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Web-Enhanced Preservice Training for Prospective Resource Parents: A Randomized Trial of Effectiveness and User Satisfaction

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Abstract

Traditionally, prospective resource parents must attend all preservice training in person. While live sessions are necessary for activities such as screening applicants, instructional portions of training could be enhanced by web-based sessions. This pilot study compares the effectiveness of online and classroom versions of one session from a widely used preservice training program. Ninety-two individuals who volunteered to complete the program in two states were randomly assigned to a treatment group that viewed an online version of the class on child abuse and neglect or a comparison group that took the same class in person. Written questionnaires were completed before and after the class. Significant group differences on knowledge of child maltreatment and empathy toward birth parents, plus high user satisfaction, were hypothesized. ANCOVA results showed the online training was more effective than the live training at increasing knowledge. MANCOVA findings on empathy were not significant but trended toward greater empathy for the online group. Feedback indicated high satisfaction with the online course. If supported by future research, the finding that online instruction is more effective than live has positive implications for practice, because web-based training offers advantages like standardizing instruction, cutting agency and trainee costs, and providing greater flexibility.

Keywords

foster/adoptive parents; kinship caregivers; preservice training; randomized trial; resource parent training; web-based training

Preservice training, traditionally conducted in a classroom setting, gives prospective resource parents a broad orientation to the child welfare system, along with foundational

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knowledge and skills on parenting children in care; at the same time, it gives agencies the opportunity to screen potential foster/adoptive parents (Baum, Crase, & Crase, 2001; Dorsey et al., 2008; Gerstenzang, 2009). Although face-to-face contact between agencies and prospective resource parents is—and will continue to be—a critical part of preservice training, online training has the potential to greatly enhance in-person training.

Current Preservice Training Programs

There are currently three widely used preservice training programs in the United States: Model Approach to Partnerships in Parenting (MAPP), developed by the Child Welfare Institute; Parent Resources for Information, Development, and Education (PRIDE), developed by the Child Welfare League of America; and Institute for Human Services (IHS), initially developed for the Ohio Child Welfare Training Program (Grimm, 2003). All three rely on in-person sessions for the delivery of their training material, and they include self-assessments to help potential resource parents decide whether they are cut out for that role. Prospective resource parents are required to attend preparatory classes to learn about state requirements, as well as the responsibilities, challenges, and rewards of volunteering for service. Agencies also use meetings to evaluate applicants' suitability to be resource parents. The classes are typically taught by trained social workers. Agencies often modify or blend a curriculum to meet their own, their county's, or their state's needs. In general, the content of the widely used training programs focuses on a similar range of germane topics, including: an overview of the child welfare system; child abuse and neglect; understanding child development issues related to child abuse; protective parenting approaches; addressing sexuality and sexual behavior in children who have been victimized; working with the primary family; working as a member of the child welfare team; cultural sensitivity; promoting permanency for children; and understanding and addressing the impact of foster care on the foster family. Full descriptions of these programs appear elsewhere; see, e.g., Christenson & McMurtry, 2007; Deluca & Spring, 1993; Dorsey et al., 2008; Grimm, 2003; Lillie, 1991; Ohio Child Welfare Training Program, 2007.

Evaluation research on preservice training programs is scarce. (For a recent review article, see Dorsey et al., 2008.) Puddy and Jackson (2003) conducted a study of the updated MAPP program (MAPP/Group Preparation and Selection of Foster and/or Adoptive Families, or MAPP/GPS). They found that prospective resource parents trained with MAPP/GPS improved on only 4 of 12 program goals and 3 of 22 parenting skills, as measured by gains in knowledge about them. The researchers concluded that the program is better suited for helping people through the self-selection process than actually preparing them to be foster parents.

Grimm (2003) described an evaluation of PRIDE by the Consortium for Child Welfare in the District of Columbia, which found that the program had a positive effect on participants' knowledge in the program's five core areas: "understanding foster care, attachment, grief and loss, child development, and universal precautions" (p. 25). Christenson and McMurtry (2007) reported on a study of PRIDE in Idaho, in which pre- to posttest gains were found in participants' knowledge of the five PRIDE competency areas (protecting and nurturing children; meeting their developmental needs; supporting their relationships with their families; connecting them to safe, nurturing relationships; and working as part of a professional team).

