

# Effective Interventions Unit

## The Life Skills Training Drug Education Programme: A review of research

### Summary

This research summary provides an overview of the findings from a literature review of the effectiveness of the Lifeskills Training drug education and prevention programme. The full report is available from the EIU. The review was commissioned by the EIU as part of the Scottish Executive's Drugs Misuse Research Programme.

#### Introduction

Lifeskills Training (LST) was developed in the USA by Gilbert Botvin of Cornell University and has been implemented in the USA for many years. Its impact has been evaluated across a number of research studies and it has been promoted as one of the few effective drug education programmes. The EIU commissioned the University of Strathclyde to undertake a critical review of the existing evidence of the programme's effectiveness, specifically to:

- Examine the methodology used in evaluations of LST and comment on the validity and reliability of the evidence of the programme's success in preventing or delaying young people's use of drugs.
- Summarise the key findings of this evidence in terms of reducing or preventing drug use among young people.
- Identify whether and how process factors impact on the programme's delivery and outcomes; for example, factors such as who delivers the programme, programme integrity, the use of booster sessions.
- Consider the implications of cultural differences between the USA and Scotland, and comment on the transferability of the programme.

#### Background

The LST programme seeks to address a broad range of personal and social skills. It consists of more than simple provision of drug information or resistance skills training, but aims also to tackle underlying, mediating psycho-social factors in the origins of drug use. The stated aims of LST are to:

- provide students with the necessary skills to resist social (peer) pressures to smoke, drink and use drugs
- help them to develop greater self-esteem, self-mastery, and self-confidence
- enable children to effectively cope with social anxiety
- increase their knowledge of the immediate consequences of substance abuse
- enhance cognitive and behavioural competency to reduce and prevent a variety of health risk behaviours.

LST is designed to be interactive and participative. It is delivered over 30 sessions of about 45 minutes each. This takes place over 3 years, starting with 15 sessions at age 11/12 or 12/13 covering the core curriculum in all skill areas. The remaining 15 booster

The review is at <http://www.drugmisuse.scot.nhs.uk/eiu/eiu.htm>  
or from 0131 244 5117 or [eiui@scotland.gsi.gov.uk](mailto:eiui@scotland.gsi.gov.uk)

sessions are delivered over the next two years, to provide additional opportunities for skills development and practice.

## Review findings

- **LST can have durable preventive effects on cannabis use if delivered relatively completely, but these effects are small in scale.** For example, in a six-year follow up study there were 4% fewer cannabis users among students who had received at least 60 % of the LST programme.
- **The impact of LST is maximised when programme delivery is faithful to the original programme design and completeness is high.** This is particularly important because drop-out from the programme may be high among high-risk groups.
- **LST had positive effects on reducing the numbers of those who used more than one of cigarettes, alcohol and cannabis.** Across the various measures of combinations of cigarettes, alcohol and cannabis, the percentage reductions ranged from 3% to 8%.
- **There was some evidence of preventive effects on a wider range of drugs in a 6.5-year follow-up study.** There were statistically significantly fewer LST students who reported use of heroin and other narcotics, or hallucinogens. There is doubt over the methodological soundness of the study, because it followed up only 7.5% of the original cohort and no selection rationale is given.
- **Effects on tobacco and alcohol, while not covered in detail in the review, can be positive if relatively modest in scale.**
- **LST impact is not, on the available evidence, achieved in the expected way:** i.e. by enhancing the social and psychological factors believed to promote substance misuse. Rather, LST appears to work largely by influencing drug-related knowledge, attitudes and normative expectations, in the context of interactive teaching and learning methods. It may be that the key mechanism by which it achieves its limited success has yet to be identified.

## Conclusions

LST can have statistically significant and durable preventive effects on substance use onset rates though the size of these effects is consistently small. Nonetheless, it is one of the few programmes for which there is research evidence of positive (albeit limited) impact.

On the basis of the review findings, the report concludes that LST promotional material overstates the programme's effectiveness. The report highlights the danger that observers may conclude that the programme is more effective than it actually is.

The report questions whether the costs and resources required for LST training and implementation are justified given the limited impact it delivers.

LST has been studied relatively extensively compared with many other drug education interventions. While criticisms can be directed at aspects of the evaluations of the programme, the review highlights a number of issues of importance for development and delivery. This is an argument for more detailed long-term evaluations of drug education interventions.