Training Personnel to Promote Quality Parent–Child Interaction in Families Who Are Homeless

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This study was designed to, first, train parent–child advocates serving homeless parents and their children (birth–three) in providing one-on-one early intervention to facilitate healthy parent–child interactions and, second, evaluate the impact of training on the quality of parent–child interactions in the intervention setting. Four advocates were trained over a 20-week period. During the first 10-week training phase, advocates observed project staff members (trainers) interacting with clients in the advocate's caseload and received training on specific interaction components. During the second 10-week phase, trainers observed and gave feedback to the newly trained advocates who implemented the learned strategies with six referred clients. All parent–child advocates reported increases (from pre- to posttraining) in knowledge and competence level about ways to provide support to parents, knowledge of children's early interactive behaviors, and ability to provide feedback to parents to promote the parent–child relationship. Observations of parent–child advocate behavior with mothers during intervention sessions also revealed changes between pre- and posttraining: Advocates increased their use of positive, contingent, and instructive feedback to parents about their interactions with their young children. Finally, the mother's behavior changed from pre- to postintervention; mothers receiving intervention became more contingent, social–emotional growth fostering, and stimulating in their interactions with their children. The results and the need for further research are discussed.

During the last 2 decades, an increasing emphasis on the importance of promoting parent–child relationships in intervention efforts with high-risk families has been noted (Baird & Peterson, 1997; Bromwich, 1997; Foley & Hochman, 1997–1998; Girolametto, Verbey, & Tannock, 1994; Greenspan, 1996; Lieberman, 1997–1998; McCollum & Hemmeter, 1997; Meisels & Fenichel, 1996; Moss & Gotts, 1997–1998; Munson & Odom, 1996; Weston, Ivins, Heffron, & Sweet, 1997). A young child's social and emotional competence, achieved through a reciprocal and nurturing parent–child relationship, is the cornerstone of successful development (Barnard, 1997; Seizt, 1990; Urban, Carlson, Egeland, & Sroufe, 1991), and research studies have substantiated the link between the early social environment of the child and the child's later development (Ainsworth, Blehar, Waters, & Wall, 1978; Beckwith & Rodning, 1996; Hann, Osofsky, & Culp, 1996; Kelly, 1996; Kelly, Morisset, Barnard, Hammond, & Booth, 1996; Lewis & Coates, 1980; Shonkoff, Hauser-Cram, Krauss, & Upshur, 1992; Stern, Caldwell, Hersher, Lipton, & Richmond, 1973; Werner, 1985).

Although the research is extensive and compelling, the application of this knowledge to intervention practice has moved at a slow pace, and the most common practices in early intervention are not directed at improving the quality of parent–child interaction (Filer & Mahoney, 1996). As Kelly and Barnard (2000) point out, most service providers lack the necessary training to give instructional feedback to parents regarding the quality of the parent–child relationship and are therefore hesitant to intervene because they feel inadequately prepared. To respond to this need, it is necessary to identify and evaluate effective early intervention practices and personnel training strategies that promote quality parent–child interaction.

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The specific aims of the present study were, first, to train parent–child advocates who were serving a sample of very high risk families (homeless families) to provide one-on-one early intervention to facilitate healthy parent–child interactions and, second, to evaluate the impact of training on the quality of parent–child interactions in the intervention setting.

Parent–Child Interaction When Families Are Homeless

Families with children are the fastest growing segment of the homeless population in the United States, making up possibly 40% of the homeless population (U.S. Conference of Mayors, 1993). Homeless parents are most often single women, with limited education and inadequate economic and social supports (Bassuk, Rubin, & Lauriat, 1986; Fox, Barnett, Davies, & Bird, 1990; Wood, Valdez, Hayashi, & Shenk, 1990). The age distribution of their children is skewed, with more infants and preschoolers than school-age children (Masten, 1992). Homeless parents expend tremendous emotional resources trying to meet basic human needs, often leaving little in reserve to offer support and understanding to their young children at a time when their children need it most. Bruder (1997) cited studies that indicate homeless women with young children show a high level of depression (Parker, Rescorla, Finkelstein, Barnes, Holmes, & Stolley, 1991) and disruptive patterns of mother–child interaction (Boxill & Beaty, 1990). Because homeless children often are denied the support of a nurturing parent, they are at dramatically increased risk of psychological and cognitive impairment (Health Care for the Homeless, 1995). Research has shown that a mother's level of psychological distress correlates strongly with her child's emotional and behavioral adjustment (Compton, 1992; Hammen, 1991) and that a variety of psychological difficulties, such as depression, impair parent–child relationships and child outcomes (Bauman & Dougherty, 1983; Howard, Beckwith, Rodning, & Kroebenske, 1989). As a result, compromised outcomes for homeless children go beyond the disruption of shelter and the threat to physical health. Recent studies have shown that the majority of homeless children are suffering from serious developmental, emotional, and learning problems (Bassuk & Rosenberg, 1990; Parker et al., 1991; Rescorla, Parker, & Stolley, 1991).

