaires). This is mainly due to the difficulty of engaging such vulnerable groups of students, but also due to students moving to alternative provisions.

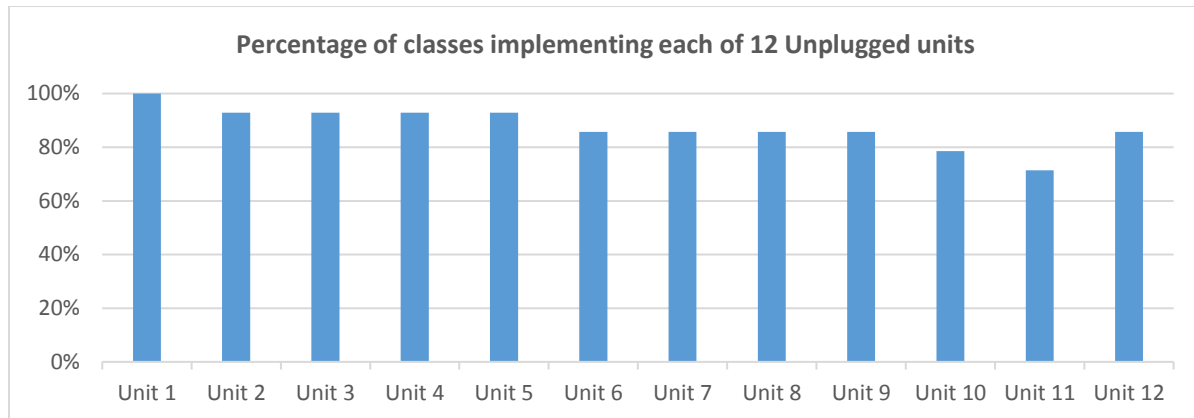
Monitoring forms

Mentor received process monitoring forms from a total of six schools (out of the nine who took part in the programme) and 14 classes. The missing process monitoring forms from the remaining three schools were either due to lack of time to provide feedback or went missing in the post. The results of these forms will be visualised by graphs; some tables are attached.

The chosen evaluation methods, and subsequent collection of forms, have proved a challenge as this has required significant time from teachers. Teachers were asked to complete process monitoring forms after the delivery of each module; however, they often lacked time to do so and were forced to complete these at the end of the programme.

The percentage of classes implementing each of 12 Unplugged units was high. A constant rate of implementation was observed (graph 26).

Graph 26: Percentage of classes implementing each of 12 Unplugged units

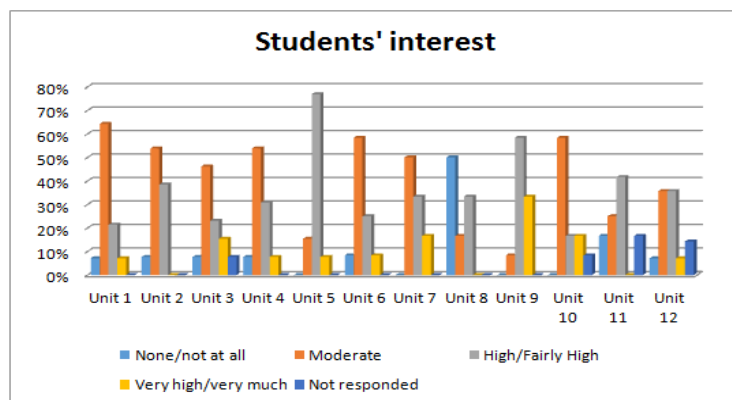


A total of 71% of the engaged classes implemented all the units (100%) in the curriculum. 14% implemented at least nine units (75% of the programme) and 7% at least five units (less than 50%). One class only delivered one unit and then withdrew from the programme. Taking the missing data into account, on average each unit was taught to 74% of the target population. This level of programme implementation is comparable to that of other curricula administered in a European setting (Stead M., Stradling R, Macneil M., et al., 2007).

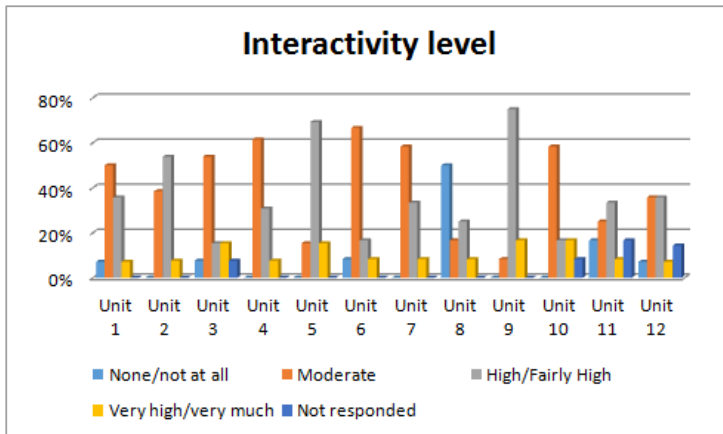
A certain level of fidelity with advised delivery methods was observed, with 5% of classes spending an average of 90 minutes on each module, 29% spending 60 minutes on each module, 17% spending between 45 and 50 minutes on each module, 15% spending between 35 and 40 minutes on each module and 20% of classes spending 30 minutes on each module. The table attached (table 27) shows details of delivery for each unit of Unplugged (classes n=14).

Process monitoring forms also asked teachers to provide information around the perceived level of students' interest (graph 28) and interactivity levels (graph 29) for each unit.