Researchers at Ohio State University conducted an evaluation of the IHS preservice training program based on feedback from foster parents who had completed the training, as well as from trainees who left the program before completing it, agency trainers, and other agency staff (Rindfleisch & Schwertfager, 1998). Following completion of the training, parents felt

they had gained knowledge in all six content areas covered by the survey (separation and placement; birth family; discipline and control; sexual abuse; impact of abuse and neglect; and values, standards, and heritage). Also, agency staff indicated that these new foster parents seemed well prepared; e.g., they were in contact with birth parents, they were advocating for the children, and they were flexible and resourceful.

Unfortunately, the little research that has been conducted on preservice training programs has not been very rigorous. The studies cited above suffer from various limitations in their design and/or methodology (Dorsey et al., 2008; Grimm, 2003). For example, while the Puddy and Jackson (2003) study of MAPP/GPS included both a treatment and a no-treatment control group, subjects were not randomly assigned to groups, and the control group was very small (n = 20). Neither of the cited studies of PRIDE included a comparison or control group. In the study of IHS, which also lacked a comparison or control group, participants were asked after completing the program to assess their own pre- and posttraining levels of knowledge, rather than being asked to complete knowledge questionnaires before and after taking the training. Although the current study was not an expansion of any of these earlier studies of preservice training programs, it did advance the level of research in this area by adopting a quasi-experimental design with a pretest and random assignment to groups. It was also the first to compare the effectiveness of an online and a classroom preservice training session.

Limitations of Current Preservice Programs

There is tremendous variability in the content and delivery of preservice training from state to state, and even from one county to the next (Dorsey et al., 2008; Grimm, 2003; Zukoski, 1999). Even when standardized programs like those mentioned above are used, they may be modified to fit local needs, and there is often a significant amount of variation in how individual trainers implement them (Zukoski, 1999). The quality of instruction depends in great measure on the competencies of individual staff (Guerney & Wolfgang, 1981; Puddy & Jackson, 2003).

Current preservice programs are stymied by a host of practical considerations, which may actually hinder, delay, or prevent potential resource parents from completing their training. Studies on foster care recruitment have pointed to cumbersome, time-consuming, and often costly preservice training requirements as a serious barrier to increasing the pool of prepared foster parents (see, e.g., Marcenko, Brennan, & Lyons, 2009; U.S. DHHS, 2002). It has long been noted that individuals have to deal with busy schedules, transportation costs, and childcare, e.g., to attend in-person training sessions (Cahoon, 1998; Grimm, 2003; Hampson & Tavormina, 1980; U.S. DHHS, 2002). As for couples, schedules often vary between the two individuals, permitting one to fulfill training requirements but preventing the other from completion. The result is a delay in their approval as a couple or even their loss to the system. Agencies, for their part, often find it difficult or impossible to offer make-up classes, and states often have a hard time tracking whether parents have satisfied their training requirements (Grimm, 2003).

Future Directions for Preservice Training: The Role of the Web

Two previous studies have demonstrated that web-enhanced training offered through FosterParentCollege.com (FPC), an online training venue for resource parents developed by Northwest Media, Inc., is an effective approach for *inservice* training, or continuing education (Pacifici, Delaney, White, Cummings, & Nelson, 2005; Pacifici, Delaney, White, Nelson, & Cummings, 2006). FPC provides online, on-demand, user-driven interactive multimedia training, along with a complete management system that allows agencies to register users, assign classes, follow viewers' progress, create reports on individuals or

groups, and interact with parents through email and discussion boards. IMM courses allow users to start or interrupt instruction at any time, participate interactively, and accomplish the work in intervals without scheduled meetings and on their own schedule.

