

## Experiences of Family Collaboration in Early Intervention among Korean and Chinese Caregivers

Veronica Y. Kang  
University of Maryland at College Park  
U. S. A.

Sunyoung Kim  
University of Illinois Chicago  
U. S. A.

Jing Wang  
University of Illinois Chicago  
U. S. A.

**ABSTRACT:** Despite the importance of family-centered practice in the Individuals with Disabilities Education Act Part C, a federally funded program for birth to two-year-old children with disabilities, there is a lack of research on Asian families who participate in early intervention in the U.S. This study examined the experiences of two Korean families and one Chinese family in early intervention in the U.S. Interviews were conducted and analyzed by bilingual researchers using ecological systems theory. As a multiple-case design study, the caregiver roles, beliefs, practices, and experiences related to their participation in early intervention were reported through within-case and cross-case analysis.

**KEYWORDS:** Early intervention, Asian American, cultural diversity, ecological systems, family-centered practice

[Korean and Chinese Immigrant Families in the U.S.](#)  
[Early Intervention in Korea and China](#)  
[Theoretical Framework](#)  
[Methods](#)  
[Findings](#)  
[Discussion](#)  
[Limitations](#)  
[Implications for Practice and Research](#)  
[References](#)  
[Appendix](#)  
[Author Contact](#)

The number of culturally, linguistically, and cognitively diverse (CLCD) families who participate in early intervention (EI) in the U.S. is rapidly growing (Madding, 2000). However, CLCD families in the U.S. have limited access to and unfamiliarity with EI services and potential marginalization (Moore & Pérez-Méndez, 2006; Woolfenden et al., 2015). The Individualized Family Service Plan (IFSP) in the US is an educational plan developed for children and their families who participate in early intervention; it requires the integration of families' priorities to provide family-centered practices (Yell, 1998). Thus, it is critical for practitioners to actively learn and integrate families' priorities and cultures into their practice (Zhang & Bennett, 2003).

In Illinois, where the study was conducted, the proportion of CLCD students with a disability is higher than in other states (Iddings et al., 2012); 46% of the children who participate in EI in Illinois are Hispanic (26%), Black (14%), Asian (3%), or from other racial backgrounds (3%; Illinois Department of Human Services, 2018). Among them, Asians are the fastest-growing ethnic group in Illinois, contributing to about 6% of the state's residents (Loury & Kang, 2020). Yet, children of Asian mothers who were born outside of the U.S. and do not speak English are less likely to be referred to EI (Clements et al., 2008), suggesting the need for more research on accessibility for Asian immigrant families.

### **Korean and Chinese Immigrant Families in the U.S.**

Korean and Chinese immigrant caregivers in the U.S. often experience linguistic and cultural barriers, unfamiliarity with different types of disabilities, and negative social emotional processes such as shame, denial, and anger related to their experiences raising a child or children with disabilities (Cho & Gannotti, 2005; Lo, 2008; see Yan et al., 2017). Particularly, Korean mothers of children with disabilities in the U.S. face conflicting cultural values with educators on areas such as self-determination and independence (Kim et al., 2020b). Moreover, Asian immigrants in the U.S., in general, report high levels of stress due to lack of social and financial support (Mui & Kang, 2006; Noh & Kaspar, 2003). Together, the findings show the importance of examining Asian immigrant caregivers' experiences and perspectives to facilitate more family-centered practices for Asian immigrant families who participate in EI in the U.S.

### **Early Intervention in Korea and China**

In order to better understand the cultural contexts that Asian immigrant families bring to their experiences in EI in the U.S., it is important to understand the historical contexts of EI in their home countries. For Korean and Chinese immigrant families, who are the largest representative populations in our study sample, we know that Korea and China are geographically neighboring countries and share similar cultural backgrounds including the value of harmony, collectivism, and reserved interpersonal communication style (Kim et al., 1998). Therefore, examining how these similar yet different cultural

groups engage in EI in the U.S. can provide valuable implications for family-centered practice for Asian immigrant families.

In Korea, EI was first established in 2011 (Kim et al., 2020a; Nam & Chun, 2014). The main goal of EI in Korea has focused on the child, rather than the family as a whole, and caregivers are “educated” rather than considered active members of the intervention (Nam & Chun, 2014). Even today, there are limited federal funds and services for young children with disabilities, resulting in families paying for services needed (Kim et al., 2019).

In China, EI was established in 1990 for children younger than 6 years old, and nation-wide EI has been encouraged through early childhood education policies (Hu & Yang, 2013; Zheng et al., 2016). EI in China focuses on rehabilitation or medical treatment, for example, for children with hearing or visual impairments, intellectual disabilities, and physical disabilities (Chiang & Hadadian, 2010). Children with Autism Spectrum Disorder (ASD) or emotional and behavioral disorders in China are less likely to participate in EI as these disability categories are not recognized (Zheng et al., 2016). Moreover, there is a lack of financial resources to facilitate family-centered practice (e.g., parent involvement) of EI in China (Su et al., 2021). The historical backgrounds of these two countries explain Korean and Chinese immigrant caregivers’ unfamiliarity with the different types of disabilities and possible negative emotional processes related to their child’s disability (see Yan et al., 2017). Providing culturally relevant EI informed by families’ values can potentially have positive impacts on children’s development (Dishion & Stormshak, 2007; McManus et al., 2020).

### Theoretical Framework

The foundation of EI has been influenced by ecological systems theory (Barnett et al., 1997; Bronfenbrenner, 1979; 1992), as the better understanding of the family characteristics, ecology, values, and accessibility to EI is critical (McManus et al., 2020) in understanding the interaction across the child’s ecological systems including the child, family, and practitioners (Marfo et al., 1992). Based on this theory, EI is recommended to include families, practitioners, and other individuals in children’s life (Dishion & Stormshak, 2007). Particularly, the US Individuals with Disabilities Education Act (IDEA) Part C, which is a federally funded program for children with developmental delays or disabilities from birth to two years old, mandates that families are actively involved in goal setting, planning, and implementation of intervention to ensure a holistic approach (Chiarello, 2017; Dunst, 2002) through parent training (Barton & Fettig, 2013) and family coaching (Rush & Shelden, 2005), as caregivers spend the most amount of time with the child in the natural setting (Meadan et al., 2016). Benefits of a family-centered approach include improvements in well-being of families (Dunst, 2004; Dunst & Dempsey, 2007) by allowing caregivers to focus on positive or improving areas in children’s development (Dunst & Dempsey, 2007). Family involvement also enables caregivers to develop self-efficacy and promotes children’s learning in their natural environment (Coleman et al., 2002). Nevertheless, more efforts are needed to allow families to play an active role in EI (Dunst & Raab, 2010; Trivette et al., 2010).

