



LifeSkills substance misuse prevention programme:

Evaluation of implementation and outcomes in the UK.

Executive summary

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realising
ambition



Life Skills Training



Executive summary

This Executive report presents findings on the implementation and outcomes of the *LifeSkills* Training programme in Scotland, England, Wales and Northern Ireland. It is accompanied by a full report which provides more details on methodology and results.¹ *LifeSkills* is an evidence based prevention and early intervention programme which prevents smoking, alcohol and substance use.

Key learning

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| Barnardo's has effectively adapted and implemented <i>LifeSkills</i> in England, N. Ireland, Scotland and Wales. |
| Preliminary findings are consistent with previous robust evaluations. Significant improvements were shown in knowledge, attitudes and skills that should help prevent young people from smoking, drinking or misusing alcohol. |
| Teachers highly recommend the programme. They report that <i>LifeSkills</i> fits with the national curriculum in the UK, the style of delivery works in classroom settings and the interactive activities engage pupils. |
| Children and young people enjoy taking part in <i>LifeSkills</i> . They like the variety of topics as well as the mix of discussion and activities. |
| Children and young people report improvements in confidence. They know more about substances, are better able to make friends and cope with stress. They also report better decision-making and feel better prepared to resist peer pressure. |
| These findings complement over 30 years of robust research showing <i>LifeSkills</i> effectively prevents substance use by young people |
| <i>LifeSkills</i> is highly cost effective, with a rate on return on investment of 72%. ² |
| <i>LifeSkills</i> reduces levels of smoking, alcohol and substance use. |
| <i>LifeSkills</i> improves self-esteem, communication, decision-making, social behaviour, coping strategies and ability to resist peer pressure. |

Why prevent substance misuse in young people?

Health behaviours and lifestyle play major roles in determining risk for accidents and disease. In the UK there is an increasing emphasis on using prevention and early intervention to avoid or lessen problems in later life, particularly around substance misuse.³ Among these behavioural risk factors, cigarette smoking has been identified as the number one preventable cause of death and disease. It is important to stop our young people from smoking because of the health risks that it poses throughout life, as well as its association with other unhealthy behaviours. Smoking has been found to

1 Sneddon, H. (2015). *LifeSkills substance misuse prevention programme: Evaluation of implementation and outcomes in the UK*. Belfast: Barnardo's.

2 <http://investinginchildren.eu/interventions/life-skills-training>

3 Allen, G. (2011). *Early intervention: the Next Steps*. London: HM Government.

increase the risk of developing problems with alcohol, cannabis, and other substances. Individuals who begin smoking cigarettes are likely to drink alcoholic beverages and many also go on to use cannabis and other illicit substances. Early initiation of alcohol use is linked to later binge drinking, heavy drinking and alcohol related problems. Over 25% of youth male mortality and approximately 10% of young female mortality is due to alcohol, as well as increased likelihood of social harm such as fighting and unprotected sex⁴. Drug use is a chronic, relapsing disease. It involves both negative physical effects caused by prolonged use of the drug itself, as well as social problems from the compulsive seeking and behavioural disorder linked to drug addiction⁵.

Children who smoke become addicted to nicotine very quickly. They also tend to continue the habit into adulthood. Around two-thirds of people who have smoked took up the habit before the age of 18. Because the risk of disease is related to the length of time a person has smoked, people who take up smoking before the age of 18 face a greater-than-average risk of developing lung cancer or heart disease. Health experts have urged the development of programmes that can prevent youth from becoming cigarette smokers.⁶ *LifeSkills* is a prevention and intervention programme which has been developed to meet this need.

LifeSkills Training Programme

LifeSkills Training Programme is a structured evidence-based prevention and early intervention programme, which prevents smoking, alcohol and substance use by young people. The *LifeSkills* Training programme was developed by Dr. Gilbert J. Botvin, who is an internationally known expert on substance use prevention. It is delivered to groups of children aged between 8 and 14 in schools or in the community. It targets the major social and psychological factors that promote the initiation of substance misuse and other risky behaviours.

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- 4 Foxcroft, D. R. and Tsertsvadze, A. (2011). Universal school-based prevention programmes for alcohol misuse in young people. *Cochrane Database of Systematic Reviews*, 2011, Issue 5. Art. No.: CD009113.
 - 5 Faggiano, F., Minozzi, S., Versino, E. and Buscemi, D. (2014). Universal school-based prevention for illicit drug use. *Cochrane Database of Systematic Reviews*, 2014, Issue 12. Art. No.: CD003020.
 - 6 NICE (2008). *NICE Guidelines [PH14]* Accessed from <http://www.nice.org.uk/guidance/ph14>
The Information Centre (2006). *Drug use, smoking and drinking among young people in England 2004*. Leeds: The Information Centre.
Royal College of Physicians (1992) *Smoking and the young*. London: Royal College of Physicians.

LifeSkills has three main components:

- **Personal competence** (self-management skills). This helps students with problem-solving, decision-making skills, critical thinking and how to regulate their emotions
- **Social competence**. This involves teaching students how to communicate clearly, make friends and develop healthy relationships
- **Drug resistance training** to help youth develop strategies for resisting peer pressure.