Graph 28: Students' interest



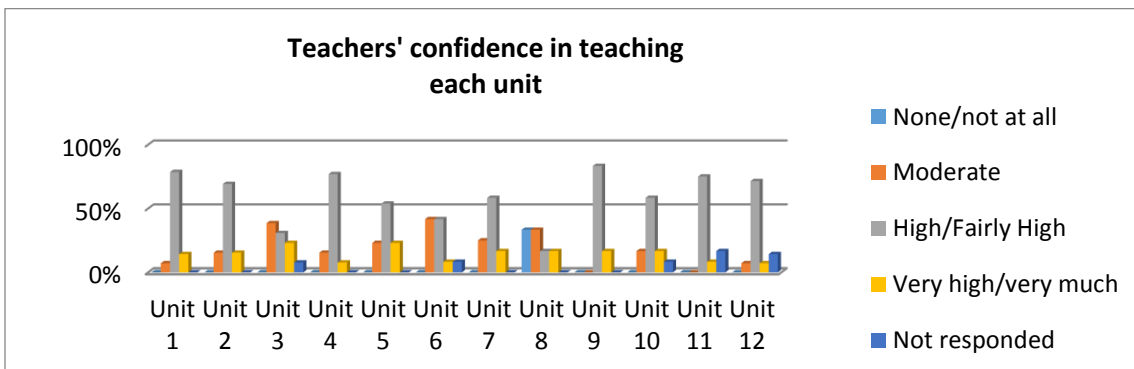
Graph 28: Interactivity level



Units 5 and 9 seemed to be the most successful, showing higher levels of students' interest and interactivity. In comparison to studies on the implementation of Unplugged in other countries, the LEAF study showed moderate levels of interest and interactivity from UK students.

Teachers were also asked how confident they felt in teaching each of the modules. Taking the missing evaluations into account, teachers' confidence (graph 29) in teaching each unit was high overall, except for units 3, 6 and 8. Negative remarks registered for these units focussed on the working methods, students not taking it seriously, time constraints and difficulties they experienced in trying to create an atmosphere of confidence to express or identify emotions.

Graph 29: Teachers' confidence



Some of the remarks teachers reported on the work during the unit are also related to the type of school. When analysing these remarks looking at the type of school, the following was mentioned:

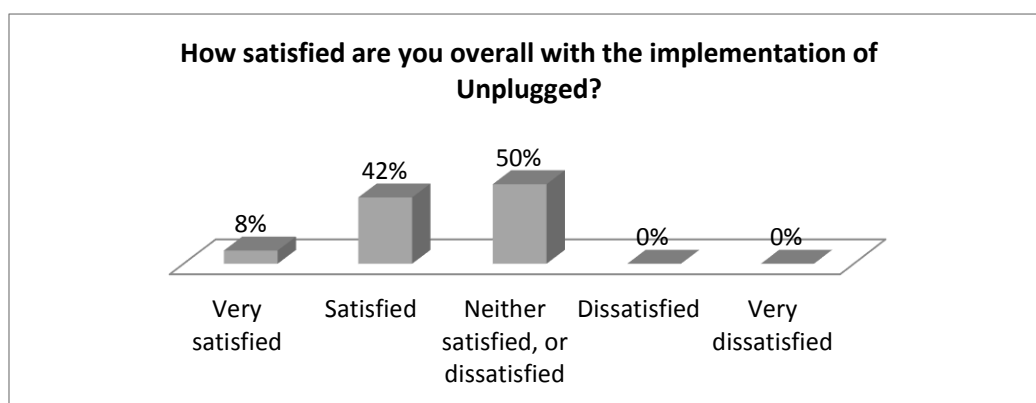
- PRUs: Need teaching assistance to facilitate activities; pupils lack the ability to express or identify emotions; difficult to engage pupils within the role play or group discussions, which makes teachers feel uncomfortable.
- SEN: Some activities were not executed due to low numbers or students' abilities (some pupils struggle with reading); the "Amazon activity" in unit 11 was impossible due to the unsettled and aggressive behaviour of students.

Teachers also mentioned environmental factors that had an impact on the implementation of the units, including teachers' illness, student absence, timing of the programme (e.g. first day back in school) and lack of time in the curriculum.

Teachers' satisfaction

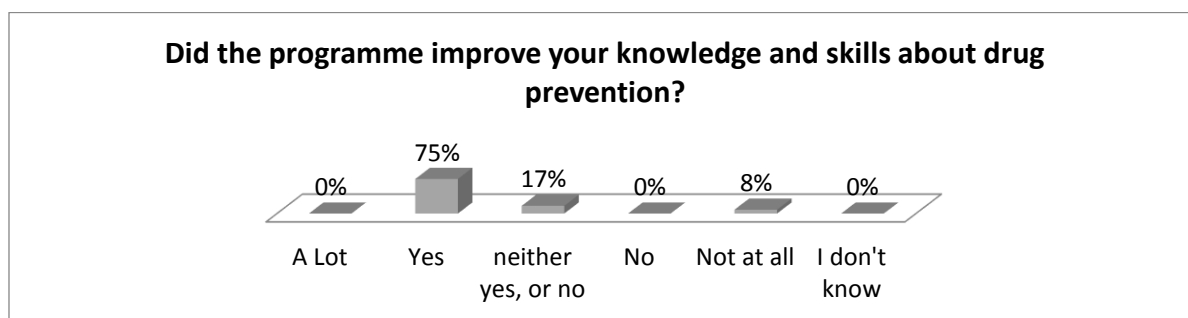
When analysing teachers' satisfaction, 67% of all teachers filled in the satisfaction questionnaire. Taking the missing data into account, only 50% of all teachers were very satisfied or satisfied, which is not a very high score. But none of the teachers said they were **unsatisfied** with the programme implementation (graph 30). We can conclude that teachers' satisfaction with the programme was not very good overall. Generally, in other studies a higher satisfaction rate was observed among teachers. This might indicate that the intervention did not work as expected at class level in this pilot. It is worth further exploring whether this is related to implementation factors, cultural context or other reasons.

