

Development of the Enhanced First Step to Success Intervention

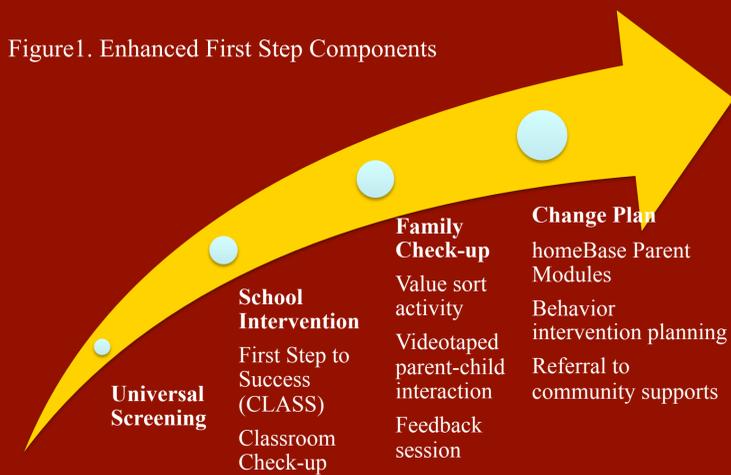


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Background

This poster presentation highlights preliminary results of a 3-year grant to develop, implement, and refine the First Step to Success program to extend its applicability to tertiary-level students with severe behavior problems in school. The revised intervention, Enhanced First Step to Success (EFS), broadens the ecological focus of First Step to affect the child in the family and the family in the community as powerfully as the original First Step intervention affects the child in the school setting by implementing Motivational Interviewing (MI) techniques systematically to guide interactions between coaches and parents and coaches and teachers. Our initial attempt to develop EFS includes four components (See Figure 1): (1) universal screening, (2) school intervention, (3) family check-up (Dishion & Stormshak, 2007), and (4) change plan.

Figure 1. Enhanced First Step Components



Methods

A manual containing the key implementation features and training protocols was developed and refined using feedback from a national and local advisory council and testing the protocols through an open case series design (N = 9). As can be seen in Table 1, our sample included children ranging in age from 5 years, 11 months to 7 years, 11 months; five children attended general education classrooms and four attended self-contained classrooms for children with behavior disorders. Eight of nine (89%) met our criteria for tertiary-level behavior problems, defined by the SSB, Stage 2 criteria, plus borderline or clinical impairment in externalizing behavior in the home setting according to parent report (Stage 3). Process measures were collected to assess the fidelity of implementation, satisfaction, and social validity; outcome measure, including teacher- and parent-reports of social skills and problem behaviors and direct observations of children's academically engaged time and social interactions with peers were also obtained at baseline and post intervention. Only preliminary analyses of satisfaction, social validity, and parent- and teacher-reported social skills have been completed to date.

Table 1. Sample Characteristics

ID	Sex	Ethnicity	ECE	AGE	Tertiary
General Ed					
1005	M	O	Speech	7.8	Yes
1010	M	B	NA	7.11	Yes
1015	M	B	NA	7.6	Yes
1037	M	W	NA	5.11	No
1042	F	B	DD	5.11	Yes
Self-contained					
1019	M	W	DD	7.5	Yes
1025	M	O	EBD	8.9	Yes
1026	M	B	EBD	9.4	Yes
1047	M	W	DD	7.3	Yes

delayed, EBD=emotionally behavioral disorder. Tertiary means the child exceeded all three gates of our screening criteria, which included Stage 1 = teacher nominated; Stage 2 = Critical Events Index > 5 and High Risk on the Adaptive Behavior Index or the Maladaptive Behavior Scale. Stage 3 = Clinically Significant or Borderline Significant on the Child Behavior Checklist (Parent version; externalizing scale)

Results

All children (100%) completed the school component, eight (89%) completed the Family Check-up, and all of those completing the Family Check-up (100%) committed to a change plan that included between one and six homeBase parent training modules. Mean ratings across the 5-point parent satisfaction survey ranged from 4.4 to 4.8, with overall mean ratings of parent satisfaction of parents of children from self-contained (M = 4.6; SD = 0.5) and general education settings (4.8; SD = 0.3) very similar. All seven respondents of the parent interviews identified benefits of the home services, with improved parent-child communication representing the most frequently stated benefit. More than half of the parents indicated that homeBase activities were enjoyable and resulted in increased parent-child interaction. Six of seven (86%) parents deemed the amount of time spent with CLASS and the home components 'Just Right.' To examine responsiveness to the EFS intervention we computed a reliable change index (RCI) to assess whether the change in functioning was statistically reliable (Jacobson & Truax, 1991). An RCI score was calculated for each student by computing the difference between observed baseline and post intervention scores and dividing by the standard error of measurement. Following the recommendations of Martinovich, Saunders, and Howard (1996), if an RCI score was greater than 1.96, the change was considered statistically reliable at p < .05. As can be seen in Table 2, using the RCI statistic 7 of 8 cases (87.5%) and 5 of 7 cases (71.4%) for which we have data responded based on teacher- and parent-reported social skills, respectively.

