

Quality of Partnerships in Service Provision for Korean American Parents of Children With Disabilities: A Qualitative Inquiry

Jiyeon Park and Ann P. Turnbull
University of Kansas

Hyun-Sook Park
California State University at Sacramento

The purpose of this exploratory study was to investigate the perspectives of 10 Korean American parents of children with disabilities about their partnerships with professionals with whom they work to meet the needs of their children and families. In-depth interviews were used for data collection and the constant comparative method was used to analyze the transcripts. Findings are discussed in terms of four themes that emerged from the analysis: cultural and linguistic factors; a lack of prerequisites including connection, information, and advocacy; interpersonal factors such as strengths based perspective, professional expertise, commitment, caring, respect, and trustworthiness; and structural factors such as financial benefits, flexibility, turnover rate, and caseload. Finally, implications for practices to facilitate partnerships with Korean American parents and suggestions for future research are provided.

DESCRIPTORS: family-professional partnerships, Korean American parents, qualitative study, cross-cultural partnerships, cultural awareness, culturally and linguistically appropriate practices

The tremendous expansion of human services during the last decade has produced an urgent demand for partnerships between parents of children with severe disabilities and professionals as many children with disabilities and their families receive services from a variety of health, education, and social service agencies to meet their multiple needs. It has long been believed that partnerships between parents and professionals mutually are beneficial and are profitable

not only to those partners but also to the children who are nurtured and educated by them (Kagan, 1988). Parents, however, seem to have difficulty working with professionals who do not regard them as equal partners or who do not have sufficient competency to meet the needs of their children (Kahn & Kamerman, 1992; Turnbull & Turnbull, 2001). Parents also have difficulty with services that are fragmented and uncoordinated (O'Connor, 1995; Roberts, Akers, & Behl, 1996). Partnerships are more at stake when the parents' cultural backgrounds differ from those of the helping professionals. This is because parents have to work with professionals whose beliefs, values, practices, and sometimes language differ significantly from theirs (Kalyanpur & Harry, 1999; Lynch & Hanson, 1998).

The term *partnership* can be defined as "an association between a family and one or more professionals who function collaboratively using agreed-upon roles in pursuit of a joint interest or common goal" (Dunst & Paget, 1991, p. 29). Many researchers have investigated what constitutes "working" or "not working" partnerships by examining the perspectives of parents of children with disabilities or the perspectives of service providers who serve them (DeChillo, Koren, & Mezera, 1996; Harrison, Lynch, Rosander, & Borton, 1990; Kagan, Goffin, Goulub, & Pritchard, 1995; O'Connor, 1995). Examples of indicators that facilitate partnerships are good communication skills such as listening skills, openness to suggestions, and responsivity (Lowenthal, 1994), adequate professional expertise and knowledge (Dinnebeil, Hale, & Rule, 1996), and (c) flexible management in which agencies are free from formal rules or guidelines that inhibit services to eligible clients (Dinnebeil et al., 1996; Roberts, Akers, et al., 1996). Examples of indicators that impede partnerships include ineffective communication strategies (Wesley, Buysse, & Tyndall, 1997) and the large caseloads of professionals, which constrain time and scheduling for

Address all correspondence and requests for reprints to
Jiyeon Park, The Beach Center on Families and Disability,
3136 Haworth, University of Kansas, Lawrence, KS 66045.
[E-mail: jiyeon@ku.edu](mailto:jiyeon@ku.edu)

helping parents and their children (Roberts, Behl, & Akers, 1996).

To understand partnerships between parents and professionals, attention should be paid to both the interpersonal and structural aspects of the partnerships (Turnbull et al., 2000). Although service delivery ultimately is implemented by individual service providers (interpersonal aspect), it is also indisputable that service delivery takes place in a larger context (structural aspect) that typically extends beyond the control of specific individuals (Bruder & Bologna, 1993; DeChillo et al., 1996). Communication skills and professional competence are interpersonal factors, whereas management systems and caseloads are structural factors.

Over the past decade, there has been an increasing number of studies on how to provide culturally and linguistically appropriate educational and social services to children with disabilities and their families (Delany-Barmann, Prater, & Minner, 1997; Hanline & Daley, 1992; Harry, 1992; Herbert, Mayhew, & Sebastian, 1997; Shapiro, 1996; Shapiro & Simonsen, 1994; Sileo & Prater, 1998). The primary focus of these studies includes the preparation for personnel who will serve children and families from culturally diverse backgrounds, multi-cultural education curricula, and the perceptions of parents of children with disabilities from diverse cultural groups about the quality of services and the people who provide those services. In the literature, there are more studies that examine partnerships with African American, Latino, or Native American families and fewer studies that cover cross-cultural partnerships with Asian families. That is, Asian children with disabilities and their families have remained one of the most poorly understood ethnic groups, despite their emergence as the fastest growing ethnic group in the United States (Chan, 1998). Because each culture in Asia is unique in terms of language, lifestyle, religion, custom, food, value, tradition, and even political orientation, an investigation of the subcultures of Asia is needed to meet the individual needs of children with disabilities and their families from Asia.

Therefore, the purpose of this study is to investigate the perspectives of 10 Korean American parents of children with disabilities about their partnerships with professionals with whom they work to meet the needs of their children and families. Ultimately, this kind of research will provide directions in establishing a foundation for personnel preparation, in clarifying the nature of high quality service experiences for parents from diverse cultures, and in affecting policies of local, state, or federal agencies to assist professional development and to remove organizational barriers to partnerships (Brown, Perry, & Kurland, 1994).

Method

Participants

Data were collected from 10 Korean American parents of children with disabilities (9 mothers and 1 father), including 1 couple. The demographics of the parents (Table 1) show that these families reflected diversity in terms of geographical location, socioeconomic status, education, English language proficiency, and acculturation level. Of the 10 parents, 6 lived in Washington, 3 lived in Illinois, and 1 lived in Virginia. There were 2 single parents and 8 married parents. There were 3 graduate students (2 full-time and 1 part-time), 4 full-time homemakers, 1 factory worker, 1 manager of her own business, and 1 saleswoman. Level of English proficiency was determined by parents' self-description. Level of acculturation, the process of adopting the cultural traits or social patterns of another culture, was determined by the length of time the parents lived in the United States, their level of English proficiency, the amount of exposure to and adoption of American culture, and the level of participation in the social events not only with Korean Americans but also with other people in the community.