In studies comparing homeless children with poor but housed children, researchers have found that half of the homeless children manifest developmental delays compared to 16% of poor but housed children (Bassuk & Rosenberg, 1990; Rafferty & Rollins, 1989). Masten (1990) found that emotional and behavioral problems among homeless children were apparent at a rate three to four times than that expected in the general population, exceeding the relatively elevated rates found in a comparison sample of poor but housed children. In summarizing research linking the effects of homelessness with poor outcomes, Hausman and Hammen (1993) concluded that virtually all the conditions that lead to developmental problems come together in the situation of homelessness, and these early emotional and learning struggles have both immediate negative impacts on homeless children and also long-term consequences for homeless children's future capacity to function effectively as parents and productively as members of society.

To mitigate the deleterious effects of homelessness on children's development, researchers and program planners are increasingly endorsing parenting programs that offer homeless parents and their children opportunities for positive interactions (Eddows, 1993; Jacobs, Little, & Almeida, 1993; Memmott & Young, 1993; Weiss, 1989). Past research has shown that for a child to escape the cycle of poverty and become a productive and healthy member of society it is essential that a child experience a nurturing relationship in which he or she is valued and communicated with (Werner, 1989). Although most program developers and staff recognize the need to facilitate healthy parent–child interactions, traditional models of early intervention are not adequate for meeting homeless families' needs. As stresses increase, the traditional didactic group model becomes ineffective (Barnard et al., 1989; Bernstein, Hans, & Percansky, 1991; Kelly, Morisset, Barnard, & Patterson, 1996). Case management also is ineffective, as overstressed parents lack the skills and resources necessary to follow through on the manager's recommendations (Brinker, Frazier, Lancelot, & Norman, 1989). In contrast to these traditional intervention approaches, it is especially important in the homeless setting to consider the individual needs of each family and to match the intervention to the individual strengths and concerns of each parent–child dyad.

The intervention approach used in the present study is an individualized, direct feedback intervention designed to facilitate healthy parent–child interactions. Similar one-on-one, videotape/feedback approaches have been used successfully in the past with high-risk parents and their young children (Bernstein et al., 1991; Kelly, 1982; Koniak-Griffin, Verzemnieks, & Cahill, 1992; McDonough, 1995). In each of these projects, service providers used videotapes to help parents observe their responses to their young children's behaviors and cues and used a parent "coaching" method to increase parents' sensitivity and responsiveness to their children. In the present study, we developed, implemented, and evaluated a training protocol to prepare service providers to use this type of approach with homeless families with young children—a very high risk group. We used a highly individualized verbal-feedback approach, using videotapes of the parents' unique interactions with their

children to guide the progress of the interaction. It should be noted that we designed the training project with program administrators in an ongoing program serving homeless families; therefore, one significant training constraint was that the training needed to occur primarily within the regular workload of the participating personnel.

METHOD

Four parent–child advocates were trained over a 20-week period. During the first 10-week training phase, advocates observed project staff members (trainers) interacting with clients in the advocate's caseload. During the second 10-week phase, trainers observed advocates implementing learned strategies with referred clients. We evaluated the effects of training by comparing pre- and posttests of advocates' knowledge and skill level (written self-evaluations) and observing their use of intervention strategies (videotaped observations of intervention sessions). Additionally, we compared the pre- and posttests of six client dyadic interactions (videotaped teaching and play episodes) to determine if parents' behaviors with their children changed as a result of the newly-trained advocates' intervention strategies.

Participants

We recruited four parent–child advocates serving homeless families and children from local transitional/emergency housing shelters. The parent–child advocate's role is to work with parents to support homeless children's developmental needs. Most of the advocates work directly at local emergency/transitional housing shelters where they meet with parents individually or in groups. Many advocates also participate in therapeutic childcare or individual play therapy with the children. The main goal of the advocates is to help both parents and children feel more secure as they struggle to find stability in their lives. Three of the four advocates in this study were employed by emergency/transitional shelters specifically designed for women who were victims of domestic violence. The fourth advocate was a mental health therapist/case manager for a program in which she was able to meet with families who were homeless for a variety of reasons. Her role is more comprehensive than the other advocates, but her experiences with the homeless population included children's advocacy (Advocate #1 below).

No entry level characteristics or skills were required of the advocates, only a commitment by each advocate to complete the 5-month project training phase. Advocates were white and female and had the following higher education degrees and experience in the field of parent education:

Advocate #1: Master's degree in social work—5 years experience;
Advocate #2: Bachelor's degree in psychology—4 years experience;
Advocate #3: Bachelor's degree in liberal arts—5 years experience;
Advocate #4: Bachelor's degree in early childhood—1 year experience.

The second group of participants was composed of six parent–child dyads referred for early intervention to the parent–child advocates (see Table 1).

None of the parents were actively abusing drugs or alcohol, which would have made them ineligible for stays in the housing projects. The primary caretaking parents in the study were all mothers; the children ranged in age from 6 to 26 months. Parents agreed to attend ten 1-hour sessions conducted by the parent–child advocates and the study trainers. At the end of the 10 sessions, parents received $100 for their participation.

TABLE 1. Sample Characteristics

Characteristic	*n*	
Mother's ethnicity		
European American	4	
Hispanic	1	
Other	1	
Mother's marital status		
Married	2	
Separated	1	
Never married	3	
Mother's school completed		
12 years	1	
14 years	5	
Mother's monthly income		
$0–$500	2	
$501–$1,000	1	
$1,001–$1,500	2	
$2,001–$2,500	1	
Child's gender: Female	6	
	M	*SD*
Mother's age (in years)	33.8	5.5
Child's age (in months)	16.3	7.6

Training Procedures

Two project staff members (trainees) trained the parent–child advocates, with each advocate assigned to one of the two trainers for the 20-week training period. Because of the advocates' time constraints, we designed the training to occur primarily within their regular workload. Trainers accompanied each advocate to her visits with two referred clients; thus, the regularly scheduled client visits became the venue for most of the training.

