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A Mother-Child Interaction Intervention for Mothers of Toddlers with Visual Impairments*

Abstract

This study aimed to develop a mother-child interaction intervention for Turkish mothers of toddlers with visual impairments (VI). An action research was conducted with two mother-child dyads in order to capture the mediating and impeding factors in an interaction intervention. Data were gathered via diaries, the Maternal Interactional Behavior Checklist, semi-structured interviews and all meetings and intervention sessions were audio and video taped. Inductive micro and macro-analyses were used in data analysis.

Findings showed improvements in attainment and generalization of target maternal interactional behaviors which in turn resulted in improved child interactional behaviors. Results also shed light on the mediating and the impeding factors regarding the procedures undertaken during the course of the study; including the target maternal behaviors, the instructional context and the setting. Taken together, the impact of a systematic parent-child interaction intervention in the field of VI for Turkish mother-child dyads was shown for all participants with important implications for future research.

Keywords: Mother-child interaction, visual impairment, interaction intervention.

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A Mother-Child Interaction Intervention for Turkish Mothers of Toddlers with Visual Impairments

Parent-child interaction is one major area of intervention for children with developmental disabilities that as Bailey and Wolery (1992) propose, needs no questioning. Intervention studies with children at risk (Bus & van Ijzendoorn, 1988; Dodici, Draper, & Peterson, 2003; Moore, Saylor, & Boyce, 1998) and various developmental disabilities (Mahoney & Perales, 2005; Mahoney, Boyce, Fewell, Spiker, & Wheedan, 1998; Seifer, Clark, & Sameroff, 1991) confirm this formulation with evidence for the effectiveness of parent-child interaction interventions on child as well as parental outcomes.

Eye contact is known to be one of the most important communication pathways for the parent-infant dyad, enabling the child to communicate her needs simply by looking/pointing at objects or socially referencing the primary caregiver (Ferrell, 1996; Fraiberg, Smith, & Adelson, 1969; Mitchell & Ziegler, 2007). Therefore, a severe or profound loss of vision may impede these benefits of eye contact in interactions. Besides such a direct impact, the developmental characteristics of children with visual impairments (VI) such as over dependency on the primary caregiver, abnormal sleep-wake rhythms and feeding problems may lead to social and physical burden upon the mother, resulting in a lack of motivation to nurture her child (Baird & Mayfield, 1997; Mitchell & Ziegler, 2007; Sonksen & Dale, 2002). Therefore, it would be wise to claim that parent-child interaction in infants and young children with VI may take different forms compared to their peers with and without other disabilities.

Intervention studies present promising evidence for enhanced parent-child interaction in the field of VI. The pioneering study by Freiberg et al (1969) was followed by more recent ones which used historical techniques such as infant massage (Lappin, 2005; Lappin & Kretschmer, 2005), included children with VI and additional disabilities (Janssen, Riksen-Walraven, van Dijk, & Ruijssenaars, 2010) and investigated the impact of interaction interventions run within an array of services (Beelmann & Brambring, 1998; Fazzi, Signorini, Bova, Ondei, & Bianchi, 2005) and reported significant positive child and parental outcomes (e.g. positive effects on language and social skills for children and positive attitudes toward parenting and parental interactional behaviors for parents).

The limited number of studies on parent-child interaction intervention studies with VI listed above is a much more critical issue in Turkey, where no parent-child interaction studies in VI exist, to date. The low prevalence of VI can be said to be a major reason for the lack of research (see Celeste, 2005; Davidson & Harrison, 2000; Deitz & Ferrell, 1994); nevertheless this small group of children with their unique needs ***do*** exist. Since parent-child interaction by no doubt has an important impact on their development and that it is believed to be the basis for all types of early intervention (Bailey & Wolery, 1992; Fraiberg et al., 1969), we as Turkish social scientists (i.e. special educators, early childhood educators, psychologists) need to investigate the ways to support parent-child

interactions in the field of VI. Therefore the purpose of this study was to investigate the impact of a parent-child interaction intervention for toddlers with VI and their mothers. The research started off with the main question, "What may be the appropriate procedures and strategies for supporting the interactions of very young Turkish children with VI and their primary caregivers through the course of an individualized intervention?" Within this general scope, the authors intended to answer the following questions:

- What procedures had to be undertaken during the course of intervention and to what extent were they feasible and supportive for the mothers and the children?
- What changes did the participants (the mothers, the children, the researcher) go through during and following intervention?