Students are also equipped with information about drug prevalence, the consequences of using psychoactive substances, resisting advertising and other media pressures and ways they can help their peers to resist using tobacco, alcohol and other drugs.

There are two versions of *LifeSkills* tailored for different ages:

- Essential which is aimed at 8 to 11 year olds
- Advanced which is aimed at 11 to 14 year olds

History of Lifeskills

LifeSkills is one of the most evaluated prevention and early intervention programmes in the world. It has been proven to be effective in preventing cigarette, alcohol and substance misuse in young people. *LifeSkills* is rated as a Model Programme in the Blueprints for Violence Prevention (its highest rating). It has also been rated by the Early Intervention Foundation in the UK as being Level 4 (its highest rating). *LifeSkills* is highly cost-effective, with a rate on return on investment as 72%.⁷

This means that *LifeSkills* has been independently assessed and shown to have the highest standards of evidence of effectiveness. More than 30 years of research undertaken in America, including several Randomised Control trials (RCTs), show it to be consistently effective with different groups of children across different locations. It has been successfully scaled up and has appropriate supports in place to ensure effectiveness is maintained when it is rolled out with new populations.

Findings from US Research Studies

LifeSkills is proven to prevent and reduce levels of misuse across a variety of substances (Figure 1). Reductions are long-lasting. *LifeSkills*:⁸

- Cuts tobacco, alcohol and cannabis use by up to 75%
- Cuts polydrug use by up to 66%

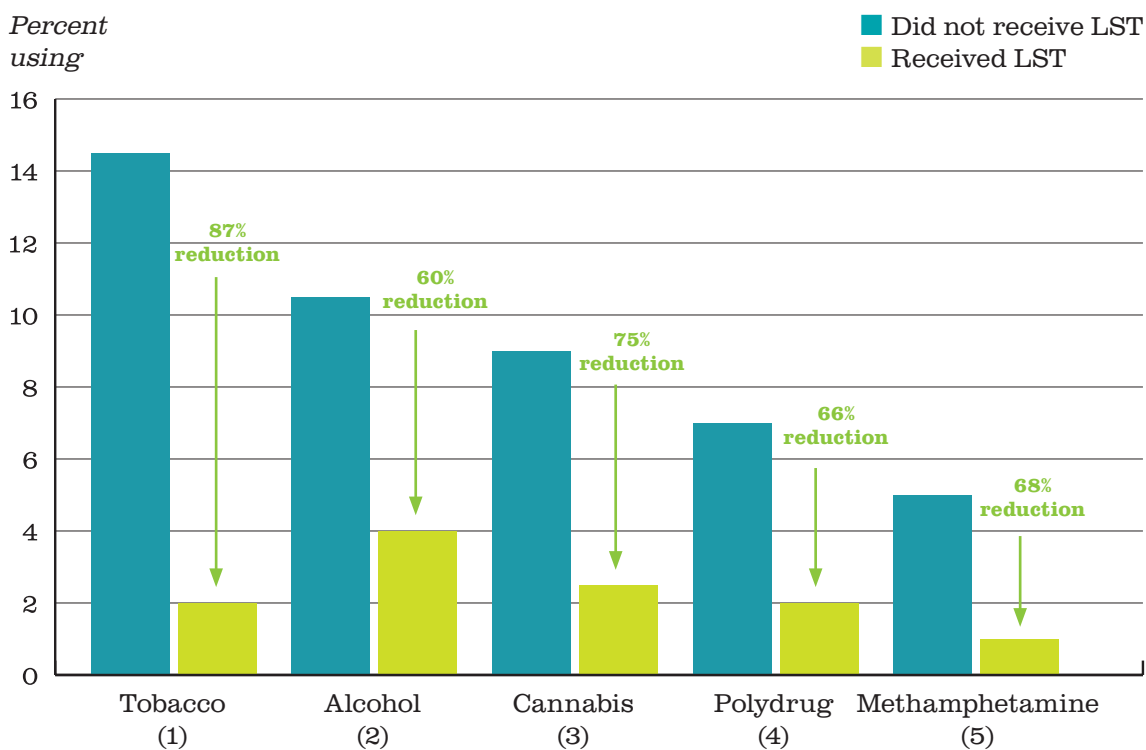
⁷ <http://investinginchildren.eu/interventions/life-skills-training>

⁸ Botvin, G. J. and Griffin, K. W. (2014). *LifeSkills* training: Preventing substance misuse by enhancing individual and social competence. *New Directions for Youth Development*, 141, 57-65.

- Decreases use of inhalants, narcotics and hallucinogens
- Effects last at least 12 years
- Booster sessions maintain prevention effects
- Effective with white, African-American and Hispanic youth
- Effective when taught by teachers, peer leaders or health professionals.

