

Perceptions of Early Intervention Services: Adolescent and Adult Mothers in Two States

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Abstract

Early intervention (EI) provides critical services to families with young children who have diagnosed disabilities, developmental delays, or who are at-risk for developmental delays. Very little is known about the experiences of adolescent mothers who have children who qualify for EI services. The authors investigated the perceptions of adolescent and adult mothers from two states whose infants or toddlers received EI services. Descriptive and qualitative analyses were performed. Qualitative analyses indicate different views relating to EI services and interactions with EI providers for mothers in each state between and within age groups. Both groups identified positive experiences, such as the professional support and other resources they received. Adult mothers reported difficulties primarily concerning access to needed services for their children. Implications are discussed.

Introduction

When an infant or toddler has a diagnosed disability or developmental delay, parenting can become more complex because of the child's developmental needs, regardless of maternal age. In the United States, federal law requires that early intervention (EI) services be offered for infants and toddlers who have disabilities or developmental delays or who are at-risk for developmental delays. The Individuals with Disabilities Education Improvement Act (IDEIA) includes regulations for referral, eligibility, and service provision, including services from developmental specialists (DS), speech and language pathologists (SLP), and physical therapists (PT) to address the children's developmental strengths and needs. A Service Coordinator (SC) also works with families to locate and coordinate resources and prepare for children's transition at age three to services in the public school (e.g., pre-kindergarten classroom or early childhood special education classroom) (P. L. No. 108-446, 118 Stat. 2647, 2004).

Ideally, EI services are built upon family-centered practices (Dunst, 2002), which include collaboration (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004) and ongoing information sharing (Woods & Lindeman, 2008) between families and EI professionals. Together, these components of practice can help to assure that services meet parents' expectations and to facilitate positive outcomes. However, research suggests mixed results related to provision of family-centered service practices. For example, parents have described difficulties accessing EI services and problems in interactions with EI service providers (Bailey, Hebbeler, Scarborough, Spiker & Mallik, 2004; Brotherson, Summers, Naig, Kyzar, Friend, Epley et al., 2010; Kontos & Diamond, 2002; Park & Turnbull, 2003; Scarborough, Spiker,

Mallik, Hebbeler, Bailey, & Simeonsson, 2004). Bruder (2010) and Kelly and colleagues (2008) emphasize the significance of relationships between parents and service providers such as developmental specialists. The need for EI service providers to understand parent characteristics and preferences has also been noted by Fialka (2001) and Hanson and Bruder (2001). Yet, some groups of parents experience discontinuity between recommendations for family-centered practices and the implementation of those practices.

One group that may be particularly at-risk for this type of “disconnect” between recommended and actual practices is adolescent mothers. In this study, an adolescent mother was defined as a female having a baby at age 19 years or younger. The United States has one of the highest adolescent birth rates in the world and among developed nations (Adamson, Brown, Mickelwright, & Wright, 2001). In 2008, adolescent birth rates were 41.5 per 1,000 births, up 5% from 2005 for adolescent females ages 15 to 19 (Martin, Hamilton, Sutton, Ventura, Mathews, Kimeyer, & Osterman, 2010); however, today, the birth rate for 15 to 19 year olds is 31.3 births per 1,000 (Hamilton, Martin, & Ventura, 2012). Research has suggested that infants and toddlers of adolescent mothers are at increased risk of having a developmental delay compared to children of adult mothers (Ryan-Krause, Meadows-Oliver, Sadler & Swartz, 2009; Whitman, Borkowski, Schellenbach, & Nath, 1997).

Altogether, many adolescents face challenging circumstances as they take on the maternal role (e.g., Barratt & Roach 1995; Barratt, Roach, Morgan, & Colbert, 1996; Duncan, 2007; Larson, 2004; Suner, Nakamura & Caulfield, 2003). These can be intensified when their child is diagnosed with a disability or developmental delay (Lloyd & Rosman, 2005). However, researchers such as Barn and Mantovani (2007) and Rutman and colleagues (2002) emphasize the capabilities or strengths of adolescent mothers. Others have noted adolescent parents’ positive self-perceptions and their understanding of their own strengths and needs (Kirkman, Harrison, Hillier & Pyett, 2001; Rolfe, 2008).

