

Fidelity of implementation as a potential threat to Service-Learning programs' effectiveness

Mirian Hervás-Torres, José Luis Arco-Tirado, Francisco D. Fernández Martín
 Department of Developmental and Educational Psychology, University of Granada (Spain)
 *e-mail: miriamhervas@ugr.es

Introduction and theoretical framework

Service-Learning programs have experienced a significant expansion in our country and internationally in the last few years. However, its potential to transform social and educational needs cannot adequately be estimated if implementation issues are not monitored (Durlak & DuPre, 2008). Fidelity of implementation means the extent to which actual implementation reflect planned implementation. The objective of this study was to identify potential fidelity problems when implementing complex programs like Huelva Educa Program (PHE) and their potential impact on the program effectiveness.

PHE was based on two complementary methodologies: Service-Learning and Mentoring. During the program, University students, conducted weekly activities with students of Compulsory Education, to reinforce content in a collaborative way. Among the benefits of this type of instructional methodologies are included: (a) an increase in the commitment of the students with learning, (b) the promotion of certain aspects of the personal and social development of students, (c) development of competencies, or (d) the stimulation of reflection and critical thinking among students.

Hypothesis

(H1) the number of PHE intervention sessions (i.e., mentoring and follow-up) will be lower than expected; (H2) there will be statistically significant differences in the average scores achieved by university students in comparing follows-up 2 and 4.

Participants

N=79 undergraduate students; N= 69 compulsory students. The sample selection technique was a non-probabilistic sampling by convenience (Patton, 2002).

Instruments

Follow-up Questionnaire and a Discussion Group Sheet, adapted from other similar studies (Fernández, Arco, Perea, & Benitez, 2003; Perea, Fernández, Arco, & Benitez, 2003).

Procedure

The intervention plan consisted of 1 seminar of training for university students and 20 nineteen minutes weekly after-school mentoring sessions across the school year. Likewise, the follow-up

plan was implemented which included 25 group sessions with teachers and families of compulsory students' participants and 10 group sessions with mentors. Finally, the results assessment plan was implemented.

Results

A total of 184 mentoring sessions (132 individual and 52 group) were cancelled, which represents 15% less than the initial planned number (955). A total of 2 follow-up sessions with mentors were cancelled, which represents 20% less than initially planned. A total of 8 follow-up sessions were held with teachers and families, which represents 100% of the initial plan. However, some variations affected the initial plan scheduled (See table 1). When comparing follow-ups 2 and 4 statistically significant differences are found in different areas like mentoring behaviour, learning strategies ($r = 0.53$, $p < 0.01$), or respect for the treatment received ($r = 0.24$, $p < 0.05$) (See tables 2 & 3).

Conclusions

Since accurate interpretations of program impact depend on knowing the presence of fidelity problems, our results reveal implementation problems affecting intervention, following-up and evaluation plans. Specifically, the reduction in the number of sessions affecting both intervention and follow-up plans were due to delays on the program implementation which, on one hand, made impossible to reschedule the initial sessions planned during that delay and, on the other hand, creating incompatibilities for mentors when combining their own academic activity with the program demands as tutors. Those changes are referred in the literature (Dane & Schneider, 1998; Durlak & DuPre, 2008) as changes on the dosage of the intervention, which could eventually impact the program's impact.

Additionally, the comparison between follow-up sessions 2 and 4 reveals that the "quality" of the sessions might have compensate the changes experienced on the "dosage", which aligns with the value of the intervention, as authors such as Durlak and DuPre (2008) point.

Estimation of fidelity problems in complex, long-term, multi-agent programs are critical to determining possible deviations in implementation and consequently in the interpretation of impact achieved.

Table 1. Follow-up sessions results

Mentoring sessions planned	Mentoring sessions conducted	Planned follow-up sessions with mentors	Follow-up sessions with mentors	Planned follow-up sessions with schools	Follow-up sessions with schools	Planned follow-up sessions with families	Follow-up sessions with families
1139	955	10	8	8 at each center	8 at each center	8 with each group of families belonging to the school	8 with each group of families belonging to the school

Table 2. Intergroup Correlations on the Development Sessions according to Mentors in Follow-up 2 & 4

Item/Follow-up	N	M	DT	r	Sig. (bilateral)
The mentoring sessions have been held on greedy basis					
Follow-up 2	72	4.59	0.68	0.39	0.00**
Follow-up 4	69	4.53	0.77		
The hours of the duration of the sessions were established by mutual agreement					
Follow-up 2	72	4.72	0.56	0.36	0.00**
Follow-up 4	69	4.71	0.59		
The sessions have been conducted on time					
Follow-up 2	72	4.61	0.59	0.53	0.00**
Follow-up 4	69	4.63	0.64		
The venue for the sessions has been optimal for the same					
Follow-up 2	72	4.27	0.90	0.62	0.00**
Follow-up 4	69	4.30	0.87		

**p < 0.01

Table 3. Intergroup Correlations on Students' Behavior in Follow-up 2 & 4

Item/Follow-up	N	M	DT	r	Sig. (bilateral)
The treatment received by your student has been respectful					
Follow-up 2	72	4.59	0.62	0.24	0.04*
Follow-up 4	69	4.72	0.48		
Mentoring sessions have been taken advantage of					
Follow-up 2	72	4.33	0.73	0.51	0.00**
Follow-up 4	69	4.39	0.62		
Students have complied with the previously signed agreement					
Follow-up 2	72	4.47	0.71	0.42	0.00**
Follow-up 4	69	4.44	0.75		
Further progress is being made in terms of their academic performance					
Follow-up 2	72	4.01	0.95	0.56	0.00**
Follow-up 4	69	4.14	0.75		
There is a greater interest in subjects					
Follow-up 2	72	3.93	0.84	0.50	0.00**
Follow-up 4	69	4.00	0.82		

*p < 0.05; **p < 0.01