Figure 1

US Research showing reductions in the percentage of young people using various types of substances before and after participating in *LifeSkills*⁹



LifeSkills also has cross-cutting benefits beyond the behaviours it specifically targets (Figure 2). These include reductions in violence and delinquency, risky driving and risky sexual behaviour:¹⁰

- It reduces young people's use of psychoactive substances and other unhealthy behaviour with evidence for long-term benefits
- It helps students to improve their social and emotional skills, while reducing their involvement in problem substance use. This increases the likelihood that students will attend school regularly and increase their attainment

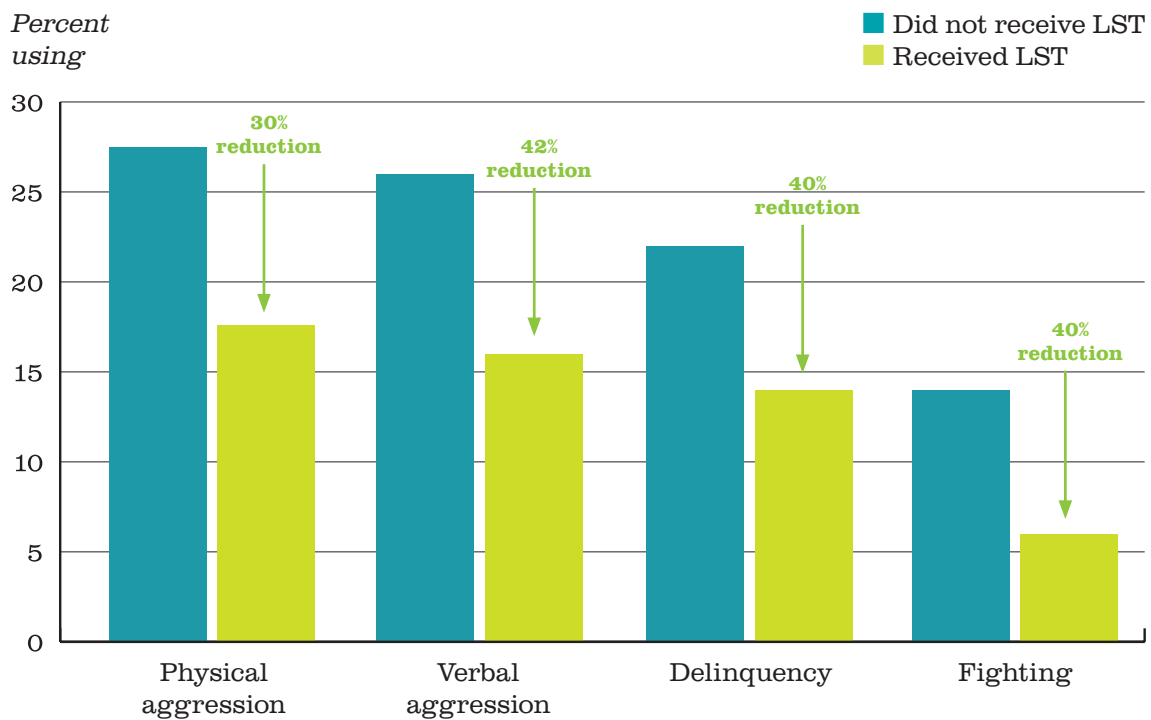
9 Graph taken from https://www.lifeskillstraining.com/resource_facts.php citing sources of data as Journal of Behavioural Medicine (1983), (2) Journal of Studies on Alcohol (1984), (3) Journal of Consulting and Clinical Psychology (1990), (4) Journal of the American Medical Association (1995), and (5) Archives of Pediatric & Adolescent Medicine (2006).

10 Botvin, G. J. and Griffin, K. W. (2014). *LifeSkills* training: Preventing substance misuse by enhancing individual and social competence. *New Directions for Youth Development*, 141, 57-65.

- The skills it teaches are also relevant to coping with stress and anxiety and avoiding emotional as well as behavioural difficulties.

Figure 2

US Research showing reductions in other antisocial behaviours before and after participating in *LifeSkills*¹¹



Implementing *LifeSkills* Training programme in the UK

Barnardo’s was funded by the Big Lottery’s ‘Realising Ambition’ programme to pilot *LifeSkills* in the UK and make any necessary adaptations to the programme in light of the learning from this implementation.

Purpose of the evaluation

The purpose of the evaluation was to examine the implementation and outcomes of *LifeSkills* in Scotland, England, Wales and Northern Ireland.

The evaluation aimed to explore the following questions about the implementation of the Essential and Advanced *LifeSkills* programmes:

- Did *LifeSkills* show the same improvements in outcomes for children and young people as observed in previous evaluations?

¹¹ Graph taken from https://www.lifeskillstraining.com/resource_facts.php citing sources of data as Preventing youth violence and delinquency through a universal school-based prevention approach. *Prevention Science*, (2006).

- Was each programme delivered consistently well across each of the sites (i.e. with high levels of fidelity)?
- What did the teachers think about the style and delivery of the programme and its fit with educational settings in the UK?
- What did facilitators see as the strengths and areas for improvement in the programme to ensure its suitability for UK participants?
- Make recommendations for adaptation to activities and resources where necessary.

