Fidelity and its Importance to Experiential Education

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The importance of implementation fidelity has been established in many fields including violence prevention (Mihalic, Fagan, & Argamaso, 2008), drug abuse treatment, mental and behavioral disorder treatment (Dusenbury, Brannigan, Falco, & Hansen, 2003), employment training (Becker, Smith, Tanzman, Drake, & Tremblay, 2001), classroom management (Webster-Stratton, Reinke, Herman, & Newcomer, 2011), and obesity reduction (Kahwati et al., 2011).

While the importance of fidelity has been established in experiential education (Hirsch & Sugerman, 2007) there are few studies and even fewer program models that take into account the importance of implementing programs with high fidelity in experiential education programs (Tucker & Rheingold, 2010). This paper has three primary areas that necessitate further research in experiential education: the importance of fidelity, factors that promote fidelity, and strategies for measuring fidelity.

The Importance of Fidelity

Fidelity of implementation refers to the degree to which facilitators implement programs as designed (Dusenbury et al., 2003). An examination of fidelity of implementation allows researchers to recognize if a program has been delivered as planned or if it has been adapted and furthermore, how such adaptations moderate the associations between program implementation and outcomes. An understanding of how fidelity might affect program outcomes can be crucial to guiding improvements in programs, as assessing fidelity can help identify program components that are central to program success as well as those components that may need to be improved or eliminated. Achieving high levels of fidelity may be difficult for some programs, a condition known as low viability. On the other hand, attention to fidelity can also point to situations in which programs are implemented with high fidelity but fail to generate desired
effects (Dusenbury et al., 2003; Johnson, Mellard, Fuchs, & McKnight, 2006; O'Donnell, 2008). Confirmation of fidelity is necessary to ensure that legitimate, potent, and fair comparisons of replicable interventions can be made (Moncher & Prinz, 1991).

**Factors that Influence Fidelity**

While many in the field of experiential education believe that it is too difficult to implement a program with fidelity due to the variety of factors such as weather, group dynamics, and individual student needs, this is not necessarily the case; if a program has clear objectives, protocols, and strategies for intervention, facilitators will be more able to implement a program with fidelity (Tucker & Rheingold, 2010). An experiential education program designer can’t necessarily control the weather, group dynamics, or an individual student’s needs, but one area that a program designer can influence is the degree to which facilitators are actually implementing the program as intended. Many facilitator traits play into whether or not a program will be implemented with fidelity, including the experience level of the facilitators (Nobel et al., 2006), facilitator buy-in (Cunningham, McCalister, & MacVicar, 2011), facilitator competency (Perepletchikova, Treat, & Kazdin, 2007), and the level and quality of program training the facilitators receive (Dusenbury et al., 2003).

The experience level of facilitators plays an important role in how they approach and implement programs (Nobel et al., 2006) and may also play a key role in whether a program succeeds or fails (Dusenbury, Brannigan, Hansen, Walsh, & Falco, 2005). Facilitator experience may be a double edged sword, however, when considering fidelity; a few studies have demonstrated that experience may be negatively associated with fidelity. Macmillan (1998) found that facilitators with high experience levels were less bought in to programs and were less adaptable to change. Similarly, Dusenbury and colleagues (2005) found that more experienced
prevention program facilitators had more negative attitudes about the programs than those with less experience. Additional research is needed to help us better understand the conditions under which facilitator experience is associated with program outcomes, and how this association might be moderated by implementation fidelity.

Facilitators’ beliefs about program goals are important as predictors of the effectiveness of their facilitation as well as the “buy-in” they have for a program (Cunningham et al., 2011). In a study of prevention program implementers, Dusenbury and colleagues (2005) found that implementers’ attitudes were correlated with their level of implementation. Specifically, implementers who felt more positive about the program, delivered the program with higher levels of fidelity. In other words, if facilitators believe that a program will produce the desired results, they are more likely to implement that program with higher fidelity (Durlak & DuPre, 2008). Buy-in to a program can be influenced by the level of involvement a facilitator has with the development of a program. The more involved a facilitator is in program development, the more likely they are to implement the program as designed (Datnow & Castellano, 2000).