Graph 30: Overall satisfaction with Unplugged



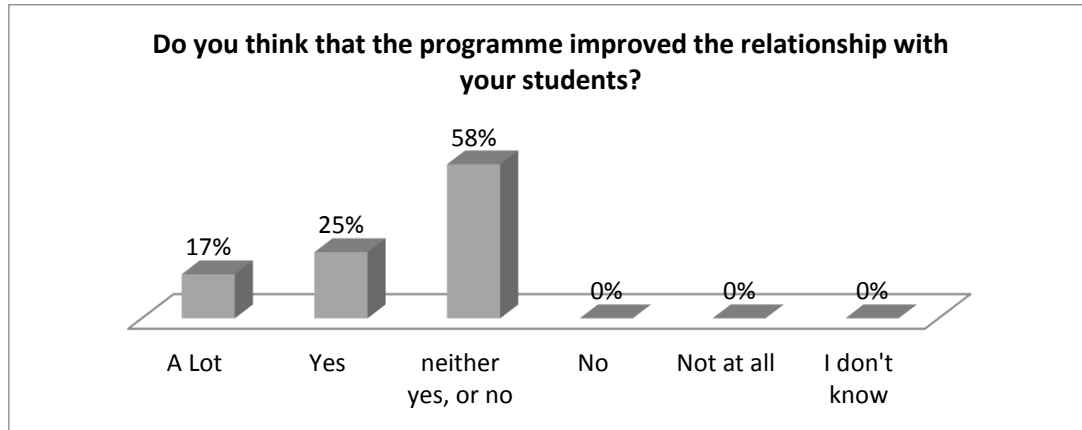
Overall, teachers providing monitoring forms perceived a big improvement (75%) in their knowledge and skills about drug prevention (graph 31).

Graph 31: Improvement of knowledge and skills about drug prevention

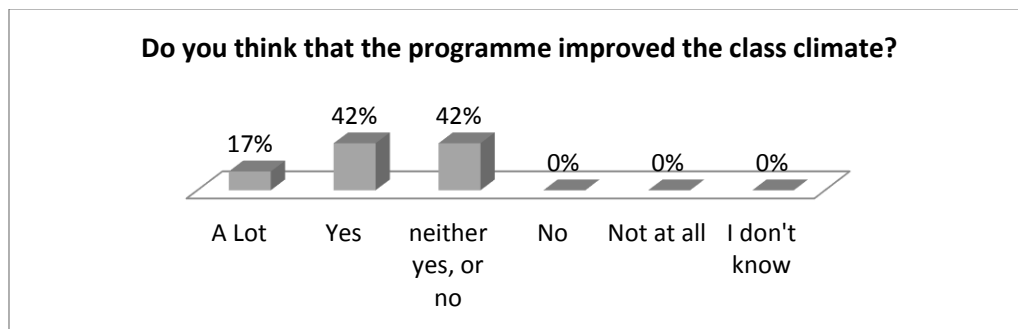


Improvement of teaching skills were declared by fewer teachers (50%) in the UK, compared to the results from the five countries that participated in the Mentor Sweden Unplugged trial funded by the IKEA Social Initiative (Mentor Unplugged, 2011). When looking at teachers' relationships with students (graph 32), more teachers (42%) than students (33%) reported an improvement in the teacher-student relationship and none of the teachers reported no improvement. In relation to class climate (graph 33) 59% of the teachers noticed an improvement; when we compare these results to pupils' responses, better relationships within class were also observed among pupils at follow-up.

Graph 32: Teachers' relationship with students

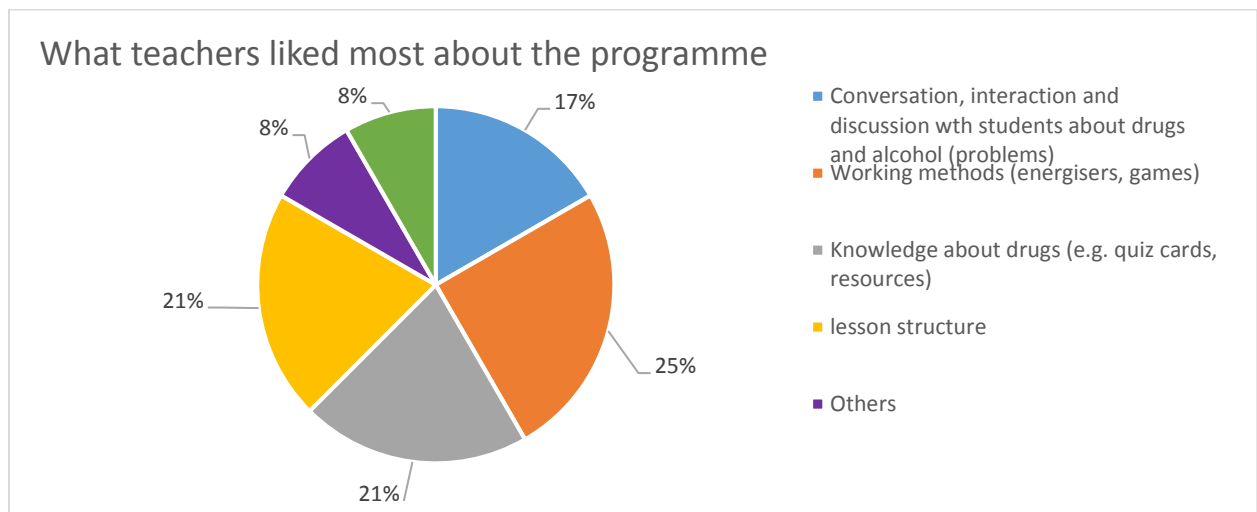


Graph 33: Class climate

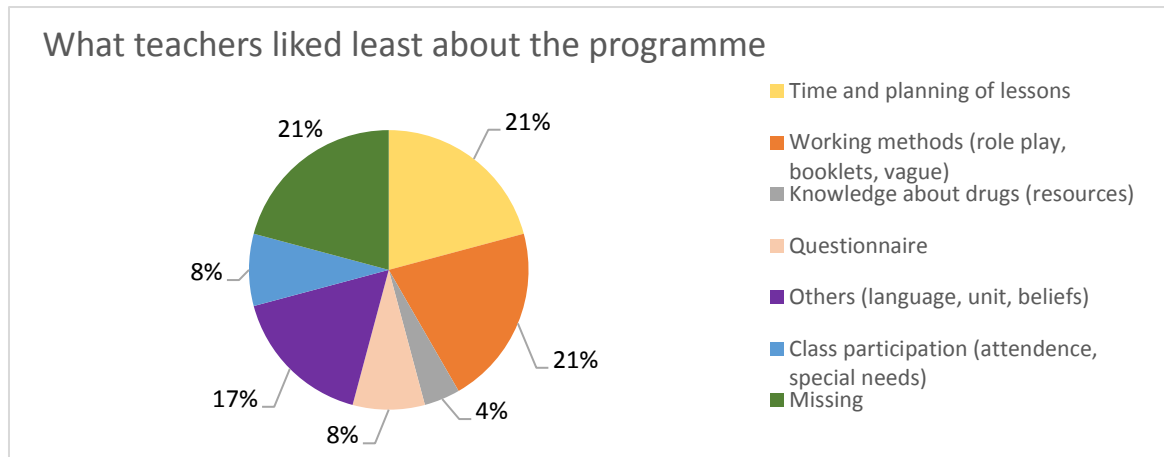


When analysing the open questions (graphs 34 and 35) on what teachers liked the most or least about the programme, we can conclude that teachers were highly satisfied with the working methods, the lesson structure and the knowledge they received teaching the Unplugged programme. They were least satisfied with the time constraints and lesson planning as well as some of the working methods. Some teachers mentioned particular difficulties delivering the booklets and the lack of engagement of students during role play activities, which was more difficult for special schools.

Graph 34: What teachers liked most about the programme



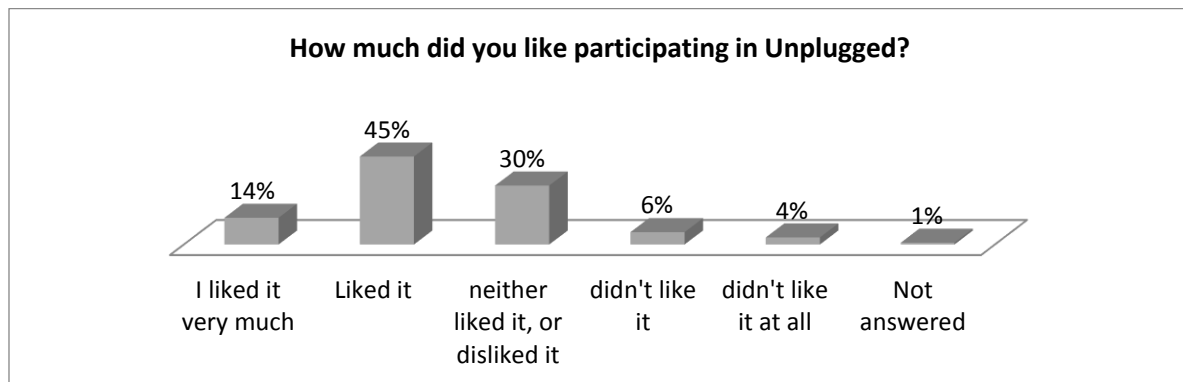
Graph 35: What teachers liked least about the programme



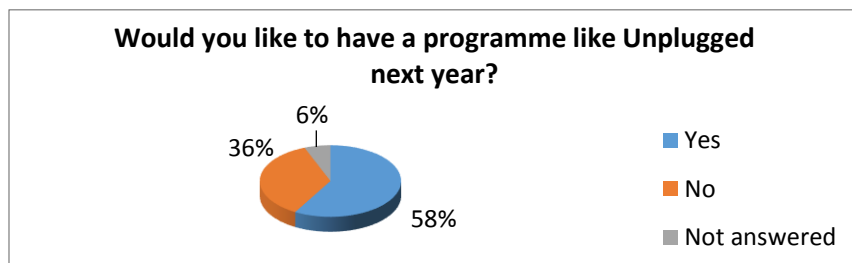
Students' satisfaction

About 98% of the students completed the Unplugged satisfaction forms. Taking the missing evaluations into account, 59% of the students were highly satisfied with the programme (graph 36) and only 10% of the students were unsatisfied. Similar results were observed when asking the students if they would like to have a programme like Unplugged next year (graph 37).