Methodology

A simple pre-post, repeated measures design was used. This used data which was already being routinely collected as part of service delivery, in addition to undertaking focus groups with staff to explore implementation. The outcomes measures used with the children and young people were standardised questionnaires developed by the programme developer to assess changes in outcomes for each programme¹². The teacher feedback questionnaire was developed by Barnardo's.

Participants were drawn from all 4 regions of the UK:

- England – Liverpool
- Northern Ireland – Belfast
- Scotland – Dundee
- Wales – Swansea

1160 children aged between 8 and 11 years (average age 9) participated in Essential Level 1 and contributed data to the evaluation. A total of 502 went on to complete Essential Level 2.

229 children aged 11 and 12 years (average age 12) participated in Advanced Level 1 and contributed data to the evaluation.

Key findings

Essential

Barnardo's has delivered the *LifeSkills* Essential programme to over 1160 children in the UK over the last three years. Preliminary analyses show that the Essential programme has been successfully implemented. Children who took part in LifeSkills showed statistically significant improvements in knowledge, attitudes and skills.

Feedback from teachers shows that *LifeSkills* complements the curriculum

12 Copies of this questionnaire and scoring instructions can be found at https://www.lifeskillstraining.com/lst_outcome_tools.php

for Key Stage 2 pupils across the UK¹³, can be delivered effectively within the school day in classroom settings and students willingly engage with the interactive style of delivery. Teachers readily recommend the use of the *LifeSkills* programme in schools.

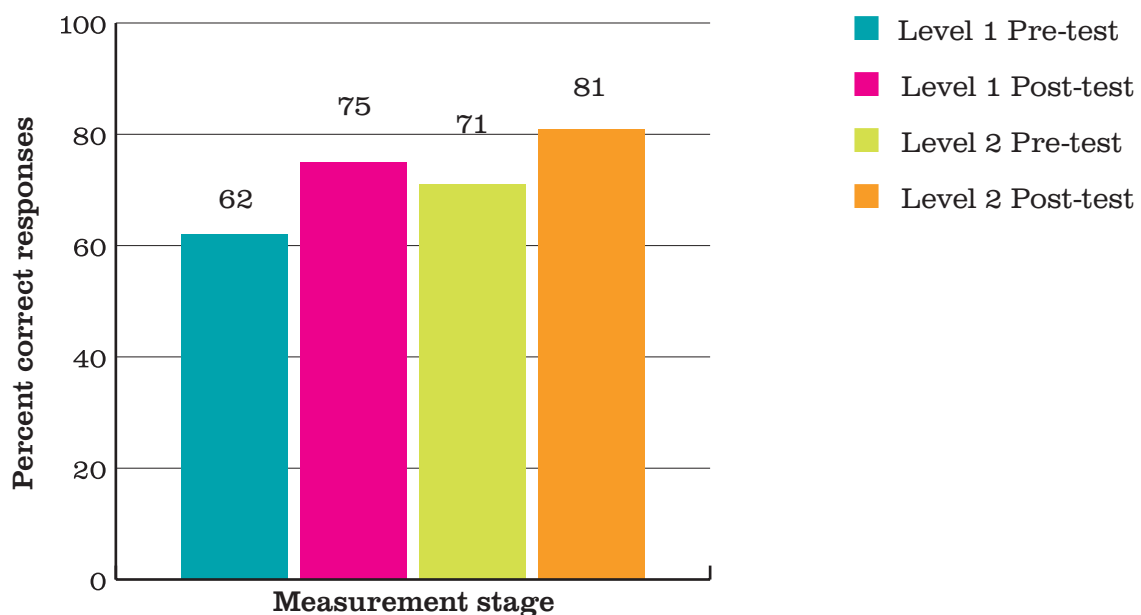
Children showed statistically significant improvements over the course of the programme. Pupils reported enjoying the programme, and seeing benefits in improved self-esteem, knowing more about the risks of substance misuse and being better prepared to resist peer pressure. Key findings from the evaluation of Essentials Level 1 and Level 2 included:

- Highly significant improvements shown in overall knowledge about substances and life skills
- Significant improvements in their levels of knowledge about the harmful effects of cigarette use and alcohol use
- Children and young people showed significant improvements in their attitudes towards cigarette smoking and alcohol use
- Young people knew significantly more about positive coping and strategies to improve their lives at the end of the programme compared to the start.

These positive improvements from Essentials Level 1 were retained and further enhanced by participating in Level 2.