Supervision of facilitators may also influence their buy-in and motivation to implement a program as designed. In a review of social work programs over ten years, Tucker and Blythe (2008) noted that when supervision of facilitators occurred, positive outcomes were three times as likely to transpire versus when supervision of facilitators was not present. The authors concluded that facilitator supervision led to higher fidelity.

In addition, training of facilitators is necessary to enhance fidelity, especially in more complex programs. Training provides the opportunity for facilitators to learn and apply the program, to better understand the theory and goals behind the program, and to facilitate a program with consistent quality implementation (Tucker & Rheingold, 2010). When a facilitator
feels secure in their capacity to do what is expected and they have the skills needed to execute a program, they are more apt to implement a program with fidelity. Training should not only occur prior to the implementation of a program, but should be an ongoing process (Durlak & Dupre, 2008). Early monitoring of program implementation followed promptly by retraining has a significant effect on the fidelity of future program implementation (Dufrene, Noell, Glibertson, & Duhon, 2008). Facilitator training should be considered a process that necessitates practice, assessment, and feedback (Bylund et al., 2009).

The competency of a facilitator to implement a program plays a significant role in whether or not fidelity will be achieved; some experts suggest that it is difficult to interpret findings on program effects without assessing both program fidelity and facilitator competence (Bylund et al., 2009). Facilitation competence can be thought of as the level of skill and judgment the facilitator possesses; it should not be assumed that competence inevitably results from facilitator training or experience levels; instead, competence of facilitation should be verified independently using measures that are both relevant to the current program and standardized for all program facilitators. Even when facilitators adhere to a program design they can still deliver a program in an incompetent manner which threatens the validity of the interpretations that can be drawn from the programmatic outcomes (Perepletchikova, et al., 2007). Facilitator adherence to a program design does not necessarily equate to facilitator competency; in other words, adherence is a necessary condition for competence, but facilitators could closely adhere to a program plan while paying little attention to soft skills such as interpersonal relationships or group dynamics. (McGlinchey & Dobson, 2003). In a review of treatment integrity literature, Perepletchikova and colleagues (2007) found that the level of facilitator competence was correlated to the level of fidelity to the program.
Measurement Strategies of Fidelity

Facilitator fidelity is typically measured using indirect, direct, and hybrid strategies. Indirect assessments include quantitative or qualitative facilitator self-reports of fidelity, journal entries, and written homework assignments completed by participants and facilitators. Direct assessments typically involve observations of facilitation by a qualified staff member or researcher. Hybrid strategies generally include both indirect and direct measures of fidelity, where comparison between self-reports and observations can be drawn (Gresham, 1989; 2009; Perepletchikova et al., 2007). Indirect measures of fidelity can be helpful in that they may permit the facilitator the opportunity for self-reflection, which can promote self-efficacy; however, the use of indirect measures as the primary operationalization of fidelity raises construct validity questions (Perepletchikova et al., 2007; Ryan, Patrick, Deci, & Williams, 2008). Direct assessments are labor intensive in that they require a highly skilled and trained rater to ensure a reliable and valid assessment of implementation fidelity; additionally, direct assessment may cause the facilitator being observed to facilitate differently due to reactivity, observations can alter performance of a facilitator and may result in higher adherence during observational sessions. Ideally in a situation involving direct observation, more than one rater will be present to ensure inter-rater reliability (Perepletchikova, et al., 2007). A solution to both the potential for reactivity and the labor intensiveness of recruiting and training outside observers in the direct assessment process is to utilize co-facilitators to monitor and report on the fidelity of each other (Thomas, 2008). One way to enhance the ability to assess fidelity effectively, then, is to make the presence of co-facilitators a priority in program design and development.

Fidelity of program implementation is an area of experiential education program evaluation that has been historically under-examined (Hirsch & Sugerman, 2007; Tucker &
Rheingold, 2010). However, paying more attention to the degree to which programs are implemented as intended is an area for growth in experiential education, and will further our understanding of the specific ways in which programs are or are not effective. Facilitator training, experience, competence, and buy-in can and do have profound impacts on the implementation of programs. Utilization of some of the fidelity measurement strategies discussed in this paper can help to ensure that programs are implemented with both efficiency and effectiveness in mind.
References