During the initial 10-week training phase, each advocate learned strategies to promote the dyadic relationship by observing the assigned trainer conducting the intervention activities. At an intake session, each dyad was videotaped interacting during teaching and play episodes. One week later, at the first intervention session, the trainer used the 20-minute videotape and information from an informal, open-ended parent interview to design interaction goals with the parent. The trainer gave the following suggestions to the mother before viewing the tape with her:

> We're interested in the positive things you and your baby are doing and what you are doing that you like. We are also interested in what you would like to work on that would make your interaction with your baby more enjoyable. We would like you to watch the video of you and your child interacting together. Please make comments about what you see that you like when viewing the video. Also let us know if you have any concerns or would like to know how to make your interaction with your child more enjoyable or positive.

After discussing the parent's feedback about the videotape, the parent and trainer designed joint goals for enhancing the parent–child interaction. At the conclusion of the first session, the parent and trainer again watched the tape together while the trainer pointed out positive mother and child behaviors as they occurred on tape. For the next 9 weeks, the trainer and parent worked on achieving the joint goals while the advocate observed the intervention session. The trainer gave positive, instructive, and contingent feedback to the parent while the parent interacted with her child. The purpose of the feedback was to encourage sensitive and responsive caregiving, contingent parent feedback based on child cues, and developmentally relevant parent behaviors. At the end of the fifth session, the parent and child were videotaped during informal teaching and play, and at the next session the parent and trainer watched the second video together and assessed progress in the parent–child interaction.

During the weekly, 45-minute post-visit training sessions, the trainer and advocate reviewed the session, explored specific issues that pertained to the particular dyad, and discussed general principles of intervention. We covered the following aspects of relationship formation: how to provide effective feedback to parents during intervention—that is, the use of positive, instructive, and reflective comments in place of general, directive, negative/dismissing comments (Week 1); attachment concepts (Week 2); child behaviors and cues (Week 3); parent communicative behaviors (Week 4); principles for establishing sensitive and supportive parent–professional relationships in the early intervention setting (Week 5); developmentally appropriate play (Week 6); understanding child behavior, communicating with children, and positive discipline (Weeks 7–9); and responses to specific parenting issues (Week 10). The 45-minute parent–child sessions with the two dyads and the 45-minute trainer–advocate sessions over a 10-week phase provided 30 hours of initial training for each of the four parent–child advocates during the first training phase.

During the second training phase, each of the four parent–child advocates recruited two parent–child dyads who had been identified for intervention by the transitional housing shelters (see Note). At an intake session, each parent–child dyad was videotaped during teaching and play episodes for project evaluation and intervention planning purposes. The same intervention procedures used in the first training phase were followed during the second 10-week training phase, except the advocates, rather than the trainers, provided the intervention with the parent–child dyads. At the end of this second 10-week phase, parents and their children were again videotaped during teaching and play. The pre- and posttest videotapes of teaching and play episodes were coded later for project evaluation purposes. A trainer attended all 10 sessions with each advocate and the parent–child dyads. After each of the 45-minute sessions with the parent–child dyads, the advocate and the trainer met for an additional 45 minutes, and the trainer shared feedback about the observed content of the session with the advocate. The 45-minute sessions with two dyads and the 45-minute trainer–advocate sessions over a 10-week phase provided an additional 15 to 30 hours of training for each of the advocates. A total of 45 to 60 training hours (45 hours for the advocates with one dyad and 60 hours for the advocates with two dyads) provided the necessary instruction for the advocates to become proficient in the individualized intervention strategies.

Evaluation Measures

Parent–Child Advocate Measures. At the study intake session in the first training phase and again at the completion of the training, project staff videotaped (for 20 minutes) each parent–child advocate intervening with one of the parent–child dyads in her assigned case load.

The staff gave the following instructions to the advocates and parents: "We are now going to videotape the two of you interacting. We would like to have an idea of what usually happens when you meet with each other."

The parent–advocate coding system was developed to capture the frequency of different types of verbal behaviors advocates used while interacting with parents who had children aged birth to 3. The coding scheme was made up of six hierarchical codes. The top two codes were specifically about the parent–child relationship. The others could be about the parent or the child but tended not to be about specific parent–child interactions.

Instructive feedback is contingent, instructional feedback the advocate uses to promote better parent–child interaction. In using instructive feedback, an advocate is responding to something specific that she observes while the parent and child are interacting. In addition to being contingent on the immediate interaction, instructive feedback gives the parent information about why the parent's behavior is important to child development. Examples of instructive feedback include, "You followed her lead so nicely when she reached for the Jack-in-the-Box. Following her lead supports her choices and lets her know that you understand her needs and wants"; "It's really nice the way you let her mouth the puzzle toy. Even though she is getting better at using her fingers, her mouth still gives her lots of information."