Graph 36: Liked participating in Unplugged

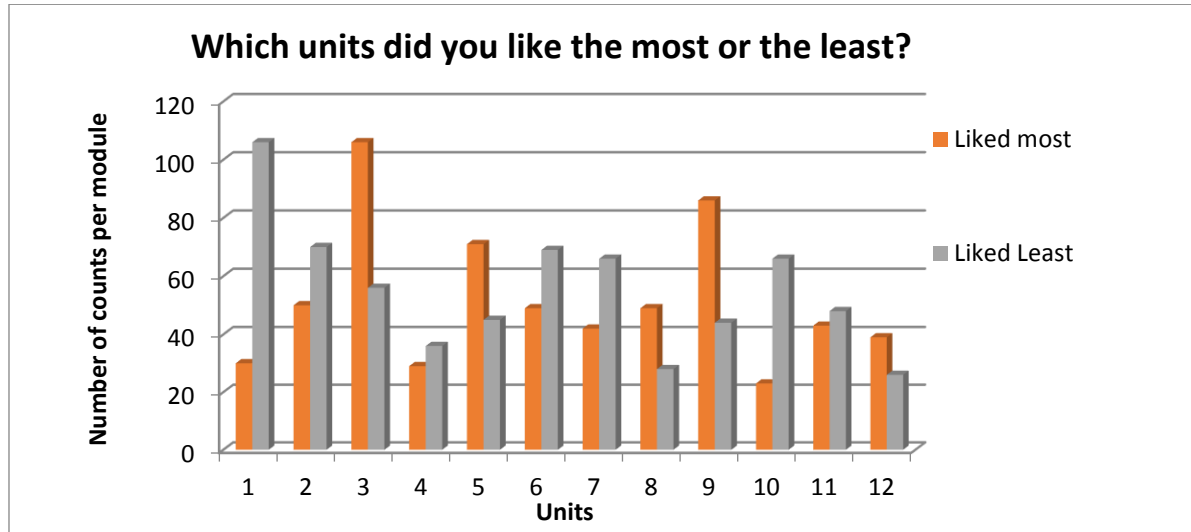


Graph 37: Unplugged next year



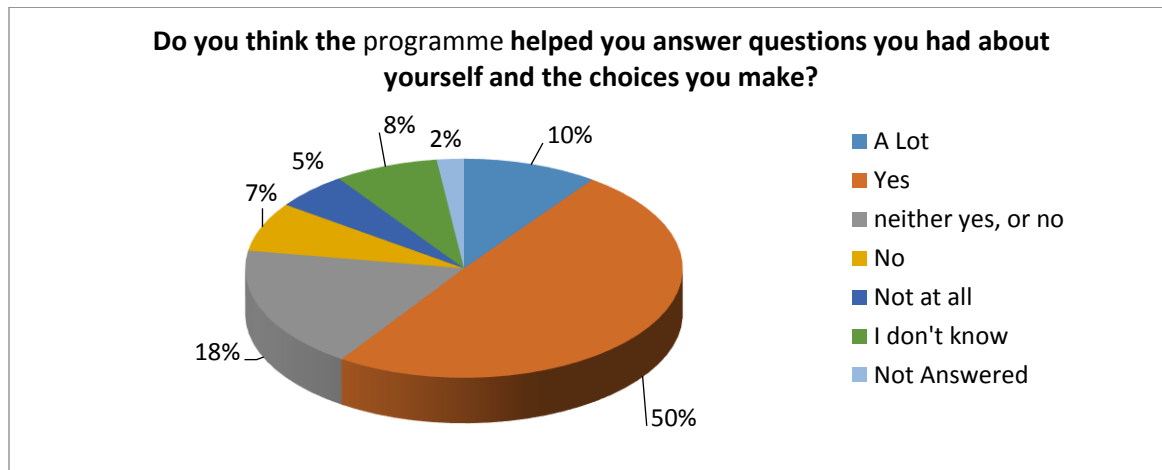
When looking at the questions about which units of the programme students liked (graph 38), unit 3 (“Alcohol”) was the most popular, followed by unit 9 (“Drugs – Get informed”) and unit 5 (“Smoking cigarettes – inform yourself”). Comparing these numbers to what teachers registered on the monitoring forms, teachers observed a higher students’ interest and a higher interactivity level in units 5 and 9, but not in unit 3. The fact teachers did not observe a higher interest or interactivity in unit 3 could be influenced by the fact that fewer teachers felt confident in teaching that unit (see graph 29).