The literature describes a range of positive and negative experiences for adolescent mothers. Adult mothers are much more likely to be viewed as competent and understanding of their young children’s development and needs. Barn and Mantovani (2007) and Rutman and colleagues (2002) note that adolescent mothers may face negative cultural attitudes toward early motherhood. Other researchers have documented positive self-perceptions in adolescent parents, and self-awareness regarding their strengths and needs (Kirkman, Harrison, Hillier & Pyett, 2001; Rolfe, 2008). These authors and others (e.g., Duncan, 2007; Suner, Nakamura & Caulfield, 2003) have brought attention to the circumstances that adolescent mothers may face in the maternal role. Barratt and colleagues (1995, 1996), for example, investigated challenges for adolescent parents related to becoming authority figures for and interaction partners with their young children. Young mothers demonstrated some difficulties with overall engagement and with responsivity to infant cues. An adolescent mother may also be more stressed than an older parent (Larson, 2004), especially when her child is diagnosed with a disability or developmental delay (Lloyd & Rosman, 2005).

Research on relationships between EI service providers and adolescent parents has indicated problem areas. For example, parents in one study reported feeling that they were not respected by their children’s service coordinators and that service providers did not get to know them. In

the same study, EI service providers reported that adolescent mothers were not doing all they could to help their children (Lea, 2006). If EI services are meant to be built upon reciprocal relationships and ongoing information sharing (Woods & Lindeman, 2008), the fact that some adolescent mothers have negative experiences is cause for concern.

Overall, little research has focused on adolescent mothers whose infants or toddlers receive EI services. In addition, research that includes adolescent mothers does not differentiate between their responses and those of adult mothers, so their perceptions of EI service are largely unknown outside of the 2006 research by Lea, mentioned above.

The exploratory study described here seeks to differentiate adolescent from adult mothers' perceptions of EI services. Rather than assume that the two groups have similar experiences, we believe that, based on the research cited above, similarities and differences exist that might moderate or more directly impact the adolescent mothers' EI experiences. Therefore, the purpose of this study was to explore adolescent and adult mothers' perceptions of their EI experiences with family centered services, related to expectations and information sharing.

Method

The investigation described here was exploratory due to the dearth of information on the topic. The intention was to further a definition of the topic, utilizing a grounded theory approach with the data shaping the emerging theory rather than the reverse (Corbin & Strauss, 2008; Lincoln & Guba, 1985).

Contextual Information

Participants in the study were adolescent and adult mothers with infants or toddlers receiving EI services from two states. Several key differences between the two states were noted in regard to EI service provision.

For the Midwestern state, funding for EI services is through the state's Department of Human Services (DHS); in the Southwestern state, funding is through the state DHS and the Department of Education.

In the Midwestern state, a bachelor of science degree is required for the position of "developmental specialist." A master of science degree is required for the same position in the Southwestern state. For a child to be eligible for services, the Midwestern state requires an established disability, 30% delay in one or more developmental areas, clinical judgment based upon a multidisciplinary evaluation, and at-risk status based on team consensus. The Southwestern state recognizes a diagnosed physical or mental condition that has a high probability of resulting in a delay or exhibiting a delay in their developmental age compared to chronological age of 50% in one or more of the following developmental areas: adaptive, cognitive, communication, physical, or social emotional development.

Parents in the Midwestern state must provide insurance and pay for EI services on a sliding fee scale. In the Southwestern state, EI services are free. Parents in the Midwestern state choose a team of EI providers from a notebook of possibilities, with input from the Service Coordinator. In the Southwestern EI program, each county has a designated team of EI professionals.

Participants

The project drew a convenience sample of adolescent and adult mothers from the southernmost nine counties in a Midwestern state and a sample from seven central and northeastern counties in a Southwestern state. All mothers had infants or toddlers receiving EI services.

Adolescent mothers (n = 9, seven from the Southwestern state) ranged in age from 14 to 19 years old when they gave birth (see Table 1). The sample was composed of one 14-year-old, three 16-year-olds, one 17-year-old, two 18-year-olds, and two 19-year-olds. Adult mothers (n = 19, six from the Southwestern state) ranged in age from 20 to 39 years old; 20- to 24-year-olds were 26.4% of the sample. The largest percentage in this group (42.1%) was 25 to 29 years old. In addition, 21.1% of adult mothers were between the ages of 30 to 34 years old. Adult mothers 35 to 39 years old comprised 10.6% of the sample. Table 2 provides information regarding the children's eligibility for EI services.