Positive feedback is similar to instructive feedback but does not include any child development information. Positive feedback is positive, specific, and contingent on the mother's appropriate and nurturing behavior. Some examples of positive feedback include, "That was nice the way you followed her over to the toy top and smiled and giggled with her"; "She loves the way you whispered just then and were so affectionate with her."

The next two codes, *instructive comments* and *positive comments,* are comments an advocate may make to the mother about child development in general or a specific problem or dilemma about child rearing the mother is struggling with. It is not about the in-the-moment "observable" parent–child interaction but may be more didactic or educational. Examples of instructive comments are "Labeling grocery items on your grocery store outings is a great language builder"; or "Reading a favorite story every night before bedtime can help him settle down for the night." Examples of positive comments are, "You care about your child so much; he's fortunate to have you for his mother"; and "It sounds as if you are making progress in helping your child get through his angry times."

Questions are coded when the advocate uses a clarifying question about the parent–child relationship or the child. Examples include, "How is your dinner time together?" or "Have you considered beginning potty training yet?" All other verbal behaviors are coded under *Other* and do not pertain to the parent–child relationship. Examples of behaviors coded under Other include conversations about housing, partner relationships, other tenants in the building, and so on.

Project staff trained two coders to code the pre- and posttest assessments of the advocate's verbal behavior. An interval recording measure scheme was used, with each verbal response of the advocate defining the interval. We trained the coders with tapes of pilot mothers interacting with advocates who were not participating in the study but who had agreed to be videotaped. In addition, trainers were videotaped interacting with pilot families demonstrating the behaviors in the coding scheme. Coders coded the tapes with project staff until they were proficient in using the coding scheme. Videotapes of additional pilot families and outside advocates were used as reliability test tapes. The two observers' interrater agreement was 85% and was based on the percentage agreement between the two observers on a total of 60 intervals across four dyads.

Parent–child advocates completed pre- and posttest self-evaluation questionnaires developed by the project staff and rated their knowledge and skill from 1 (*inadequate*) to 5 (*very adequate*) on 18 different items to determine their skill in providing parent support services (5 items), their knowledge of young children's interactive behavior (5 items), and their ability to provide parental feedback to promote the parent–child relationship (8 items). The following are examples of items used to assess skill in providing parent support: "I know the specific verbal and nonverbal listening skills that help build rapport"; and " I feel confident when reflecting parents' situations, feelings, and needs." Examples of items used to assess knowledge of young children's interactive behavior include, "I can explain the significance of interpreting subtle infant/toddler cues in the provision of care"; and "I can identify the cues from young children that communicate: 'I want to interact.'" Examples of items used to assess the ability to provide feedback to parents that promote the parent–child relationship are, "I can explain to parents about sensitive pacing when playing with their young children"; "I can differentiate for parents when to allow their child to explore and when to set limits"; and "I feel comfortable giving parents feedback as they interact with their child."

We chose these aspects of advocate behavior because we expected that knowledge and skills in these areas would increase as a result of training and would be related to the advocates' ability to promote the parent–child relationship. We expected that an advocate's ability to support the parent would enable the advocate to model relationship-building skills for the parent and to establish the kind of trusting relationship with the parent necessary for successful intervention. We also expected that advocate knowledge of child interactive behaviors would give advocates the necessary background about child behavior, cues, states, and the like to promote the

dyadic relationship. Finally, with knowledge of child interactive behavior, advocates could coach parents to read their children's behaviors and cues in order to respond in sensitive and growth-producing ways.

Parent–Child Interaction Measures. The study measured parent–child interaction during both teaching and play episodes. The teaching and play pretest occurred in the mothers' shelter homes at the intake visit, and the posttest took place in the shelter home at the conclusion of the 10 intervention sessions.

For the teaching episode, the advocate asked the parent to choose an activity that her child could not do from a list of birth to 4 developmental tasks. The advocate then asked the parent to teach this task to her child, to take as long as she wanted using the appropriate materials provided, and to let the advocate know when she had finished. The teaching tasks typically lasted from 3 to 5 minutes.

The Nursing Child Assessment Teaching Scale (NCAST; Sumner & Spietz, 1994) was used to code the parent–child videotaped interaction in the pre- and posttest teaching episodes. The Teaching Scale is organized into six subscales: parent sensitivity to cues, parent response to child's distress, parent social–emotional growth fostering, parent cognitive growth fostering, child clarity of cues, and child responsiveness to caregiver. A contingency subscale measures the amount and quality of parental contingent behavior toward her child. The scale consists of 73 binary items that produce two summary scores, one score for the parent's interaction with her child and one score for the child's interaction with the parent. In addition, subscale scores can be calculated for each of the seven subscales described above. The NCAST Teaching Scale has been shown to be a valid predictor of child IQ and language outcomes at 3 to 5 years of age (Kelly & Barnard, 2000) and of first-grade school behavior as rated by the teacher (Kelly, 1996). Morissett (1994) found that 10-month scores on the total parent score, on the total teaching score (parent and child combined), and on the parent subscales, as well as sensitivity to cues, social–emotional growth fostering, and cognitive growth fostering all showed significant correlations with the child's 24-month Bayley Mental Development Index. Parents' characteristics discriminate the parents' scores for Hispanic mothers and those with fewer years of schooling (Morissett, 1994), those who use drugs (Blackwell & Kaiser, 1994), those who abuse their child (Bee, Disbrow, Johnson-Crowley, & Barnard, 1981), those with high family stress (Barnard, Spieker, & Morissett, 1990; Farel, Freeman, Keenan, & Huber, 1991; Grace, 1990), and mothers with low IQ (Spieker, 1989). In all instances, the parent characteristic is associated with a lower score on the parent item total.

Two coders were trained by NCAST staff using standard reliability procedures. During training, staff coded NCAST tapes specifically designed for reliability purposes. The two coders reached 91% interrater agreement based on the percentage agreement on a total of 73 items across two episodes. The coders coded only one test from each subject, so both a pre- and posttest were never coded by the same coder.

For the play episode, the advocate asked the mother to spend 15 minutes playing with her child. The play episode varied slightly according to the age of the child. At infant age, the advocate asked the parent to spend 7 minutes playing with any toy available in the shelter home, and for the remaining 8 minutes, the advocate gave the mothers a standard set of toys to use in play with their infants. For children of 1 to 3 years of age, the advocates asked the mothers to play with their children for 15 minutes using age-appropriate toys in three containers labeled #1, #2, and #3 (Three Boxes Procedure; Vandell, 1979). The advocate instructed the mother to start with container #1, then move to container #2, and finally, to use the toys in container #3.

Mother–child interaction during play was rated using global rating scales developed for the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care (NICHD Early Child Care Research Network, in press). Coders used a 4-point rating system (1 = *not at all characteristic,* and 4 = *highly characteristic*) to rate the mother's sensitivity, intrusiveness, detachment, stimulation, positive regard, negative regard, and flatness of affect. These aspects of mother–child interaction were measured because of their known association with early indicators of child socialization (e.g., attachment security, compliance) and child cognitive development. In reports from the NICHD Study of Early Child Care, these ratings have been among the stronger predictors of infant attachment, child compliance and behavior problems, and child cognitive and language development. This effect was constant after controlling for mother's demographic and psychosocial characteristics and child care quality indicating that mother's behavior during this play protocol adds significantly to the prediction of child outcomes (NICHD Early Child Care Research Network, 1997a, 1997b, 1998).

Interclass correlations for reliability on these items ranged from .95 to 1.0.

Results

Changes in Parent-Child Advocates' Competence and Behavior

Self-Reported Competence. Figure 1 shows the mean scores on each subscale for each advocate based on the 5-point ratings. All four parent–child advocates reported increases (from pre- to posttraining) in knowledge and competence level about ways to provide support to par-

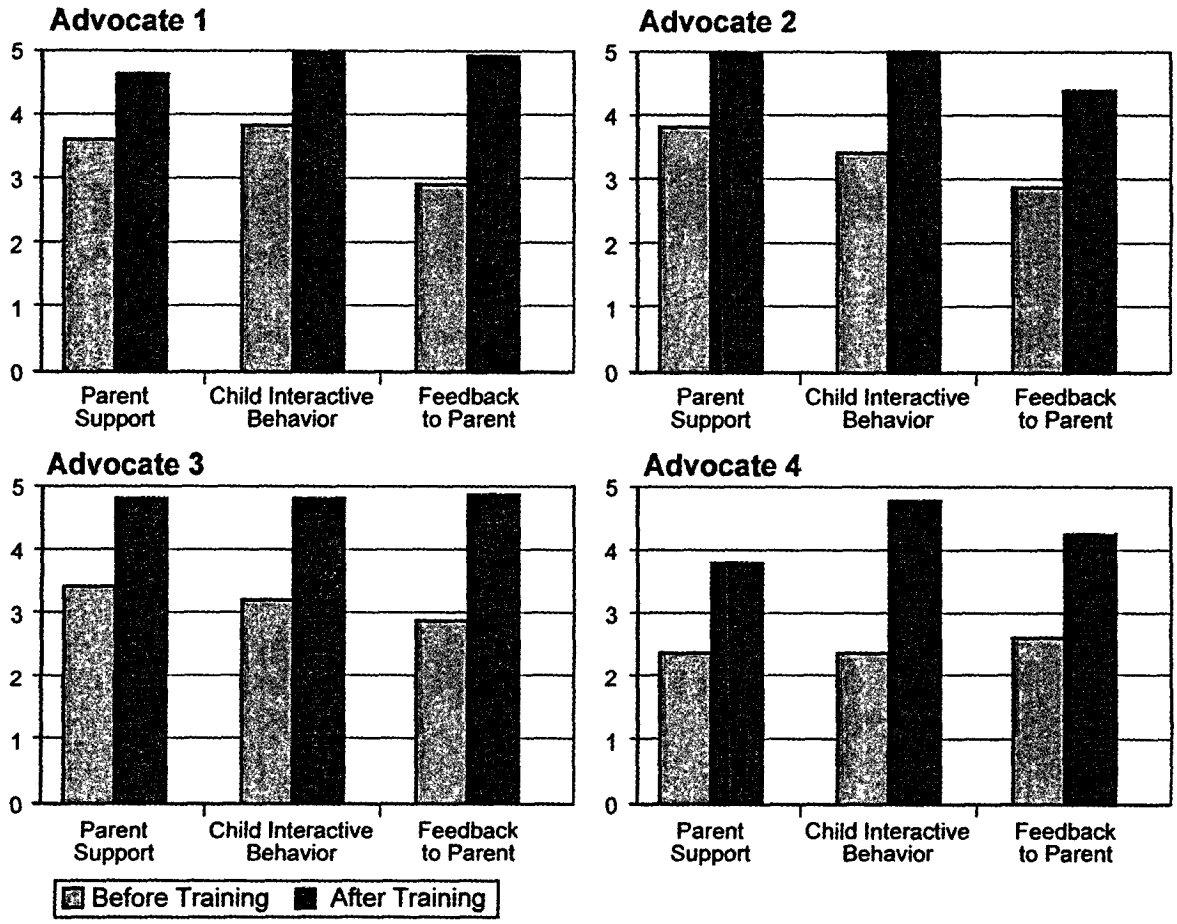

FIGURE 1. A comparison of advocate's self-evaluations before and after training.

ents, knowledge of children's early interactive behaviors, and knowledge regarding how to provide feedback to parents to promote the parent–child relationship. Advocates #1, #2, and #3 had higher pretest levels and concluded with higher posttest levels than Advocate #4.

Observed Behavior with Mother. Observations of parent–child advocate behavior with mothers during intervention sessions also revealed changes between pre- and posttraining. Figure 2 shows the pre- and posttest differences in strategies that advocates used in their intervention sessions, based on the percentage of total advocate behaviors during the episodes. During the pretest, Advocates 1 and 4 engaged in talk primarily about issues other than parent–child interaction and/or the child in general. Advocates 2 and 3 engaged in a good deal of "other" talk but also verbalized a substantial amount about general child development issues. In summary, we observed the mothers and advocates talking together about the general concerns and issues that mothers were having about their children or other general issues separate from the child. None of the four advocates gave positive, specific, contingent feedback to parents regarding their interactions with their children. After training, two new strategies emerged: instructive and positive feedback. Advocates 1, 2, and 3 shifted their communications with mothers from general conversation ("other") and general talk about child development issues to providing predominantly instructive and positive feedback to mothers while they interacted with their children. Advocate 4 continued to use a substantial amount of verbal behavior directed at general child development issues but also introduced specific, positive verbal feedback contingent on the parent–child interaction. In general, after training, the advocates' verbal interactions became more instructive, positive, and contingent on the parent–child interaction.

Changes in Mother Behavior

Table 2 shows changes in mother's teaching behavior from pre- to posttest, based on ratings on the NCAST Teaching Scale. Although there are seven NCAST subscales, we used only the five mother subscales, the