Ecological systems theory has been used widely in previous research to examine childhood development and experiences in Western as well as Korean and Chinese cultures (Hong et al., 2011; Xie & Li, 2019; Zhao & Fu, 2020). The framework also has been used in American special education research to consider the diversity in human development (Trainor & Kim, 2012). In the current study, we examined the experiences of the Korean and Chinese families through the lens of ecological systems theory. The microsystem of each case was explored to understand the experiences and interactions within each family. The mesosystem was explored to understand the interactions across the family and EI service providers. The exosystem was explored to understand the interdisciplinary collaborations that occurred across different types of service providers including EI providers, translators, and health care providers. The macrosystem was explored to understand the cultural practices, beliefs, and identities of each family and how these cultural components influenced the ways in which they engaged in EI. Together, the ecological systems framework was appropriate to interpret the experiences and perspectives of the three Korean and Chinese CLCD families who participated in EI in the U.S.

Specifically, the current study explored the experiences of EI among Korean and Chinese caregivers in Illinois, U.S.A. The following research questions were addressed: (a) What are the roles and experiences of Korean and Chinese caregivers who participate in EI in the U.S.? (b) How do Korean and Chinese caregivers collaborate with EI professionals in the U.S.?

## Methods

We adopted a qualitative approach to conduct a multiple-case (Stake, 2006) study on three cases: two Korean families and one Chinese family who participated in EI in the U.S. While Korea and China exhibit some commonalities, each family presented unique cultural backgrounds and experiences. Therefore, each case, or the bounded system (Stake, 2006; Creswell, 2002), consisted of a child and their family. A multiple case study allowed us to examine the complex experiences of EI within and across three cases holistically (Stake, 2006). As each case differed in the disability type, ethnicity, and geographic locations (i.e., suburb vs. urban), the within- and cross-case analyses were used to summarize each case and patterns across cases.

## Participants and Recruitment

Five caregivers from three families (two Korean and one Chinese) who met the inclusionary criteria (i.e., an Asian parent of a child who is receiving or received EI within the past year) participated in the study. A purposive sampling (Patton, 2002) was used by distributing a recruitment flyer to early childhood education institutions and non-profit organizations that collaborate with Asian families in Illinois, U.S., where the authors were located. Caregivers who were interested in the study contacted the authors and confirmed their identity. Table 1 summarizes the characteristics of the participants which have been

considered to bound each case. All five caregivers immigrated to the U.S. 5-20 years prior to the interview for education or employment. Case 3 resided in a suburban neighborhood with a median income of \$123,000 and Cases 1 and 2 resided in an urban neighborhood with a median income of \$33,924 (U.S. Census Bureau, 2021). Caregivers received monetary incentives. All names are pseudonyms. This study was conducted after university IRB approval.

**Table 1**

**Demographics**

	Name	Age (yrs)	Child Disability	Type of EI services	Duration of EI participation	Yrs of residence in the US	Employment status	English proficiency	Family Language/Proficiency	Geographic region
Case 1	Child	Angel	3	Multiple disabilities Medical, physical, speech, occupational, & developmental therapy	2 years	2	NA	NR	Mandarin Chinese/Native	Urban
	Mother	Fang	40s			6.5	Part time massage therapist	Limited		
	Father	Li	50s			6.5	Part time driver	Limited working		
	Sibling	Cathy	3			2	NA	NR		
Case 2	Child	Sue	3	Language delay & autism spectrum disorder Physical, speech, occupational, & developmental therapy	6 months	3	NA	NR	Korean/Native	Urban
	Mother	Sohee	30s			10	Full time student	Fluent		
	Father	Jinwoo	40s			20	Full time chef	Professional working		
	Sibling	Joo	4			4	NA	NR		
Case 3	Child	Hoon	3	Down syndrome Physical, speech, occupational, & developmental therapy	2 years & 5 months	3	NA	NR	Korean/Native	Suburban
	Mother	Yuna	40s			5	Unemployed	Elementary		
	Sibling	Unnamed	13			8	NA	NR		

*Note.* yrs = years; EI = early intervention; US = United States; N/A = not applicable; NR = not reported.

**Data Collection**

A semi-structured, in-person interview and a follow-up phone interview were conducted with each caregiver in the participants' preferred language. The interview protocol (Appendix A) was developed after reviewing a previous study on family support for children with disabilities (Bailey et al., 2007) and a study examining the experiences of Korean mothers of children with disabilities (Kim et al., 2021). The questions were modified to focus on the parents' experiences related to EI (e.g., communicating with practitioners, parent involvement and knowledge). As a Korean-English bilingual, the first author conducted the interviews in Korean with the three Korean caregivers, Sohee, Jinwoo, and Yuna (Cases 2 and 3). As a Chinese-English bilingual, the third author conducted the interviews in Mandarin Chinese with the two Chinese caregivers, Fang and Li (Case 1).

The interviews were conducted in families' homes. The duration of the interviews was 44 (mother) and 49 (father) minutes for Case 1, 49 (father) and 53 (mother) minutes for Case 2, and 52 (mother) minutes for Case 3, totaling up to 247 minutes. After the

interview, we conducted an initial coding to identify the emerging themes and shared the transcribed document with the parents for their review. Then, a follow-up interview was scheduled in which the first or third author asked clarifying questions and allowed parents to add or revise information on the transcript. The follow-up interviews were conducted via phone. As the interviewer observed and interacted with the caregivers during the initial and follow-up interviews, e-mail, and phone correspondence, the interviewer completed fieldnotes regarding the families' engagement and attitudes. A total of 104 pages of translated English transcripts from initial and follow-up interviews and five pages of fieldnotes were collected.

## Data Analysis

The interviews were transcribed using InqScribe. For Korean, the first author translated from Korean to English and the second author back-translated from English to Korean to verify the accuracy of translation. For Chinese, the third author translated from Chinese to English, and another Chinese-English bilingual graduate student back-translated from English to Chinese for verification. Then, the English transcripts were coded and analyzed using NVivo 12.

While accepting the cultural commonality among Korean and Chinese families, the unique traits and perspectives of each family case existed. A within-case analysis was conducted to capture such uniqueness within each case. Open and descriptive coding was conducted to identify codes that address the research questions in alignment with the theoretical framework (Saldaña, 2015). While the pre-developed set of interview questions were used to obtain data, the transcribed data were analyzed based on ecological systems theory. We developed descriptive codes such as "cultural sensitivity," "lacking training," "active communication," and "lacking knowledge." We reviewed each other's codes to ensure agreement and that the codes aligned with the theoretical framework. The second coding cycle involved a cross-case analysis which allowed the identification of similarities and differences across cases.

During the analysis, we utilized axial and pattern coding to construct patterns across data (Saldaña, 2015). We identified patterns throughout the codes to group initial codes with similar meanings. For example, within-case codes such as "active communication between family and providers," "caregiver knowledge and skills to support child," and "resources from non-direct providers" were grouped to form the first theme of the cross-case analysis, "family ecology in EI." We repeated this until we met consensus. Both the within- and cross-case analyses allowed us to identify emerging themes that addressed the research questions.

## Trustworthiness

Multiple validation strategies were used to ensure trustworthiness (Creswell & Poth, 2018). First, we used triangulation of multiple sources including initial interviews, follow-

up interviews, and fieldnotes. We reviewed data through constant and collaborative analysis and identification of emerging themes. Second, we acknowledged biases and personal experiences through an intentional reflection of our beliefs and experiences during data collection and analysis. Simultaneously, being cultural “insiders” allowed us to use the participants’ language and incorporate their cultural norms during interviews (Creswell & Poth, 2018). Third, member checking was conducted during follow-up interviews. The participants reviewed the transcripts in their native language prior to follow-up interviews and answered clarifying questions to confirm or add on to our interpretation. Fourth, we invited an external auditor with expertise in family collaboration to review the analysis, findings, and conclusion to verify validity. Finally, the nature of the multiple-case study allowed for a rich and thick description with detailed description of each case and subsystem.

### **Researcher Reflexivity**

The first author identifies as a U.S.-born Korean American bilingual. She conducted the interviews with the Korean families in the study, analyzed data, and led the manuscript writing. At the time of the interview, she was a doctoral student studying special education at a university in Illinois, U.S. She conducts research on CLCD families’ experiences and family-centered practices in EI and special education. The second author is a Korean-born researcher in the United States. She conducts research on early childhood special education, including early childhood inclusion and early intervention services. She was the principal investigator of this project and guided the first and third authors to conduct qualitative research with Korean and Chinese populations. The third author identifies as a Chinese bilingual and collaborates with Chinese children with disabilities and their families. She conducted the interviews with the Chinese families in the study and collaborated with data analysis and manuscript writing. She is a doctoral student studying special education at a university in Illinois.

### **Findings**

The within-case analysis resulted in two themes: caregiver roles; and caregiver-professional partnership. Table 1 lists the demographic characteristics including children’s disability diagnosis, age, types and duration of EI services, caregiver employment status, language proficiency, and geographic region. Table 2 lists the themes, subthemes, and quotes from each case.

**Table 2**  
**Themes and Quotes**

		Case 1: Angel's Family	Case 2: Sue's Family	Case 3: Hoon's Family
Family ecology in EI	Child disability	Multiple disabilities	Language delay and ASD	Down syndrome
	Geographic region	Urban	Urban	Suburban
Partnership with EI professionals	Resources in the neighborhood	The most challenging part was going to different sections and departments.	No structure, incorrect information	The referral process was systematic and automatic.
	Parent knowledge of EI	1. The nurse quit the job unexpectedly. 2. Angel could not make progress without the therapists. Challenging, hard, unfamiliar	1. More structure is needed. 2. More systematic training and supervision could be helpful.	1. Good educator 2. Really care about my child 3. Makes me feel really good 4. I engaged in small talks with the therapists.
Siblings involvement		1. I could not distinguish different types of services. 2. There was a long list of diseases in medical terms. 3. I felt totally lost. 4. I could not understand.	1. We didn't know anything about occupational therapy, so we were not sure why we need it. 2. We just thought she was a quiet child. 3. I did not know the benefits of intervention. 4. I had to figure things out of my own.	Not discussed
		Not discussed	I would like therapists to teach children to share and play with the sibling. Sue received an autism diagnosis, so the relationship with the siblings could be broken, so we could have worked on how to better get along with her older sister.	Not discussed
Skills and attitudes of EI professionals	EI providers	1. The nurses often made mistakes when using the medical equipment, so we needed to correct her. 2. The nurse watched TV all the time. Just changed the diaper when it was time and fed milk. 3. Sometimes it's hard to know whether they are babysitters or therapists. 4. Our therapists were all very nice to us and put their best effort for Angel.	1. I wish EI has a system to make sure that things are going well. Talented therapists should be the head of the agency and train other therapists. 2. There was no structure in sessions. I wonder if the sessions could be more effective if there is more structure. 3. The therapist did not look at me, and looked at the interpreter only, so that didn't make me feel good. 4. I wish that providers could be more emotionally sensitive	1. When the therapists really cared about my child and did whatever they could do for him, that made me feel really good. 2. The therapists loved Hoon so much. So even if they don't have good skills, I could really tell that they loved Hoon, so I did not bring up any concerns to them.
	Social workers	The social worker facilitated the scheduling of EI services.	1. The social worker told me about a book on parenting, like 1,2,3 magic. She was really helpful.	Not discussed
Caregiver-professional communication	Interpreter	The interpreter provided information about the EI system.	1. The interpreter was really proactive. She helped us outside of the EI sessions. 2. The interpreter worked even on weekends with many families like ours.	Not discussed
		The therapists will only talk about Angel's progress in regular meetings. We would like to know more about what other challenges Angel may have or how to better take care of Angel at home when the therapists are not present.	When the session ended, there were a lot of times when the therapist looked really tired and left right away. I wish that I could receive more updates regarding the child's progress.	Every six months or so, the therapists, the coordinator, and I met as a group, and discussed how much progress Hoon has made. It's very systematic. The therapists asked, "Do you think he shows these skills right now?", "How often does he use this skill?", "Do you think we need to work on this more or not?"
Culture and language		1. When Angel did not listen to the therapist, we wondered if it was because she could not understand the instruction in English. 2. I can't understand English at all, so I asked the therapist to type what she said on my phone so that I can use the translation app. 3. Angel developed the comprehension skills successfully and made a progress in speech because the therapist was Chinese.	1. The speech therapy was conducted purely in English, so that was a little bit confusing for me as a parent. 2. It gets really confusing because we talk in Korean at home and then the therapists come and start talking to them in English 3. There needs to be a connection with the child and the parents. I wish that parents can share more input more comfortably. 4. The culture and language must be integrated to develop a better understanding of each other. This will benefit the child, the parents – the entire family.	1. Korean moms don't feel comfortable communicating concerns directly to others. 2. I wish that there are Korean therapists because he uses Korean at home. 3. At times, I misunderstood and ended up saying something else to the therapists.

Note. EI = early intervention; ASD = Autism Spectrum Disorder.



### **Case 1: Angel's Family**

Prior to and during their participation in EI, the social worker facilitated the scheduling of EI services for Angel's family. Fang, the mother, said, "The social worker helped us with getting everything done." At the beginning, Angel's parents had limited knowledge of EI and communication in English was a challenge. Li (father) said, "One of the cultural barriers was language. We didn't know which doctors to look for, where to go, and what to do." Fang, the mother, reported, "The interpreter came to our house frequently. She helped me when looking for nurses and therapists. She helped me with everything." With assistance from the Chinese interpreter, Fang and Li developed a better understanding of the EI system in the U.S. During their EI services, Angel's parents reported that they watched how the therapists interacted with Angel and imitated the skills to support Angel's development.

A nurse visited Angel's home and childcare center to support her feeding. However, both parents reported low satisfaction in their collaboration with the nurse as she did not operate the feeding machines correctly and "quit the job unexpectedly." This was problematic as, "Angel could not make progress without the therapists." Fang and Li were satisfied with their collaboration with the speech-language and physical therapists and the interpreter who shared the same cultural and linguistic backgrounds. Fang said, "I was most satisfied with the speech language pathologist who was Chinese."

### **Case 2: Sue's Family**

Prior to receiving EI services, Sue's mother, Sohee, felt like, "I had to email, call, and then things got resolved." Sohee contacted different offices via e-mail and phone to schedule EI. Jinwoo, the father, said, "If someone had told us that we had to get early intervention sooner and that if it would have been better to start early, like, starting from 6 months, when the brain is developing, it would have been much more beneficial for our baby." During Sue's EI services, Sohee provided physical support such as "holding and redirecting Sue as Sue was moving around constantly." Sohee desired to be more actively involved in EI such as providing feedback to the therapists about Sue's goals and progress. Jinwoo worked full-time to support the family and was not able to participate in any sessions or communication with the therapists.

Sue's parents described positive relationship with the social worker and interpreter; Sohee received counseling and parenting tips from the social worker and worked with a Korean interpreter to understand the different parts of EI. Jinwoo said, "We felt so lucky to have such a great person (the interpreter). She happened to live right across from us, so even nowadays, we receive a lot of help." Yet, Sue's parents still wished that the therapists completed more training; Sohee wished that the therapists "explained what they did for that day and talked about what we can do during the week until they come back next week." Jinwoo (father) explained that the therapists often ignored Sue's sister during the sessions, saying, "I think she did not have much experience, so she maybe thought that she had to block Joo [the sibling]. I think she needed more training to work

with families who have multiple children.” Jinwoo suggested more “systematic training” to engage family members.

### **Case 3: Hoon’s Family**

As Hoon received his “diagnosis of Down syndrome at 16 weeks during pregnancy, three months after, we participated in an evaluation and then received the services right away.” Yuna (mother) said, “I didn’t do anything. They called me first and the program started automatically.” During Hoon’s EI services, Yuna said, “I tried to be near Hoon and the therapist and catch Hoon when he runs away, reposition him, and bring the materials they need.” Yuna also shared,

I learn from what the therapists do and try to play with him like five minutes each day. It’s really hard to do it, though. But, without watching them, I wouldn’t know how to play with my child, so I try to watch what they do and play with him.

Finally, Yuna participated in team meetings where she engaged in communication with EI providers regarding Hoon’s progress and goals, and her desires for the future.

Although Yuna (mother) did not speak English fluently, Yuna built and maintained strong relationships with the therapists. Yuna believed that a positive caregiver-therapist relationship would lead to a positive child-therapist relationship, so she purposefully engaged in small talk with the therapists before and after the sessions. Yuna said,

The therapists are human beings so once they become close with the mothers, then they naturally pay more attention to the children, and to do that, the language can be a barrier. So even with my really poor language, I act as if I am really close to them and keep talking to them.

While Yuna was satisfied with the partnership with the therapists, when concerns arose, she chose to not communicate the concerns with the practitioners. She said,

Korean moms don’t feel comfortable communicating concerns directly to others. My personality makes it impossible for me to say that I don’t like something about the way the therapist works with my child. How can I see their face? I can’t do that! Instead, I just watch them really carefully and just let them be.

### **Cross-case Analysis: Emerged Themes across Three Cases**

The cross-case analysis resulted in five themes: (a) family ecology; (b) sibling involvement; (c) skills and attitudes; (d) communication; and (e) culture and language.

### ***Family Ecology in EI***

While all three children were three years old and had recently completed participation in EI, each child had a different type of disability and parents' narratives focused on different topics (see Table 1). For example, Angel's parents discussed nurses' medical support and the operation of medical equipment for Angel, who has multiple disabilities. Contrastingly, the parents of Sue and Hoon, who both had delays in speech and behavioral development, discussed concerns regarding their child's social and communicational skills and professionals who supported these areas (e.g., speech and developmental therapists). Based on the children's characteristics, the parents presented different values and priorities in their relationships with the EI professionals.

The families' experiences and views of EI differed particularly between Hoon's family and the other two families. Yuna (Hoon's mother), who lived in a suburban neighborhood which was composed of primarily middle- to high-income residents (see Participants and Recruitment), discussed the wide range of resources provided in the neighborhood, including a publicly available program for children with Down syndrome and frequent interdisciplinary team meetings (i.e., physicians, nurses, family service coordinator, and therapists). Moreover, Yuna used words such as "good educator," "really care about my child," "makes me feel really good," "love," and "systematic" to describe the people she worked with and the services they provided. Contrastingly, Angel's and Sue's families, who lived in urban neighborhoods composed of primarily low- to middle-income residents (see Participants and Recruitment), presented lower levels of satisfaction with regard to their experience in EI. For example, both families indicated that there was a lack of resources to identify who caregivers should contact for the referral and initiation process, which resulted in delays of services. Moreover, both families had to search for personal acquaintances or reach out to their interpreters outside of scheduled sessions to ask about completing paperwork and identifying a point of contact to express concerns during their participation in EI. Sue's caregivers used words such as "angry," "incorrect," "confused," "no structure," and "challenging" to describe these issues. Similarly, Angel's caregivers used words such as "challenging," "cannot understand," "hard," and "problems" numerous times throughout their interviews. The narratives of caregivers across different regions within the same state showed that there may be differences in the quality of EI services across different geographic regions.

All families stated that they had limited knowledge of EI when they first began EI. Sohee (Sue's mother) said, "We didn't know anything about occupational therapy, so we were not sure why we needed it." Similarly, Yuna (Hoon's mother) and Li (Angel's father) reported that they were "unfamiliar" with EI and "could not distinguish the different types of services" available. Li further stated that "the most challenging part was going to different sections and departments." In addition to the knowledge of EI, Jinwoo (Sue's father) described his unfamiliarity with the early signs of disability. He said, "We just thought she was a quiet child, but that was not the case. I did not acknowledge it at first. I did not know the benefits of intervention." Across all cases, caregivers expressed their unfamiliarity or lack of knowledge about EI including the points of contact, application process, qualification criteria, and benefits, as well as the signs of developmental delays to initiate their inquiry for EI.

### ***Importance of Sibling Involvement***

While all three families had multiple children in the household, only Sue's family discussed meaningful involvement of siblings in EI. Sohee said,

The therapist could have been a little bit gentler, but she was really cold to our older child. Joo is just a kid, but the therapist kept saying "No" and that made me feel sad. I would like therapists to teach children to play with their sibling. Every child is different, but for Sue, she received the autism diagnosis, so the relationship with her sister could be broken, so we could have worked on how to better get along with her sister.

Sohee's desire regarding sibling involvement could be due to the narrower age gap between her children as the older sister was one year older than Sue. Contrastingly, when Yuna was asked about sibling involvement, Yuna explained that her older son was encouraged to join their therapy sessions a few times. However, Yuna did not discuss further interests or desires for sibling involvement, which could be due to the wider age gap between Hoon and his older brother (10 years). For Angel's family, her sister joined the session only during free play time. Regardless, sibling involvement was a low priority for the family as the parents' primary goal was to receive medical and daily living support (e.g., "operating the feeding machines" and "changing diapers").

### ***Skills and Attitudes of EI Professionals***

All parents appreciated the professionals' efforts and support for their families. Sue's social worker provided counseling services related to parenting. Sohee (Sue's mother) said, "The social worker recommended a book on parenting which was really helpful." The interpreters also played a critical role in bridging the gap that existed due to the family's language and cultural backgrounds and limited knowledge of EI. Jinwoo (Sue's father) said, "The interpreter was proactive. She helped us outside of the sessions." Similarly, Li (Angel's father) said, "The interpreter worked on weekends with many families like ours."

All parents reported that the social workers and interpreters provided support both during and beyond their allotted times to share parenting tips or resources, translate documents, and answer questions about navigating the EI system and procedures. Simultaneously, parents discussed areas for improvement. For Angel, who had multiple disabilities, an accurate knowledge of how to operate the medical appliances was considered important. Fang (Angel's mother) said, "The nurses sometimes made mistakes when using the medical equipment. We needed to correct her several times." Angel's parents said that only one nurse knew how to correctly operate the machines. Li (Angel's father) stated, "One of our nurses mainly watched TV and changed the diaper and fed milk when it was time, and nothing else." Similarly, Yuna (Hoon's mother) said, "Sometimes it's hard to know whether they are babysitters or therapists." The types of activities the professionals facilitated during the sessions seemed to impact the parents' perception of EI and the involved personnel.

To improve the quality of EI, particularly the skills and efficiency of the professionals, parents suggested a mentorship or supervision model for the EI professionals. Jinwoo (Sue's father) said, "I wish EI has a system to make sure that things are going well. Talented therapists should be the supervisors and train other therapists." Sohee (Sue's mother) said, "There was no structure during the sessions." Moreover, the attitudes towards the children and parents were discussed across all three families. Sue's parents discussed the practitioners' "attitudes" and "mindsets." Sohee (Sue's mother) explained the importance of active communication between the parents and the professionals. She said, "The therapist did not look at me and looked at the interpreter only, so that made me feel sad." Contrastingly, Hoon's and Angel's parents seemed to appreciate the attitudes of the professionals they worked with. Angel's parents said, "Our therapists were nice to us and put the best effort." Likewise, Yuna (Hoon's mother) stated, "When the therapists cared about my child and did whatever they could do for him, that made me feel good." Yuna added, "Our therapists loved Hoon, so even when they seemed to lack some skills to work with my child, I did not bring up any concerns." Overall, all parents across the three families considered a positive family-professional "connection" as a needed component of EI. Jinwoo (Sue's father) said, "There needs to be a connection between the child and the parents." Similarly, Sohee (Sue's mother) said, "I wish that the EI providers could be more emotionally sensitive."

### ***Communication between Caregivers and EI Professionals***

Angel's and Sue's parents explained that active communication could provide clearer information about their child's progress and help the parents understand how to support their child more effectively. Li (Angel's father) stated that, "The therapists talked about Angel's progress only during the regular meetings. We wanted to know more about what challenges Angel may have and how to better take care of Angel at home when the therapists are not present." Similarly, Sohee (Sue's mother) said, "When the session ended, the therapist looked really tired and left right away. I wished that I could learn more about Sue's progress." Parents believed that the informational exchange between the families and the professionals could provide timely resources for parents to use at home.

On the other hand, Yuna (Hoon's mother) reported that there were frequent opportunities for her to communicate with the EI professionals. Yuna said, "Every six months, the therapists, coordinator, and I met and discussed Hoon's progress. The therapists asked, 'Does he show these skills right now?', 'How often does he use this skill?', 'Do we need to work on this more?'" Yuna played an active role in developing the goals and evaluating Hoon's progress. Through this communication, Yuna described that she "learned how to play more effectively" with Hoon. These narratives showed that the geographic regions, the timing of the diagnosis, and the availability of resources and professionals in the families' neighborhoods influenced the frequency and quality of communication between the families and the professionals.

## ***Culture and Language***

Three out of five parents in the study reported challenges in communicating in English. The remaining two parents (Sue's parents) were proficient in English. Regardless, all families preferred their primary language to be integrated in their children's EI services. In particular, all parents hoped to collaborate with a therapist who could use the family's language. Li (Angels' father) said, "When Angel did not listen to the therapist, we wondered if it was because she could not understand English."

Sohee (Sue's mother) and Yuna (Hoon's mother), whose children received a diagnosis of language delay, explained that it would be beneficial to receive speech therapy in the family's primary language to promote effective communication between family members at home. Sohee said that, "The speech therapy was conducted in English so that was confusing for me as a parent." Jinwoo (Sue's father) added, "It became confusing because our family communicated in Korean at home and then the therapists came and talked to Sue in English." Similarly, Yuna (Hoon's mother) explained that the speech therapy in Korean could be beneficial as Hoon had emerging language (i.e., vocalization and a few single words). Yuna said, "I wished that there were Korean therapists because Hoon used Korean at home." Yuna knew that the strategies used by the therapists were effective, so Yuna hoped that those strategies could be used to teach not only English but also "the Korean alphabet and pronunciation." Similarly, Li hoped that Angel could learn the Chinese alphabet from a speech therapist. All parents across cases believed that integrating their primary language could result in a more effective intervention.

Relatedly, language played a critical role in caregiver-professional communication. Yuna (Hoon's mother) stated, "At times, I misunderstood and ended up saying something completely irrelevant to the therapists." Li (Angel's father) requested an interpreter to participate in team meetings, as "I cannot understand English at all, so I asked the therapist to type what she said on my phone so that I can use the translation app." When the family's language was used, parents understood the strategies used by the therapists and applied them to their routines at home. For example, Fang (Sue's mother) felt "lucky" because the speech therapist used Chinese during the sessions. Fang said, "I learned the skills from the speech therapist and used those skills at home." Fang believed that "Angel developed the comprehension skills successfully and made progress in speech because the therapist was Chinese." Parents believed that language influenced children's outcomes, family-professional collaboration, and family-led, home-based support during the families' daily routines.

Parents also discussed the impact of culture on family-professional partnerships. Yuna (Hoon's mother) said, "Koreans do not communicate concerns directly." This pattern was also observed in Sue's and Angels' parents. Sue's parents explained that they never communicated their concerns with the professionals. Additionally, the format of the sessions was influenced by families' culture. For instance, Yuna preferred home-based interventions because it saved her time but also because she was not comfortable having Hoon crawl around inside the clinic where people wore shoes indoors. Also, Hoon's occupational therapist was Polish and Yuna (mother) believed that the therapist's

teaching style “was like a strict mom’s style and fit well with the family’s culture.” The similar cultural backgrounds positively impacted Hoon’s and Yuna’s relationship with the therapist.

Finally, there were similarities in the parents’ conceptualization of caregiving roles. Sue’s parents used the word, Boomo (“parents” in Korean), rather than “mother” or “father.” Jinwoo (Sue’s father) said, “There needs to be a connection with the child and the parents (Boomo)” and “I wish that parents (Boomo) can share more input with the professionals.” Similarly, Sohee (Sue’s mother) stated, “It’s confusing for me as a parent (Boomo)” and “family’s culture and language must be integrated during the sessions to develop a better understanding of each other. This will benefit the child and the parents (Boomo) – the entire family.” These narratives aligned with the two parents’ collaborative efforts to take care of their child, Sue. Similarly, Angel’s parents used the word, Fu Mu (“parents” in Chinese). Li said “As parents (Fu Mu), our expectation for Angel is simple. We hope that Angel can be healthy and happy.” The narratives of both families aligned with the “harmonious” or collectivistic culture that is often observed in Asian cultures (Kim et al., 1998).

## Discussion

We explored the Korean and Chinese parents’ experiences participating in EI in one area of the U.S., and the findings aligned with previous research. First, the ecological systems of the child (e.g., disability, geographic region, presence of sibling, age, culture, and language) shaped parents’ experiences and perceptions of EI (Dishion & Stormshak, 2007; Parette et al., 2004; Zhang & Bennett, 2003). Specifically, the cultural and linguistic adaptation in EI and more opportunities for parents’ and siblings’ participation could improve family satisfaction and involvement in EI (Dunst, 2004; Dunst & Dempsey, 2007; McManus et al., 2020; Meadan et al., 2016). Moreover, sharing the intervention goals and progress (Chiarello, 2017; Dunst & Raab, 2010; McManus et al., 2020) through reciprocal communication between the providers and families using families’ native language (Early Intervention Program for Infants and Toddlers with Disabilities, 2016) could be crucial for the family-professional partnership. While parents’ self-efficacy impacts the child’s development (Coleman et al., 2002), parents’ self-efficacy in EI could be influenced by the cultural and language barriers as well as the lack of accessibility to resources and knowledge of EI, particularly for families who do not speak English fluently or families who come from a non-Western cultural background (Moore & Perez-Mendez, 2006; Woolfenden et al., 2015). Further, sibling involvement could be beneficial as siblings could model novel skills and behaviors (Glugatch & Machalicek, 2021; Shivers & Plavnick, 2015). Finally, professional development for educators and health care providers on seeking and integrating family input could promote more family-centered collaboration (Bottiani et al., 2018; Jongen et al., 2018).

Language and culture play a critical role when partnering with the professionals across different stages of EI. During the initial stage, limited English and unfamiliarity of EI may lead to delays in referral (Clements et al., 2008; see Yan et al., 2017). Consequently, parents could benefit from working with the interpreters to ask questions

and learn about specific terminologies related to EI. Our findings showed that the interpreters' roles are not limited to translation but also advocacy, cultural brokerage, and navigating within the system outside of their scheduled hours. Therefore, (a) a clearer distinction of the interpreters' roles, (b) assignment of additional personnel who could assist with additional tasks as cultural brokers, and (c) systematic training for effective family-centered and culturally relevant strategies (Acar & Blasco, 2018) could advance the collaboration across families, providers, and interpreters.

Finally, when working with Asian immigrant families, applying collectivistic values (Kim et al., 1998) could provide more culturally sensitive practice. As the quality of family-professional communication impacts children's intervention outcomes, especially for CLCD children with disabilities (Trainor & Kim, 2012), practitioners must be provided with resources, including time and training, to effectively communicate with families who do not speak English as their primary language or come from a non-white cultural background. For example, a part of an EI provider's schedule could be devoted to discussing the child's goals and progress collaboratively with the parents through a 1:1 meeting or an exchange of written documents (Kim et al., 2021). An intentional effort to seek parental input would be necessary, as families from diverse cultural backgrounds, particularly of Asian descent, could withdraw themselves from initiating conversations to express their concerns to authority figures (Blair et al., 2020). Finally, more bilingual EI providers, especially speech language pathologists, are needed to teach children to communicate in the family's primary language.

### **Limitations**

The study presents some limitations. First, while we present implications for the understudied subset of families who participated in EI in Illinois, U.S., due to the small sample size, the findings may be specific to the three families who participated in our study. Second, because the families were recruited from Illinois, where the authors were located, the findings could have limited generalizability for families in other parts of the U.S. Third, the analysis was based on the data obtained from one interview and a follow-up interview from one or two caregivers in each household. Thus, longitudinal data through extended observations and prolonged researcher-family interactions could be useful to learn more. Finally, as the data were collected and analyzed based on the parents' report, exploring the experiences of multiple stakeholders including the EI professionals who work with Asian families could add to our findings.

### **Implications for Practice and Research**

The findings present several implications for practice. First, written documents that outline the referral process and contact information in various languages could benefit families who are not familiar with the EI system and terminologies in the U.S. Second, a guideline for family-professional communication and children's goals and progress (i.e., check-in discussion at the end of the session, written reports in family's language) could



improve parents' understanding of and involvement in EI. Third, we found that interpreters play a crucial role in answering families' questions and guiding families through different stages of the EI by dedicating extra time outside of the sessions. Such efforts must be acknowledged and, furthermore, identifying specific personnel (e.g., family advocates) to execute administrative and counseling roles for parents, especially immediately before or after the referral, could promote successful family collaboration. Fourth, as children and similar-aged siblings often play with each other, children who participate in EI and their siblings could be encouraged to collaboratively learn social and communication skills as a part of the EI sessions. Practitioners could receive specific trainings to facilitate sibling-mediated support to teach social, communication, language, and daily living skills. Finally, with the growing number of CLCD families in EI (Madding, 2000), educational and licensure programs could recruit and train more individuals from diverse cultural and linguistic backgrounds to increase the number of professionals who can provide dual language or culturally adapted interventions (Hanson, 2004).

Finally, future research with CLCD families in EI could (a) involve multiple interviews, observations, and regression or latent growth models (Blacher et al., 2013), (b) examine the experiences of family members other than parents (e.g., grandparents, siblings), and (c) collect longitudinal data on children's developmental trajectories to identify family characteristics that may be related to both children's and families' long-term outcomes. For instance, research on siblings' experiences and involvement in EI, such as sibling-mediated interventions (Spector & Charlop, 2018), may add novel findings to the literature of family-centered practice. To understand various stakeholders' experiences (Division for Early Childhood, 2010), interviews or focus groups with professionals who partner with Asian families including EI providers, service coordinators, social workers, and translators could also be meaningful.

## References

- Acar, S., & Blasco, P. M. (2018). Guidelines for collaborating with interpreters in early intervention/early childhood special education. *Young Exceptional Children, 21*(3), 170-184. <https://doi.org/10.1177/1096250616674516>
- Bailey, D. B., Jr., Nelson, L., Hebbeler, K., & Spiker, D. (2007). Modeling the impact of formal and informal supports for young children with disabilities and their families. *Pediatrics, 120*(4), e992-e1001. <https://doi.org/10.1542/peds.2006-2775>  
<https://doi.org/10.1542/peds.2006-2775>
- Barnett, D. W., Lentz, F. E., Bauer, A. M., Macmann, G., Stollar, S., & Ehrhardt, K. E. (1997). Ecological foundations of early intervention: Planned activities and strategic sampling. *Journal of Special Education, 30*(4), 471-490. <https://doi.org/10.1177/002246699703000407>
- Barton, E. E., & Fettig, A. (2013). Parent-implemented interventions for young children with disabilities: A review of fidelity procedures. *Journal of Early Intervention, 35*, 194-219. <https://doi.org/10.1177/1053815113504625>

- Blacher, J., Begum, G. F., Marcoulides, G. A., & Baker, B. L. (2013). Longitudinal perspectives of child positive impact on families: Relationship to disability and culture. *American Journal on Intellectual and developmental disabilities, 118*(2), 141-155. <https://doi.org/10.1352/1944-7558-118.2.141>
- Blair, K.C., Lee, J.D., Matsuda, K., & Knochel, A. (2020). Culturally tailored applied behavior analysis treatments for Asian American clients and families. In B. M. Conners & S. T. Capell (Eds.), *Multiculturalism & diversity in applied behavior analysis* (pp. 81-95). Routledge.
- Bottiani, J. H., Larson, K. E., Debnam, K. J., Bischoff, C. M., & Bradshaw, C. P. (2018). Promoting educators' use of culturally responsive practices: A systematic review of in-service interventions. *Journal of Teacher Education, 69*(4), 367-385. <https://doi.org/10.1177/0022487117722553>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1992). *Ecological systems theory*. Jessica Kingsley Publishers.
- Chiang, L. H., & Hadadian, A. (2010). Raising children with disabilities in China: The need for early interventions. *International Journal of Special Education, 25*(2), 113-118.
- Chiarello, L. A. (2017). Excellence in promoting participation: Striving for the 10 Cs—Client-centered care, consideration of complexity, collaboration, coaching, capacity building, contextualization, creativity, community, curricular changes, and curiosity. *Pediatric Physical Therapy, 29*, 16–22. <https://doi.org/10.1097/PEP.0000000000000382>
- Cho, S., & Gannotti, M. E. (2005). Korean-American mothers' perception of professional support in early intervention and special education programs. *Journal of Policy and Practice in Intellectual Disabilities, 2*, 1-9.
- Clements, K. M., Barfield, W. D., Kotelchuck, M., & Wilber, N. (2008). Maternal socio-economic and race/ethnic characteristics associated with early intervention participation. *Maternal and Child Health Journal, 12*(6), 708-717.
- Coleman, P. K., Trent, A., Bryan, S., King, B., Rogers, N., & Nazir, M. (2002). Parenting behavior, mothers' self-efficacy beliefs, and toddler performance on the Bayley Scales of Infant Development. *Early Child Development and Care, 172*(2), 123-140.
- Creswell, J. (2002) *Research design: Qualitative, quantitative, & mixed method approaches*. SAGE.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE.
- Dishion, T. J., & Stormshak, E. A. (2007). *Intervening in children's lives: An ecological, family-centered approach to mental health care*. American Psychological Association.

- Division for Early Childhood (2010). *Responsiveness to all children and professionals: Integrating cultural and linguistic diversity into policy and practice*. <https://www.decdocs.org/position-statement-family-culture>
- Dunst, C. J. (2002). Family-centered practices: Birth through high school. *Journal of Special Education*, 36(3), 141-149. <https://doi.org/10.1177/00224669020360030401>
- Dunst, C. (2004). An integrated framework for practicing early childhood intervention and family support. *Perspectives in Education*, 22(2), 1-16.
- Dunst, C. J., & Dempsey, I. (2007). Family–professional partnerships and parenting competence, confidence, and enjoyment. *International Journal of Disability, Development and Education*, 54(3), 305-318. <https://doi.org/10.1080/10349120701488772>
- Dunst, C. J., & Raab, M. (2010). Practitioners' self-evaluations of contrasting types of professional development. *Journal of Early Intervention*, 32(4), 239-254. <https://doi.org/10.1177/1053815110384702>
- Early Intervention Program for Infants and Toddlers with Disabilities, 20 U.S.C. §§1431-1444 (2016).
- Glugatch, L. B., & Machalicek, W. (2021). Examination of the effectiveness and acceptability of a play-based sibling intervention for children with autism: A single-case research design. *Education and Treatment of Children*, 1-19.
- Hanson, M. J., & Lynch, E. W. (2004). *Understanding families. Approaches to Diversity, Disability, and Risk*. Baltimore: Paul H Brookes Publishing Co.
- Hong, J. S., Lee, N. Y., Park, H. J., & Faller, K. C. (2011). Child maltreatment in South Korea: An ecological systems analysis. *Children and Youth Services Review*, 33(7), 1058-1066.
- Hu, X., & Yang, X. (2013). Early intervention practices in China: Present situation and future directions. *Infants & Young Children*, 26(1), 4-16.
- Iddings, A. C. D., Combs, M. C., & Moll, L. (2012). In the arid zone: Drying out educational resources for English language learners through policy and practice. *Urban Education*, 47(2), 495-514. <https://doi.org/10.1177/0042085911430713>
- Illinois Department of Human Services (2018). IDEA section 618 reports child count by year.
- Jongen, C., McCalman, J., & Bainbridge, R. (2018). Health workforce cultural competency interventions: A systematic scoping review. *BMC Health Services Research*, 18(1), 1-15.
- Kim, J. W., Kim, H. W., Moon, D. S., Lim, Y. S., McDougale, C. J., & Howe, Y. J. (2019). Comparison of services for autism spectrum disorder in Massachusetts with those in Seoul. *Journal of Korean Medical Science*, 34(43), e288. <https://doi.org/10.3346/jkms.2019.34.e288>.

- Kim, S. W., Kim, J. K., Jhon, M., Lee, H. J., Kim, H., Kim, J. W., ... & Shin, I. S. (2020a). Mindlink: A stigma-free youth-friendly community-based early-intervention center in Korea. *Early Intervention in Psychiatry*, 1-6. <https://doi.org/10.1111/eip.13076>
- Kim, S., Kim, H., Kim, J., Nichols, S. C., & Kang, V. Y. (2021). Experiences and impact of having children with autism spectrum disorder on the lives of their Korean-American mothers. *Exceptionality*, 29(5), 327-343.
- Kim, S., Kim, J., Yan, M. C., & Kang, V. Y. (2020b). Korean-American Mothers' Perceptions of Self-Determination of Primary School Children with Autism Spectrum Disorder. *International Journal of Disability, Development and Education*, 1-16.
- Kim, D., Pan, Y., & Park, H. S. (1998). High-versus low-context culture: A comparison of Chinese, Korean, and American cultures. *Psychology & Marketing*, 15(6), 507-521. [https://doi.org/10.1002/\(SICI\)1520-6793\(199809\)15:6<507::AID-MAR2>3.0.CO;2-A](https://doi.org/10.1002/(SICI)1520-6793(199809)15:6<507::AID-MAR2>3.0.CO;2-A)
- Lo, L. (2008). Chinese families' level of participation and experiences in IEP meetings. *Preventing School Failure*, 53, 21-27. <https://doi.org/10.3200/PSFL.53.1.21-27>
- Loury, A., & Kang, E. Y. (2020, June 25). *Asians are the fastest growing racial demographic in Illinois*. Chicago Public Media. <https://www.wbez.org/stories/asians-are-the-fastest-growing-racial-demographic-in-Illinois/1acba558-9754-4271-ac3c-53c00d4a47c3>
- Madding, C. C. (2000). Maintaining Focus on Cultural Competence in Early Intervention Services to Linguistically and Culturally Diverse Families. *Infant-Toddler Intervention: The Transdisciplinary Journal*, 10(1), 9-18.
- Marfo, K., Dinero, T. E., Browne, N., Gallant, D., Smyth, R., & Corbett, A. (1992). Child, program, and family ecological variables in early intervention. *Early Education and Development*, 3(1), 27-44. [https://doi.org/10.1207/s15566935eed0301\\_2](https://doi.org/10.1207/s15566935eed0301_2)
- McManus, B. M., Murphy, N. J., Richardson, Z., Khetani, M. A., Schenkman, M., & Morrato, E. H. (2020). Family-centered care in early intervention: Examining caregiver perceptions of family-centered care and early intervention service use intensity. *Child Care, Health and Development*, 46(1), 1-8. <https://doi.org/10.1111/cch.12724>
- Meadan, H., Snodgrass, M. R., Meyer, L. E., Fisher, K. W., Chung, M. Y., & Halle, J. W. (2016). Internet-based parent-implemented intervention for young children with autism: A pilot study. *Journal of Early Intervention*, 38(1), 3-23. <https://doi.org/10.1177/1053815116630327>
- Moore, S. M., & Pérez-Méndez, C. (2006). Working with linguistically diverse families in early intervention: Misconceptions and missed opportunities. *Seminars in Speech and Language*, 27(3), 187-198. <https://doi.org/10.1055/s-2006-948229>
- Mui, A. C., & Kang, S. Y. (2006). Acculturation stress and depression among Asian immigrant elders. *Social Work*, 51(3), 243-255. <https://doi.org/10.1093/sw/51.3.243>

- Nam, S., & Chun, J. (2014). Influencing factors on mothers' parenting style of young children at risk for developmental delay in South Korea: The mediating effects of parenting stress. *Children and Youth Services Review, 36*, 81-89. <https://doi.org/10.1016/j.chilgyouth.2013.11.008>
- Noh, S., & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *American Journal of Public Health, 93*(2), 232–238. <https://doi.org/10.2105/ajph.93.2.232>
- Parette, P., Chuang, S. J. L., & Blake Huer, M. (2004). First-generation Chinese American families' attitudes regarding disabilities and educational interventions. *Focus on Autism and Other Developmental Disabilities, 19*(2), 114-123.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). SAGE.
- Rush, D. D., & Shelden, M. L. (2005). Evidence-based definition of coaching practices. *Case in Point, 1*(6), 1–6.
- Saldaña, J. (2015). *The coding manual for qualitative researchers*. SAGE.
- Shivers, C. M., & Plavnick, J. B. (2015). Sibling involvement in interventions for individuals with autism spectrum disorders: A systematic review. *Journal of Autism and Developmental Disorders, 45*(3), 685-696. <https://doi.org/10.1007/s10803-014-2222-7>
- Spector, V., & Charlop, M. H. (2018). A sibling-mediated intervention for children with autism spectrum disorder: Using the natural language paradigm (NLP). *Journal of Autism and Developmental Disorders, 48*(5), 1508-1522. <https://doi.org/10.1007/s10803-017-3404-x>
- Stake, R. E. (2006). *Multiple case study analysis*. Guilford Press.
- Su, H., Llewellyn, G., Yi, Y., Gao, Y., & Liu, J. (2021). The feasibility of family-centered early intervention for children with disabilities in mainland China: Practitioners' perceptions. *Child Care, Health and Development, 47*(6), 869-876. <https://doi.org/10.1111/cch.12898>
- Trainor, A. A. & Kim, S. (2012). Multicultural transition planning. In P. Wehman (Ed.), *Life beyond the classroom* (pp. 121-141). Brookes Publishing.
- Trivette, C. M., Dunst, C. J., & Hamby, D. W. (2010). Influences of family-systems intervention practices on parent-child interactions and child development. *Topics in Early Childhood Special Education, 30*(1), 3-19. <https://doi.org/10.1177/0271121410364250>
- U.S. Census Bureau (2021). QuickFacts, United States. <https://www.census.gov/quickfacts/fact/table/US/PST045219>
- Woolfenden, S., Posada, N., Krchnakova, R., Crawford, J., Gilbert, J., Jursik, B., ... & Kemp, L. (2015). Equitable access to developmental surveillance and early intervention—understanding the barriers for children from culturally and linguistically diverse (CALD) backgrounds. *Health Expectations, 18*(6), 3286-3301. <https://doi.org/10.1111/hex.12318>

- Xie, S., & Li, H. (2019). 'Tiger mom, panda dad': a study of contemporary Chinese parenting profiles. *Early Child Development and Care*, 189(2), 284-300.  
<https://doi.org/10.1080/03004430.2017.1318870>
- Yan, M. C., Kim, S., Kang, H. J., & Wilkerson, K. L. (2017). Perceptions of disability and special education among East Asian parents: U.S. immigrants and non-immigrants. *Journal of International Special Needs Education*, 20(1), 41-55.  
<https://doi.org/10.9782/2159-4341-20.1.41>
- Yell, M. L. (1998). *The law and special education*. Prentice Hall.
- Zhang, C., & Bennett, T. (2003). Facilitating the meaningful participation of culturally and linguistically diverse families in the IFSP and IEP process. *Focus on Autism and Other Developmental Disabilities*, 18(1), 51-59.  
<https://doi.org/10.1177/108835760301800107>
- Zhao, M., & Fu, W. (2020). The resilience of parents who have children with autism spectrum disorder in China: A social culture perspective. *International Journal of Developmental Disabilities*, 1-12. <https://doi.org/10.1080/20473869.2020.1747761>
- Zheng, Y., Maude, S. P., Brotherson, M. J., & Merritts, A. (2016). Early childhood intervention in China from the families' perspective. *International Journal of Disability, Development and Education*, 63(4), 431-449.  
<https://doi.org/10.1080/1034912X.2015.1124988>

## Appendix A

### *Interview Protocol Adopted from Kim et al. (2021)*

- 1) What was the timing of first concerns, diagnosis, referral, and service entry for your family participating in Part C early intervention programs?
- 2) What kind of contact did your family have with medical professionals when first concerned about your child's development?
- 3) How much effort did it take for you to find out about and receive early intervention services?
- 4) What challenges did you face in finding out about the services, if any?
- 5) What roles do you play in developing a plan for services?
- 6) Are you satisfied that the services provided are those that are needed?
- 7) Are you satisfied with early interactions and with early intervention professionals?
- 8) Does the process of getting early intervention differ for your family as a function of selected child or family characteristics?
- 9) What part of EI services and process are considered challenges? What do you like the best?

- 10) What aspects of your culture were integrated into your early intervention experience?
- 11) What aspects of your culture do you wish were integrated into your early intervention experience?
- 12) How were your linguistic backgrounds integrated in your early intervention experience?
- 13) How do you wish your linguistic backgrounds were integrated in your early intervention experience?
- 14) How was your interaction/partnership with the interpreter?

### **Acknowledgment**

The authors thank the families who shared their stories and insights.

### **Author Contact**

Veronica Kang, [vkang@umd.edu](mailto:vkang@umd.edu)

Sunyoung Kim, [sunnykim@uic.edu](mailto:sunnykim@uic.edu)

Jing Wang, [jwang213@uic.edu](mailto:jwang213@uic.edu)