Table 2. Standard Scores and Reliable Change Index (RCI) for SSIS Teacher- and Parent-Reported Social Skills

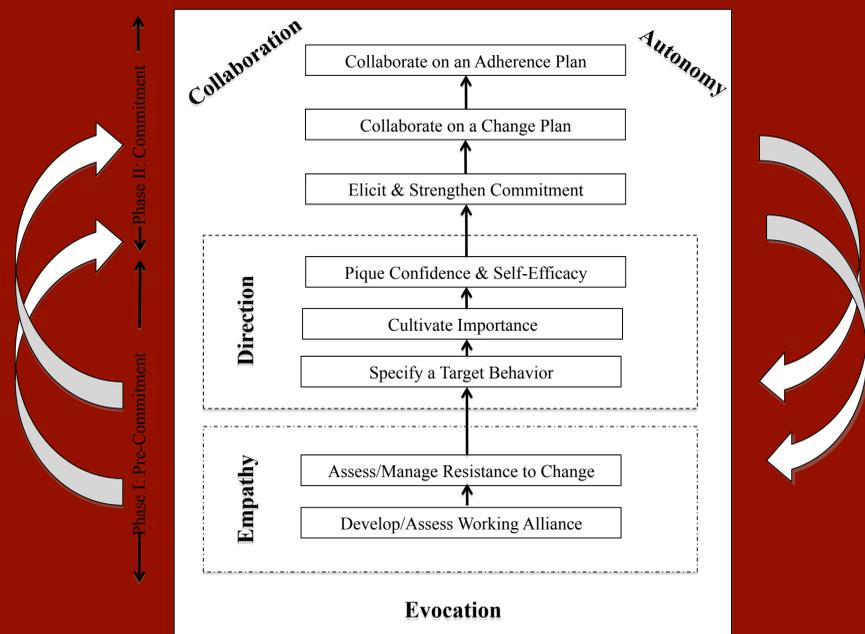
ID	Parent Reported Social Skills			Teacher Reported Social Skills		
	Base (SS)	Post (SS)	RCI	Base (SS)	Post (SS)	RCI
General Ed						
1005	76	69	-2.74	76	90	5.00
1010	74	82	3.08	61	88	10.24
1015	93	--	--	70	--	--
1037	82	97	6.16	87	97	3.81
1042	77	101	9.92	80	98	5.72
Self-contained						
1019	--	76	--	81	105	8.81
1025	96	100	1.71	88	107	7.15
1026	81	89	3.42	92	102	3.81
1047	86	114	11.64	94	98	1.67

Note: RCI score > 1.96 can be considered statistically reliable change at p < .05
 Bold text = statistically reliable change

Conclusions

Motivational interviewing is a promising approach to create new school-based interventions or enhance existing ones. Our initial attempt to refine the First Step to Success program to extend its applicability to tertiary-level students with severe behavior problems in school was encouraging. Specifically, our screening procedures identified tertiary-level students and their parents engaged in the intervention; all but one of the families completed the Family Check-up and participated in a parent training session. Parents reported high program satisfaction, and the majority of students demonstrated reliable improvement in social skills as reported by both teachers and parents. However, much work remains to achieve our goal of seamless integration of the four EFS components represented in Figure 1. Next year, we will implement the EFS intervention as a whole-school, primary grades initiative to capture the full range of the intervention and increase its appeal for administrators and politicians who must distribute limited resources. Our most significant revisions will include the addition of primary prevention bibliotherapy campaign related to parenting practices, infusion of a modified version of the Classroom Check-up (Reinke, Lewis-Palmer, & Merrell, 2008), and improving our coaches ability to systematically infuse directive and nondirective motivational interviewing strategies into all interactions with teachers and parents, while refining a training model for school personnel. Cloud, Lee, & Frey (2010) developed an MI Navigational Map in response to the difficulty some professionals experience applying the MI concepts with fidelity within the interviewing process (Figure 2).

Figure 2. Motivational Interviewing Navigational Map



The map allows those learning MI techniques to locate themselves within an objective based hierarchy across the pre-and post-commitment MI phases. The hierarchical structure indicates that the successful completion of higher-level objectives is contingent upon completion of those below them. The circular arrows round the entire map reflect the fact that although the process is linear in general, lower level objectives should be revisited frequently, either as a preventative strategy, in response to relational stress or resistance to change. This important research will not only improve the effectiveness of First Step with children with serious behavioral problems but will serve as a model for researchers in the field on how to conduct sensitive iterative studies of contextual and participant-specific factors that effects the implementation of behavioral interventions within applied settings. This project supports a broader knowledge base related to the infusion of motivational interviewing into other promising school-based interventions, and contributes substantially to the emerging knowledge base on improving treatment fidelity for applied interventions delivered in home settings.