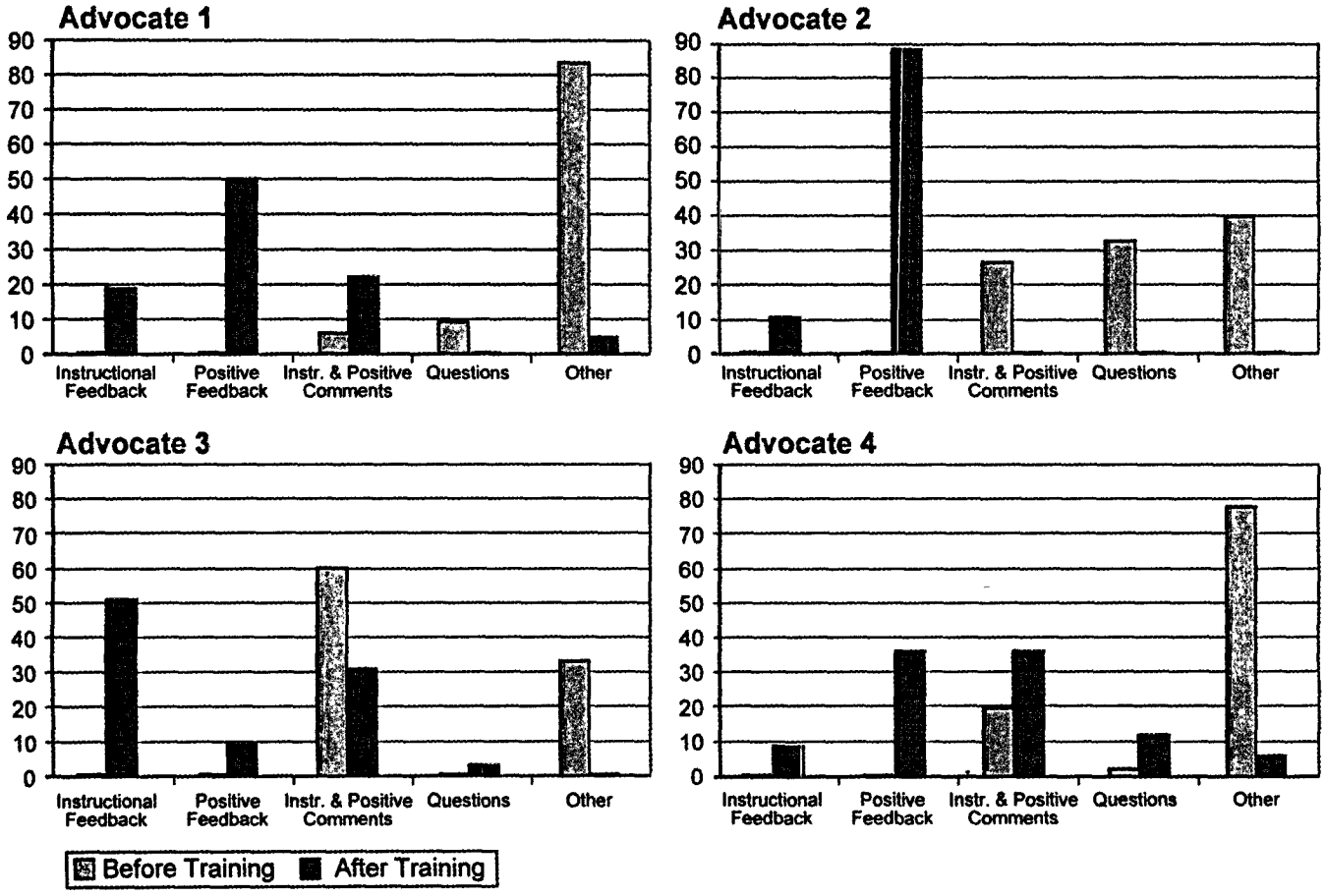

FIGURE 2. A comparison of advocate's intervention behaviors before and after training.

mother contingency subscale, and the mother's total score on teaching. We expected that mother behavior would change during the 10-week intervention, but we did not anticipate that infant behaviors would change within this brief intervention phase. Mothers' teaching behaviors increased significantly, based on paired *t* tests, social–emotional growth fostering, contingency behavior with children, and total teaching score.

Of the seven behaviors examined during play, only one improved significantly. Mothers' cognitive stimulation increased significantly, based on paired *t* tests, from pre- to posttest sessions (see Table 3).

Discussion

The purpose of the present study was to train parent–child advocates to give direct, contingent, and positive feedback to homeless parents to increase the quality of their parent–child interaction. As described above and shown in Figure 2, during the pretest phase, advocates did not engage in positive, instructive feedback to parents contingent on the parent–child interaction. The advocates did not structure the intervention sessions so that the mother was interacting with her child. Instead, they structured the intervention so that the advocates and mothers discussed issues while the child played with available toys. Advocates 1 and 4 used substantially more "other" verbal behaviors than Advocates 2 and 3. The individual differences among advocates on the pretest were probably due to differences in training, role description, and experience. Advocate 1 was a therapist by training and most comfortable letting the parent direct the course of intervention. Her job description was more inclusive than the other advocates in that she provided therapeutic services to mothers in addition to advocating for the child. By enrolling in the training, she understood that the purpose of the training was to help parent–child advocates learn new strategies for promoting parent–child interaction, and for training purposes, she subjugated her therapist role to parent–child advocacy during the training program. Advocate 4 was very new to the field, was worried about being intrusive, and felt more comfortable letting the parent structure the session.

TABLE 2. Mother's Behavior During Teaching on the NCAST Teaching Scale

NCAST subscale	Range	Pretest		Posttest	
		M	*SD*	*M*	*SD*
Sensitivity to cues	1–11	7.67	2.5	9.67	1.03
Responsive to distress	1–11	7.80	1.64	9.40	2.51
Fosters social–emotional growth	1–11	7.67	2.07	9.33	1.21*
Fosters cognitive growth	1–17	9.17	4.71	12.67	1.63
Contingency	1–20	10.50	4.14	14.67	2.25*
Total teaching score	1–50	31.00	8.15	40.67	3.50*

Note. $N = 6$; NCAST = Nursing Child Assessment Teaching Scale Sumner & Spietz, 1994).
*$p < .05$.

TABLE 3. Mother's Behavior During Play on the NICHD Mother-Child Play Scales

Subscale (range = 1–4)	Pretest		Posttest	
	M	*SD*	*M*	*SD*
Sensitivity	3.17	.75	3.33	1.03
Intrusiveness	1.17	.41	1.33	0.82
Detachment	1.50	.84	1.33	0.52
Stimulation	2.50	.84	3.17	0.98*
Positive regard	2.33	.52	2.83	0.75
Negative regard	1.00	.00	1.00	0.00
Flatness of affect	1.83	.98	1.17	0.41

Note. $N = 6$; NICHD = National Institute of Child Health and Human Development global rating scales (NICHD Early Child Care Research Network, in press).
*$p < .05$.

During the initial training phase (during which the advocates observed project trainers intervene with the parents), the advocates, although very committed to the training protocol, expressed hesitancy about their ability to intervene in the parent–child relationship because of their own limited knowledge level and the possibility that their feedback would seem intrusive. An important part of the training, therefore, was to model strategies for the advocates to demonstrate their positive effect on the parent–professional and parent–child relationships. The trainer's feedback to parents during intervention (the first 10-week training phase) was always positive and never critical; the trainer singled out for comment the parents' positive behaviors with their children and affirmed and instructed parents in the use of those specific, positive behaviors. Parents learned that they already engaged in interactions with their children that fostered their children's growth and development, and the trainer encouraged and instructed the parents as to why these behaviors were important to their children. The parents began to feel more competent and also began to realize how critical they were to their children's growth. Parents often expressed their enjoyment during the intervention process, and instead of an intrusive atmosphere, the advocates observed that the intervention appeared to empower parents because parents liked and trusted the nonjudgmental, positive feedback.