Children’s knowledge increased from the start to the end of Level 1, and then increased further by the end of Level 2

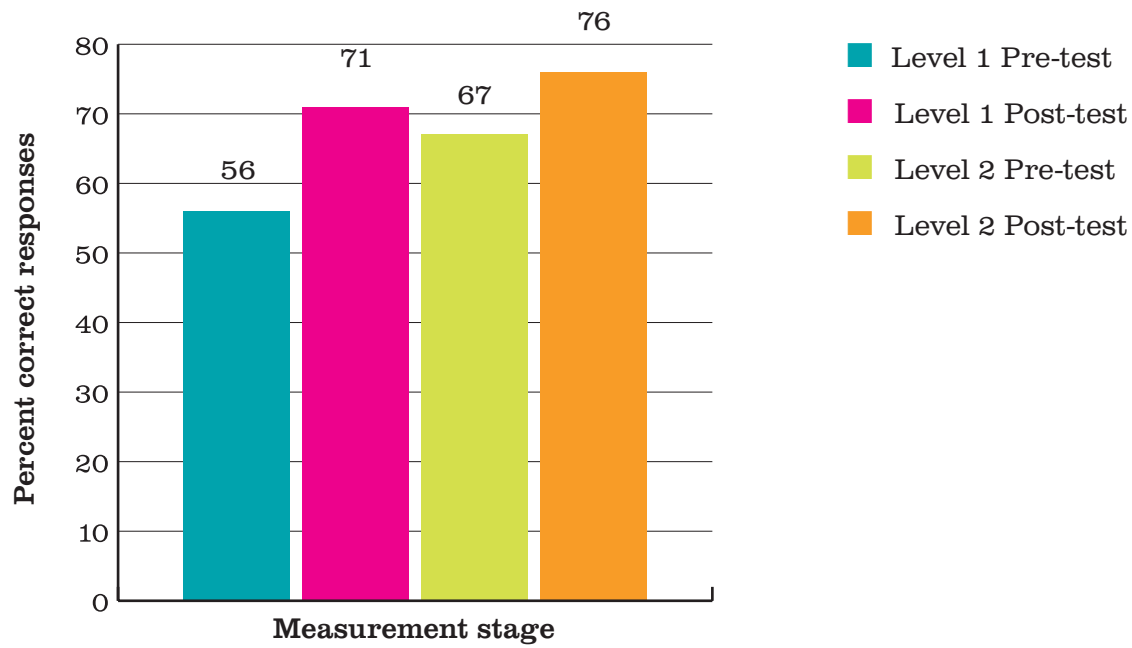
Figure 3 – Overall knowledge before and after participation in Levels 1 and 2



¹³ Key Stage 2 (KS2) relates to slightly different age groups across the four nations of the UK. For example, in Northern Ireland KS2 relates to pupils aged 8-11 years old in Years 5 to 7. In England and Wales KS2 pupils are aged 7-11 years old in Years 3 to 6.

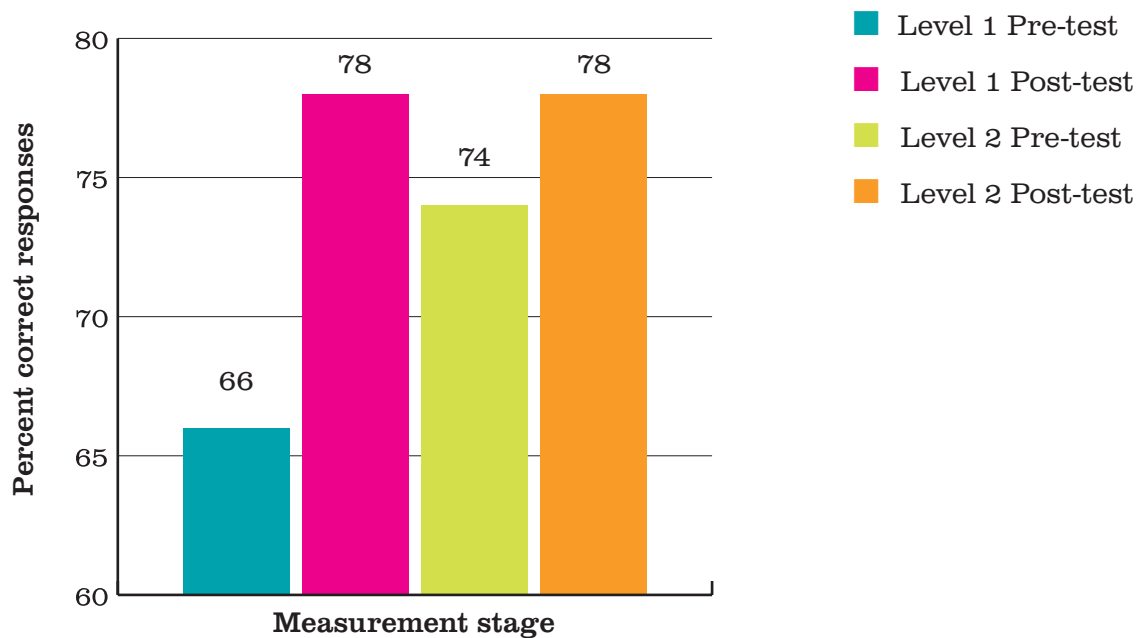
Levels of knowledge about smoking also showed a similar pattern. They increased from the start to end of Level 1 (from 56 to 71), then increased further to 76 by the end of the Level 2 (Figure 4).