Table 2 provides the information about the 9 children of the 10 parents who participated in the study. Disabilities included severe/multiple disabilities ($n = 5$), a severe hearing impairment ($n = 2$), autism ($n = 1$), and attention deficit hyperactivity disorder (ADHD) and other learning disabilities ($n = 1$). Except for 1 child who stayed at home because of his fragile health condition, all the children attended school from preschool to high school. Only 3 children were enrolled in inclusive educational programs, whether fully or partially. The other 6 were in self-contained classrooms or stayed at home. Speech therapy was the most prominent service provided (7 of 9 children received this service). Of these 7 children, 1 received physical therapy and another received both physical and occupational therapy in addition to speech therapy. One child received a sign language interpreter service.

Purposive and criterion based sampling was used to select participants. The sampling method involves the deliberate selection of subjects in order to provide important information that cannot be obtained from other choices (LeCompte & Goetz, 1982; Lincoln & Guba, 1985). The criteria for selecting participants included a parent who had at least one child with a disability who qualified for special education and related services, as well as a first generation U.S. parent. The criteria did not include the severity of the child's disability, considering the small number of Korean American parents who had children with severe disabilities.

With the exception of one mother who was already known to one of the authors, all the parents were identified through a parent organization that was known to serve Asian

Table 1
Family Information

Parent	Marital status	Age	No. of children	Highest degree earned	Occupation	Spouse's occupation	Economic status	Geographical location	Level of English acquisition	Level of acculturation
Cheryl	Divorced	40	1	Junior high	Housewife	NA	Low	Urban	Introductory	Less
Jennifer	Single	38	1	High school	Housewife	NA	Low	Suburban	Intermediate	Somewhat
JungMee	Married	46	2	Junior high school	Self-owned gas station	Self-owned gas station	Moderate	Suburban	Introductory	Less
Lisa	Married (wife)	30	2	Bachelor's degree	Housewife	Student	Moderate	Urban	Introductory	Less
Matt	Married (husband)	32	2	Bachelor's degree	Student	Housewife	Moderate	Urban	Intermediate	Less
NamSuk	Married	30	1	Elementary school	Working in a factory	Military personnel	Low	Suburban	Introductory	Somewhat
Sue	Married	47	4	Junior high school	Housewife	Military personnel	Moderate	Suburban	Introductory	Somewhat
Taylor	Married	35	1	Master's degree	Student	Businessman	High	Urban	Advanced	More
Young	Married	36	2	Master's degree	Student	Professor	Moderate	Urban	Advanced	More
Yuni	Married	40	2	Associate degree	Sales	Businessman	Moderate	Suburban	Intermediate	More

American parents of children with disabilities, Korean American parent advocates, and researchers who have a long history of parent support. Twelve parents were identified initially as potential participants. They were contacted by telephone to be informed of the purpose and procedures of the study. One parent could not be interviewed because her phone was disconnected after the initial contact and the other mother refused to participate after initial contact because of her husband's disagreement with her participation.

Data Collection

In-depth personal phone interviews in the parents' native language, Korean, were used for data collection. This method was chosen because it could give voice and representation to a group that has not been represented adequately in the professional literature (Walsh, Tobin, & Graue, 1993), in this case, Korean American parents of children with disabilities. The first author of this study, a native speaker of Korean, conducted interviews with the 10 parents. She is a certified special education teacher both in Korea and Kansas and has teaching experience in both countries.

To facilitate and guide the interviews and to be consistent across interviews, questions (which served as an interview guide) were developed by the researchers. The questions were based on the objectives of the study, a review of the literature on partnerships between parents and professionals and cultural diversity, and on discussion with a Korean American consultant who had experience working with many Korean American parents of children with disabilities. Sample questions included: What were the best experiences that you ever had with any professionals who provided services for your child? What factors kept that partnership in operation? How did the cultural and linguistic differences between you and the professionals with whom you worked influenced your experience? (The interview guide is available upon request.) The interview guide was used only to facilitate/guide the interview rather than to direct the interview (Creswell, 1994; Krueger, 1994). Participants were encouraged to talk about their partnership experiences with professionals.

After the initial contact to inform potential participants of the purpose and procedures of the study, introduction letters and consent forms were sent to those who indicated a willingness to participate. As soon as consent forms were received, scheduling for interviews was started. The interview guide was sent by mail a week before the scheduled interview to allow time for participants to think about answers. All materials, including the interview guide and consent forms, were written both in English and in Korean so that participants and their family members could read them in their preferred language. The participants were asked about the most convenient time for the interviews.

Table 2
Child Information

Child	Parent's name	Child's disability	Gender	Age	School placement	Class placement	Related services
Hoon	Cheryl	Mental retardation, autism	M	14	Junior high	Self-contained	Speech, social work
Bob	Jennifer	Mental retardation, cerebral palsy	M	4	Home	Staying at home	Social work
Ben	JungMee	Attention deficit hyperactivity disorder, learning disabilities	M	12	Junior high	Self-contained	Speech
Amy	Lisa and Matt	Hearing impairment	F	5	Preschool	Fully included	Speech
James	NamSuk	Mental retardation, physical disability	M	8	Elementary	Self-contained	Speech, physical therapy
Sophia	Sue	Mental retardation	F	13	Junior high	Self-contained	Speech, social work
Kimberley	Taylor	Mental retardation, physical disability	F	8	Elementary	Self-contained, partially included	Speech, physical therapy, occupational therapy
Sun Hee	Young	Hearing impairment	F	8	Elementary	Fully included	Interpreter
Ian	Yuni	Autism	M	16	High	Self-contained	Social work, speech

In addition, they were asked to find the most comfortable and uninterrupted place for the interview. The time of the interviews varied from morning to night and 9 of 10 participants chose home for the place for the interview.

One interview session involved an in-depth interview of 60-120 minutes (an average of 80 minutes) with subsequent contacts for clarification and elaboration of ideas. Subsequent contacts were made once for 6 participants and did not exceed 30 minutes. Participants were interviewed two or three times according to their preference. They could choose either three short interviews or two interviews that were a bit longer. As a result, there were 24 interview sessions. In addition to these interview sessions, some follow-up questions were asked as data analysis proceeded (e.g., How many friends other than Korean Americans do you have? In what kind of community activities are you or your family members involved?). We realized the important role of acculturation in their responses.

Interviews were audiotaped with the permission of the interviewees using a telephone call recorder for subsequent verbatim transcription. Notes were taken also by the interviewer during the interviews. Contact logs on formal and informal contacts with participants were kept in the audit trail. The Hangulpro 96 (Hangul and Computer, 1996), a software program for Korean language word processing, was used to transcribe the interviews that were conducted in Korean. A student research assistant who uses Korean as a primary language proofread each transcript while listening to the corresponding tape to ensure that the tapes were transcribed correctly.

Data Analysis

A constant comparative method of qualitative analysis was used for data analysis (i.e., code categories were compared constantly with each other to get a general framework that properly interprets the data and the emerging interpretation

was reduced gradually to produce a small set of higher level concepts; Lincoln & Guba, 1985). The principal investigator read the first transcript, established the first set of codes, and entered them into a codebook. The indicators of partnerships identified from the literature (e.g., communication, respect, caring) and the framework that examines partnerships at two levels (i.e., interpersonal and structural) guided the initial coding process, but codes were added as new ideas emerged from the data. While reading the second transcript, the first codebook was revised in order to incorporate new themes found in the transcript. By repeating this process, the codebook was revised as many times as the number of transcripts, although the number of revisions was reduced gradually as the number of transcripts increased. Once the last transcript was coded, the previous transcripts were read once again and coded with the final version of codes. In order to check the accuracy of coding, a graduate student with experience in qualitative research and who speaks Korean as a primary language independently coded the transcripts with the final version of codes. The principal investigator and the graduate student discussed any disagreements to reach consensus. The codes were compared constantly against each other to get a small set of higher level concepts (Lincoln & Guba, 1985). The final version of the codebook had 37 codes, which were refined and reduced gradually to four themes with 17 subthemes.

In order to ensure credibility of the analysis, member checks were conducted with 4 participants and with the Korean American consultant who was involved with the development of the interview guide. A summary of the themes and subthemes, written in Korean, was sent to the 4 participants. They were contacted by the interviewers who asked them if the summary appropriately reflected their perceptions. Also, the findings were discussed with the Korean American consultant who had many years of

experience in supporting Korean American families with children with disabilities (including 3 participants in this study) to check if the findings reflected the experiences of Korean American parents of children with disabilities. All feedback was positive, and no change was suggested.

Findings

Findings are organized into four themes that emerged from the qualitative data analysis (Figure 1): cultural and linguistic factors, a lack of prerequisites, interpersonal factors, and structural factors. Although not recognized as a separate theme, the level of acculturation of each participant was considered across the themes to discern variations or differences in the parents' perceptions.

Cultural and Linguistic Factors

The parents were asked specifically how cultural and linguistic differences influenced their partnerships with professionals. The cultural and linguistic factors that the participants mentioned were categorized into four subthemes: language barriers, discrimination, linguistic considerations, and different values and practices.

Language barriers. Limited English proficiency was the biggest barrier for many of the participants in forming partnerships with professionals. Language barriers are the basis of many issues that will be described in subsequent themes. Eight parents said that their limited English proficiency isolated them from meaningful partnerships with professionals; limited their access to basic connections, information, and advocacy; and prevented them from participating actively in school events and meetings. The other 2 parents who were less limited in their English proficiency were highly educated and acculturated to American culture in terms of lifestyle, values, and social relationships.

In spite of numerous examples of language becoming barriers to partnerships, only 3 of 8 mothers who had difficulty communicating in English had used interpreter services for their meetings with professionals, which the Individuals with Disabilities Education Act (IDEA)

entitles them to request. However, these 3 parents said that they were not satisfied with the interpreter services and soon discontinued the service. For example, JungMee said it took too long for the conversation to be interpreted back and forth between Korean and English. By the time she had to leave the conference because another parent was waiting, she found that she was not able to finish even half of her agenda. Namsuk expressed that she used an interpreter only once because she believed that the interpreter was trying to persuade her to accept the professionals' opinions, rather than remaining impartial while interpreting. Parents who had never used interpreters attributed their hesitation to two reasons. First, they could not find an interpreter who had knowledge about special education and services for children with disabilities. One mother said, "I felt sorry to ask for an interpreter to school since my family is the only Korean family in the school." Second, some parents mentioned a confidentiality issue. They did not want other Korean Americans to know about their child and family matters.

Feelings of discrimination. Four mothers expressed feelings of racial discrimination even though they could not support this idea with discernible proof. In talking about these feelings, the parents agreed that the incidents of discrimination were so subtle that other people might not see them as discrimination. The mothers were very careful in using the word *discrimination* because they did not believe that professionals would discriminate explicitly against their children and because there had been no verification.

I feel that his teacher at the previous school was somewhat prejudiced against non-white people like us. Similarly, his teacher at the third school, the school he went right before the current school, seemed to dislike him too. When I was watching the school's Special Olympics Games, a coach would blame Bob for making troubles whenever he had problems with other American kids. Of course, when children fight, both parties are equally guilty, not

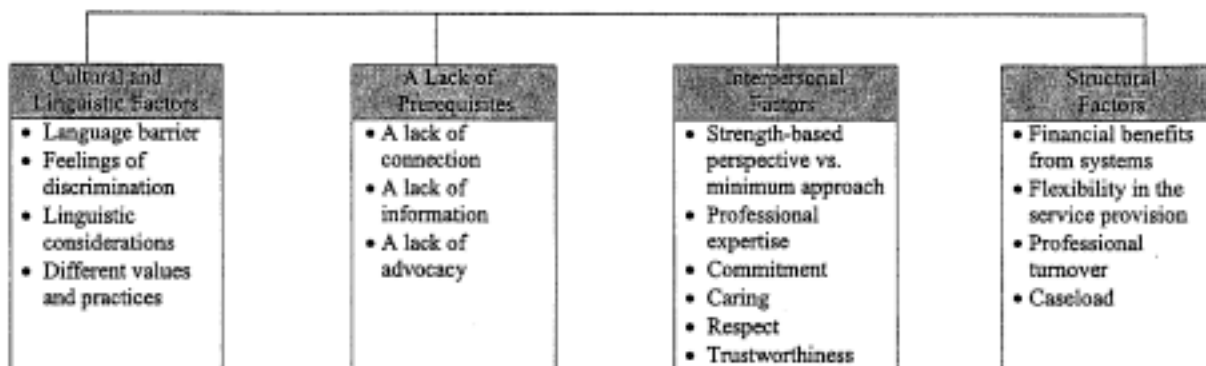


Figure 1. Organization of themes.

just one. It made me feel that they are discriminating against him.

Yes, he is a citizen, but, regardless of his citizenship, he looks different. I think if he had blond hair and blue eyes, any American teacher may have helped him more actively. And they seem to think that he is treated much nicer here than in Korea and seem to tell me that I should be satisfied with what I have.

When children had less severe disabilities that parents believed could be improved through intervention, the parents believed that the professionals did not do their best to help their children reach their potential because their children were not white.