Graph 38: Units liked most or least

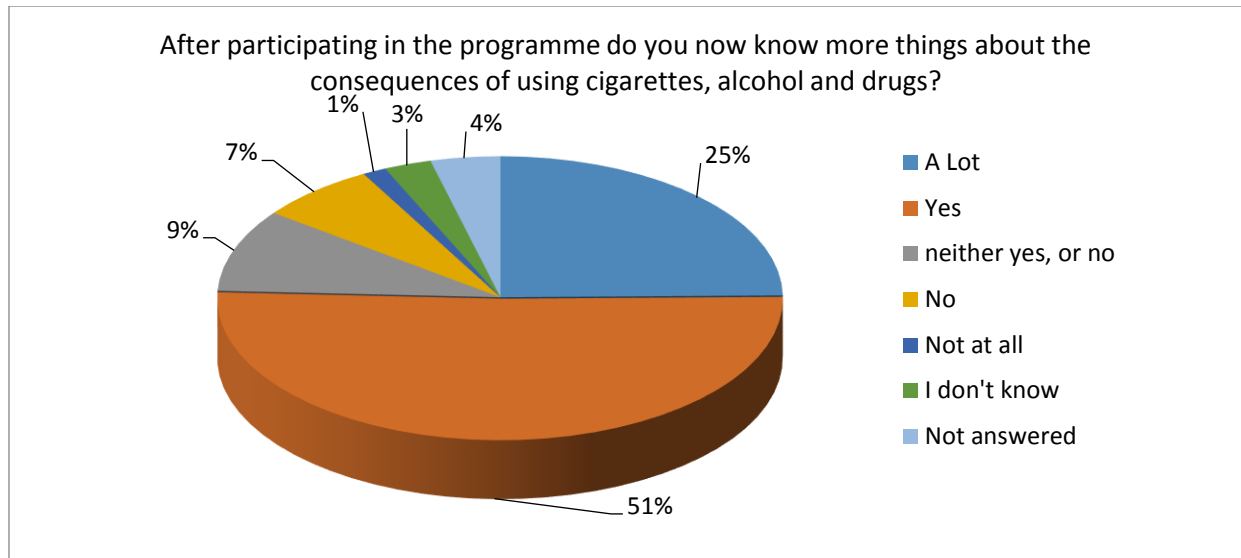


Of the students who provided monitoring forms, 60% said they found the Unplugged programme useful for making choices and increasing their knowledge on drugs (graphs 39 and 40). Improving other personal skills was also mentioned as being liked by students. Even more students (76%) perceived an improvement in knowledge, which they also declared in the open question (n=127).

Graph 39: Is Unplugged useful for making choices?