In the current study, the training linked a sequence of brief instructional segments that included several media components: an audiovisual presentation of a scripted conversation between a narrator and nationally recognized content experts, a series of dramatized audiovisual reenactment stories, a number of interactive exercises, printable handouts, an electronic and private journal for notes, a discussion board, and email for inquiries to agency instructors from any point in the program. This design required participants to view segments in sequence and to frequently interact with the program for it to continue to run, eliminating the possibility of running the training while stepping away from the computer.

Personal contact between agencies and prospective foster parents has been widely considered an important ingredient of *preservice* training, because it allows mutual assessments: self-selection by the potential foster parent (Do I really want to be a foster parent?) and screening by the agency (Are they up to the task of being foster parents?) (see, e.g., Baum, Crase, & Crase, 2001; Dorsey et al., 2008; Gerstenzang, 2009; Grimm, 2003). However, a substantial part of preservice training involves conveying knowledge and shaping attitudes and expectations that are necessary for effective resource parenting, tasks which lend themselves to online delivery. Using quality online training can reduce the amount of time and scheduling involved in attending classes and the number of staff hours required for in-person training. Online modules can also be used by agencies to supplement or enhance their current live training. The use of quality web-based training that is self-regulated has a number of distinct advantages: It standardizes the content and presentation, using nationally recognized expert trainers. Its content can be quickly updated. It can relieve some of the burden on prospective resource parents by allowing them to complete or review parts of the training in the convenience of their homes. The online presentation is more succinct and efficient; in this study, the module was reduced from 3 to 2 hours. Resource parents can use the individual training modules to serve as a make-up or refresher if they missed or wish to review one or more sessions. Interactive multimedia instruction is a compelling and popular environment for parent learning. Web-based training is also cost-effective for both agencies and parents, as it reduces staff time for the former and travel and childcare expenses for the latter. The online management and report system saves time and allows individual trainers and agencies to more easily regulate, document, and track training.

The present study assessed whether the online training format was as effective as the classroom format in improving participants' knowledge about child abuse and neglect, as well as their empathy for birth parents. It also compared participants' satisfaction with the online and classroom delivery formats.

We hypothesized that there would be significant differences between the treatment and comparison groups' scores on parent knowledge of child maltreatment at posttest (controlling for pretest differences). We also anticipated significant group differences in empathy toward birth parents at posttest (controlling for pretest differences). In addition, we expected strong satisfaction ratings for the intervention (2.5 or higher on a scale of 1-5, where 1 is the best and 5 is the worst).

Method

This study evaluated the first *preservice* training offered on FosterParentCollege.com. The study assessed the effectiveness of a single online training module, adapted for the web from the original IHS preservice training program for prospective foster, kinship, and adoptive

parents. The complete IHS preservice training program consists of twelve 3-hour workshops. We selected the module on the *Impact of Abuse and Neglect on Child Development* as the first one to adapt for the web, because it is a foundational unit for the rest of the training program, imparting relevant knowledge to parents about child maltreatment and also promoting empathy toward birth parents. (Note: We did not cover child sexual abuse in any detail during the online version of this module, leaving that delicate topic for later in the series.) In addition, it was singled out by a sample of trainers in the Ohio State University study as "hard to deliver and hard to maintain interest" (Rindfleisch & Schwertfager, 1998, p. 29), making it a good test case for interactive, multimedia delivery.

Participants

Prospective foster parents were recruited through four IHS training sites in Utah and Wisconsin, representing both rural and urban settings. Our final sample included 92 prospective foster parents, 41 in the treatment group and 51 in the comparison group. Of the 92, 60% were female. Racially, the sample was about 89% White, 7% Black or African American, and nearly 4% biracial. In terms of ethnicity, 10% of the sample identified themselves as Hispanic or Latino. The mean age of participants was 38.6 years. Most of them (about 86%) had not previously participated in any foster parent training.

Because human subjects were involved in the study, Institutional Review Board approval was sought and obtained before the study began. Participation in the study was voluntary, and upon completion, participants received $35.

Procedure

Information about the study was announced at each of the study sites to groups of prospective foster parents attending the introductory meeting of the IHS preservice training. Interested individuals completed a consent form and were then randomly assigned to a treatment or comparison condition. Next an email was sent to treatment group members with instruction for logging in to the online class.

All participants took the first two classes in the IHS training program in person. Participants in the treatment group viewed the third class online, on a computer at home or elsewhere that was equipped for high-speed Internet access and sound. Comparison group participants attended the third class meeting in person. Both groups attended all remaining classes in person as usual.

All participants completed the pretest assessment battery at the first class meeting and the posttest assessment battery before the beginning of the fourth class. The pretest battery included the following questionnaires (described below): *Background Information, Knowledge of Child Abuse and Neglect*, and *Empathy & Perspective Questionnaire*. The posttest battery included the *Knowledge* and *Empathy* questionnaires, as well as the *User Satisfaction Questionnaire*.

The Web-Based Intervention

The online course we produced, entitled *Child Abuse and Neglect*, consisted of three integrated instructional sections: Understanding Child Maltreatment, Creating Empathy for Birth Parents, and Maltreatment Recognition and Reporting. The first part consisted of four chapters. Chapter 1 provided an overview of child maltreatment. Chapter 2 gave definitions of abuse and neglect; differentiated between physical abuse, neglect, and sexual abuse; examined other forms of child maltreatment; discussed the co-occurrence of different forms of child maltreatment; and introduced the purpose and composition of the foster care team.

Chapter 3 discussed the complexities of identifying the circumstances and characteristics of families where child maltreatment occurs. Chapter 4 debunked stereotypes about birth parents' personalities and the likelihood that they will maltreat a child.

The second part explored the relationship between birth parents and foster parents, underscored the psychological and practical importance of building bridges between them, discussed factors in the development of empathy, and introduced a story of three successive generations of a maltreating family. The third part presented sequences of visual slides depicting and describing child abuse to help prospective resource parents recognize the physical signs of abuse. It also discussed criteria for recognizing the occurrence of child abuse, presented general procedures for reporting suspected child maltreatment, clarified criteria and responsibilities for mandatory reporting, and examined factors that heighten the risk of child abuse while the child is in foster care, as well as strategies for reducing those risk factors.

Interlaced throughout the course were interactive exercises to help viewers understand and retain the course content. In the exercises, viewers heard a series of statements on a topic and were asked to choose, e.g., whether the statements were true or false. After viewers clicked on an answer, they immediately received feedback on the correct answer. Finally, the online course included four printable handouts with supplemental material.

Measures

All study measures were paper-and-pencil, self-report measures.

Background Information—A 7-item background information questionnaire was developed by project research staff to obtain information regarding participants' gender, age, ethnic and racial background, education, income, and previous foster parent training.

Knowledge of Child Abuse and Neglect (KCAN)—The 20-item knowledge scale, also developed in-house, was based on the content in module 3 of the IHS training curriculum. True-false and multiple-choice questions covered the dynamics of child maltreatment, the underlying reasons primary parents may abuse or neglect a child, and the concept of empathy.

Empathy & Perspective Questionnaire—Project staff developed this 14-item adaptation of the Empathic Concern (EC) and Perspective Taking (PT) subscales of the Interpersonal Reactivity Index (IRI) (Davis, 1980). The overall IRI is a self-report measure composed of four 7-item subscales tapping different aspects or components of empathy. It is the most widely used measure of empathy (Pulos, Elison, & Lennon, 2004). Respondents indicate how well each statement in the IRI describes them on a 5-point Likert-type scale ranging from 1 (*does not describe me well*) to 5 (*describes me very well*).

The EC subscale taps the "tendency to experience other oriented feelings of warmth, compassion, and concern" (Cliffordson, 2002, p. 51). Higher scores on the subscale indicate higher levels of empathic concern. Standardized alpha coefficients for the EC subscale by gender are .68 for males and .73 for females (Davis, 1980).

In adapting the EC subscale, we retained the original subscale's format and number of items, only changing the language of the statements somewhat to better fit our study sample of prospective foster parents and their empathic concern for the relevant birth parents.

The PT subscale of the IRI taps a more cognitive, rather than affective, dimension of empathy. Higher scores on the subscale indicate higher levels of cognitively taking the

perspective of another. As with the EC, in adapting the PT subscale we retained the original format and number of items, changing only some wording of statements to better fit our sample.

At posttest, we also asked all study participants to complete the original versions of the IRI's EC and PT subscales, so that we could evaluate our adaptations relative to the criterion measure. Raw scores were used to help establish the concurrent, criterion-related validity of the overall Empathy & Perspective Questionnaire.

User Satisfaction—Two versions of this questionnaire (a 14-item treatment group version and a 5-item comparison group version) were developed in-house to elicit feedback about the course from study participants. The two versions had several items in common for purposes of comparison; the treatment group version had additional items related to the website and online training. Both versions included an open-ended item giving participants a chance to make comments or suggestions about the training, and the treatment group version included an open-ended item asking about any difficulties experienced while using the website.

Results

Preliminary Analyses

Of the 119 initial participants, 92 had complete study data and were included in all further analyses. Because the attrition rate was greater than 5%, we examined group differences between completers and noncompleters to see if there was any systematic explanation for study drop-out. Importantly, drop-out did not appear to be differential, i.e., equal numbers of noncompleters were from the treatment and comparison groups χ^2 (1, N = 119) = 2.83, p = .09.

Proceeding with the 92 participants who had complete data, we examined differences between our two experimental groups on all demographic items from the Background Information questionnaire. We conducted independent samples t-tests and/or chi-square analyses to detect any systematic demographic differences between the two groups. Using an alpha level of .05 we found no significant difference between the groups.

Content validity for the KCAN and the EC and PT subscales was estimated using the original IRI subscales as the criterion measure. The KCAN was not found to significantly correlate with the original IRI subscales. However, both of the adapted subscales (EC and PT) did correlate strongly and significantly with both of the original IRI subscales (concurrent coefficients: adapted Empathic Concern subscale with original IRI Empathic Concern subscale, r = .73, and with IRI Perspective Taking subscale, r = .59; adapted Perspective Taking subscale with original IRI Empathic Concern subscale, r = .57, and with IRI Perspective Taking subscale, r = .77).

Study Design and Methods of Analysis

This study used a design with a pretest and random assignment to groups. Because the design included a pretest, it allowed for the use of more powerful statistical analyses through the use of covariates (Campbell & Stanley, 1963; Shadish, Cook, & Campbell, 2002). In this case, the KCAN measure appeared to be distinct from the measures of empathy and perspective taking. Therefore, we elected to address our research questions according to domain, with a one-way, between-subjects analysis of covariance (ANCOVA) to assess differences on the Knowledge measure and a one-way, between-subjects multivariate analysis of covariance (MANCOVA) to assess differences on the adapted Empathy and

Perspective Taking subscales. In this design, and for each analysis, group served as the independent variable with two levels: intervention and comparison. For the ANCOVA model, quantitative pretest scores on the Knowledge measure served as the covariate, and posttest scores on this measure served as the dependent variable. In the MANCOVA model, quantitative pretest scores on the Empathy and Perspective Taking subscales 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 M/ANCOVA were met, primarily that we demonstrated an adequate control of sources of extraneous variability. We also evaluated the statistical assumptions of these procedures and, using a variety of methods and tests, became satisfied that the assumptions were adequately met. We then selected the most appropriate ANCOVA or MANCOVA model for each analysis.

Selecting appropriate model – KCAN—Because we conducted an analysis using a covariate, we considered multiple models and accepted the most parsimonious. The first model, unequal slopes and unequal intercepts, was abandoned, because the differences in slopes across the groups were neither significant ($F(1, 88) = 0.36$, $p = .55$) nor important ($\eta^2 = .00$).

We found the slopes in the ANCOVA model to be significantly different from zero ($t = 4.78$, $p = .00$) for the KCAN measure. We therefore chose to analyze our data using ANCOVA model 2, assuming equal slopes and unequal intercepts.