Method

Research Design

This study was designed as an action research for the following reason: each parent-child dyad has unique characteristics and dynamics embedded within a certain culture (Campbell, 2003; McCollum & Hemmeter, 2000; Perez-Pereira & Conti-Ramsden, 2001). However, we don't have any culturally relevant examples to guide us in planning some program and testing its effectiveness on a Turkish sample. In addition, we cannot take the liberty of relying solely on foreign literature because our family structure differs in important ways compared to others in the sense that an average Turkish family's child rearing practices rests on enmeshment and dependency compared to industrialized cultures (Kağıtçıbaşı, 2009). Therefore, there seems to be a need to identify the do's and don'ts of an interaction intervention within the daily lives of Turkish families, which may best be achieved with an action research design.

The action research approach in this study utilized a cyclical self-reflective spiral of defining the problem, planning, acting, observing and reflecting (Costello, 2003; Mills, 2003: Somekh, 2006), which provided a means of understanding and improving the mother-child interactions in VI. Figure 1 shows the action research cycle of this study and the reader may view the events that took place during each stage in Table 1.

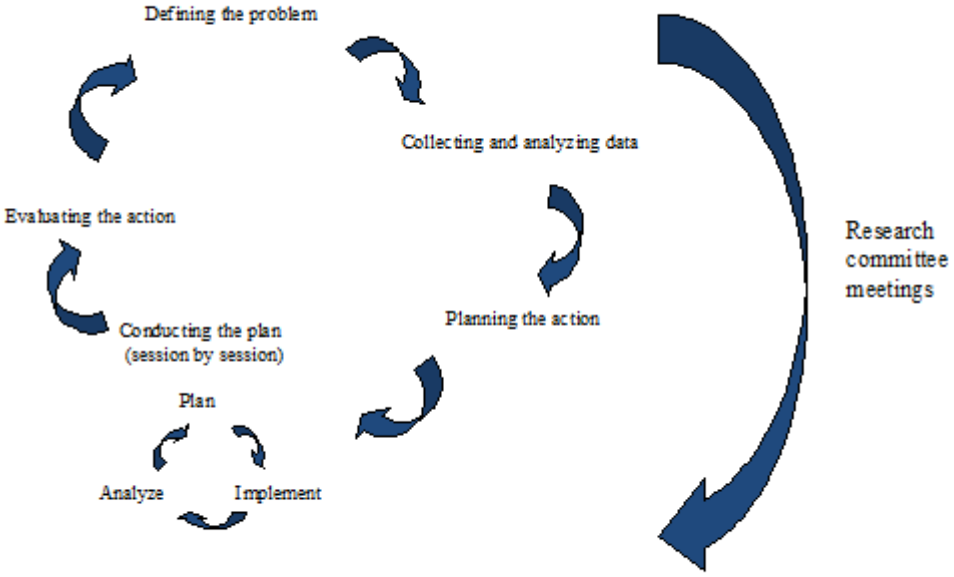


Figure 1. *The Action Research Cycle*

Table 1. *Steps of the Study*

Research phase	Procedures
Problem definition	• Elaborating on personal experiences • Literature review • Focus group discussions with parents of children with VI • Research committee meetings
Data collection and analysis	• Personal contacts with the participant mothers • Semi-structured interviews with the participant mothers • Home visits • Research committee meetings • Inductive analysis (with the co-advisor) • Identifying the individual needs of each dyad
Planning the action	• Planning individualized intervention sessions for each dyad
Conducting the action plan	• Conducting individualized intervention sessions for each dyad • Simultaneous data collection • Research committee meetings
Evaluating the action	• Semi-structured interviews with the participant mothers • Follow-up videos of mother-child play interaction • Inductive analysis (with the research committee)

Participants

The researcher. The researcher was the former author of this article, a psychologist with an M.S. degree in special education conducting her doctoral dissertation. She worked as an early childhood special educator at Ankara University during the time of the study.