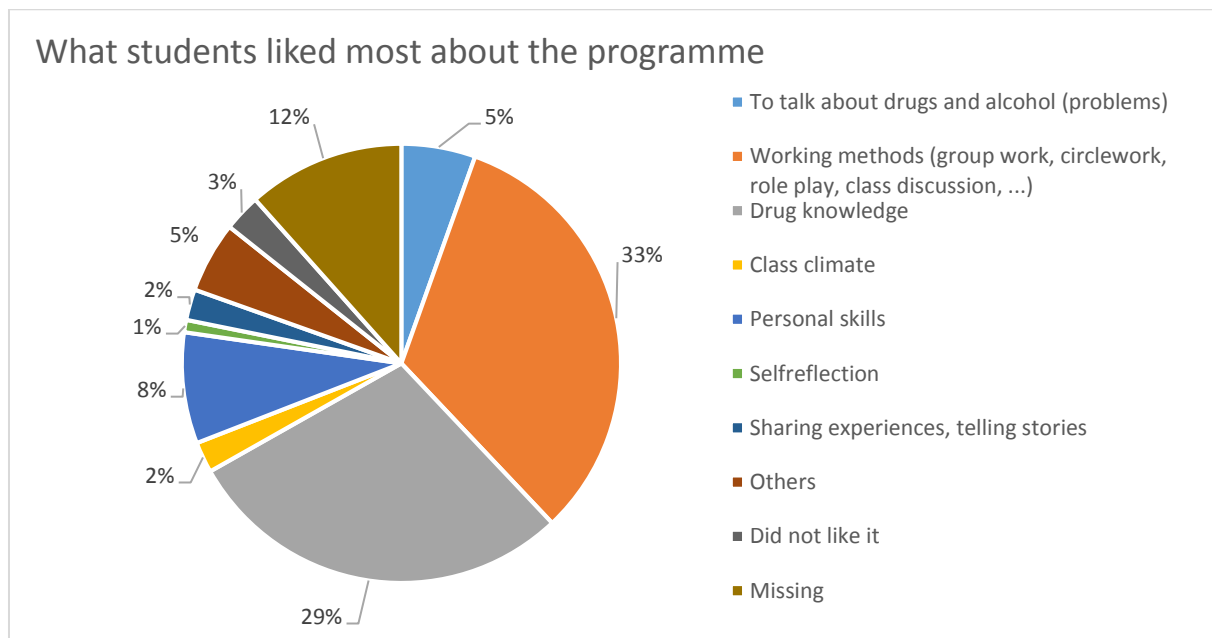


Graph 40: Knowledge on drugs

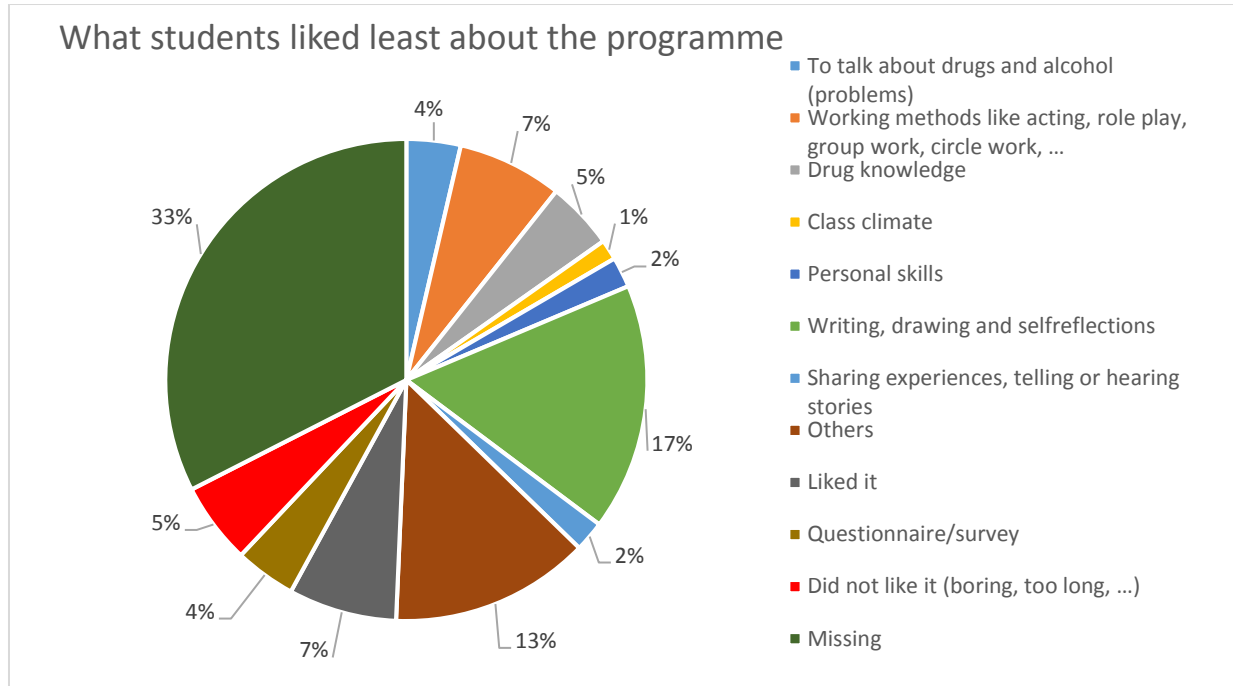


When comparing these results with the open questions in the students' satisfaction questionnaires about what they liked most about the programme (graph 41), students also mentioned the working methods (33%) and the fact that they learned about drugs and alcohol (29%). What students liked least about the programme (graph 42) was the writing, drawing and self-reflections (17%). They were numerous missing answers or features that could not be categorised within the scope of this report. Only 5% of the students reported they did not like the programme at all.

Graph 41: What students liked most about Unplugged



Graph 42: What students liked least about Unplugged



Limitations

Methodology

The number of eligible students participating in the programme was much higher than the actual participation rate at baseline (830 vs 536). The number of non-participants increased due to restructuring in schools, lack of time in the curriculum, student absence and difficult conditions in special schools. Drop out after baseline and unavailable student codes decreased to number of matched data used for analysis (296 at baseline vs 225 at follow-up). This means the sample was rather small, increasing the risks of this being a non-representative sample. Statistical tests require a larger sample size to ensure a representative distribution of the population and to be considered representative of groups of people to whom results will be generalised or transferred.

The best way to avoid a biased or unrepresentative sample is to select a random sample, but in this pilot study a non-random sample was chosen. The effectiveness of preventive interventions without a control group has less evidential value, because it is impossible to say whether the effects were caused by the intervention or coincidence; however, the difference between the pre- and the post-test could give us a first indication on the impact of Unplugged.

The one group pre-test post-test design is a non-quasi-experimental design without a control group. This means that there is less information available to evaluate the effect of interfering environmental factors. In this design the effects of extra experimental occurrences, such as false answers in baseline or a more active participation in the project, cannot be defined. Intermediate variables can also change due to increase in age, which could explain the higher reporting of accepting substance use after the intervention. This makes it possible that a change between post- and pre-test is no more than a spontaneous effect.

In this type of design, it is very important to argue the impact interfering factors could have, such as the inability of monitoring fidelity (other than true process monitoring forms) and the ability of teachers to continue using their own teaching resources or approaches such as 'beer goggles' or 'drug boxes'. If the Unplugged programme is introduced in extreme conditions, such as first day back in school or for vulnerable youngsters in special schools, the programme could be less effective.

Difficulties on questionnaires

The anonymous code was difficult to fill in: student badge number was often unknown or changed in time, letters were mixed up probably due to not following procedure. SEN schools and PRUs experienced difficulties filling in and understanding questions in the baseline questionnaire (e.g. anonymous code, language problems, etc.) For some schools or classes, the questionnaires were too long for pupils to fill in; other questions were difficult to answer for pupils from single-parent homes.

Difficulties on process evaluation

The chosen evaluation method, and subsequent collection of forms, have proved a challenge as it required considerable time from teachers. Teachers were asked to complete process monitoring forms after the delivery of each module; however, they often lacked time to do so and were forced to complete all forms at the end of the programme.

This significantly influenced the quality of information gathered and the ability of Mentor's staff to monitor fidelity throughout programme delivery, specifically in relation to the decision (for some schools) to integrate the delivery of Unplugged with other educational activities implemented by third party organisations and other service providers.

If data on fidelity of implementation are not gathered, it is impossible to determine whether non-significant outcomes (if these are found) are due to a poorly designed programme or simply to incomplete or poor delivery. In fact, through a cross-analysis of process monitoring forms and students' satisfaction questionnaires, it was clear the extent to which some teachers had significantly adapted the modules to either fit their existing plans for alcohol and drug education, or to commit to their own perception of what is effective.

Students from various schools mentioned 'beer goggles' as one of the Unplugged features they either liked or disliked; however, beer goggles, drug boxes and similar tools are not part of Unplugged and were not envisaged to be part of the programme. One school explicitly mentioned inviting an external organisation to talk about drugs and alcohol and delivered some of the Unplugged modules as part of the sessions.

Moreover, teachers were instructed to administer the student satisfaction forms straight after lesson 12, signifying the end of the programme. This was not followed consistently and it was therefore challenging for teachers to get those same students together in a class to complete the forms.

Conclusions and recommendations

The aim of this study was twofold: to evaluate the process of programme implementation of Unplugged in three areas in the UK among young people aged 12-14; and to contribute to a reduction in tobacco, alcohol and drug initiation by measuring the impact of Unplugged on mediating factors. The findings presented here contribute to the growing body of evidence of the need to systematically evaluate school-based interventions, although more research is needed to ensure reliable and valid results. The following conclusions are made based on the analysis of quantitative and qualitative data.