Selecting appropriate model – EC and PT—Again, due to the covariate in this analysis, we considered multiple models before arriving at the most parsimonious. Neither the first nor second model was selected, as there were found to be no differences in slope across groups ($F(2,84) = 1.35$, $p = .27$; $\eta^2 = .03$), and slopes were not found to be significantly different from zero when regressed on either the EC scale ($t = 1.10$, $p = .28$) or the PT scale ($t = 1.20$, $p = .23$). A model without a covariate was therefore most appropriate to use in this case.

Outcome Analyses – KCAN

All output for the KCAN is based on an equal slopes ANCOVA model. Findings confirmed our first hypothesis. The main effect of the intervention on Knowledge of Child Abuse and Neglect was both significant, $F(1, 89) = 22.85$, $p < .00$, and meaningful, $\eta^2 = .20$, and indicated that scores were, on average, higher for parents who had participated in the intervention. Twenty percent of the variability in posttest scores was due to the effect of the intervention.

Outcome Analyses – EC and PT

All output for the subscales of Empathic Concern and Perspective Taking is based on an unadjusted MANCOVA model. Findings did not confirm our second hypothesis. The main effect of the intervention on the EC and PT scales was nonsignificant, $F(2, 86) = 2.12$, $p = .13$. Five percent of the variability between the intervention and comparison conditions was attributable to the intervention. However, it is worth noting that, when examining unadjusted means on these two measures, we saw trends for higher scores on both scales for the online intervention group.

Post-Hoc Analyses, Interpersonal Reactivity Index (IRI) Subscales

As indicated in the Measures section above, at posttest all participants completed the original IRI versions of the EC and PT subscales in addition to our adaptations of them for prospective foster parents, so that we could evaluate our adaptations relative to the criterion measure. Although originally intended for use only as a criterion measure, a post-hoc examination of the original IRI subscale data revealed significant differences between the intervention and comparison conditions at posttest. Because this measure was not administered at pretest, full experimental control is not established. However, the groups were equivalent on the newly developed EC and PT subscales at pretest, and these measures correlated strongly and positively with the IRI subscales.

User Satisfaction

Overall, treatment group feedback confirmed the expectation stated in our third hypothesis. Participants indicated high satisfaction with the web-based course. On the five website feedback items, participants expressed the most satisfaction with the interactive exercises (which they found helpful), and they also rated the site easy to use. Both the treatment and comparison group versions of the user satisfaction questionnaire included the following three statements, with which participants indicated how much they agreed or disagreed on a scale from 1 (*strongly agree*) to 5 (*strongly disagree*): *The course helped me understand what child abuse and neglect is. The course helped me understand families that have maltreated their child. The course helped me better understand the relationship between foster caregivers and birth parents*. On all three items, treatment group means were lower than comparison group means; on a scale composed of the three items, the treatment group mean was 2.0 and the comparison group mean was 2.4, indicating more positive feedback for the web-based course than for the in-person course. On a fourth item that the two versions of the satisfaction questionnaire had in common (*I would recommend this course to other prospective foster caregivers*), the treatment and comparison group means were nearly the same (2.4 and 2.3, respectively). The overall satisfaction ratings of both groups were better than the criterion level of 2.5.

In response to an open-ended feedback question, some comparison group participants felt there wasn't enough time for trainers to cover all of the intended material, or that they might have missed hearing some of the information presented. A few treatment group participants expressed unhappiness about having to wait for material to download, confusion about navigating the site, or a sense they might have missed something by not being in the classroom.

Discussion

The current study evaluated a single, comprehensive multimedia training module for prospective resource parents on *Child Abuse and Neglect*, a foundational course in the Institute for Human Services preservice training program. The course was designed for use on a web-based parent training venue (FosterParentCollege.com). The *Child Abuse and Neglect* module represents the first online version of a standardized preservice training module.