Figure 4 – Antismoking knowledge before and after participation in Levels 1 and 2



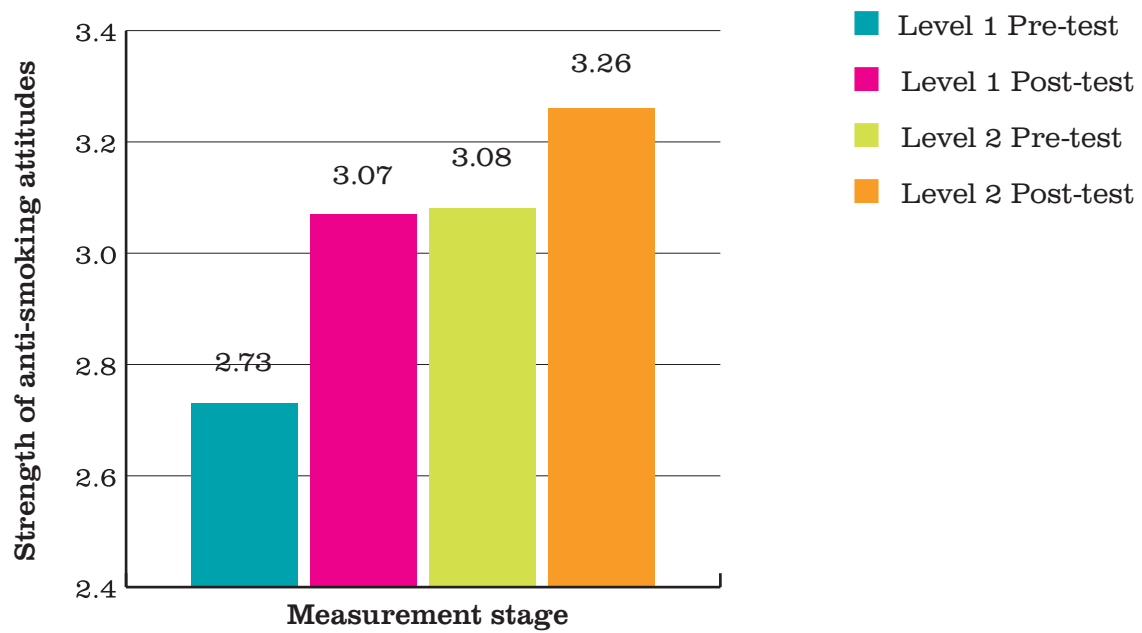
Life skills knowledge rose from 66 to 78 in Level 1, and was maintained at this level at the end of Level 2 (Figure 5).

Figure 5 – Life skills knowledge before and after participation in Levels 1 and 2



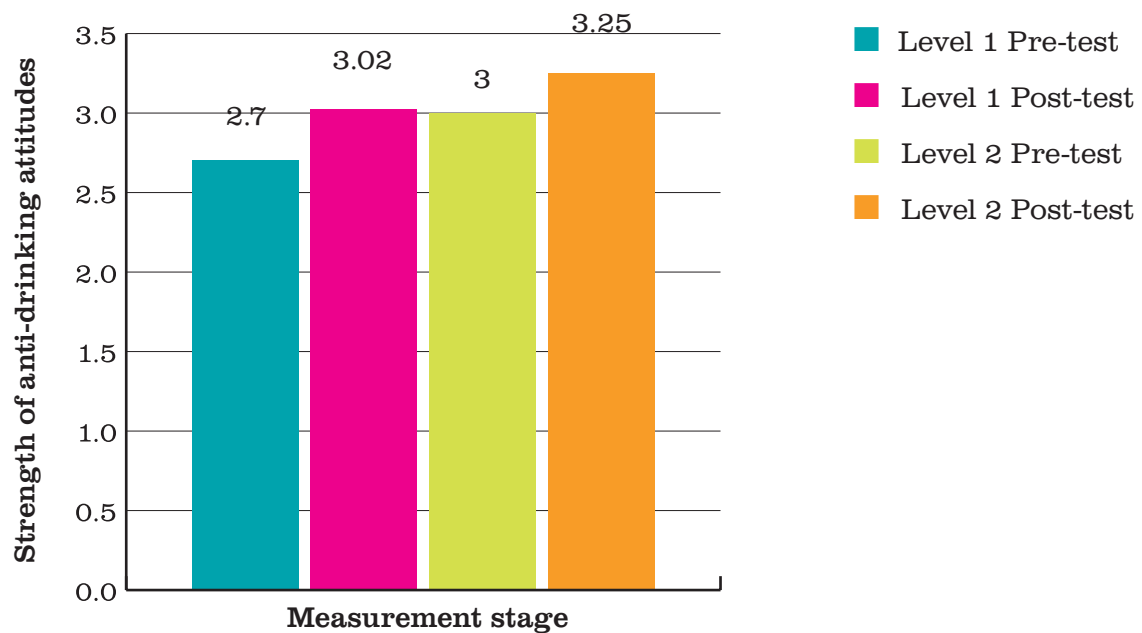
Antismoking attitudes showed an improvement from the start of Level 1 to the end of Level 2 (Figure 6).

