The Positive Action Family Program: A Pilot Randomized Trial and Replication

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Abstract

We report results from the first randomized trial of the *Positive Action* intensive family program. We randomly assigned approximately 1/3rd of 29 families who were court mandated to attend a family program to a wait-listed control condition. Eighteen families (parents and teens) attended 7 weekly meetings, with parents and teens attending separate sessions for the first half of each session and then attending a joint session for the second half. We surveyed parents before the program and at immediate posttest with 16 items assessing family conflict, family cohesion and parent-child bonding (alphas between .74 and .79). Data were also collected from 45 and 96 additional parents who participated in two subsequent rounds of the program and 24 youth participated in one of those rounds. Results suggest that the PA intensive family program had immediate positive effects on all three outcomes with effect sizes between .34 and .59. Significant interactions with pretest scores for conflict and cohesion indicated stronger effects for those families at highest risk among this high-risk sample. Data from subsequent pretest-posttest only groups replicated these results. We conclude that this first randomized trial of the *Positive* Action intensive family program and the pretest-posttest replications provide results worthy of further follow-up.

Key words:

Family program, randomized trial, pilot study, family conflict, family cohesion, parent-child bonding

The effects of school-based prevention programs vary widely (Greenberg et al. 2003; Tobler et al., 2000), suggesting a strong need for quality family programs. The best family programs involve all family members (children, adolescents, parents) in an engaging way and teach longterm skills for success and happiness (Kumpfer & Alvarado, 2003). Additionally, effective prevention programs should seek to improve social skills, teach family management skills, increase the time parents spend with children, decrease family conflict, and provide positive role models for children (Kumpfer & Fowler, 2007). Despite the relative success of parent and family programs in research settings (e.g., Biglan and Metzler 1998; Brody et al. 2006; Farrington and Welsh 2002; Kumpfer and Alvarado 2003; Patterson et al. 1982), few such programs have been tested with the very highest-risk families in real-world settings. Furthermore, a major limitation of many existing family programs concerns attendance -- many high-risk families choose not to engage with preventive interventions. Even in carefully designed, well-funded family-focused preventive interventions, typically less than 50% of targeted parents begin an intervention and complete it, partly because of stigma (Baydar et al., 2003; Brown, Catalano et al, 2005; Dishion & Kavanaugh, 2003; Spoth et al. 2006; Spoth & Redmond, 2002; Tolan, & McKay, 1996).

Avoiding the stigma of implied deficient parenting can be accomplished by an intervention that is not presented primarily as a parenting program, but instead is presented as an adolescent health and wellness program that shows parents and teens techniques for helping adolescents avoid pitfalls such as substance use, deviant peers, unhealthy sex behaviors, and violence. In such a design, changes in parent and adolescent behavior related to monitoring, warmth and problem solving are presented as a means to an end. The prime motivation for the parent is to help their adolescent avoid risks for negative outcomes. The *Positive Action* program is ideal for application of this no-stigma strategy because it emphasizes adolescent, rather than parent

behaviors, although parents will also be changed by their involvement in the program. The program's "Family Kit" involves the parent interactively in activities that promote beneficial adolescent outcomes.

The *Positive Action* approach relies on intrinsic rather than extrinsic motivation for developing and maintaining positive behavioral patterns. The *Positive Action* (*PA*) program teaches the motivation and basic skills for achieving success and happiness for all family members. The program is based on the intuitive philosophy that you feel good about yourself when you do positive actions, and there is always a positive way to do everything. The universal premise is represented by the self-reinforcing "Thoughts-Actions-Feelings" Circle (Figure 1). It shows that positive thoughts lead to positive actions, positive actions lead to positive feelings about yourself, and positive feelings lead to more positive thoughts (Frederickson, 2000).

--- Figure 1 about here ---

PA builds on the philosophy and circle with specific positive actions, or skills, for the physical, intellectual, social, and emotional areas (the whole self). They are taught through six focus units (Table 1). The philosophy and focus units align and unite the multiple program components designed to apply to all spectrums of people. The complete program includes components for K-12 Instruction, School Climate Development, Counselors, Family Engagement, and Community Involvement. They all work together as a seamless whole, in any combination, or effectively stand alone. We have previously reported on quasi-experimental tests of the school-based Positive Action program (Flay & Allred, 2003; Flay, Allred & Ordway, 2001) and two randomized trials are currently under way. This study concerns only the family classes component.

--- Table 1 about here ---

The *PA Family Kit* is used by families and diverse groups working with families to lead them to success and happiness as a family and as individuals. Parents or providers can use it to promote positive thoughts, actions, and feelings about self to their families. The kit contains a manual with multi-age, 15-minute lessons: six for each of six units and six for review. Colorful materials such as an ICU (I See You Doing Something Positive) Box, "Word of the Week" cards, Conflict Resolution Plans, games, posters, and songs make lessons interesting and memorable. The 15-minute lessons easily fit into the schedules of busy families to bring *PA* concepts to the home and provide a link to school or another agency. They can teach lessons once a week or follow a different schedule set by the school or agency.