Study findings were very encouraging. As hypothesized, results showed that the online interactive multimedia presentation was indeed more effective than the classroom training at increasing parents' knowledge of child abuse and neglect. This was especially impressive, given that the educational content was exactly the same for both conditions and that the trainers in the classroom condition were highly seasoned presenters. Because the online version offers such added advantages over regular classroom instruction as being available

to trainees 24/7 and providing standardized delivery, we would have been pleased to find similar increases in the two conditions. The fact that parents showed greater knowledge gains with the online version underscores the capability of parents to more flexibly regulate and process the instructional content using this format. It may also reflect the personal engagement required by the online course's interactive exercises.

Findings on empathy did not reach significance as hypothesized; the study results showed no significant improvement on either the Empathic Concern or the Perspective Taking scale. However, both groups showed a similar increase on these scales, and treatment scores were higher than comparison scores for both scales. Also, as discovered in a post-hoc analysis of the IRI data, the intervention condition scored significantly higher than the comparison condition on the two subscales of this measure at posttest. This finding must be interpreted with caution, because the IRI was not administered at pretest, but it does suggest a favorable impact that would likely continue to increase over the entirety of the program, perhaps significantly so for the multimedia intervention.

Not only were satisfaction ratings high for the web-based course as hypothesized, but feedback from study participants was more positive for the online presentation than for the classroom presentation in terms of self-assessed gains in understanding of child abuse and neglect, a finding consistent with results on the knowledge questionnaire. The finding that participants in the two groups were about equally likely to recommend the course to others was somewhat surprising, as intuitively the classroom format would seem to have some distinct interpersonal advantages. However, those advantages may be offset by the convenience and other advantages of web-based training.

This study was the first randomized trial of an online IMM version of preservice training for foster parents that directly compared results to live classroom training. The project represented an extensive and successful effort to produce the media-based training that worked smoothly in a real-world situation. The participating agencies' enthusiastic cooperation in the study was a promising sign for the integration of a media-based approach into current training programs.

Two limitations of the present study are worth noting. First, the study design included a posttest administered soon after completion of the intervention with no follow-up. Second, the study included no parent or child behavioral outcome measures. Future research should include a follow-up assessment at least 3 months after the intervention to compare the *retention* of gains by participants trained online and in person. Further, while parent knowledge and empathy are important elements for change, the central aim and utility of the training is to improve parenting practices and child adjustment. Therefore, future research should include measures of these hoped-for behavioral outcomes.

Overall, the study findings support the potential utility of online preservice training as an enhancement to traditional classroom preservice training. Its uses could include providing convenient make-up classes and reaching prospective resource parents who are homebound, which could increase the success of resource parent recruitment efforts. Online courses could provide "booster" sessions, which parents could view repeatedly if desired. Online preservice training modules could also be incorporated into traditional classroom sessions, allowing trainers to focus more of their training time on tasks such as building relationships with prospective caregivers and assessing their suitability for the role, tasks that require face-to-face interactions.

Conclusion

The current study represents a first and encouraging step in translating the core instructional portions of a preservice training program for foster parents into an interactive multimedia format deliverable online. Parents who viewed the media-based version of a training module not only liked it and thought they learned more from it than from classroom instruction but also showed greater gains in knowledge about child abuse and neglect, as well as empathy toward birth parents. These gains may be a function of both easier access to the online materials and greater control over viewing the instructional content. Agencies that come to trust the efficacy of an IMM approach and to use it in the future will be able to turn more of their time and attention to assessing clients and to providing them with individualized feedback.

Research currently under way will assess the entire online IHS preservice training program and will also include a 3-month follow-up assessment to make possible an exploration of the persistence of gains. When completed, this larger study will permit firmer conclusions to be drawn regarding the effectiveness of web-enhanced preservice training and prospective resource parents' satisfaction with it.

