



THE IMPORTANCE OF IMPLEMENTATION FIDELITY

Over the past several years, a large amount of information has been collected on the causes of violence and prevention programs that can modify risk and protective factors that contribute to violence. The Blueprints Initiative has been in the forefront in identifying exemplary programs that have been evaluated in rigorous, controlled trials, and much attention has been focused nationally on selecting and implementing quality programs. However, identifying effective programs is only the first step in the efforts to prevent and control violence, as program fidelity must also be considered.

Widespread implementation of effective programs is unlikely to affect the incidence of violent crime unless there is careful attention given to the quality of implementation, the degree to which a program is delivered as intended. Fidelity is important because, we typically do not know which components of a program may be responsible for the reductions in violence. Therefore, the belief that some intervention is better than none may be erroneous. Programs must be implemented with fidelity to the original model to preserve the behavior change mechanisms that made the original model effective.

Implementing a program with fidelity includes, providing all the core components of a program at the intended dosage. Ensuring that community providers understand all the core program components that are necessary for success is a serious challenge to program disseminators. When research studies move from the original trials, where they are well controlled by the designer, to less controlled naturalistic settings, the chances for key program components to be "watered down" increase. For instance, a research study conducted in 56 New York State schools by the designer of the Life Skills Training program (Botvin, Baker, Dusenbury, Tortu, & Botvin, 1990), showed that only 27% to 97% of the material in the curriculum was covered, with only 75% of the students in the prevention conditions exposed to 60% or more of the prevention program (i.e., one in four students had teachers who implemented less than 60% of the important points

of the lessons).

The importance of implementation fidelity is demonstrated in a meta-analysis study of 200 programs. This study found that the best interventions can reduce recidivism by about 40 percent. Thorough implementation, however, was found to be a significant factor in relation to recidivism effects. Intervention effects were larger when attention was given to the integrity of the program implementation. Additionally, programs of more than six months' duration were, on average, more effective than those of shorter length. *Figure 1* shows the independent contribution of several program characteristics to recidivism rates compared with the recidivism rate of routine probation, or treatment as usual services found in the control groups of these 200 studies (Lipsey, 1999).

Evaluations of prevention programs can incorrectly conclude that specific programs do not work when treatment effects aren't found, because of weak program implementation. Fidelity of im-

(cont., pg. 2)

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What's New!
CSPV has been awarded funding for a third Life Skills Training (LST) grant from OJJDP!
To Apply Contact CSPV
(See pg. 2 for program description and contact information)

Newsletter Highlights:

- Implementation Fidelity
- Process Evaluation
- LST Program Description

Figure 1. Program Characteristics	Recidivism
Routine Probation (P)	50%
P + Minimal Program (Programs with average effect size)	46%
P + Best Intervention Type (B) (Programs with largest effect size)	40%
P + B + Good Implementation (I)	35%
P + B + I + Over 6 Months' Duration	32%

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Process evaluations (i.e., formative evaluation or program monitoring) assess the delivery of a program by describing and documenting how well the program is being implemented, or the “integrity” or “fidelity” of the implementation in comparison with the program’s stated intent. It primarily describes what services were provided to whom, the intensity and duration of services provided (dosage), and what problems were experienced. This involves documenting whether the program is delivering the program service or intervention as it was designed (adherence), i.e., with staff trained appropriately; using the right protocols in totality and in the correct order, techniques and materials; the required number of hours or sessions or activities; and in the locations or contexts prescribed. For example, if a program is designed to be taught in the classroom three times a week, fewer sessions might dilute the effectiveness of the program. A process evaluation would document whether the required number and content areas of lessons were actually taught.

(Fidelity cont. from pg. 1) plementation analysis (i.e., process evaluation) has shown consistently stronger outcomes when programs are implemented with fidelity. These analyses typically yield stronger prevention effects for the high-fidelity samples than for the full samples. For example, in an evaluation of the Life Skills Training program (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995), results from the full sample and the high fidelity sample both found significantly lower rates of weekly, monthly and heavy smoking activity, as well as heavy drinking. However, the high fidelity sample also showed significant decreases in weekly and monthly alcohol and marijuana use, as well as 3 drinks or more per occasion and drunk rates.

It seems intuitive that programs might show superior outcomes when implemented with greater fidelity; however, a more threatening scenario is that some program evaluations ONLY show significant effects in the high fidelity samples. For example, the Child Development Program was evaluated in 12 schools but, only five of these schools showed clear evidence of widespread implementation. There was no clear evidence of positive program outcomes for students at all 12 program schools; however, at the five high fidelity

schools, there were significant declines in alcohol and marijuana use and an increase in students’ sense of school community, compared to the control schools (Battistich, Schaps, Watson, Solomon & Lewis, in press). If fidelity of implementation analyses had not been conducted to demonstrate that the program was effective when implemented correctly, we would be left with the conclusion that this program does not work.

This example, as well as other research, clearly demonstrates the importance of high-quality implementation in achieving successful outcomes. If schools and agencies are not committed to program fidelity, they may be utilizing a great deal of valuable time and resources with little to no effect on the behaviors they are trying to change.

These findings underscore the need to understand and document the reasons leading to poor implementation and improve conditions which can facilitate a high quality implementation. There are numerous financial, psychological, and organizational factors that challenge the successful adoption of programs. If these factors are not overcome, the end result may be poor implementation or program failure. These factors will be discussed in a future newsletter.

Life Skills Training Program Description

The Office of Juvenile Justice and Delinquency Prevention has awarded CSPV and National Health Promotion Associates, Inc. (NHPA) funding to replicate the Life Skills Training (LST) program in sites nationwide. CSPV and NHPA will provide selected sites with three years of training and technical assistance, materials, and a process evaluation.

LST is a three-year, school-based drug prevention program designed to be implemented in the classroom and intended for use with all students in junior or middle schools. The program comprises 15 sessions in year 1, 10 booster sessions in year 2, and 5 booster sessions in year 3. Optional violence prevention lessons are also included at each year.

The goal of the LST program is to prevent gateway substance use among adolescents by making an impact on risk factors associated with tobacco, alcohol, and marijuana use. The LST program is designed to provide students with 1) self-management skills; 2) general social skills; and 3) drug-related information and skills. Skills are taught using training techniques such as instruction, demonstration, feedback, reinforcement, and practice.

Battistich, Victor, Schaps, Eric, Watson, Marilyn, Solomon, Daniel, and Lewis, Catherine (in press). Effects of the Child Development Project on students’ drug use and other problem behaviors. *Journal of Primary Prevention*.

Botvin, Gilbert J., Baker, Eli, Dusenbury, Linda, Botvin, Elizabeth, and Diaz, Tracy (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association*, 273, 1106-1112.

Botvin, Gilbert J., Baker, Eli, Dusenbury, Linda, Tortu, Stephanie, and Botvin, Elizabeth (1990). Preventing adolescent drug abuse through a multimodal cognitive-behavioral approach: Results of a 3-year study. *Journal of Consulting and Clinical Psychology*, 58, 437-446.

Lipsey, Mark (1999). Can intervention rehabilitate serious delinquents?

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