The *PA Family Classes Instructor's Kit* is used with the *Family Kit* to teach family or parenting classes in seven sessions. It can be used for high-need, at-risk families, in court-mandated situations, or just to train families of a school or other group in positive family behavior. In the first session, families learn the Thoughts-Actions-Feelings Circle philosophy and in subsequent session they learn the basics of each of the other five *PA* units (Table 1). During the first half of each session, the parents, adolescents, and children have separate, concurrent classes with age-appropriate lessons that cover the same concepts. In the wrap-up portion of the session, all the groups come together to review the concepts and participate in an activity as whole families. This powerful tool is designed to improve the relationships, communication, and dynamics of family life.

To hold *Family Classes*, sites start by choosing either the *Intensive Model* or the *Extensive Model*. The *Intensive Model* teaches the seven sessions over seven weeks, and is often used for at-risk or court-mandated families. The *Extensive Model* teaches the seven sessions over 36 weeks, often in alignment with a school's or other agency's regular *PA* curriculum. Once this

decision is made, the site will go through several steps: review and understand the *Family Classes Instructor's* Kit; coordinate with other efforts in the community or with the school, identify and train three or four instructors, find families to take the classes through different sources and information sessions, plan class schedules and locate a facility with appropriate space, order all In-Class Family Materials and At-Home *Family Kits* and, finally, conduct sessions of the *Family Classes*. Here we report results from a randomized study of the *Intensive Model*.

Methods

In a rural western community, 29 families were court mandated to participate in the *Positive Action* (PA) intensive family program (PAFP) during the Winter of 2005. We randomly assigned approximately one third (N = 11) to wait until the following session, and they were used as a wait-listed control group with which to compare the change in the group of families getting the program. Both groups completed a survey before the group sessions commenced and at the end of the family program (7 weeks).

Participating parents in subsequent family programs (Winter, Spring and Summer of 2006, N = 45; and Fall 2006-2009, N = 96) completed the same instruments at the start and end of their group sessions and 22 youth completed a similar instrument at the start and end of their group sessions. It was hypothesized that these data would provide replication of the effects for the program group, thus suggesting robustness of the program effects.

Parent outcomes were measured with 16 items that contributed to three scales of family functioning. Reliability analyses were performed on the total 2006 sample (N = 74) of parents. Family conflict questions (3 items) asked parents how much they agree with statements about conflict in their family or how often conflict occurs (score range 1-4, alpha = .74). Family

cohesion questions (6 items) asked parents how much they agree with statements about family cohesion in their family or how often cohesive events occur (score range 1-4, alpha = .75). Parent-child bonding questions (7 items) asked parents how much they agree with statements about the quality of bonding between themselves and this children or how often bonding events occur (score range 1-7, alpha = .79). Youth answered the same questions for family cohesion and conflict and additional questions for decision-making¹.

We tested for pretest comparability with t-tests on the pretest scores. We applied ANCOVA to the posttest scores using the pretest scores as covariates. We first ran a model that included the interaction between pretest scores and condition to enter the model; when the interaction was not significant we re-ran the model without the interaction. Given the small Ns of the pilot study, the clear directional hypotheses, and that the practical consequences of finding negative results would be the same as finding no difference (essentially indicating that the program should not be used), we applied one-tailed tests (Knottnerus & Bouter, 2001).

Results

Family members attended an average of 5.94 (SD = 1.95) or 85% of 7 sessions and an average of 13.57 families were represented at each meeting (SD = 2.51). The mean values on the above scales before (Pre) and immediately after (Post) the program are shown in Table 2, together with p-values, effect sizes (Cohen's d) and percentage relative improvement. The two groups were not different on any pretest scores. The control group improved a little (non-significantly) on all 3 scores, but the PAFP group improved significantly more than the control group on all 3 scores. The effect sizes were .34 to .59. and the percentage relative improvement ranged from 6.9% to 9.9%. In all cases the pretest scores were highly significant predictors of

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¹ We did not have access to the raw data for the last group of parents or the youth, so are unable to calculate and report reliability analyses for them. Instead, these data are taken from reports provided to the group providers by the Utah State agency

posttest scores, and interactions with pretest scores for cohesion and conflict indicated stronger program effects for higher risk families.

--- Table 2 about here ---

Only 6 of the wait-listed control group families enrolled in and completed the subsequent training (with others waiting until a subsequent round) and their posttest scores after their own training were all as good or better than the PA posttest scores reported here (2.06, 3.33 and 5.66, for family conflict, family cohesion and parent-child bonding, respectively) providing further validation of the effects in the randomized trial.

