Author's response to reviews

Title: Blueprints for Violence Prevention Process Evaluation of the Life Skills Training Drug Prevention Program: Factors Related to Implementation Fidelity

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Author's response to reviews: see over
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Brian Mittman, Editor
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Dear Dr. Mittman:

We are appreciative of the comments by the two reviewers of our manuscript, Blueprints for Violence Prevention Process Evaluation of the Life Skills Training Drug Prevention Program: Factors Related to Implementation Fidelity. Both reviewers make some excellent comments, and many of their comments have now been addressed in the paper.

For instance, Reviewer 2 has noted the overlap between this paper and the first published article we completed on this replication project. That article was primarily qualitative and included only two years of data on Grant 1 sites, one year of data for Grant 2 sites, and no data for Grant 3 sites which had only just begun implementation. The current article is intended to supplement that article with data available from three years of implementation for all three grant sites. It uses quantitative methods to help understand the relative importance of some of those factors that we had observed early in the project to be important strengths and barriers to implementation. The similarities and differences between the two papers have been better articulated (see pages 8-9).

Reviewer 2 also notes the need for additional detail about the training of observers and tests of reliability across the sites so that readers can be confident about the validity of the findings. Because of the large number of teachers and schools and the geographic spread of the project, a CSPV representative tried to conduct at least one classroom observation with each of our observers. Because of the scope of this project and logistical problems that sometimes arose, we were not able to conduct joint classroom observations with each observer. However, we were able to conduct 302 joint observations. The average 89.7% correspondence between CSPV and observer ratings for the number of joint observations
conducted is reasonable justification that the observers were able to recognize when the major objectives listed on the LST checklist were made or not made by teachers. This information has now been included in the paper, along with more information about the training and supervision of observers (pages 12 and 16).

Reviewer 2 notes that the reliability of the observations is important in justifying our finding that 86% of the curriculum points were made. This finding is quite a bit larger than the 65% adherence found in a smaller study conducted by Reviewer 2. However, in their study there was no effort made to influence fidelity. In contrast, we made a concerted effort to influence fidelity from the beginning to the end of the replication project. Fidelity was discussed prior to site selection, and it was discussed in yearly site visits and reports. Thus, our own actions likely influenced higher fidelity rates, which we state in the Discussion (page 30).

Much more difficult to incorporate into this paper is the need for process and descriptive data associated with those processes suggested by Reviewer 1. In fact, Reviewer 1 considers the data sources and questions too general to allow meaningful data analysis and suggests reconceptualizing the article as a case study and providing considerable amounts of descriptive data regarding the processes used to attempt to implement the program in these 428 schools. We appreciate the comments made by Reviewer 1 and consider them immensely beneficial to anyone who is designing an implementation study. We began our implementation study in the late ’90s during a time when the study of implementation processes for juvenile prevention programs was in its infancy. In fact, we began this project when most were still trying to discover “what works” in the area of prevention, and the lists of effective programs were only beginning to proliferate. Soon after this, the field began to narrowly take interest in the processes involved in implementation after discovering that evidence-based programs were not always effective when implemented in real world situations. We designed our replication study during this early stage in the development of implementation research hoping to discover some of the strengths and barriers to implementation. As such, our study was primarily qualitative, although we collected some quantitative data to supplement our observations. Because of the scope of the project, we believe that the quantitative data collected can be used to discover some of the more important dimensions of implementation. The quantitative data analysis in the paper is followed by a qualitative discussion of the problems encountered at sites, further supplementing those data analyses and providing greater detail.

All of the comments made by Reviewer 1 would be extremely beneficial if we were to conceptualize the paper as a case study, as he suggests. However, this was not the intent of the article, thus, many of the requests by Reviewer 1 for greater detail (e.g., information on purveyors and their impacts on buyin and implementation, other than our statement that our site visits and emphasis on fidelity may have increased the overall fidelity of the project) must go unaddressed in this paper. Some of this information is available in a manuscript we have written on implementation (see Chapter 3, “Assessing Site Readiness” of Mihalic, Fagan, et al., 2002).
We have added an Addendum that provides greater detail on the site selection and training and technical assistance processes. We have also provided more information in the paper about the violence lessons that were added to the LST curriculum during the project and the LST fidelity checklist (see the footnote on page 11 regarding the violence lessons, and pages 15-16 for more detail on the LST fidelity checklist). Demographics on teachers and schools (other than numbers of students and whether schools were urban, suburban, or rural) were not collected. Reviewer 1 also requested more information on the collection and measurement of the independent variables, which has been added (see pages 13-14).

Reviewer 1 states that we use fidelity as a proxy for outcomes (high fidelity = better outcomes, low fidelity = poor outcomes). We do state in the paper that there is evidence that some programs only work when implemented with a high degree of fidelity, and other research that suggests that closer adherence to core components results in stronger participant outcomes. There are several citations given of research projects that demonstrate these findings. The research overall is very compelling that better fidelity will result in better outcomes. We were not collecting outcome data on student behavior for this replication project, however, previous evaluations of LST have examined the impact of fidelity on student outcomes and demonstrated that higher fidelity results in better student outcomes. We have included a citation for an LST evaluation that demonstrates that teachers who implement more of the curriculum achieve better student outcomes (see page 5).

One last major concern of Reviewer 1 was our use of implementation vs. intervention fidelity. The reviewer distinguishes in his work differences between implementation and intervention fidelity. In general, implementation fidelity refers to “a specified set of activities designed to put into practice an activity or program of known dimensions,” such as providing the training designated by the program, assigning a coordinator to oversee implementation, purveyor site visits to improve fidelity. Intervention fidelity is referred to as the core components of the intervention (in this case, the core components used by teachers, such as appropriate dosage, teaching all objectives of each lesson, and using interactive teaching techniques). Using this terminology, the LST fidelity checklist would be a measure of intervention fidelity. There is variation in how implementation has historically been defined and measured. Until the publication of the reviewer’s manuscript on Implementation Research: A Synthesis of the Literature (Fixsen et al., 2005), implementation generally referred to “how well a proposed program or intervention is put into practice and has been alternatively referred to as treatment adherence, fidelity or integrity” (Durlak, 1998). This definition incorporates intervention processes into the broader term of implementation. Even the most recent research continues to use the term implementation in this broader manner (Kam, Greenberg, & Walls, 2003; Dusenbury et al, 2005). Our use of the term “implementation fidelity” follows the historical usage. Because we are examining both the processes of implementation and intervention fidelity, we believe the broader term of implementation fidelity is easier to use and less confusing to readers than alternating between the terms implementation and intervention fidelity.
Both of the reviewers are leading experts in the field of implementation research, and we appreciate the time taken by each to provide us with suggestions for improving the paper. We have taken each suggestion very seriously. We hope that the additional information provided in the body of the article and in the Addendum will be satisfactory to both reviewers, but we recognize that the level of detail requested by Reviewer 1 is simply not possible as the current paper is conceptualized.

Sincerely,

Sharon Mihalic, M.A.
Director Blueprints for Violence Prevention Initiative

References:


