Web-Based Training Center for Foster & Adoptive Parents

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Phase I Final Progress Report

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A. General Scientific and Technological Aims

In Phase I we developed and evaluated a Web-based course for foster and adoptive parents on understanding and managing children with serious anger problems. The approach uses an innovative, interactive multimedia format in which the viewer hears other parents tell stories of their parenting experiences to Dr. Richard Delaney, a leading expert on foster and adoptive care. Through an ensuing parent-expert dialog, viewers hear clinical insights into the problem behavior, practical steps they can take to alleviate anger outbursts, as well as useful background information about anger in children.

The course, titled Anger Outbursts, will become part of Foster Parent College, a proposed training center for foster and adoptive parents that will offer a comprehensive selection of courses via the Web or DVD video. Having the courses on both media is expedient, since the production processes are closely related and in order to reach a wider range of home users.

The evaluation study examined the effect of the training on parent knowledge of children's serious anger problems and key aspects of parent self-perceptions such as confidence, comfort, and objectivity.

B. Phase I Research Activities

Program Content

A central focus of this project was to increase foster and adoptive parents' access to high quality training materials. These parents report that attending training classes places impractical, if not untenable, demands on them. Over the years, limited access to services has resulted in a disconcerting reduction in the standards surrounding continuing education activities for foster parents. The first step that we took to address these issues was to bring the training material to parents' homes.

Initially, we planned to deliver the training material via the Web. However, as described below, the presentation format evolved well beyond what we originally proposed and would require a high-speed Internet connection, which would further limit access. DVD video players were a practical alternative because: 1) they are nearly as popular as VCRs, 2) they are as easy to use as VCRs, and 3) they deliver interactive programs, much like the Web. Thus, we decided to produce the program for DVD and the Internet since it was both technologically feasible and accommodating to a much wider home audience.

The second and more challenging factor regarding user accessibility was ensuring that parents could use and understand the materials without the typical kinds of support they would receive from a live trainer. To achieve this goal we used the following principles to guide us in shaping product development:

- Organize the content into brief segments with clear purposes and goals.
- Build viewers' comfort with the topics by depicting parents telling their stories and interacting with an expert.
- Communicate clinical information using lay language.
- Use a well-known clinical expert to build rapport and convey essential information.
- Allow viewers to interact with and regulate aspects of the instruction.

We applied these principles of parent support to all materials throughout the product development phase. To begin, we developed content for four courses on serious child behavior problems: anger outbursts, sexualized behavior, eating disorders, and fire-setting. We then further organized each course into four clinical subtypes, or variations, of the targeted behavior. In the course on anger outbursts, for example, the behavioral variations were:

1) Temper tantrums.
2) Assaultive behavior towards other children.
3) Rage towards the mother.
4) Erratic or unpredictable anger.

  Each behavioral variation constituted a chapter in the course, which was organized into a sequence of segments. The default choices in the program took the viewer through the segments in sequence, but viewers could opt out by going to a chapter menu, navigating to another chapter, and then going to a particular segment within that chapter. Viewers could also rewatch a segment at any time. Figure 1, below, shows the overall content and navigational scheme of the Anger Outbursts course. We estimate the minimum viewing time for a course to be about 30 minutes.

- Opening Menu:
  Displays the home page of Foster Parent College.
  - Viewers can:
    - View program credits,
    - Go to a chapter menu to choose a specific chapter and then go to submenu on any one of the chapters to choose a segment within the chapter, or
    - Play the first chapter on temper tantrums.
- Introduction:
  Dr. Richard Delaney, the principal investigator and a well-known clinical psychologist specializing in foster and adoptive parenting, briefly presents the topic of the course and then introduces four sets of parents, each of whom is dealing with a clinical variation of the targeted behavior.
  - Viewers can:
    - Play the first chapter on temper tantrums,
    - Repeat the introduction, or
    - Click on-screen choices (or use the remote for DVD players) to stop or pause the program.
- The Parent Story:
  A dialogue begins between Dr. Delaney and the parent (or parents) representing the behavior subtype that the viewer chose. The parent tells Dr. Delaney about his or her experience with the problem behavior. Typically, the parent also discusses relevant historical information about the child. A montage of accompanying images is used here and throughout the rest of the program to dramatize the situation and bring the problem behavior into a practical and recognizable context.
  - Viewers can:
    - Go to the next segment,
    - Repeat viewing the current segment, or
    - Stop or pause the program.
- Questions & Responses:
  Following the Parent Story, Dr. Delaney poses a number of follow-up questions to the parent to get more detail and clarification of their problem situation.
  - Viewers can:
    - Go to the next segment,
    - Repeat viewing the current segment, or
    - Stop or pause the program.
- Insights:
  Dr. Delaney takes relevant information gleaned from the Parent Story and follow-up Questions & Responses, and, using lay language, synthesizes it into a succinct set of clinical insights aimed at helping the parent better understand their child's behavior. Encapsulated text is displayed in bulleted form as Dr. Delaney makes informational points, a technique that is also used in all subsequent sections – Steps, General Steps, and Expert Facts.
  - Viewers can:
    - Go to the next segment,
    - Repeat viewing the current segment, or
    - Stop or pause the program.
- Steps:
  Dr. Delaney suggests a series of possible next steps the parent can take to deal with the

problem. In addition to getting professional help, he may suggest safe and important actions they can take to help manage the situation.
   Viewers can:
   - Go to the next segment,
   - Repeat viewing the current segment, or
   - Stop or pause the program.

After the chapter on temper tantrums is finished, the program proceeds to the next chapter, and so on until the four behavioral subtypes are covered in similar manner. Once the user views all four chapters, the program proceeds to the final two summary sections:

- General Steps:
  Dr. Delaney recapitulates a few essential steps that parents who are dealing with anger outbursts in their children should take.
     Viewers can:
     - Go to the next segment,
     - Repeat viewing the current segment, or
     - Stop or pause the program.
- Expert Facts:
  Dr. Delaney provides a brief list of background information and facts on the targeted behaviors.
     Viewers can:
     - Repeat viewing the current segment, or
     - Stop or pause the program.

Program Development
   The project team, which included Dr. Delaney, the principal investigator; Caesar Pacifici, Ph.D., the project director; Lee White, executive producer; and Carrie Keller, media director, developed curriculum materials in several stages.
   Originally we proposed 18 topics, or courses, for Phase I, all under the general category of dealing with children's serious emotional problems. To begin, the team chose four that were judged to be of current and special interest in the field: anger outbursts, eating disorders, fire-setting, and sexualized behavior.
   We outlined and scripted content for each of the four courses through an iterative review process. The PI wrote the original draft, the project director edited the draft, then the executive producer and media director reviewed the edited draft. The team came to a consensus on final versions of the scripts.
   The depth of the content was considerably greater than we originally anticipated. We realized that successfully conveying the clinical aspects underlying these behaviors had to involve a careful use of language, good story-telling, the effective use of imagery coordinated with the story, and extensive debriefing between expert and parents. Thus, even at this early stage of the project, it became apparent that the scope of content originally proposed was far too great to complete and evaluate in the 6-month time constraint.
   The project team made a decision to produce the initial version of the program for DVD video because we anticipated that our user group would be more likely to have a DVD player than a fast Internet connection. Except for authoring, the development process for both media is very similar.
   The team also developed the overall graphical look and the navigational elements of the program through an iterative review process. The team briefed the graphic artist on the basic requirements and preferences for the program and then reviewed the graphic artist's successive treatments and layouts until a final consensus was reached.

Here, too, the development process went well beyond our original vision. We were determined to evolve the look of the material into a state-of-the-art format that enhanced learning and thoroughly engaged the audience in that process. The trade-off was that enhancing the presentation format meant increasing the load time over the Web. Once we realized that DVD video was a practicable, and in some ways preferable, alternative to the Web product – it meant we would not have to sacrifice content for loading time – we opted for a much larger and more articulated visual format.

Once we decided on the medium, the team began producing the media elements for the course on anger outbursts. We sorted story characters by sex, age, and race. We then compared character description and appropriate action with stock footage, made script adjustments, reviewed and approved them. One of the stories served as a production "template;" we fully developed this story to achieve the desired look, feel, and timing. We could then replicate this format for the other stories.

We captured still photographs of appropriate character matches from video footage using Avid Xpress DV 3.0 nonlinear editing software. We then captured additional stills using the Sony DSC-F707. The graphic designer treated the stills in PhotoShop 6.0 and Freehand 10. Treatment included: cropping, layout, and incorporation into design elements. We then transferred all materials to the Flash animator.

We assigned voice-over parts concurrently to talent, scheduled and conducted rehearsals, and directed and recorded final recording sessions. Recording sessions occurred both in-house and were remotely directed with lead talent recording from the Education Technology Training Center in Denver, Colorado. The sound engineer then transferred the resulting audio tracks for cleaning, sweetening, filtration, and editing on Cool Edit Pro 1.2a and Sound forge 5.0.

The Flash animator used final audio files and graphic elements to create a first rough-cut according to the script, using Micromedia Flash 5.0 software. We conducted an initial review in which we cut some material and added additional sound effects and animations. This process was followed by another review, which further tightened timing and added or changed graphic elements. Additional reviews and revisions followed, resulting in streamlined content, a simplified user interface, with original music.

After the project team approved the template story, we continued the production of the other three stories in Anger Outbursts. We used the Flash environment to complete the bulk of the production process due to its capacity for quick turnaround time in production and revision. After final revisions, we output all files to be compatible with SonicDVDitPE, and from there authored as our final medium of DVD. This transfer required the Flash animator to undo the interactive programming in the Flash files, and export each story segment as an audio visual image (AVI). Our graphic designer also reproduced the buttons and menu screens and provided these in a format usable by the DVD author and designer. We completed and reviewed DVD authoring and added additional menus for user clarification. The team then burned the final DVD files, designed and created graphic labels, and replicated the Anger Outbursts DVD as a final product.

We subsequently have turned our attention to methods for streamlining the delivery of this product over the Web and have already considerably scaled down the load time for use with a dial-up modem.

<u>Focus Group</u>
We alpha tested the complete DVD video program with a group of foster parents recruited through Oregon Social Learning Center's foster parent training program, located in the Eugene community. The group consisted of four foster mothers, ages 40 to 59 years; two were white non-Hispanic, one was white Hispanic, and one was Asian. One had only 5 months of experience as a foster parent, while the other three were highly experienced (5-13 years).

The main purpose of the focus group was to assess parents' general impression of the presentation, to get specific feedback about any problematic content, and to test the ease of navigation. Everyone watched the program together on a DVD player, with parents taking turns operating the program using a remote control.

In these types of focus groups, we often learn about some key flaws or see some hesitation about aspects of the training program we are reviewing. However, the feedback in this case was remarkably positive. All four parents indicated:

- The material was exceptionally well organized.
- The material included an appropriate variety of behaviors.
- The instruction on concepts, skills, and information was very effective.
- The DVD was superior to the typical way in which they receive instruction, which is often "on the fly" and makes it much more difficult for them to comprehend and master.
- They especially liked the use of the multimedia montage to depict the family interactions.

- They appreciated the use of still images rather than videos, which they felt tend to be unrealistic and contrived.
- It was easy for them to use the remote control to navigate the program.

Final Production

In preparation for the evaluation study we replicated 80 copies of Anger Outbursts on DVD, labeled the discs, and designed a cover for the jewel case. In addition, we produced a full-color companion Viewer's Manual that summarized the program information. The organization of the manual paralleled the program. (A copy of the DVD is attached in Appendix A, and a copy of the Viewer's Manual is attached in Appendix B.)

Although we did not use the Web-based version of the program for the evaluation study, we completed development.

Experimental Methods

Sample

Participants were recruited from across the United States with the help of the National Foster Parent Association (NFPA) and the Colorado Coalition of Adoptive Families (COCAF). The response to the recruitment announcements was overwhelming, which demonstrated the large demand for this type of training. Once parents contacted their local agency, those groups passed on their names to this organization where we screened parents for acceptability into the study. In order to be eligible, parents had to be caring for a foster or adopted child over the age of 5 years throughout the time frame of the study and have access to a DVD player. After the initial eligibility call, we randomly assigned parents (using MS Excel's random number function) to both a group (either intervention or control) and one of our four trained phone interviewers. We then mailed informed consent letters to potential participants with a self-addressed, stamped envelope for their return. Participation in the study was voluntary. Foster parents who completed the study received credit for two continuing education hours, a copy of the Anger Outbursts program and viewer guide, and $50 compensation.

The final study sample was composed of 74 foster parents who completed both the preintervention and post-intervention assessments. (An additional six foster parents began the study but did not complete it because the callers were unable to reach them for all of the necessary telephone interviews.) Of the six noncompleters, only three completed background information and only two completed pretest information. Based on the small number of participants in these groups, analyses for differences between completers and noncompleters on either background or pretest information were not feasible. The final sample consisted of

only those participants who completed all measures – 40 parents in the control group and 34 parents in the intervention group.

As expected, the foster parent sample was predominantly female (about 92%). Ethnically, 3% of the overall foster parent sample identified themselves as Hispanic, while the remaining 91% identified themselves as non-Hispanic or Caucasian (5% of the sample were categorized as unknown/unreported ethnicity). Racially, the foster parent sample was also diverse, with 20% of the sample reporting races other than White or Caucasian. The foster children in the sample were more equally distributed by gender than the group of foster parents. Approximately 43% of all foster children were females. The foster children in the study sample also reflected diverse ethnic and racial backgrounds. (See Tables 1 and 2 in Appendix C for details regarding sample demographics.)

We found only one significant difference between the intervention and control samples on demographic and background information. Children in the control group were significantly *less* likely to have been previously placed with another foster family, X^2 = 4.11 (N = 74, p = .04).

<u>Data Collection</u>

Data collection occurred over five weeks and consisted of five interview calls. Initially, the callers introduced themselves, ensured that the families had returned the consent forms, and set up a time to conduct the next four calls. We used a standard script for these and all subsequent phone calls. During the first interview call, participants completed a demographics questionnaire, as well as pretest questionnaires on knowledge and perceptions of anger outbursts in children. (All questionnaires are described in the *Measures* section below.) The pretest call was 20-30 minutes in duration and took place prior to mailing intervention materials.

The intervention period began after the pretest interview call at the conclusion of week two. At this time, we mailed two DVDs to participants in the intervention group, one packet containing a test DVD and the other containing the intervention materials. During production, we realized that the method we used for replicating the Anger Outbursts DVDs was not compatible with some older DVD players. We used an in-house replication process so that we could produce a relatively small number of copies for the study. We instructed participants to first view the test DVD (which contained unrelated content about coping with memory loss in older adults) and to notify us if they experienced difficulty in viewing any of the content. Of the initial 39 intervention group families, 5 were unable to view the test DVD and were placed in the control group. Follow-up analyses found no significant differences on background or pretest information between those participants whose DVD players were incompatible with the Anger Outbursts DVD, and either the original control or intervention groups. The remaining 34 families continued in the intervention and spent the next two weeks viewing the training materials. Participants in the control group received no materials at this time.

The intervention period lasted two weeks, during which time all subjects received weekly phone calls. For the intervention group, these calls were designed to assess implementation fidelity. The control group was also phoned once a week for two weeks; however, they were asked only about their involvement, if any, in other foster parent training activities.

The final interview call, the posttest call, ranged from 20-30 minutes and took place during the fifth and final week of the study. Both intervention and control group participants completed the two questionnaires regarding parent knowledge and perceptions of anger outbursts in children. Also during this call, callers asked intervention group participants to complete a brief user satisfaction questionnaire on the relevance and quality of the materials they had reviewed. Callers again assured all participants of the confidentiality of their responses and provided them with access to debriefing upon completion of their participation. Following the posttest

calls, we mailed copies of the Anger Outbursts training materials to the control group families. Foster parents from both groups were permitted to keep all of the study materials they received. In addition, each participant received two education hours toward his or her organization's annual requirements and $50 as compensation.

Measures

Copies of all measures are included in Appendix D. All measures were created for the present study and underwent extensive analyses using focus groups (see *Results* section).

1) *Background Information (BI)*

This questionnaire consisted of demographic questions referring to both the foster parent and the foster child on whom the parent focused when responding to the questions on the Parent Perceptions questionnaire (described below). Foster parents reported their age, sex, race, income, level of educational attainment, and number of children in the home, as well as their foster parenting experience. They also noted the foster child's sex, age, and race, as well as the child's experience in the foster care system and any educational, behavioral, or mental health problems.

2) *Parent Knowledge*

This questionnaire consisted of 20 multiple-choice and true/false items. Items were based on informational content from all segments in the Anger Outbursts program. Three researchers reviewed the items until reaching a consensus on the appropriateness of language and format. We then conducted focus groups to assess the measures' face validity.

3) *Parent Perceptions*

This questionnaire consisted of 8 items that assessed three dynamic aspects of parents' self-perceptions regarding their children's angry behavior; 4 items dealt with parents' *confidence* in having the relevant parenting skills; 2 items dealt with parents' *comfort* with having a foster child with serious anger problems; and 2 items dealt with parents' *objectivity* in situations involving a foster child with serious anger problems. Parents rated how well each statement described their situation with their foster child (1 = *not at all*; 2 = *a little*; 3 = *mostly*; 4 = *very much*).

4) *User Satisfaction*

This questionnaire consisted of 8 items that asked parents to rate their satisfaction with various aspects of the program on a four-point scale (1 = *not at all*; 2 = *a little*; 3 = *mostly*; 4 = *very much*). An additional item asked parents to rate the overall quality of the program on a scale of 1 (*poorest*) to 10 (*best*). Finally, parents reported additional comments they may have had to the producers of the program.

5) *Implementation Fidelity (Check-In)*

Callers used a measure of implementation fidelity weekly throughout the intervention period. This measure had two versions, one for the intervention group and one for the control group. The question common to both measures asked if the foster parent had been involved in any other parent training activity during the past week. For the intervention group, the check-in measure contained two additional questions asking the foster parents if their DVD was working correctly and an approximation of the time they spent on the materials in the previous week.

Results

The results are summarized using three sections: a description of our research questions, preliminary analyses, and final outcome analyses.

Research Questions

We examined the impact of the training materials on two main outcome variables. We were also interested in how much time parents spent viewing the materials and what they thought of

the program, resulting in four main research questions:

1) Controlling for pretest differences, to what extent is there a main effect of group on knowledge of anger outbursts in children, where foster parents in the intervention group demonstrate significantly higher scores on the Anger Outbursts knowledge questionnaire at posttest?

2) Controlling for pretest differences, to what extent is there a main effect of group on parent perceptions of anger outbursts in children, where foster parents in the intervention group report higher scores on the Parent Perceptions measure at posttest?

3) How much time, on the average, did the intervention group spend using the training materials?

4) To what extent are the user satisfaction ratings favorable for foster parents in the intervention group?

<u>Preliminary Analyses</u>

Focus Groups.

Prior to the Phase I evaluation study, we conducted alpha tests of both the measures and the training materials. The first focus group we conducted provided a preliminary check of the study's measures. Members consisted of one foster mother and one foster father, ages 38 and 43, both white non-Hispanic. Their feedback was useful and helped to clarify instructions, abbreviations, and language on all measures.

We conducted a second focus group as a final check of both the measures (their readability and sensitivity to change over time) and the Anger Outbursts DVD itself. Participants completed the questionnaires before and after watching the Anger Outbursts DVD, so that we could check for possible floor and ceiling effects and to get a preliminary sense about the sensitivity of the measure to treatment effects. Members consisted of four foster mothers, ages 40 to 59 years; two were white non-Hispanic, one was white Hispanic, and one was Asian non-Hispanic. Feedback indicated that the corrections we made after the first focus group solved any problems with language or instructions. Combining results from the first focus group and the pretest of the second, high variability in scores indicated no ceiling or floor effects for any item. Finally, scores for the second focus group improved from pretest (M = 11) to posttest (M = 14.25).

Assumptions of MANCOVA.

This study used a pretest, posttest control group design with random assignment to groups. This experimental design can adequately control for all main threats to internal validity (Campbell & Stanley, 1963; Shadish, Cook, & Campbell, 2001) and allow for the use of more powerful statistical analyses through the use of covariates. Given the power of our experimental design, we were able to address our research questions using a one-way, between subjects multivariate analysis of covariance (MANCOVA). MANCOVA has superior power for detecting differences on multiple dependent variables within a single study. In this design, group served as the independent variable with two levels: intervention and control. Quantitative pretest scores on the anger outbursts knowledge and parent perceptions questionnaires were standardized to form a composite covariate, and posttest scores on these same measures were used as dependent variables.

Given our choice of experimental design, many of the theoretical assumptions of MANCOVA were met, primarily that we demonstrated an adequate control of sources of extraneous variability. However, before proceeding, we also needed to evaluate the statistical assumptions of this procedure: multivariate normality, equality of variance-covariance matrices (homoscedasticity), linear relations between all quantitative measures, homogeneous regression of all covariates and dependent variables, reliable covariates, independence of

independent and dependent measures (no multicollinearity or singularity).

Using visual analysis of histograms, we found that the distribution of pre- and posttest scores on both quantitative measures was approximately normal for both groups. With respect to the assumption of homoscedasticity, Levene's test of Equality of Error Variances was nonsignificant (Anger Outbursts-Knowledge F 1,72 = 2.67, p = .11; Parent Perceptions F 1, 72 = 1.93, p = .17), indicating that the assumption of equal variance covariance matrices was tenable.

We also used visual analysis of scatterplots to examine linearity of relations between and among dependent variables, covariates, and dependent variable/covariate pairs. All scatterplots indicated moderate linear relations. With respect to correlations, the dependent variables were correlated without being redundant, r = 0.21, p = .08, and the covariate was also found to correlate significantly with both dependent variables, Anger Outbursts-Knowledge r = .23, p = .05; Parent Perceptions r = .45, p = .00.

When assessing the reliability of our covariates, we found low Cronbach's alpha for the Anger Outbursts Knowledge (.48) and a moderate to high test statistic for the Parent Perceptions measure (.75). It is important to note that MANCOVA is robust to violations of this assumption when there are no missing data and sample sizes are large and equal. In this case, sample sizes were relatively equivalent between groups ($n_{intervention}$ = 34, $n_{control}$ = 40), and there were no missing data from pre- to posttest. Convinced that our statistical analysis was appropriate, we began the model selection procedure to choose the most appropriate analysis for dependent measures.

Selecting Appropriate MANCOVA Model.

Whenever conducting an analysis using a covariate, one must consider multiple models and accept the most parsimonious. The first model, unequal slopes and unequal intercepts, was abandoned given that the differences in slopes for the intervention and control groups were neither significant, (Anger Outbursts-Knowledge: F 1, 70 = .09, p = .77; Parent Perceptions: F 1, 70 = .28, p = .60), nor important (Anger Outbursts-Knowledge and Parent Perceptions, η^2 = .00).

We chose to analyze our data using the second model, assuming equal slopes and unequal intercepts, given that the slopes for both intervention and control groups were significantly different from zero (Anger Outbursts-Knowledge: t 70 = 4.12, p = .00; Parent Perceptions: t 70 = 2.00, p = .05).

Outcome Analyses
Multivariate Results and Follow-Up Analyses.