The research committee. A research committee was gathered to monitor all procedures undertaken throughout the study. The committee included 4 academics in special education, 2 of whom were the second and third authors and all had training and experience in one or more of the following specialty areas: early childhood special education, visual impairments, parent-child interaction, action research.

The focus group participants. Two focus groups discussions were held by the first author to find out whether problems regarding parent-child interaction in VI truly existed among Turkish families with children with VI. Nine parents (7 mothers, 2

fathers) of 7 children with VI (3 boys and 4 girls) born between 2001 and 2006 (between 4 and 10 years of age at the time of the study) attended the discussions. All parents signed an Informed Consent Form prior to the discussions.

The mother-child dyads. Following the focus groups, two mothers (who had not joined the focus groups) were contacted by the researcher via phone and both parents gave written informed consent to join the study in their first meeting with the researcher.

Both mother-child dyads resided in the suburban region of Ankara, the capital of Turkey. Mother A (MA), the mother of two children (Child A [CA] and his 11 year old sister) was a 32 year-old housewife with a high school diploma. CA, the sibling of MA, was a 16 month old (at the beginning of the study) male with bare light perception, who was diagnosed with glaucoma at a university hospital shortly after birth. Family monthly income showed that the family was in the low SES strata. CA and his family had no experience with any early intervention services.

Mother B (MB), the mother of two children (Child B [CB] and his twin brother) was a 25 year-old housewife with a high school diploma. CB, the sibling of MB, was a 29 month old (at the beginning of the study) male with low vision diagnosed with ROP (Retinopathy of prematurity) at birth followed by glaucoma at 23 months. Parental reports and researcher observations on his visual accuracy showed that CB had form and color perception at close distances, had good eye-hand coordination and could walk in and around the house and the neighborhood independently. He had been taking individualized instruction at a private special education and rehabilitation center 2 hours per week since the last 2,5 months. As in the first family, MB's family was in the low SES strata.

Data Collection Techniques and Instruments

Due to the nature of action research, this study made use of multiple qualitative and quantitative data collection instruments (Mills, 2003; Somekh, 2006) including the Socio-Demographics Form, direct observation, researcher and mother diaries, the Maternal Interactional Behavior Checklist and the committee notes (notes included the topics discussed and the decisions made during committee meetings). All meetings, interviews, home visits and intervention sessions were audio and video recorded by the researcher.

The Socio-Demographics Form. This form, developed by the authors and filled by the mothers during the first meeting with the researcher, included the various demographic characteristics of the child (e.g. date of birth, the diagnosis) the parents (e.g. education level, occupational status) and the family (e.g. persons living in the home, monthly income).

Maternal Interactional Behavior Checklist. In Turkey, no instruments for assessing the interactional behaviors of mothers of young children with VI are available. Therefore, such a checklist was developed by the researchers in order to gather qualitative data on

maternal interactional behaviors. It consisted of 32 items under 9 categories of which were *responsiveness, directiveness, turn taking, child directed speech, providing sensory stimulation, making physical contact, creativity, honesty in verbal interaction* and *enjoyment.* The item pool included maternal interactional behaviors gathered via a thorough literature review. The operational definition of each item was placed in the left column of the checklist and the second column named "Notes" included the qualitative features of the behavior, if the behavior was observed at any time during the mother-child interaction session. The observer was to note the date, the session number and the duration of the interaction at the top of the first page of the 3 page checklist.

The face and content validity of the checklist was checked by three of the committee members prior to the data collection phase. The checklist was filled out by the first author by watching the interaction videos following each session. Interrater reliability was checked for four of the sessions' interaction videos of MA and CA with the third author. Two types of data were compared to ensure reliability: the observance of the behavior at any point during the interaction and the qualitative features of the behavior(s). Any discrepancies between the raters were discussed thoroughly following independent coding.

Interviews. Semi-structured interviews were conducted during the data collection, intervention and post-intervention phases of the study in order to collect data on the personal views of the participants regarding the procedures. All interview formats were prepared according to the following steps: (1) a question pool was developed by the researcher, (2) the pool was sent via e-mail to 3-5 academics including an evaluation form, (3) the question pool was revised by the researcher by taking into account the evaluation forms, (4) the revised interview format was re-evaluated by the second and third authors, and (5) the final version of the interview was formed to be used in the interviews.

The Study

This study originated with the first author giving birth to her son with a profound VI in 2007. For the author, the 2007-2008 period was a time of intensive reading on VI, searching for support services and frequent conversations with the second author. These discussions included answering the question "What do families with a very young child with VI firstly need to help their child survive and develop to her potential?" Among many ideas, the researchers came up with an idea in which they believed would set a sound basis for all child developmental domains: a well established caregiver-child relationship. The next step was to find out whether problems in parent-child interaction existed among Turkish families. At the same time, the first author's thesis proposal was accepted by the Ethics Committee of the Institute of Educational Sciences of Ankara University. With the permission of the university as well as the research committee's approval, the first author conducted 2 focus groups with parents of children with VI aged 4 to 10 to answer the aforementioned question. The results confirmed the fact that parents did face many difficulties and therefore needed formal support in parent-child interaction during their child's first three years. Shortly after, two mothers of children

with VI below the age of 3 were contacted via phone and both agreed to take part in the study.

The data collection phase (March 2011 - May 2011) with the two dyads included semi-structured interviews, a group meeting with both parents and home visits – which were all videotaped. In all home visits during this phase, mother-child interaction was recorded to be used as pretest data. Data collected from the dyads showed that mothers needed individualized assistance in several parental interactional behaviors such as responsiveness, directiveness, child-directed speech and/or turn taking. Another important finding was that both mothers displayed several personal issues which demanded attention from various professions, some of which involved maternal psychological well-being, familial stresses, and informational needs on child care and health.

Data collection and analysis was followed by the intervention phase. Individualized action plans were developed for both dyads and were discussed with the mothers to gain their approval on the target maternal behaviors. Following this, the mothers and the researchers agreed to conduct intervention in the families' homes due to the dyads' transportation issues and the home-based intervention sessions began.

The sessions for both dyads were conducted in the living rooms of the families. The researcher brought with her developmentally appropriate toys, a session plan, activity cards, a camera and a laptop computer in all sessions. The session plan was used to note the important issues and interaction tips that came up during instruction and was handed to the mother at the end of each session. The activity cards prepared by the researcher were practical games that would create a context for the mother to practice her skills and have fun with her child during daily interactions. One or two of these cards were given to the mother after each session.

The instructional techniques used in the sessions included direct and video modeling, video based performance feedback, prompting, listening and problem solving (*committee notes,* May 5, 2011), which Peterson et al (2007) combine under *coaching.* The authors define this process as a process through which a coach and a learner work interactively on agreed upon objectives. The coach is responsible for encouraging the learner to display new skills and giving her feedback based on her performance. By this, the learner finds the opportunity for self-observation, self-correction and discussion of her performance with her coach which results in active participation in learning. Within this framework, video modeling was used to show the mothers the researcher's appropriate behaviors during interaction with the child, while video based performance feedback for helping the mother to observe her own behaviors during her interaction with her child. These video based strategies were conducted within an active problem solving and self-correcting atmosphere. All strategies were used interchangeably or in a combined way whenever the mothers needed extra support to gain and transfer the target behaviors.

Intervention with dyad A lasted 20 sessions (May 17, 2011 - October 21, 2011). During the follow-up, an interview with MA and a video of mother-child interaction in the home was conducted in order to investigate the impact of intervention. In addition, a feeding session was also recorded every five sessions in order to see any possible generalization effects. Intervention with dyad B was somehow more complicated, with the mother intending to end the sessions twice during the course of intervention. Each time, the researcher had to travel to the family's home in order to convince the mother to continue to work with the researcher. As a result, intervention with dyad B lasted only 7 sessions (July 14, 2011 - September 8, 2011). MB was interviewed by the researcher shortly after the end of intervention. Feeding video for generalization effects could not be recorded for dyad B. Table 2 summarizes the elements of the intervention phase for both dyads.

Table 2. *The Intervention Phase*

		Dyad A	Dyad B
Number of sessions		20	7
Behavioral objectives	**Mother**	Responsiveness (read child's behavioral cues, follow child's lead) Directiveness Turn taking Child directed speech Provide stimuli to trigger the senses Instruction Behavior management Creativity	Responsiveness (read child's behavioral cues, follow child's lead) Directiveness (decreasing the level of directive behavior)
	Child	Initiate verbal or nonverbal interaction Maintain verbal and nonverbal interaction Follow directions Haptic exploration (including to play) Turn taking	Initiate verbal or nonverbal interaction Maintain verbal and nonverbal interaction Follow directions
Instructional techniques		Modeling (direct and video) Feedback (direct and video) Prompting Listening	
Materials		Video camera Laptop computer Session plans (a copy given to the mother at the end of session) Activity cards (games to play with child at home) Developmentally appropriate toys	

Data Analysis

The cyclical approach taken by this action research demanded session by session planning throughout the intervention phase. Therefore, this study undertook the constant comparative method which includes a simultaneous collection, analysis and interpretation of data throughout that cycle (Mills, 2003). In other words, each session was followed by the analysis of data collected in that specific session which included a through inductive analysis of the full session video and the researcher notes (researcher diary). The results obtained from the data were reviewed for validity and reliability by the second and third authors. The two authors viewed all data collected in that session considering (1) the appropriateness of researcher behaviors in terms of instruction and communication with the mother and the child and (2) the appropriateness of the researcher's plan for the next session (the objectives, materials and type of instruction chosen). The following session was planned and conducted accordingly.

In addition to these analyses, an inductive macro-analysis was conducted following intervention (Kış & Akçamete, 2013). At this stage, researcher and mothers' diaries, results of the Maternal Interactional Behaviors Checklist filled throughout the intervention and semi-structured interviews with the mothers at the end of intervention were analyzed inductively and categories and themes were formed independently by the first and third author. The results of this macro-analysis were validated by the research committee during the final committee meeting.

Results and Discussion

The macro-analysis revealed two themes regarding factors related to the procedures and the changes the participants went through during the course of the study. The themes and subthemes are depicted in Table 3.

Table 3. The Results of Macro-analysis

Theme	Subtheme
Procedures during intervention	Behavioral objectives
	Instructional context
	The setting
Participant experiences	The mothers
	The children
	The researcher

Theme 1. Procedures undertaken during the course of intervention

This theme was grouped under 3 subthemes.

Behavioral objectives. Many authors stress the importance of parents' ability to read their child's communicational cues as a prerequisite for a positive parent-child

relationship (Baird & Mayfield, 1997; Howe, 2006; Jamieson, 1994; McCollum & Chen, 2003). This maternal behavior was observed to be lacking in both mothers during the data collection period, where mothers displayed a more "ends" rather than a "means" oriented interactional style. Put another way, mothers were insensitive to their children's preferences and only focused on completing the task successfully, resulting in highly directive interactional behaviors. Therefore "appropriate directive behavior" was introduced to mothers 2 or 3 sessions after responsiveness. The microanalyses showed that improvements in these maternal behaviors had positive effects on both children's initiating and maintaining verbal and nonverbal interaction.

Perhaps the question to be asked at this point is "why is taking the child's lead a problem for mothers of children with VI which causes excessive directive behavior?" Jamieson (1994) claims that mothers of children with hearing impairments are more intrusive compared to others because they cannot catch their child's mode of perceiving life with senses different from theirs. Therefore all they can do is focus on the task. This explanation may fit with our participants as well, which shows us that maternal responsive and directive behaviors may be made a priority in parent-child interaction interventions in the field of VI (Chen, 1999; Dodici et al., 2003; Dote-Kwan, 1995; Howe, 2006; Hughes, Dote-Kwan, & Dolendo, 1999; Recchia, 1998) and this postulation seems to be far from being culture specific.

Another issue on these two parental behaviors may have important implications for planning intervention. Responsiveness and directiveness can actually be thought of two behavioral styles on the two ends of a continuum. Therefore, an interventionist can work on these skills within the same sessions, perhaps saving the interventionist and the mother time. It may also be that teaching the mother to be responsive can automatically result in less directive behaviors toward the child (e.g. Moore et al., 1998). Thus, although we took the liberty of tackling these behaviors separately, it may be wise for future studies to blend the two maternal behaviors within the same sessions.

Different from other studies (e.g., Mahoney & Perales, 2003, 2005; Phillips, Morgan, Cawthorne & Barnett, 2008), maternal behaviors other than responsiveness and directiveness were also included as maternal objectives for MA. Turn taking, providing stimuli to trigger the senses, instruction, child-directed speech, creativity and behavior management were included in the sessions due to maternal needs determined in the data collection phase. According to Mahoney and Wheedan (1997), relationship based interventions should be limited to supporting responsive and directive parental behaviors so that minimal intrusions be made to family's daily life in order to show respect for privacy as well as avoiding any parent dependency on the interventionist. In this study however, targeting additional maternal behaviors for dyad A mentioned above actually worked for both the mother and the child, in the sense that improvements in those maternal behaviors were observed only following the sessions including those behaviors. For example MA, during the post-intervention stated that child-directed speech was the one skill she was able to display very easily in daily life compared to others (*interview,* November 25, 2011). Therefore, we believe that working on maternal interactional

behaviors in addition to responsiveness and directiveness is one factor that future studies may take into account.

The instructional context. McCollum and Hemmeter (2000) claim that parent-child interaction interventions should reflect the daily routines of the dyad. As in many studies (e.g. Seifer et al., 1991), we preferred to conduct the sessions within a play context and collected data on mother-child interaction during feeding once every 5 sessions to see any generalization effects (which could only be conducted for dyad A). The major reason for this was that Turkish mothers spend most of the day with care-giving activities and we hypothesized that if we could help them interact effectively with their child during a rare daily activity (i.e. play), they might generalize this pattern to care-giving situations (*committee notes,* June 29, 2011). Analysis of the feeding videos showed that this was so for MA, with more responsive, less directive and more verbal language oriented interactional style compared to the feeding videos taken during the intervention phase. However as Ferrell (1996) states, natural interaction times for a mother-child dyad are mostly comprised of care-giving activities such as feeding, bathing and changing diapers and talking to, cuddling and touching the child during these activities are remarkable times for teaching the world to the visually impaired child. Thus, it may be wise to recommend that studies be conducted within care-giving activities, so that we may compare the impact of different contexts for supporting parent-child interaction in VI.

The setting. Several factors related to home-based sessions came up during the course of the study. In both homes, the researcher at times had to work with the mothers in the presence of other family members, something we Turkish educators often come across. Although these are typical in Turkish homes and thus should not be considered problematic in an action research, they usually result in for instance, food and/or beverage offers to the researcher, which may be considered an intervening situation for instruction. Interestingly, despite others' presence, the mothers could not get anyone to babysit their son during sessions that required private conversations and/or instruction. In addition, the physical conditions of the rooms worked were not suitable for video modeling and feedback (e.g. lack of a table to place the laptop computer).

These impeding factors led the researchers to reconsider the proper setting for intervention. In their study with a Turkish sample, Küçüker, Ceber-Bakkaloğlu, and Sucuoğlu (2001) point out that it may be more effective for interventionists to conduct parent-child interaction observations in the families' homes, while instruction be center-based, allowing the interventionist to take control of potential intervening factors. We believe that the same may hold with our participants as well, a question to be answered in future studies.

Theme 2. The experiences of the participants through the course of the study
This second theme included the impact of intervention on the mothers, the children and the researcher.

The mothers. As noted earlier, both mothers showed improvements in the target maternal interactional behaviors. One very important finding related with these gains was the mothers' ability to generalize these skills to other contexts. Both mothers' diaries included anecdotes involving improved mother-child interactions during indoor and outdoor daily activities, while for MA, the evidence was more convincing based on generalization data (*video record,* July 29, September 5, September 30, December 23, 2011). For instance, MB in her diary shared a mother-child enjoyment during a daily activity and the reader should note the responsive and appropriate directive behavior of MB: *"We went by his father doing repairs around the house. He tried to imitate his father hitting with a hammer. I gave him a wooden stick. First I showed him how to make noise with it and then he did it. I realized that he was getting bored and I hit with the stick a while. He enjoyed it. Then we did it together and continued by taking turns. It was exciting. I very much enjoyed watching him." (MB's diary,* July 27, 2011, p.32-34).

As is known, empowering parents to make use of personal and familial resources to meet needs is considered the major goal of early intervention (Dunst, Trivette, & Snyder, 2000). Both mothers' improved skills in self-corrections during instruction, self-reports on the critical role they play in their child's life and their motivation to transfer their gains to significant others (*video records, mothers' diaries*), showed that they were in some way empowered through the course of intervention.

The macro-analysis also pointed to certain maternal needs. A need frequently brought up by MB was social support. The semi-structured interview following intervention revealed that she ended the sessions due to her husband's relatives' unwillingness to let her go on (*interview with MB,* November 23, 2011). This issue is critical especially for cultures like ours in the sense that an important number of newly married couples live with the husband's extended family and many among them continue to live that way for several years. Accordingly, Turkish educators may come across many mothers in similar situations and may have to deal with the issues that came up during this study. Therefore, parallel with Bronfenbrenner's (1979) ecological viewpoint, intervention for cases like MB may have to include the mother's social network by including those individuals as study participants and/or teaching the mother to cope with other family members' negative attitudes and behaviors.

Secondly mothers frequently expressed informational needs (e.g. psychiatric services, eye surgeries). These needs were all met by the researcher via contacting related specialists and found useful by the mothers (*interview with MA,* November 25, 2011; *interview with MB,* October 23, 2011; *researcher diary,* August 25, 2011). Despite these positive findings, the authors began to question the role of the interventionist in a parent-child interaction intervention. In several countries, relationship-based interventions are usually conducted within an array of services (Mahoney et al., 1998; Peterson et al., 2007). In this study however, the interventionist was "all by herself" in meeting the various needs of the mothers. Therefore, we educators have to take into account the feasibility factor in providing so many services on our own and have to look for ways to implement service coordination models for these families, which is still a major problem in Turkey.

The children. The intervention revealed important benefits for the children as well. CA's gains included initiating and maintaining verbal and nonverbal interaction with the mother as well as an unfamiliar adult, using new one or two word utterances, object play, and orientation and mobility (e.g. *video records:* June 3, August 2, October 10, 2011). The major problem in dyad B was lack of enjoyment during interaction due to mother's expectations regarding her son's taking orders immediately and stopping running away from her (*interview,* April 7, 2011). Following the positive changes in responsive and directive maternal behaviors, CB began to stick to the play, smile more and take his mother's requests which in turn motivated the mother to spend time with her son (*video record:* July 21, 27, 2011).

An important issue regarding the developmental gains of CB is whether his taking individual instruction at a special education center could have made a difference on our results. Three points are of mention here. First, during the data collection phase (prior to intervention), MB stated that this instruction included psychomotor skills and functional vision rehabilitation and that the institution provided no parent education (*interview,* April, 7, 2011). Second, action research by its nature does not intend to control the ongoing routines and choices of its participants but rather makes efforts to take action in order to make things better for them within an ongoing context (Mills, 2003; Somekh, 2006). Last but not least, MB's reports during the informal conversations as well as the post intervention interview (October 23, 2011) lead us to conclude that appropriate child interactional behaviors followed appropriate maternal interactional behaviors, something we may consider as an impact of this intervention.

Taken together, the improvements in child and maternal interactional behaviors point to the reciprocal nature of the mother-child relationship. MA made a good point about this in her diary: *"I frequently talk to ... about what is going on around us during the day. He listens to me carefully (and I keep talking and talking). I believe that this input is piling up in his mind and someday he will get to know what I mean" (MA's diary,* October 5, 2011, p.125).

The researcher. Findings on the professional development of the researcher showed the advantages and disadvantages of working as a parent-professional, where being a mother of a child with VI herself, can and should be considered a possible threat to validity. Three related issues are worthy of discussion here. During the data collection period, both mothers believed that they were better understood by another parent with a child with a VI and that this motivated them to "keep going" with the researcher (*researcher diary,* April 8, April 28, 2011). This raised the question "Does an interventionist have to have a child with similar conditions to establish a good relationship with her clients?" The answer is most definitely "no". It can however be claimed that the researcher had *one small advantage* compared to other researchers without a child with VI; that of time, such that the positive parent-professional relationship probably took shorter to establish which could well be formed with another "non parent-professional" within a longer but acceptable time (*researcher diary,* April 8, 2011).

Another issue involving the parent-professional role was having to share one's parenting behaviors with the participants. The researcher was cautioned by the committee on this matter shortly after sessions with dyad A began (*committee notes,* June 29, 2011). Prior to the study however, both mothers were informed by the clinicians who had sent the mothers to the researcher about the researcher's situation. Thus, mothers joined the study with a tendency toward benefiting from the personal experiences of the researcher. Although this seemed problematic at the beginning, the researcher kept these conversations to a minimum and took the approval of the committee at all times on the ones she should be sharing. Thus, we may recommend to parent-professionals working with VI that it may be their choice to share their personal parenting experiences; however if they do, it would be beneficial for them to keep these to a level where the focus of intervention is still dominating the process.

As De Steiguer, Erin, Topor and Rosenblum (2008) report, these are some of the problems parent-professionals with children with VI go through in work life, together with certain advantages such as a better focus on one's job and advocacy. The researcher experienced the advantages as well as the disadvantages of working as a parent-professional and these experiences showed the authors the problems a parent-professional might come across in her work life, which may be considered a positive contribution to professional development.

Conclusion

All the above factors seem to answer the question: "Are the things I am doing feasible and/or appropriate?"; a question we had attempted to answer beginning from the problem definition phase of our study. Despite working with only two mother-child dyads, we believe we have answered some critical ones or that at least have opened the road to asking the right questions. As qualitative researchers, we are not concerned with generalization issues. Nevertheless, we recommend similar studies in the future to gain a general understanding on parent-child relationships of Turkish families with small children with VI and develop appropriate service coordination models.

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Görme Yetersizliği Olan Küçük Çocuğa Sahip Türk Annelerine Yönelik Bir Anne-Çocuk Etkileşimi Müdahalesi*

Öz

Bu araştırmada, görme yetersizliği olan küçük çocuğa sahip Türk annelerine yönelik bir anne-çocuk etkileşimi müdahalesinin geliştirilmesi hedeflenmiştir. İki anne-çocuk çiftiyle yürütülen eylem araştırmasında, bir etkileşim müdahalesinde karşılaşılabilecek destekleyici ve olumsuz etmenlerin belirlenmesine odaklanılmıştır. Veriler günlükler, Anne Etkileşim Davranışları Kontrol Listesi ve yarı yapılandırılmış görüşmeler yoluyla toplanmış, tüm toplantı ve müdahale oturumlarının ses ve görüntü kayıtları alınmıştır. Veri analizinde tümevarımsal mikro ve makroanalizden yararlanılmıştır.

Bulgular, annelerin hedef davranışların kazanımı ve genellenmesinde anlamlı gelişmeler gösterdikleri ve çocukların etkileşim davranışlarının da buna bağlı olarak geliştiği yönündedir. Analiz sonuçları aynı zamanda seçilen hedef davranışlar, öğretim bağlamı ve öğretim ortamlarına göre karşılaşılan destekleyici ve olumsuz etmenleri ortaya koymuştur. Sonuç olarak bu araştırmada, ileri araştırmalara da ışık tutacak şekilde görme yetersizlikleri alanında Türk anne-çocuk çiftleri için uygulanacak sistematik bir etkileşim müdahalesinin katılımcılarda yarattığı değişimleri ortaya koymak mümkün olmuştur.

Anahtar Kelimeler: Anne-çocuk etkileşimi, görme yetersizliği, etkileşim müdahalesi.

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