The impact of Unplugged on mediating factors

Including headlines of teachers' and students' satisfaction ratings

- 214 matched questionnaires were analysed in total, with a high matching ratio of 96%.
- Students were mainly 13 or 14 years old; boys and girls were almost equally divided.
- Only 31% of students lived with both parents; the majority (57%) lived with just one parent
- Compared to baseline, the rate of correct answers indicating knowledge remained low, but students' knowledge about alcohol and cannabis increased significantly, meaning there is strong evidence that the programme improved this knowledge. The knowledge on gender differences on tolerance increased by almost 20%. Females increased their knowledge more on alcohol and nicotine than males. A large number of both teachers (75%) and students (76%) mentioned an improvement of their knowledge and skills about drug prevention in the satisfaction forms.
- There was no evidence that Unplugged increased students' negative beliefs or decreased their positive beliefs about drug use. Responses around positive beliefs indicated a low perception of benefits from substance use.
- Regarding attitudes towards drugs, both negative and positive attitudes remained more or less the same after the programme.
- Regarding risk perceptions, pupils were better informed after the programme but the number of incorrect answers pertaining to risks indicate a continued need to be correctly informed.
- Positive self-esteem remains good overall, but at follow-up we still observe a borderline level of negative self-esteem.
- Students' abilities to make good decisions remains positive, but responses indicated an increase in bad decision-making abilities at follow-up. In the satisfaction forms about the

programme 60% of the students said they found Unplugged useful for making choices and answering questions they had about themselves.

- Refusal skills showed a low proportion of pupils accepting the use of cannabis and tobacco offered by friends. The percentage of pupils accepting the use of alcohol increased at follow-up, but could be influenced by many factors, such as age. The overall score still indicates good refusal abilities.
- The overall scores for communication skills were better at follow-up than during baseline. This confirmed good communication skills among pupils, but there was no strong evidence the intervention improved these skills.
- At follow-up, scores indicating a good family climate and a better class climate remained positive. Satisfaction forms indicated that more teachers (42%) than students (33%) reported an improvement of the teacher-student relationship; none of the teachers mentioned no improvement.
- More males than females declared having behavioural problems due to alcohol or drug use. The number of girls declaring behavioural problems due to alcohol use was lower at follow-up than during baseline, while the number of boys declaring behavioural problems due to drug use was higher. This might show that the impact of the intervention on girls was higher than for boys, whereas in the EU-Dap European study (Vigna-Taglianti et al, 2009) results for boys were stronger than for girls.

Evaluation of the process of programme implementation

- A high proportion of classes implemented all the units into the curriculum. A constant rate of implementation was observed, which strengthens the fidelity of this project and is comparable to curricula administered in a European setting.
- Teachers' confidence in teaching each unit was high overall, except for units 3, 6 and 8. Teachers' remarks also varied with the type of school. Special schools specifically mentioned needing to consider the vulnerability of pupils attending these schools.
- Teachers reported that students' overall interest and interactivity were moderate. Higher levels of interest were observed in units 5 and 9. When comparing this to students' responses, it seems units 3, 5 and 9 were very popular. The fact teachers did not observe a higher interest or interactivity in unit 3 could be influenced by the fact that fewer teachers felt confident in teaching that unit.
- Overall, teachers were neither satisfied nor dissatisfied with the programme. Teachers' satisfaction with the program was not good overall. Generally, in other studies a higher satisfaction rate was observed among teachers. This might indicate that the intervention did not work as expected at class level. It is worth further exploring whether this is related to implementation factors, cultural context or other reasons.
- Of the students, 59% were highly satisfied with the programme and a similar number responded positively when asked if they would like to have a programme like Unplugged next year. Compared to other studies on the implementation of Unplugged in other countries, the LEAF study showed moderate interest and interactivity from students.
- Teachers and students were both highly satisfied overall with the working methods used for Unplugged. Teachers also liked the structure of the lessons. Difficulties using working methods were mainly observed by teachers in special schools. Some students (17%) also mentioned they did not like the writing, drawing and self-reflection activities.
- 60% of the students said they found Unplugged useful in answering questions they had about themselves and making choices.

The fidelity of the programme's implementation was assessed through the process monitoring protocol (annex) and was strictly followed by Mentor UK. The overall implementation of Unplugged met the participants' expectations and their satisfaction with the programme. The context and the operational processes involved in the programme were achievable within the given setting, although it is important to adapt the programme for special schools and to evaluate time, planning and some working methods.

Decisions on the study design type were impacted by feasibility and cost-effectiveness, which led to multiple limitations related to the chosen approach: a small sample, which increases the risks of a non-representative sample; a non-random sample without a control group, which has less evidential value; and less information to evaluate the effect of interfering with environmental factors such as age. To achieve statistically significant and reliable results, a sample of 1500/2500 pupils per group would be needed. It is important to mention that even the small effects we detected could be due to chance. The Unplugged intervention had a significant impact on the targeted mediator (knowledge) and we observed interesting findings for other mediators, although additional research is needed to collect more statistical evidence on the effectiveness of the Unplugged school-based prevention programme for young people in the UK. Therefore, it is unclear whether Unplugged can be effective in UK because of the context, characteristics and cultural acceptance of alcohol use. We would recommend the delivery of larger studies to clarify the effectiveness of Unplugged in the UK. This pilot study suggests that the European evidence-based programme Unplugged could improve the drug use prevention efforts of UK public schools. The results can help policy makers to understand what elements are essential for a successful adaptation of Unplugged in the UK context.

This pilot study is designed as a non-random one group pre-test post-test design without a control group (J. Billiet and H. Waege, 2003). Additional research is needed to evaluate the process of the programme implementation and to collect more statistical evidence on the effectiveness of the Unplugged school-based prevention programme for young people in the UK.

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