Data from subsequent groups showed the same pattern of significant changes in mean scores for all 3 scales (see Table 2). For parents, percentages improvement across the three scales were higher than those found in the randomized trial (8% to 17.2%), possibly reflecting the increased experience of the facilitators. For youth, the percentages improvement across the three scales fell in a similar range (6.8% to 12.8%).

Discussion

In the experimental trial, the control group improved a little (non-significantly), but the PAFP group improved more and scored better than the control group at the posttest (the two groups scored at the same level at pretest) on all 3 scales. These differences were all statistically significant and, thus, show that the program improved family functioning for those families who received the PA Family Program more than they would have improved by themselves.

Participants in following groups showed the exact same pattern of changes, with some improvements, thus replicating the initial findings and, perhaps, reflecting increased experience of the facilitators. Youth assessed in a following group also showed improvements in the parallel measures of family cohesion and conflict, and the additional measure of decision-making skill.

Given that these families were court-mandated to attend the program and, thus, would have been highly motivated to improve (hence some improvement by control families), these results demonstrate that the PA Family Program can help high-risk families improve much more than they could improve on their own.

The major limitations of this pilot randomized study plus additional pre-post only groups are 1) the small numbers of families involved in the randomized study and 2) the lack of long-term follow-up data. The waitlisted families were promised the program immediately after the posttest, so long-term follow-up of the controls was not attempted. Despite these shortcomings, this first randomized trial of the *Positive Action* Family Program provided results worthy of further follow-up. The replication of the findings, for both parents and youth, in subsequent pretest-posttest only evaluations provide further validation of the program effects.

The *Positive Action* program promotes a broader range of adolescent characteristics than other preventive interventions, which might make it more appealing to high-risk families. Similar to other successful interventions it targets attitudes, beliefs, self concept, refusal skills and social skills. But, in addition, it targets positive feelings, values, respect, empathy, kindness, fairness, and cooperation. These characteristics provide a basis for friendship and avoiding problem behaviors (substance use, violence, etc.). Positive psychology research shows that these characteristics are directly linked to psychological adjustment and well being or happiness (Seligman et al., 2005; Fredrickson & Losada, 2005). Because psychological maladjustment is associated with substance abuse and violence, increases in these positive characteristics may reduce maladjustment and have substantial preventive benefits (Fredrickson, 2000). Given that these characteristics are universally recognized as beneficial in American culture, parents understand them and are easily motivated to promote them.

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Table 1: Positive Action Philosophy and Focus Units

<u>Philosophy</u>: You feel good about yourself when you do positive actions, and there is always a positive way to do everything.

Six Focus Units:

- 1. Self-Concept: What It Is, How It's Formed, and Why It's Important (Philosophy and Circle)
- 2. Physical and Intellectual Positive Actions for a Healthy Body & Mind
- 3. Managing Yourself Responsibly
- Getting Along with Others by Treating Them the Way You Like to Be Treated (Social Skills & Character)
- 5. Being Honest with Yourself and Others (Mental Health)
- 6. Improving Yourself Continually (Setting & Achieving Goals)

Table 2: Pretest and posttest scores by condition with effect sizes									
	Cor	Control		PA Family Progran					
Measure	Pre	Post	Pre	Post	р	ES	%RI		
						-			
Family Conflict (lower score is better)	2.55	2.36	2.57	2.17	0.019	0.36	-8.2		
Family Cohesion (higher is better)	2.88	3.06	2.89	3.27	0.045	0.34	6.9		
Parent-child bonding (higher is better)	5.26	5.3	5.02	5.58	0.019	0.59	9.9		
p values are all two-tailed. ES = Effect Size = Mean differences divided by pooled SDcontrol									
Interactions with pretest scores were significant for cohesion and conflict.									
ES = Effect Size = (postest diff - pretest diff)/pooled standard deviation									
%RI = % relative Improvement = (postest diff - pretest diff)/pretest control									

Table 3: Pretest and posttest scores for parents and youth in							
subsequent groups							
	Pre	Post	%lmp				
Parents (2006, N = 45)							
Family Conflict (lower score is better)	2.25	1.96	-12.9				
Family Cohesion (higher is better)	2.97	3.26	9.8				
Parent-child bonding (higher is better)	5.15	5.63	9.3				
Parents (Fall2006-09, N = 96)							
Family Conflict (lower score is better)	2.32	1.92	-17.2				
Family Cohesion (higher is better)	3.12	3.37	8.0				
Parent-child bonding (higher is better)	5.22	5.96	14.2				
Youth (2007-09, N = 22)							
Family Conflict (lower score is better)	2.26	1.97	-12.8				
Family Cohesion (higher is better)	2.92	3.12	6.8				
Decision-making (higher is better)	2.83	3.05	7.8				
Notes: All differences significant at p < .05 (one-tailed)							
%Imp = % improvement = (posttest-pretest)/pretest)							

Figure caption: The Thoughts-Action-Feelings (about self) Circle