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Table 1

Correlations Between All Outcome Measures, at Pre- and Posttest, Including the IRI Subscales

	KCAN-Post	EC-Pre	EC-Post	PT-Pre	PT-Post	IRI-1	IRI-2
KCAN-Pre	.32** (92)	.05 (92)	.05 (92)	.08 (92)	.10 (89)	.02 (88)	.02 (88)
KCAN-Post		.15 (92)	.11 (89)	.11 (92)	.11 (89)	.06 (88)	.03 (88)
EC-Pre			.74** (89)	.66** (92)	.61** (89)	.71** (88)	.59** (88)
EC-Post				.56** (89)	.71** (89)	.73** (88)	.59** (88)
PT-Pre					.56** (89)	.49** (88)	.52** (88)
PT-Post						.57** (88)	.77** (88)
IRI-1							.60** (88)

Note. KCAN = Knowledge Scale, Child Abuse and Neglect; EC = adapted Empathic Concern subscale of the Interpersonal Reactivity Index (IRI) (Davis, 1980); PT = adapted Perspective Taking subscale of the IRI; IRI-1 = Interpersonal Reactivity Index, EC subscale; IRI-2 = Interpersonal Reactivity Index, PT subscale. The two original subscales of the IRI were administered at posttest only. Sample sizes are reported in parentheses.

* $p < .05$.

** $p < .01$

Table 2

Mean Performance on Outcome Measures, by Group and Pre/Post Status

	KCAN[a]			EC[b]			PT[b]			IRI-1[b]			IRI-2[b]		
Group	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***	***n***
Intervention-Pre	.53	0.09	41	4.08	0.68	41	4.00	0.71	41	.	.	.	.	.	.
Intervention-Post	.73*	0.13	41	4.14	0.71	38	4.21	0.64	38	4.37†	0.48	37	4.12*	0.59	37
Comparison-Pre	.55	0.11	51	3.76	0.62	51	3.87	0.60	51	.	.	.	.	.	.
Comparison-Post	.62	0.13	51	3.87	0.63	51	3.96	0.61	51	4.13	0.60	51	3.82	0.62	51

Note. KCAN = Knowledge Scale, Child Abuse and Neglect; EC = adapted Empathic Concern subscale of the Interpersonal Reactivity Index (IRI) (Davis, 1980); PT = adapted Perspective Taking subscale of the IRI; IRI-1 = Interpersonal Reactivity Index, EC subscale; IRI-2 = Interpersonal Reactivity Index, PT subscale. Unless otherwise noted, unadjusted means are reported throughout the table. The two original subscales of the IRI were administered at posttest only.

*Differences between groups (intervention and comparison) are significant at p .05.

†Differences between groups (intervention and comparison) approached significance at $p \leq .05$.

[a]Parent Knowledge scores are reported as the percentage of items correct out of 20 questions. Because results were analyzed using an Analysis of Covariance, adjusted means are reported.

[b]Scores on the EC, PT, IRI-1, and IRI-2 scales are reported as the average rating of seven items on a scale from 1 (*does not describe me at all*) to 5 (*describes me very well*) with higher scores indicating higher levels of empathic concern (EC and IRI-1) or cognitively taking the perspective of another (PT and IRI-2).

Table 3

Results of Univariate and Multivariate Tests of Significance for Outcome Measures

Source	*Df*	*F*	η^2	*p*
Group – KCAN[a]	1, 89	22.85*	.20	<.00
MANCOVA Results				
Multivariate (Group)[b] EC & PT	2, 86	2.12	.05	.13
Post-Hoc, Univariate Results				
Group – IRI-1	1, 86	3.98†	.04	.05
Group – IRI-2	1, 86	5.29*	.06	.02

Note. KCAN = Knowledge Scale, Child Abuse and Neglect; EC = adapted Empathic Concern subscale of the Interpersonal Reactivity Index (IRI); PT = adapted Perspective Taking subscale of the IRI; IRI-1 = Interpersonal Reactivity Index, EC subscale; IRI-2 = Interpersonal Reactivity Index, PT subscale. The two original subscales of the IRI were administered at posttest only. Thus, results must be interpreted with caution.

[a]ANCOVA Model 2 is used, assuming equal slopes and unequal intercepts.

[b]MANCOVA Model 3 (Unadjusted MANCOVA) is used. Slopes were not significantly different from zero.

*$p < .05$.

†$p \leq .05$