Linguistic considerations. The study included 1 mother and 1 couple, each of whom had a child with a hearing impairment. There were conversations about issues regarding this specific disability, such as audiologic testing and sign language. Because these parents all came to the United States after their children had spent several years in Korea, the children were exposed fully to the Korean language before immigrating to the United States. Upon entry to U.S. special education services, their children went through a comprehensive evaluation for diagnosis, classification, and placement. A father shared his concern regarding the process of audiologic testing:

As you know, the consonants /f/, /v/, and /z/ do not exist in Korean. The audiology test is organized according to the English phonics system, so it does not reflect the exact hearing capacity of my child who just arrived in the U.S. after being exposed to a different sound system for several years. I understand that it would be almost impossible for professionals to create a totally separate test system for each foreign language, but it would be helpful if they could consider the special linguistic situations of the child in the evaluation process.

Different values and practices. The Korean American parents described their traditional values and practices (e.g., discussion style, childrearing, and eating) that they wanted professionals to understand. Most parents, regardless of their level of acculturation, said that they usually tried to listen and follow professionals' opinions without disagreeing or posing questions. Lisa said, "As you also know, we Koreans are very compliant to professionals, especially teachers. We are taught to say 'yes' to teachers, whereas being assertive is so important in this country." Her comment indicates that not only language itself but also different discussion styles between two cultures could be a barrier to vigorous communication between parents and professionals.

Even the 2 parents who were the most acculturated and have been actively involved in the partnerships with professionals said that they would think over and over again before making any suggestions or complaints. They indicated that they would write a personal letter to professionals rather than talk directly to them. Whether in writing or in direct talking, they said that they were trying to sound sweet and nice in their tone of speaking up. Even when they made a complaint about something, they said that they tried to find the most modest expressions rather than directly criticizing professionals. Regarding childrearing, 1 mother shared her experience of a home visit from professionals. She did not interact with her child while visitors were in her home because she was taught not to express parental affection to children in front of others. However, the visitors misunderstood her attitude as uninterested and unresponsive and interpreted the mother's lack of interaction with her child as "problematic".

Regarding eating practices, 1 mother shared her hesitation about a learning objective developed for her daughter who had severe disabilities. The objective was to explore the texture of various foods with fingers during lunch, but this did not go well with her Korean style of eating courtesy that her family practiced at home. She said:

We Koreans always use utensils to eat meals. We were taught not to touch food with hands. I understand the intent of the lesson, but I would rather like her to learn using utensils during that time. As you know, Koreans like soup (*guk*) and my family also has rice (*bab*) and soup together for almost every meal, so finger-feeding is not such a needed skill for my daughter.

Interestingly, these two examples regarding home visit and finger-feeding were from the 2 most acculturated parents. These parents maintained Korean traditions in these areas even though they adopted many Western styles of living (e.g., social gathering). The other parents also mentioned that they still maintained Korean traditions in many aspects, such as cooking style and food selection, eating manner, or childrearing practices. Regardless of the parents' English proficiency, the length of time in the United States, involvement in American society, or education level, all of the parents seemed to keep Korean traditions and values to some extent and wanted professionals to take these cultural differences into account in working with them and their children.

A Lack of Prerequisites: Connection, Information, and Advocacy

The theme of a lack of prerequisites emerged more pervasively in the conversations with the parents who were less educated, less fluent in English, and less involved with

social relationships with other people (both Korean Americans and non-Korean Americans). The interviewer found it quite challenging to talk about partnerships with 3 of the participants because they did not have a basic understanding of special education and other social and human services. Four other parents were a little more knowledgeable than these 3 parents, even though their knowledge and understanding were also fractional. It was evident that these parents lacked prerequisites for understanding the nature of partnerships with professionals. They were not informed about some very important matters (e.g., a right to request a meeting to review their child's individualized education plan [IEP]).

At first, the researchers planned to approach parents with direct questions about facilitating factors or barriers of partnerships; however, we had to modify our research questions because of the parents' lack of prerequisites. Some parents did not understand common terms (e.g., Medicaid, subsidy), so many terms were paraphrased into descriptive words to assist the parents' understanding. Through this process, we realized that the extent of acculturation is an important factor in determining the level of prerequisites that parents have, and, in turn, that the level of prerequisites is an important basis for establishing partnerships. A lack of prerequisites in their lives is described below in terms of three subthemes, that is, connections, information, and advocacy.

A lack of connections. Five parents said that they did not have a reliable ally. They often used an expression that "we [my family] don't have any ties." This may not be too surprising considering that they are immigrants from a foreign country. However, the fact that they did not have even minimum connections with professionals was problematic. For example, 2 parents said that, within the last 5 years, they had never initiated a conversation with their child's teacher. The next two subthemes might be the natural results of this unconnected phenomenon.

A lack of information. As mentioned above, 3 parents were unable to judge the quality of their partnerships because they did not have even minimal information about the nature of service delivery or their parental rights and 4 parents had little more knowledge than the other 3 parents. For example, 1 mother said that she signed her child's IEP without reviewing it or understanding the contents because she knew neither the required IEP components nor her parental rights in developing the IEP.

A lack of advocacy. Given the significant lack of information, these 7 parents did not have the advocacy skills needed to represent their children's interests. When there are no reliable allies to advocate for the parents, the parents' own advocacy skills are the prerequisites to initiating an equal partnership with professionals. However, parents regarded special education rights, such as free public

education or free transportation, as "blessings" rather than "rights" and hesitated to raise questions or disagree with the agencies, question the performance of professionals, or request assistance related to their rights. For example, 1 mother moved to a house closer to the school instead of asking for some assistance with her son's challenging behaviors on the school bus. Although free transportation and positive behavior support are services to which her son was entitled, she chose to move rather than advocating for the rights, because she did not want to cause trouble with the school and she did not have confidence in her advocacy skills.

Interpersonal Factors of Partnerships

When the 10 parents were asked about the characteristics of professionals who were the most or least helpful, they provided a number of indicators that facilitated or impeded partnerships. Facilitating factors and barriers are summarized according to whether they are interpersonal or structural because, as stated in the review of the literature, partnerships should be understood at both levels (Bruder & Bologna, 1993; DeChillo et al., 1996). The interpersonal factors suggested by the parents were strengths based perspectives versus minimum approaches, professional expertise, commitment, caring, respect, and trustworthiness.

Strengths based versus minimum approach. Most parents appreciated teachers who encouraged their children's potential and did not emphasize what their children could not do. For example, Yuni was thankful to her son's elementary school teacher who discovered his talent for mathematics, in spite of his autism, and tried to teach him lessons, even after school. Because parents frequently heard negative feedback about their children, they were thankful for professionals who nurtured their children's positive attributes and challenged them to progress.