To evaluate our first two research questions, we first examined the multivariate effect for group using an equal slopes MANCOVA model. We found a significant multivariate effect of group, F 2, 70 = 10.19, p = .00, as well as a large, overall effect size for the model, η^2 = .23 (see Table 3 in Appendix C).

Based on the significant multivariate effect, we conducted follow-up univariate Analyses of Covariance (ANCOVAs) to determine on which dependent variables (or linear combination of variables) the groups differed. We found significant group differences for each dependent variable in the analysis, Anger Outbursts-Knowledge: F 1, 71 = 17.01, p = .00, η^2 = .19; Parent Perceptions: F 1, 71 = 4.01, p = .05, η^2 = .05 (see Table 4 in Appendix C).

Implementation Fidelity.

Regarding implementation fidelity in the treatment group, we found promising results. On average, participants in the treatment group viewed the Anger Outbursts DVD a total of 2 times – approximately 1½ hours of total training time (M = 2.06, SD = 1.31, n = 36). Also as part of

this analysis, we examined any group differences on the number of additional training activities in which participated during the two-week intervention period of our study. We found no significant differences, X^2 = 2.26 (N = 76, p = .32).

User Satisfaction Data.

Our fourth and final research question was to evaluate the extent to which intervention group participants rated the DVD with high satisfaction. We found that the majority of participants responded favorably (M = 3.56, SD = .41, n = 34). On a scale from 1 to 4 with higher scores representing higher levels of user satisfaction, no participant had an average rating below 2.5. The final user satisfaction question was a rating from 1 to 10 (one being poorest quality, 10 being highest quality) on the overall quality of the DVD. Over two-thirds of the sample gave the DVD a rating of 8 or higher, with only six percent giving it a rating below 6.

Discussion

The results of our Phase I evaluation were uniformly encouraging. Not only did participants' knowledge of the content increase from pre- to postassessment, but their overall perceptions around their confidence in dealing with these issues in their own children also improved. These changes for the intervention group were not only significant but also *important*, based on indicators of effect size. According to Cohen (1992), effect sizes of .35 are considered large in a multivariate analysis. For our study, we found effect sizes (as measured by an estimate of eta-squared) of .23, well within the medium to large range.

Participants rated the materials highly in terms of their own satisfaction with the product and, as such, chose to view the material more than once, which also probably contributed to the large effect sizes.

The results were an important indication that in-home training is a feasible way for foster parents to learn clinically based information about challenging topics. We attributed this finding to: 1) the soundness of the content, 2) parents' ability to regulate the pace of instruction, 3) the credibility of and comfort with the parent-expert dialog, and 4) the use of a multimedia slide-show format to realistically convey problem situations. Video dramatizations, in contrast, often appear contrived, are quickly outdated, and can be so specific in their personal and contextual representations that groups of viewers can sometimes feel excluded.

It was especially encouraging that participants showed significant gains in knowledge *without* any supervision. This finding undoubtedly will provide agencies with some much-needed relief from having to provide staff-based training. It will also likely be a boon to parents in helping them keep up-to-date on their training requirements

Improvements in parent perceptions added another important dimension to the findings. Measures of perceived confidence in one's skills, comfort, and objectivity to deal with a serious behavior problem may not be easily changed because they involve personality factors and well-established family dynamics.

Although the scope of development in Phase I included fewer courses than we originally proposed, we did invest our time and effort in creating a new presentation format. The development of this format was an intensive creative process that also took advantage of unfolding technological improvements. Our findings have given us considerable confidence that the format we developed will be highly effective as a training resource.

Appendix A

DVD

Anger Outbursts

Appendix B

Viewer Guide

Anger Outbursts

Appendix C

Tables

Table 1

Sample Demographics

Item	Foster/Adoptive Parents		Foster/Adoptive Children	
	%	*N*	*%*	*N*
Sex				
Female	91.9	68	43.2	32
Male	8.1	6	56.8	42
Ethnic Background				
Hispanic or Latino	2.7	2	18.9	14
Not Hispanic or Latino	90.5	67	75.7	56
Unknown/Not reported	6.8	5	5.4	4
Racial Background				
White	79.7	59	58.1	43
Black or African American	9.5	7	17.6	13
American	2.7	2	2.7	2
Native Hawaiian/Other	0	0	2.7	2
Multiracial	2.7	2	9.5	7
Other	1.4	1	4.1	3
Unknown/Not reported	4.1	3	5.4	4
Experienced FP/AP[a]	85.1	63		
School Services			63.5	47
Mental Health Services			68.9	51
Suspension / Expulsion			35.1	26

Note. There were no significant differences between groups (intervention and control) on any of these items from the background information questionnaire.

[a] Foster and adoptive parents were considered "experienced" if they had been care providers for at least 2 years at the time of the study.