Following the initial observation training phase, the advocates used the newly learned strategies to provide the intervention during the second 10-week training phase. Although they were initially hesitant to use the strategies, they became increasingly more comfortable with this type of intervention as they progressed through the second 10 weeks of training.

Posttraining observations of the parent–child advocates showed that all four advocates added instructional feedback (positive, contingent on the dyadic interaction, instructional element included) and positive feedback (positive, contingent on the dyadic interaction) to their verbal repertoire. Advocates 1, 3, and 4 continued to use other verbal behaviors during the posttest that may have been appropriate. Advocate 3 discontinued use of all other verbal behaviors in the posttest, indicating that she had structured the interaction so that the mother was interacting with her child the entire time Advocate 3 gave instructional/positive verbal feedback contingent on the interaction. Advocate 4 shifted her behaviors to the parent–child interaction but continued to use a majority of behaviors other than instructional/positive behaviors contingent on the specific parent–child interactions. The differences among the advocates could be attributed to

two main factors: differences in personality characteristics and differences in experience levels. Advocate 4 changed less dramatically from pre- to posttest. She was a rather shy advocate, new to the field of early intervention, and very concerned about appearing intrusive to the parent.

The advocates' self-reported competence increased significantly after training. Advocates reported that they had increased their ability to provide support to parents; their knowledge and skill levels about child state, cues, and behaviors; and their ability to give feedback to parents about parent–child interaction. Their perceived self-competence was associated with increases in observed behaviors related to their abilities to provide supportive (positive) feedback to parents on how to recognize their child's interactive behaviors and cues. It was important that the advocates' confidence about their own knowledge of child cues and behaviors increased, as this enabled them to feel confident about their ability to help parents recognize and respond sensitively to their children's interactive behaviors.

Several researchers have suggested that professionals' intervention behaviors should serve as models for parent–child interaction behaviors (Bromwich, 1997; Kelly & Barnard, 2000; Lieberman, 1997–1998; Weston et al., 1997). The results from the present study suggest that the use of the strategies described above were associated with some positive changes in parents' behaviors with their children. That is, advocates' contingent and positive behaviors with mothers during mother–child interaction paralleled an increase in mothers' contingent, social–emotional, and stimulating behaviors with their young children. Other researchers also have examined strategies used by effective parent trainers to produce changes in parent behaviors (Dangel & Polster, 1984). Strategies identified as successful included specific feedback with praise and clear directions. Hester, Kaiser, Alpert, and Whiteman (1996) found that coaching, providing positive examples, giving specific instructions, and giving specific rather than general feedback were effective parent training strategies and concluded that early intervention personnel should be taught to use these strategies in the early intervention setting. Bernstein et al. (1991) emphasized that in order to support the parent–child relationship, an interventionist must go beyond traditional early intervention, parent education, and support based on responding to the family's need. Instead, program staff must concentrate on the ongoing communication between the parent and the vulnerable, young child. In the present study, we designed the training to increase advocates' use of contingent, specific, positive, and instructional feedback to parents related directly to increasing the quality of the parent–child interaction. Building on our own research and that of other investigators, we successfully implemented a training program for advocates serving a homeless population, with training elements shown to effectively alter parent behaviors. It should be noted, however, that parental behaviors changed to a significant extent in less than half of the measured domains.

The present study has several limitations. First, no parent–child control group or repeated measures design was in place to compare intervention effects. Second, the sample sizes were small; therefore, it was difficult to generalize to a more diverse group of professionals or high-risk dyads (e.g., child and parent's gender, parent's educational level, etc.). Additionally, the intensity of the advocate training was not varied; for this reason, it was not possible for this study to determine if fewer training hours would yield the same effects. Finally, this was not a longitudinal study, so we draw no conclusions regarding the durability of the training effects. It is important for future studies to include larger numbers of participants and to include more rigorous evaluation methods. Given these limitations, however, the results of the present study offer encouraging evidence that individualized training efforts are effective in changing intervention focus to include an emphasis on promoting the parent–child relationship. Additionally, these results suggest that when trained advocates employ these strategies to help high-risk parents improve their interactions with their young children, parents can improve the quality of their interactive behavior (although, because of the limited number of participants, the results should be interpreted with caution).

It is now important to move forward in several ways. First, research needs to continue to refine training and evaluation strategies. Longitudinal studies could begin to answer questions about the long-term effects of training. For example, are changes in professional behavior associated with greater changes in parent behavior over time? Are resulting changes in parent behavior associated with advances in the child's development? What is the value of this type of parent training compared with more traditional types of parent training (e.g., parent education classes, parent support services, home visiting intervention) without a specific feedback approach? Can this training be used successfully with well-trained paraprofessionals in early intervention settings?

Second, personnel preparation programs need to include facilitation of parent–child interaction in their list of competencies. Personnel working with young children and their parents need to be taught to practice these strategies in supervised training programs until they feel comfortable and competent in their role as facilitators of quality parent–child interaction. Further training evaluation efforts could determine the duration and intensity of training efforts necessary to produce enduring and effective personnel strategies that help parents form growth-producing relationships with their young children. These

necessary steps will help parents and early intervention program staff work together to promote caregiving environments that help children better reach their developmental potential.◆

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NOTE

Two of the eight dyads dropped out of the study after the initial pretest, leaving a total of six participating dyads in the second training phase.

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