Figure 6 – Average antismoking attitudes before and after participation in Levels 1 and 2



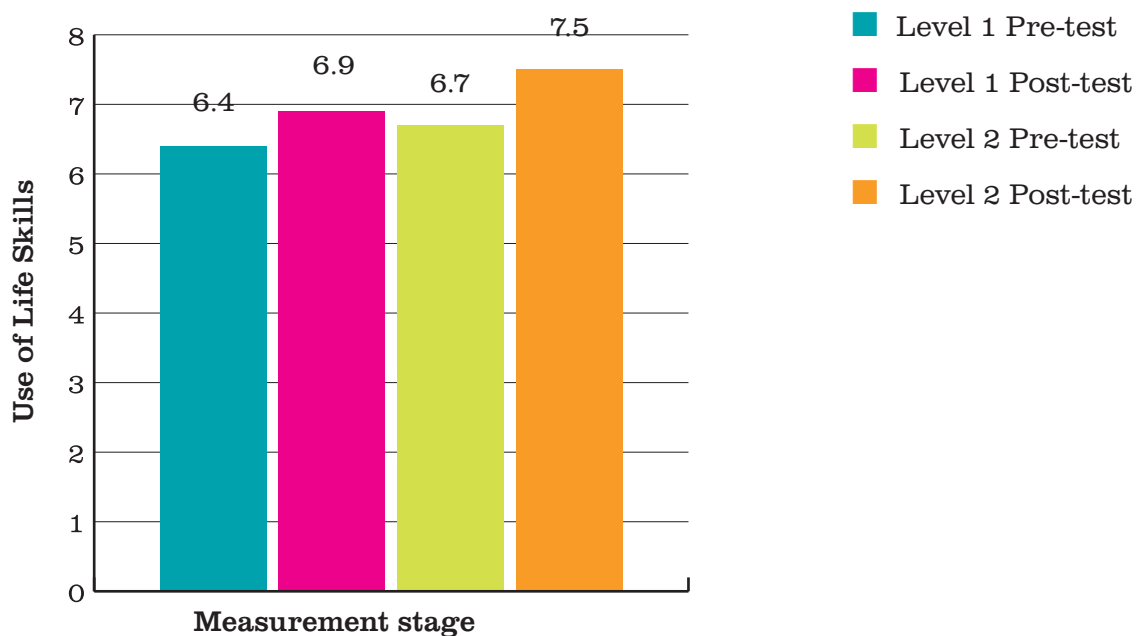
Antidrinking attitudes showed an increase across the levels from 2.7 to 3.25 (Figure 7).

Figure 7 – Average antidrinking attitudes before and after participation in Levels 1 and 2



Use of life skills also increased from the start to end of Level 1 (from 6.4 to 6.9), dipped slightly at the start of Level 2 then increased again from 6.7 to 7.5 (Figure 8).

Figure 8 – Average use of life skills before and after participation in Levels 1 and 2



These comparisons of changes over time suggest that Level 2 of the Essential programme is effective as a booster programme for the learning acquired in Level 1. It provides useful benefits in maintaining and boosting the improvements shown across all areas in children who have previously taken part in Level 1. Further analyses should be done to match individuals' improvements across Level 1 and Level 2 (the analysis presented above in the graphs shows the mean scores obtained by the groups pre- and post- at each Level).

Advanced

The *LifeSkills* Advanced programme for older children is in an earlier stage of implementation in the UK than Essential. So far it has been delivered to 229 children since 2014. The findings show that the Advanced Level 1 programme was implemented with high levels of fidelity in all sites.

Feedback from teachers shows that *LifeSkills* complements the Key Stage 3 curriculum across the UK¹⁴, can be delivered effectively within the school day in classroom settings and students readily engage with the interactive style of delivery. Teachers readily recommend the use of the Advanced programme. All of the teachers said they would definitely recommend the programme.

¹⁴ Key Stage 3 (KS3) relates to slightly different age groups across the four nations of the UK. For example, in Northern Ireland KS3 relates to pupils in Years 8 to 10, while in England and Wales KS3 pupils are in Years 7 to 9.

Young people report enjoying the Advanced programme and value the opportunity to discuss these topics in a supportive environment with their peers and the facilitator. They report feeling more confident and more knowledgeable about the risks of substance misuse, as well as feeling better able to deal with peer pressure. As well as discussing increases in their knowledge about substance misuse and risky situations they also feel they have learnt strategies to deal positively with these.

Children and teacher feedback about LifeSkills

What children and young people say about LifeSkills

“I liked the activities because they made learning fun.”

“I learned a lot of things about LifeSkills, smoking, peer pressure and all the fun games. It’s good to learn LifeSkills so next time I know what to do.”

“I learned loads ... make that truck loads – assertiveness, saying no, decisions, verbal/non verbal, self esteem.”

“I learned how to do things more effectively in life and how to communicate better.”

“I loved all of it and I would like to do it again.”

“I learned about smoking what it can do to you, I also know what to say to someone if they ask me to do something that I don’t want to.”

“I liked social skills the most because we learned how to speak more confidently and let out our feelings.”

What teachers say about LifeSkills

“The young people have learned about making informed choices, developing a bank of strategies to help avoid giving into peer pressure and information about smoking.”

“Young people learnt a lot from each session of the LifeSkills programme. Each week they were given new information which allowed them to challenge themselves and explore their own knowledge and understanding, self worth, confidence and self esteem.”