Table 2

Sample Demographics Part 2

Item	Foster/Adoptive Parents		Foster/Adoptive Children	
	Mean	Median	Mean	Median
Age (years)	45.65	45	10.09	10
Time in Foster/ Adoptive Care[a] (months)	105.47	93	67.29	60
Level of school completed[b,c]		Two-years college		
Gross Annual Family Income[b,c]		$40,000 - $49,999		
Total Foster/Adoptive Children[c]	42.45	14		
Current Foster/ Adoptive Children[c]	1.82	1		
Children in the home[c]	3.84	4		
Time in Current Placement (months)[d]			37.42	21
Number of other foster families[d]			2.45	2

Note. Children in the control group were significantly *less* likely to have been previously placed with another foster family, $X^2(1, N = 74) = 4.11$, $p < .05$.

[a] Time in foster/adoptive care for parents is equal to their length of time as a foster/adoptive parent; time in foster/adoptive care for children is equal to the length of time as a child in the foster/adoptive care system.

[b] Nominal scale, not appropriate to report mean scores.

[c] Not applicable to foster/adoptive children sample.

[d] Not applicable to foster/adoptive parent sample.

Table 3

Results of Equal Slopes MANCOVA for all Families on both Outcome Measures

Source [a]	df	F [b]	η^2	p
Group	2, 70	10.19*	.23	<.00
Covariate	2, 70	5.95*	.15	<.00

[a] Model 2 is used, assuming equal slopes, given the non-significant group by covariate interaction.
[b] Based on Pillai's Trace.
* *p* < .01.

Table 4

Results of One-way, Between Subjects Analysis of Covariance for Both Dependent Measures

Source [a]	df	Parent Knowledge			df	Parent Perceptions		
		F	η^2	p		F	η^2	p
Group	1	17.01**	.19	<.00	1	4.01*	.05	<.05
Error	71	(117.61)			71	(0.19)		
Corrected Total	73				73			

Note. Values in parentheses represent mean square errors.
[a] Model 2 is used, assuming equal slopes, given the non-significant group by covariate interaction.
* $p < .05$.
** $p < .01$.

Appendix D

Measures

Background Information

The following questions are about YOU.

1. Age:

2. Gender:
   ☐ Female   ☐ Male

3. Ethnicity
   ☐ Hispanic or Latino   ☐ Not Hispanic or Latino   ☐ Unknown or not reported

4. Race *(check all that apply)*:
   ☐ White   ☐ Black or African American
   ☐ American Indian or Alaska Native   ☐ Native Hawaiian or Other Pacific Islander
   ☐ Asian   ☐ Other: ___
   ☐ Unknown or not reported

5. Highest level of school completed *(circle one)*:

   Grade: 1 2 3 4 5 6 7 8 9 10 11 12   College: 1 2 3 4 5+

6. Previous year's gross family income:
   ☐ under $20,000   ☐ $40,000 to $49,999   ☐ $60,000 to $69,999
   ☐ $20,000 to $29,999   ☐ $50,000 to $59,999   ☐ over $70,000
   ☐ $30,000 to $39,999

7. How long have you been a foster parent? _____ months/years *(circle one)*

8. How many foster children *in total* have you provided care for?

9. How many foster children are you *currently* providing care for?

10. How many other children (birth, step, adopted) do you have?

11. How many children ages 18 and under live in your home right now?

Background Information

These next questions refer to YOUR FOSTER CHILD.
If you have more than one foster child, choose ONE child for this project
who has, or may have, problems with anger outbursts.

1. Gender:
   ☐ Female   ☐ Male

2. Age:

3. Ethnicity
   ☐ Hispanic or Latino   ☐ Not Hispanic or Latino   ☐ Unknown or not reported

4. Race *(check all that apply)*:
   ☐ White   ☐ Black or African American
   ☐ American Indian or Alaska Native   ☐ Native Hawaiian or Other Pacific Islander
   ☐ Asian   ☐ Other: _____
   ☐ Unknown or not reported

5. When did your foster child first enter the foster care system? _____ / _____ /

6. Was your foster child placed with other families before yours?
   ☐ Yes   ☐ No

   If Yes, how many other families?

7. How long has your foster child lived in your home? _____ months/years *(circle one)*

8. Does your foster child receive any school services because of education or behavior problems?

   ☐ Yes   ☐ No

9. Does your foster child use any mental health services?
   ☐ Yes   ☐ No

10. Has your foster child ever been suspended or expelled from school?
    ☐ Yes   ☐ No

Anger Outbursts
Parent Knowledge

I'll read a question and then some possible answers.
You tell me which answer you think is the BEST one.
There are 20 questions.

1. Which is the most likely reason for erratic anger outbursts in children?
   a. Temperament.
   b. Observing domestic violence.
   c. Being a victim of child abuse.
   d. Brain chemistry.