On the other hand, the parents were unhappy with professionals who used the minimum approach, which meant that children with disabilities were given the simplest and easiest tasks and were not challenged to improve their current performance. Ian, Yuni's son, had just started vocational training in his high school at the time of the interview and Yuni shared her dissatisfaction about the career education curriculum. In spite of his autism, Ian was able to express his needs in English and Korean and liked manipulating parts of home appliances and listening to music. He was able to name almost all the songs that he listened to on a particular radio station. However, when he started his vocational training, his teacher taught him custodial skills and had him clean the school building, instead of finding out and incorporating Ian's talents, potential, or preferences into the program. Yuni was very depressed by this.

They told me that the first project for students in special education is the "Janitor Job Training." So,

they let Ian clean the school. It is painful for me to bear that. Do I have to let him clean the school? Does he really need to? Even if Ian has a disability, does he really need to clean the school? He may do well at something other than cleaning. Also, cleaning is a kind of labor, why does he have to work without getting paid? I often asked Ian what he did at school. Ian said that he cleaned the school. That made me very sad and discouraged.

In another example, JungMee was very unhappy when she saw her son, Ben, playing a game at the Special Olympics where he stood in one place and occasionally picked up a ball coming around him. That sporting event was originally designed for students using wheelchairs, and Ben was the only one not using a wheelchair. JungMee was very sorry that the sports coach did not see her son's maximum capability but rather simply placed him in the easiest game, a game which her son did not even enjoy.

Professional expertise. Seven parents indicated that professional expertise was one of the most important qualities required of professionals who work with them and their children. To these parents, professional expertise was an extensive concept that encompassed good teaching skills, knowledge about planning for their children's future (e.g., independent living and employment), and resourcefulness.

The parents wanted professionals to tell how the parents could help their children to catch up academically. Parents liked professionals who were skilled at teaching academics and decreasing their children's challenging behaviors. Taylor emphasized that one of the components of professional expertise includes the capability to help with future planning for her child because she was worried a lot about her child's future after her and her husband's death. She said that the issue has been a major concern for the couple because their child has severe disabilities and will be unable to live independently without parental help. In the case of JungMee, she remembered a teacher who told her in detail about a respite care subsidy and how to apply for it. JungMee said that she was impressed by the teacher's knowledge of benefits and services and that such experiences increased her trust in the teacher.

Commitment. According to these parents, professionals who were committed were the best people with whom to establish partnerships. Parents remembered and were thankful for professionals' committed attitudes. One mother recalled a teacher who taught her son 3 years ago and provided additional teaching time for her son after school.

At the time, we had [a] hard time [managing] my son's behaviors. He sometimes did not follow directions and showed some tantrums. Of course, he did that at school, too. But, he had a very good teacher at the time.

If he did not finish his work or showed behavioral problems, the teacher had him stay in school even after other kids went home and worked with him until all work was done and he calmed down completely. I have never seen a teacher who tried to teach him even after school time.

Caring. The parents desired a partnership relationship where genuine caring was evident—just like in family relationships. In fact, some parents had worked with professionals who were mothers of children with disabilities. They said that these professionals understood them very well and provided very useful information. Although parents agreed that not all professionals could be parents of children with disabilities, they wanted to work with professionals who would regard their students with disabilities as their own children and who would treat them accordingly.

Several parents had negative experiences with professionals who had uncaring attitudes about their children (e.g., professionals who were not interested in their children's progress). These parents used an expression "working for a paycheck" to describe these professionals. These professionals were described as having no passion and being neglectful of their students' learning. One mother said, "The teacher was not interested in her students. She just watched a clock on the wall and only filled the class hours without doing anything! My son did not learn anything in that year. What a waste of time!"

Respect. All participants mentioned respect at least once as one of the facilitating factors for partnerships. They conceived of respect in two ways: respect for children and respect for parents. "Respect for child," meant that their children were treated the same as children without disabilities and as non-Korean American children with disabilities. "Respect for parents," meant that parents were treated as equal partners in seeking the best education opportunities for their children. According to Sue, she felt very good about the professionals who considered her suggestions and accepted them. She asked teachers to teach Sophia how to type using a keyboard because Sophia liked computers. The teachers modified their lesson plans and taught Sophia how to type. This experience facilitated her partnerships with teachers by making her feel respected by the professionals.

Trustworthiness. Five parents said that untrustworthy professionals did not make good partners. A trustworthy professional followed up on promises made and kept appointments. For example, 1 mother said, "I could not trust the case manager anymore when she did not keep an appointment on three occasions without any notice." She refused to work with her any more and requested another case manager. She said that it was exhausting to wait for a

person who ultimately did not show up.

Regardless of their degree of acculturation, parents had consistent perspectives on how working partnerships could be enhanced. However, the extent of their acculturation influenced how they responded to problematic situations. For example, highly acculturated parents would write letters, although worded moderately, to let professionals know their thoughts and feelings. Parents who were less acculturated did not have the knowledge, information, and advocacy skills to speak up or take action to correct the problems that they experienced. For example, JungMee, the mother who was unhappy about her son's placement in the Special Olympics for students using a wheelchair, neither asked why his coach placed him in that game when his ambulatory skills (ability to walk and run) could have allowed more active participation in a different game, nor did she request a placement change.

Structural Factors of Partnerships

Structural factors that facilitate or impede partnerships mentioned by the participants can be summarized into four subthemes: financial benefits from agencies, flexibility in the service provision, professional turnover, and caseload.

Financial benefits from agencies. The financial benefits provided by various government and other agencies were mentioned by many parents as a facilitating factor of their partnerships with special education services. Four participants received Medicaid benefits, which relieved their concern about medical costs for their children with disabilities. Seven participants were receiving a subsidy (i.e., respite care or other type) at the time of the interview. These 7 parents used the financial assistance to hire someone to help with child care or to enroll their children in extracurricular activities such as drumming, Tae-Kwon-Do, and swimming. The funds provided practical benefits to parents and their families without too many restrictions.

Excessive paperwork required by various service agencies, however, was mentioned as a big burden to parents, especially when English was not their primary language. This barrier diminished their appreciation of the helpful benefits. For example, 1 mother said that she gave up using the subsidy money for respite care because of all the paperwork involved each time she hired a baby-sitter for her son.

Who would be willing to baby-sit him if they would have to fill out such many papers for that little money? Also, the part that I have to fill out is a challenge, too. I don't have anyone to help me fill out the form. I may as well give up rather than suffering from these headache-evoking papers.

Flexibility in the service provision. Three parents talked about a lack of flexibility that blocked their motivation to

establish partnerships with professionals and the system including service agencies and schools. One mother said that she never had enough conversation time with teachers at any parent conferences because the school assigned 3 days for the conferences, which meant that teachers allowed only 20 minutes for each parent.

The school [limited] parents [to] 20 minutes. That 20 minutes went so fast while I was trying to understand what the teachers said about my son's progress and needs, then I had to leave ... keeping my questions and comments to myself because the next parents were ... waiting for [their] turn. How can I establish a relationship with [the] teacher in this way?

Professional turnover. Three participants said that a frequent change of service providers, due to high turnover in social service agencies, resulted in inconsistent and uncoordinated services. For example, 1 mother said, "We had four different case managers in six months. I don't know why they [quit] their job so soon. Each time, I felt as if everything needed to start again from the beginning." She said that it was very hard to establish rapport when she was not sure if the service provider would show up the next week.

Caseload. Heavy workloads were mentioned as barriers by 2 parents. One mother said that she began to expect little from her case manager when she heard that about 200 families were assigned to one case manager. She believed that a meaningful partnership would be impossible with someone who would have to take care of 200 families. This mother had similar thoughts about teachers. She said that she was not going to bother teachers, because there were so many children with various disabilities in one class and teachers were busy enough taking care of them.

How can I ask her to only pay attention to my son and teach him this or that when I [know] that she has many kids with various kinds of disabilities in her own classroom and in [another] regular classroom?

Discussion and Implications

This study delineated several cultural and linguistic factors and other interpersonal and structural factors that influenced Korean American parents' perspectives toward partnerships with professionals. Although the themes in each factor affected the partnerships to different degrees, they also interacted with each other. For example, the use of interpreter services was affected by a structural factor. Families found that interpreter services were time-consuming, which limited their meeting time with professionals. Interpreter services were also affected by a cultural factor. Families may not want others from the same culture (i.e., Korean American

interpreters) to know about their children with disabilities due to embarrassment, perhaps because having a child with disabilities is sometimes considered to be a loss of face or a result of previous sins (Kim, 1998).

The parents identified similar interpersonal factors regardless of their acculturation levels, but they differed in their response to difficult situations. More acculturated parents communicated their concerns to professionals, whereas less acculturated parents did not. However, it was notable that even the more acculturated parents were not as forthright as empowered parents in voicing their concerns. They were modest in their communication with professionals even though they had extensive knowledge about their rights and ideas about attaining appropriate education and services for their children. On the other hand, American empowered parents are portrayed as "... assertive, knowledgeable, and empowered and fighting against..." (Turnbull & Turnbull, 2001, p. 30) the school system to attain their children's rights.

Given this complexity of how each factor influences the other, this study suggests that the partnerships between Korean American parents and professionals should be understood from perspectives that encompass all of these factors. Although it is necessary for professionals to get to know individual families in order to understand where each family stands on different factors (e.g., language, acculturation), there are certain implications for building stronger partnerships between Korean American families and professionals.

Availability and Quality Control of Interpreter Services Are Basic Needs for Families With Limited English Proficiency

The findings indicated that the extent of English proficiency was a significant determinant of successful partnerships between parents and professionals. It is inevitable that parents with limited English proficiency will be seriously disadvantaged when working with American professionals. Cross-language communication is frustrating for both parties (Hanson, Lynch, & Wayman, 1990). When the collaborative time necessary to share, plan, and implement services is cut short because of difficult communication, some of the goals can be lost (Hanson et al., 1990). The findings suggest that effective training and use of interpreter services should be considered before forming parent-professional partnerships. For example, state and local educational agencies could connect Korean American parents with some of the 40,000 Korean students who study in the United States (Number of students studying abroad, 1999) or with people in community organizations (e.g., Korean American churches). These agencies could also provide training and payment for those who are willing to work for the parents on a regular basis.

In addition, the study suggests that allowing more time for

a meeting when an interpreter service is to be used is necessary in order to make the interpreter services more effective and useful to Korean American families. The parents in this study did not want to use the interpreter services because it reduced the amount of discussion in a time limited meeting. The findings also indicated that the quality control of interpreter services needs to be monitored to make interpreter services effective for the families. For example, the recruitment of an interpreter who is familiar with a Korean American family's culture and needs can enhance the quality of interpreter services as long as the family feels comfortable sharing its family matters with an interpreter.

Empowerment of Korean American Families in Advocating for Their Children

Several participants mentioned that they did not have connections to reliable allies, to information about services and rights, and they did not have the advocacy skills to represent their children's interest. The findings imply that connecting Korean American families to other families with children with disabilities is crucial to empower these families. For example, extending existing Parent-to-Parent programs, which have been successful in connecting parents whose children have just been diagnosed with disabilities with parents who have had experience with coping with children with disabilities, to Korean American parents may be extremely useful. These state-of-the-art Parent-to-Parent programs can be enhanced by including parents from culturally and linguistically diverse backgrounds (Santelli, Turnbull, Marquis, & Lerner, 1993, 1997). When Korean Americans live in rural areas or in towns where few other Korean Americans live, a telephone connection to other Korean American parents can be helpful. Emotional support and information exchange among parents would be valuable and helpful though there would be some limitations in exchanging instrumental help (e.g., providing transportation, accompanying parents to IEP meetings).

The empowerment of Korean American families also can be enhanced by making information related to their children's education more accessible. For example, at each of the approximately 75 federally funded Parent Information and Training Centers, an information packet, written in Korean and incorporating quotes and examples from Korean American families, could be made available to Korean American parents of children with disabilities. These packets may include prerequisite information and resources, such as parental rights assured by the law, the application process for Social Security Income (SSI) or Medicaid, a list of parent organizations, and a list of interpreters and translators (Turnbull, Blue-Banning, Turbiville, & Park, 1999). Another vehicle for providing information to Korean American families is a web page written in Korean, which the first author has run for the last 6 years

(URL: <http://www.sped21.com>). The website provides general information about special education and disability laws. More individual and specific supports are available through the bulletin board of the web page or personal e-mail. Korean American parents may be introduced easily to this website if there is no other support for Korean Americans in their community.

Responsiveness to Cultural and Linguistic Difference Facilitates Parent-Professional Partnerships

The findings of this study imply that professionals working with Korean American parents are required to make appropriate adaptations for Korean American parents. These adaptations are based on the awareness of the cultural and linguistic uniqueness of Korean American children and families so that the parents can participate in partnerships in meaningful ways to meet their children's special needs.

There are three findings of which professionals should be aware. First, there are phonic and linguistic differences between the Korean and English languages, so that Korean American children with disabilities, and even their parents, may show a certain pattern in their linguistic mistakes. Second, traditionally, Korean culture emphasizes deference and compliance with professionals, including teachers. Therefore, the parents may appear passive or uninterested. These parents, however, may be very dedicated to their children's achievements. Third, there are a number of Korean specific ways of living, which may cause misunderstanding. For example, some Korean parents do not make public their intimate feelings toward their children, but this does not reflect their attachment and responsiveness to their children.

Respect, Caring, and Trust Are Prerequisites for Developing Positive Partnerships

This study indicated that several interpersonal factors facilitated the partnerships between Korean American parents and professionals, these being trust, caring, and respect as well as professional expertise and focus on children's strengths. These findings are consistent with those described in the literature for the European American families (Dinnebeil et al., 1996; Lowenthal, 1994; Roberts et al., 1996; Soodak & Erwin, 2000). They are also consistent with those identified by the parents from other ethnic groups, including African Americans, Hispanics, and Asian Americans (Kalyanpur & Harry, 1999; Lynch & Hanson, 1998).

Several examples of less positive partnerships are related to the lack of or ineffective communication between parents and professionals (e.g., JungMee's dissatisfaction with the game for students using wheelchairs in which her son, Ben, was placed). Although parents need to learn how to communicate better with professionals regarding their children, professionals may also need to make certain accommodations when communicating with Korean

American parents. First, more time needs to be allocated for communicating with Korean American parents. Leaving parents alone for a while so that they can read documents and ponder what they have heard before making important decisions may be helpful. On parent conference days, more time should be allowed for parents who have limited English proficiency or who have been less involved in partnerships in the past. Second, multiple options should be presented to parents so that they are asked "which of these..." questions rather than "yes/no" questions. A thorough explanation of all possible options should be provided. For example, in planning the transition to adulthood, professionals may provide a range of options from which students and families can choose (e.g., if the planning is about living arrangement, options may range from independent living to residential facilities) with detailed descriptions of each option. Independent living may be a strange option to Korean American parents because Koreans do not take it for granted that young adults will leave their parents to live by themselves (Chan, 1998); though independent living is often the most preferred option for many U.S. parents and professionals (Cimera & Rusch, 2000). Third, whenever professionals need to treat their child differently from other children, an advance explanation about the rationale should be provided. Also, professionals should provide a personal note when refusing or postponing parents' suggestions or requests in order to diminish the possibility for misunderstandings or parental perceptions of discrimination.

Changes at the Structural Level Are Imminent in Strengthening Partnerships

The present study, consistent with the literature, identified several structural barriers to parent-professional partnerships such as schedule constraints, large caseloads, inconsistent and uncoordinated services resulting from high staff turnover rates, and the excessive amount of paperwork required by service agencies (Dinnebeil et al., 1996; Lowenthal, 1994; Roberts et al., 1996; Soodak & Erwin, 2000). Each service agency should take into account the appropriateness of the amount of paperwork they expect parents to complete. All unnecessary paperwork should be eliminated to keep paperwork at a minimum.

Limitations of Study and Directions for Future Research

Although this study provided a unique perspective from Korean American parents about their experiences with professionals, several limitations exist. First, the use of telephone interviews is a limitation. Although it was inevitable because each participant lived far away from the researchers, this method limits data collection to verbal communication. Second, a lack of participation from fathers limited the study. Although it appears true that mothers

take charge of the children's education in Korean families (Kim, 1996), input from fathers would provide interesting information regarding partnerships with professionals. In the Korean family structure, the father is the primary decision maker as the family representative and principal provider (Chan, 1998). Third, only parents' views were investigated in this study, although an important feature of partnership is reciprocity. Inclusion of the perspectives from professionals would have provided a more comprehensive and reciprocal picture of the partnerships between parents and professionals.

Therefore, we suggest that future research explore the perspectives of professionals who work with children and families from culturally diverse backgrounds as well as the families by using more diverse and interactive qualitative research techniques (e.g., participant observation, focus groups). Also, future research can extend this study by including diverse perspectives from other family members including fathers, siblings, and other extended family members who are related closely to the child with disabilities.

As a final reflection from this study, we want to acknowledge that it was encouraging to note that the 10 parents, in spite of all the difficult times they have encountered, still held hopes and visions for the future. With inner strengths and endurance, they seek ways for their children to get better educational services and to develop themselves. They expressed their desire to be helpful to other parents of children with disabilities, whether through participating in research or advocacy activities. They indicated that they had the capability to broaden their scope of interest to other people beyond their own families. We want to encourage others to connect with parents from culturally and linguistically diverse backgrounds. This, we believe, will empower and benefit all stakeholders, including children with disabilities and their families, professionals, researchers, and policy makers.

References

- Brown, C. W., Perry, D. F., & Kurland, S. (1994). Funding policies that affect children: What every early interventionist should know. *Infant and Young Children, 6*, 1-12.
- Bruder, M. B., & Bologna, T. (1993). Collaboration and service coordination for effective early intervention. In W. Brown, S. K. Thurman, & L. F. Pearl (Eds.), *Family-centered early intervention with infants and toddlers: Innovative cross-disciplinary approaches* (pp. 103-127). Baltimore: Paul H. Brookes.
- Chan, S. (1998). Families with Asian roots. In E. W. Lynch & M. J. Hanson (Eds.), *Developing cross-cultural competence: A guide for working with young children and their families* (2nd ed., pp. 251-354). Baltimore: Paul H. Brookes.
- Cimera, R. E., & Rusch, F. R. (2000). Transition and youth with mental retardation: Past, present, and future. In M. L. Wehmeyer & J. R. Patton (Eds.), *Mental retardation in the 21st century* (pp. 59-70). Austin, TX: Pro-Ed.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- DeChillo, N., Koren, P. E., & Mezera, M. (1996). Families and professionals in partnership. In B. A. Stroul (Ed.), *Children's mental health* (pp. 389-407). Baltimore: Paul H. Brookes.
- Delany-Barmann, G., Prater, G., & Minner, S. (1997). Preparing Native American special education teachers: Lessons learned from the rural special education project. *Rural Special Education Quarterly, 16*, 10-15.
- Dinnebeil, L. A., Hale, L. M., & Rule, S. (1996). A qualitative analysis of parents' and service coordinators' descriptions of variables that influence collaborative relationships. *Topics in Early Childhood Special Education, 16*, 322-347.
- Dunst, C. J., & Paget, K. (1991). Parent-professional partnerships and family empowerment. In M. Fine (Ed.), *Collaboration with parents of exceptional children* (pp. 25-44). Brandon, VT: Clinical Psychology.
- Hangul and Computer. (1996). *Hangulpro 96 for Windows* [computer software]. Seoul, Korea: Author.
- Hanline, M. F., & Daley, S. E. (1992). Family coping strategies and strengths in Hispanic, African-American, and Caucasian families of young children. *Topics in Early Childhood Special Education, 12*, 351-366.
- Hanson, M. J., Lynch, E. W., & Wayman, K. I. (1990). Honoring the cultural diversity of families when gathering data. *Topics in Early Childhood Special Education, 10*, 112-131.
- Harrison, P. J., Lynch, E. W., Rosander, K., & Borton, W. (1990). Determining success in interagency collaboration: An evaluation of processes and behaviors. *Infant and Young Children, 3*, 69-78.
- Harry, B. (1992). An ethnographic study of cross-cultural communication with Puerto Rican-American families in the special education system. *American Educational Research Journal, 29*, 471-494.
- Herbert, M. A., Mayhew, J. C., & Sebastian, J. P. (1997). The circle of life: Preparing teachers to work with American Indian students with disabilities. *Rural Special Education Quarterly, 16*, 3-9.
- Kagan, S. L. (1988, November). *The changing world of early care and education: Retrofitting practice and policy*. Paper presented at the National Conference on Early Childhood Issues: Policy Options in Support of Children and Families, Washington, DC.
- Kagan, S. L., Goffin, S. G., Goulub, S. A., & Pritchard, E. (1995). *Toward systemic service integration for young children and their families*. Falls Church, VA: National Center for Service Integration.
- Kahn, A. J., & Kamerman, S. B. (1992). *Integrating services integration: An overview of initiatives, issues, and possibilities*. New York: National Center for Children in Poverty.
- Kalyanpur, M., & Harry, B. (1999). *Culture in special education: Building reciprocal family-professional relationships*. Baltimore: Paul H. Brookes.
- Kim, B.-L. C. (1996). Korean families. In M. McGoldrick, J. Glordano, & J. K. Pearce (Eds.), *Ethnicity and family therapy* (2nd ed., pp. 281-294). New York: The Guilford Press.
- Kim, S. (1998). HanGuk JangAeln JungCheck InyumGwa GwaJae [Ideology and tasks in Korean disability policy]. In S. Kim, J. Kim, K. Kim, Y. Lee, S. Kwon, T. Park, K. Oh, & J. Kim (Eds.), *JangAeln JungCheck IpMun [Introduction to disability policy]* (pp. 13-22). Seoul, Korea: Shinhan.
- Krueger, R. A. (1994). *Focus groups: A practical guide for applied research* (2nd ed.). Newbury Park, CA: Sage.
- LeCompte, M. D., & Goetz, J. P. (1982, March). *Sampling and selection issues in educational ethnography*. Paper presented at the 66th annual meeting of the American Educational Research Association, New York.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

- Lowenthal, B. (1994). The service coordinator and the home visitor: Competencies for the dual role. *Infant-Toddler Intervention, 4*, 43-50.
- Lynch, E. W., & Hanson, M. J. (Eds.). (1998). *Developing cross-cultural competence: A guide for working with young children and their families* (2nd ed.). Baltimore: Paul H. Brookes.
- Number of students studying abroad. (1999, December 8). *The Chosun Daily Newspaper*, p. 8.
- O'Connor, B. (1995). Challenges of interagency collaboration: Serving a young child with severe disabilities. *Physical and Occupational Therapy in Pediatrics, 15*, 89-109.
- Roberts, R. N., Akers, A. L., & Behl, D. D. (1996). Family level service coordination within home visiting programs. *Topics in Early Childhood Special Education, 16*, 279-301.
- Roberts, R. N., Behl, D. D., & Akers, A. L. (1996). Community-level service integration within home visiting programs. *Topics in Early Childhood Special Education, 16*, 302-321.
- Santelli, B., Turnbull, A. P., Marquis, J. G., & Lerner, E. (1993). Parent-to-parent programs: Ongoing support for parents of young adults with special needs. *Journal of Vocational Rehabilitation, 3*, 25-37.
- Santelli, B., Turnbull, A. P., Marquis, J. G., & Lerner, E. (1997). Parent-to-parent programs: A resource for parents and professionals. *Journal of Early Intervention, 21*, 73-83.
- Shapiro, E. R. (1996). Family development in cultural context: Implications for prevention and early intervention with Latino families. *New England Journal of Public Policy, 11*, 113-128.
- Shapiro, J., & Simonsen, D. (1994). Educational/support group for Latino families of children with Down syndrome. *Mental Retardation, 32*, 403-415.
- Sileo, T. W., & Prater, M. A. (1998). Creating classroom environments that address the linguistic and cultural backgrounds of students with disabilities: An Asian Pacific American perspective. *Remedial and Special Education, 19*, 323-337.
- Soodak, L. C., & Erwin, E. J. (2000). Valued member or tolerated participant: Parents' experiences in inclusive early childhood settings. *Journal of The Association for Persons with Severe Handicaps, 25*, 29-41.
- Turnbull, A. P., Blue-Banning, M., Turbiville, V., & Park, J. (1999). From parent education to partnership education. *Topics in Early Childhood Special Education, 19*, 164-172.
- Turnbull, A. P., & Turnbull, H. R. (2001). *Families, professionals, and exceptionality: Collaborating for empowerment* (4th ed.). Upper Saddle River, NJ: Merrill/Prentice-Hall.
- Turnbull, A. P., Turnbull, H. R., Poston, D., Beegle, G., Blue-Banning, M., Diehl, K., Frankland, C., Lord, L., Marquis, J., Park, J., Matt, S., & Summers, J. A. (2000, August). *Enhancing quality of life of families of children and youth with disabilities in the United States*. Paper presented at Family Quality of Life Symposium, Seattle, WA.
- Walsh, D. J., Tobin, J. J., & Graue, M. E. (1993). The interpretive voice: Qualitative research in early childhood education. In B. Spodek (Ed.), *Handbook of research on the education of young children* (pp. 464-476). New York: Macmillan.
- Wesley, P. W., Buysse, V., & Tyndall, S. (1997). Family and professional perspectives on early intervention: An exploration using focus groups. *Topics in Early Childhood Special Education, 17*, 435-456.

Article received: October 11, 2000

Final acceptance: July 3, 2001

Editor in charge: Linda M. Bambara