“LifeSkills complements the curriculum without repeating it.”

“All of the aspects covered in the LifeSkills training programme fit in with the values we try to promote and address in [the national curriculum] and so are all extremely relevant to the pupils”

“I would highly recommend this programme to other teachers/schools as it is curriculum based, effectively delivered and memorable for the children. I was amazed at how well they were able to recall what each individual lesson had been on, and about the key points they had been taught!”

“Pupils benefit from the opportunity to discuss issues which worry them in a non-threatening and less formal setting. It has been a pleasure to observe pupils becoming more confident and thinking about issues that matter to them.”

Learning about implementation

LifeSkills is a structured programme which includes specific topics to be covered in each session, but allows for some flexibility at point of delivery in adapting the pace and activities to the needs of the group of children or young people. It is delivered in the UK by trained facilitators. A common theme in the feedback from teachers for both the Essential and Advanced levels is how important the skills of these facilitators are in engaging the young people. High levels of fidelity were achieved (meaning implementation was consistently of a high quality). This suggests that Barnardo's has developed an effective support structure to ensure this programme can be delivered consistently well.

This project has shown that *LifeSkills* can be implemented effectively in UK schools. The core topics are relevant in the UK context and the programme can be delivered with fidelity. Cultural adaptations for UK spelling and language have been made, as well as presentation of UK prevalence information for substance misuse. Some adaptations have been made to specific exercises around advertising to improve their cultural relevance. Some resources have been re-designed to make them more engaging and user friendly for children and young people as well as their parents. All adaptations have been agreed with the programme developer as maintaining the fidelity and integrity of the programme.

Conclusions

LifeSkills has already been established as an effective programme that leads to significant improvements for children and young people. Preventing substance misuse is a key issue in the UK and *LifeSkills* meets this need by building knowledge and resilience in young people. The findings from this evaluation show that *LifeSkills* can be implemented in the UK with high levels of fidelity. Teachers and students report improvements in the expected areas.

Although teachers and young people saw *LifeSkills* as helpful in increasing knowledge about substances and changing attitudes, they also valued the programme for improving outcomes in other key areas of development. These included social skills, decision making, assertiveness, and equipping students with strategies to cope with peer pressure, stress and anxiety.

The findings show the Essential Level (ages 8 to 11) can be implemented efficiently in schools and complements the UK curriculum. Teachers and pupils enjoy the interactive style of delivery, and report high levels of engagement with the material. Teachers recommend the use of the programme.

Children who took part in the Essential programme said they enjoyed it. They showed significant improvements in the knowledge, attitudes and skills that should help prevent them from smoking, drinking or misusing alcohol. Level 2

was effective in consolidating and boosting the knowledge and skills obtained in Level 1. Further analysis should be undertaken to examine the data in more detail to see whether there are differences amongst different groups of young people and whether there is any clustering of effects in different schools or geographical areas. Existing evidence from *LifeSkills* in other jurisdictions suggests that this programme should be equally effective in different genders as well as ethnic groups and locations.

Findings from the early implementation of the Advanced programme (ages 11 to 14) are also positive. The programme has high acceptability amongst teachers who praise its interactive format and how well the students have engaged. It fits with the UK school curriculum and complements other activities during the school day. Outcomes data should be analysed for the Advanced programme once it is fully 'bedded-down' to verify the positive qualitative information already obtained.

It could be seen to be a weakness of this evaluation that no comparison group was examined: only children and young people who took part in the *LifeSkills* programme were evaluated. It may be possible, therefore, that the improvements that have been observed would have happened even if the children had not taken part in the programme. However, previous evaluations of *LifeSkills* using robust methodologies (such as quasi-experimental and randomised control trials) have shown that changes like the ones observed in the current study are due to participation in the programme. They do not usually occur naturally amongst children who have not taken part in *LifeSkills*.

Similar to any other evidence-based programme, it is critical that *LifeSkills* is implemented effectively, and Barnardo's has developed an approach to ensure this. This includes training, staff supervision and support, ongoing monitoring and outcomes measurement. The skills of the Barnardo's facilitators in tailoring delivery to each group's needs was praised by the teachers in the schools, and seen to be critical to the success of the programme.

Barnardo's has been delivering *LifeSkills* across the UK for 3 years and has developed appropriate implementation supports for training, staff support, monitoring and delivery. By 2015, they delivered *LifeSkills* to 4322 children and young people.

The content and style of delivery of the *LifeSkills* Essential and Advanced programmes appealed to both teachers and young people. They liked the variety of activities, the broad range of topics covered, interacting with their peers and they saw the programme as a fun way to learn important skills.

Recommendations

***LifeSkills* should be considered as a cost-effective way to prevent young people from misusing cigarettes, alcohol and drugs. As well as preventing substance misuse, it also leads to important improvements in other core skills which are key for healthy development amongst young people. These include self-esteem, communication, social skills and ability to cope with stress. Investing in and effectively implementing this programme should improve skills, knowledge and resilience. This will help children and young people have healthier and more enjoyable lives.**

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