2. Fathers should *not* get involved in disciplining a child who directs rage toward the mother.
   True.
   False.

3. Showing sympathy when a child throws a temper tantrum:
   a. Is essential to restoring the child's self-esteem.
   b. Only temporarily calms the behavior.
   c. Can encourage the behavior.
   d. None of the above.

4. Homicide is the second leading cause of death among youth 15-24 years.
   True.
   False.

5. Exposure to alcohol in the womb can cause a child to have unpredictable anger outbursts.
   True.
   False.

6. Children usually throw tantrums because:
   a. They fear adults.
   b. They want to control others.
   c. They have a neurological problem.
   d. They don't have good social skills.

7. Poor attachment may be the source of a child's anger toward adults.
   True.
   False.

8. What is a good first step in getting help for a child with serious anger outbursts?
   a. Request a thorough psychological assessment.
   b. Plan an Individualized Educational Plan with the child's school.
   c. Find a qualified therapist.

d. Ask a pediatrician about parenting techniques.

9. Self-mutilating behavior is ***not*** related to anger in children.
    True.
    False.

10. A psychological assessment of a child who is assaultive should include:
    a. The child's capacity to attach.
    b. The child's school work.
    c. The child's motor skills.
    d. All of the above.

11. Foster parents should ***not*** get involved in their assaultive child's psychotherapy.
    True.
    False.

12. If a child with an anger problem feels loyal toward the birth mother:
    a. Foster parents should point out the birth mother's limitations.
    b. Caseworkers should talk to the child about terminating parental rights.
    c. Counselors should discuss it as part of the child's psychotherapy.
    d. None of the above.

13. In dealing with children's tantrums, parents should:
    a. Stay with the child until the tantrum is over.
    b. Keep other family members out of solving the problem.
    c. Encourage children to use words to get what they want.
    d. Avoid using time out.

14. Being picked on by other children is a major warning sign of serious anger problems.
    True.
    False.

15. Most erratic anger is a bad habit that can be changed through behavior management techniques.
    True.
    False.

16. When experienced foster parents have a child with unpredictable anger and there are no obvious explanations for the behavior:
    a. The parents probably need more training.
    b. It is time to move the child to a new foster home.
    c. The cause may involve the child's nervous system.
    d. The parents are probably exaggerating the problem.

Anger Outbursts
Parent Knowledge

17. It is more common for foster children entering a new home to direct their rage toward the father than the mother.
    - True.
    - False.

18. Abused children may take out their anger on other children because:
    - a. They are intimidated by adults.
    - b. They've learned that smaller individuals hurt bigger ones.
    - c. They are bullies.
    - d. All of the above.

19. Letting an angry child get frustrated at times:
    - a. Can help the child learn to wait.
    - b. Is useful only for older children.
    - c. Is useful only for younger children.
    - d. Can damage a child's self-esteem.

20. Which is *not* a warning sign of serious anger problems in a child?
    - a. A history of anger outbursts and violence.
    - b. Poor behavior control.
    - c. Being withdrawn.
    - d. Violent themes in drawing or writing.

Anger Outbursts
Parent Perceptions

I'll read a statement, then you tell me how well it describes
you and your foster child right now.
1 is not at all; 2 is a little; 3 is mostly; and 4 is very much.

	ot all	a little	mostly	very much
I would know when I needed to get professional help for my child's anger outbursts................................	1	2	3	4
I would know how to handle my child if he or she had a serious problem with anger outbursts............	1	2	3	4
I can recognize the different types of anger outbursts in children..	1	2	3	4
I understand what causes different types of anger outbursts in children..	1	2	3	4
It would affect my child's placement if he or she had a serious problem with anger..	1	2	3	4
I feel drawn into power struggles with my child when he or she is angry.............................	1	2	3	4
I feel my child's anger is aimed personally at me	1	2	3	4
I feel comfortable talking with other parents about my child's anger................................	1	2	3	4

User Satisfaction

*For each statement I read,
tell me how satisfied you were with the training materials.
1 is not at all; 2 is a little; 3 is mostly; and 4 is very much.*

	not at all	a little	mostly	very much
1. Did you find these materials helpful?	1	2	3	4
2. Do you think having the instruction on DVD was effective?	1	2	3	4
3. Were the parenting stories in the DVD relevant to your experiences as a foster parent?	1	2	3	4
4. Was it easy to understand how to view the stories on the DVD?	1	2	3	4
5. Was it helpful that the materials addressed different kinds of anger problems?	1	2	3	4
6. Would you recommend these materials to other foster parents?	1	2	3	4
7. Would you want to receive more instruction with a DVD?	1	2	3	4

8. On a scale of 1 to 10, where 1 is the
   poorest quality and 10 is the highest
   quality, how would you rate the DVD?............... 1 2 3 4 5 6 7 8 9 10

9. Do you have any comments or suggestions to the producers about this project?