Table 1
Socio-demographic factors by maternal age at child's birth

	Adolescent Mothers (n = 9) n (%)	Adult Mothers (n = 19) n (%)
AGE (YEARS)		
14	1 (11.1)	
16	3 (33.3)	
17	1 (11.1)	
18	2 (22.2)	
19	2 (22.2)	
20-24		5 (26.4)
25-29		8 (42.1)
30-34		4 (21.1)
35-39		2 (10.6)
RACE/ETHNICITY		
Caucasian	4 (44.4)	17 (89.4)
Black	3 (33.3)	1 (5.3)
Native American	2 (22.2)	0.0
Hispanic	1 (12.2)	1 (5.3)

EDUCATION

7th grade	1(11.1)	0.0
8th grade	0.0	1 (5.3)
9th grade	1 (11.1)	0.0
10th grade	2 (22.2)	0.0
11th grade	1 (11.1)	1 (5.3)
High School	3 (33.3)	3 (15.8)
Some College	1 (11.1)	8 (42.1)
Associates Degree	0.0	1 (5.3)
Bachelors Degree	0.0	2 (10.5)
Professional Degree	0.0	3 (15.8)

Table 2
Child eligibility status for EI services
(*N* = 28)

Child's eligibility status	n
Speech and language delay	10
Down syndrome	3
Developmental delay	2
Hydrocephalus	2
Prematurity	2
Achondroplasia	1
Cerebral palsy	1
Cleft lip and palate	1
Goltz syndrome	1
Heart failure	1
Multiple birth defects	1
Oral Motor	1
Physical development delays	1
Plagiocephaly and torticollis	1

Procedure

After receiving approval for the research from the University's Human Subjects Committee, the researchers contacted local program administrators from each state; applicable forms and assurances were completed concerning the study. The appropriate supervisors were then contacted and given recruitment information for adolescent and adult mothers with a child receiving EI services.

In the Midwestern state, the researchers worked with service coordinators in the EI program for the nine counties to recruit adolescent and adult mothers. After approval, service providers approached mothers at EI visits and asked if they would be willing to participate in the study. Once the consent was obtained to participate in the study, participants were asked to complete several surveys followed by a semi-structured interview conducted either face-to-face or via telephone. (See [Appendix](#) for interview protocol.)

In the Southwestern state, an EI professional (usually a developmental specialist) informed potential participants about the study. Those who agreed to participate were given an informed consent form and the surveys to complete. At the next EI visit, the EI professional then collected the signed consent form, survey responses, and a contact number so that one of the researchers could conduct the follow-up semi-structured interview.

Demographic Form. Participants completed a demographic form which requested information such as maternal age, age at child's birth, and current living situation, as well as information about the children, the children's fathers, and caregiving activities (e.g., feeding, bathing, and putting infants to sleep). The demographic form (Thompson & Bruns, 2007) was developed specifically for the study.

Interviews. The researchers trained undergraduate research assistants to conduct the semi-structured interviews. The students reviewed the interview questions and questions were clarified by the researchers before conducting the interviews. The undergraduate research assistants were also provided with strategies to facilitate responses, such as probes to request elaboration and examples (Lincoln & Guba, 1985). Most interviews in the Midwestern state were conducted face-to-face, although some were conducted over the phone based on parent preference. All Southwestern state interviews were completed by phone. All participants received a \$20 gift card.

Analysis. Due to the sample size, results for the demographic data were explored using frequencies and means (SDs). The semi-structured interviews were transcribed verbatim into Microsoft Word files. Qualitative data were analyzed using a constant comparison methodology to examine similarities and differences in themes within and between the groups. The two authors and an undergraduate research assistant each read the data generated from interviews that had been separated by age group and by state (a total of four categories). Each reader grouped similar responses into emerging themes across age and location, as well as noting outlier responses (Huberman & Miles, 1994; Lincoln & Guba, 1985; Patton, 2002). The authors and the undergraduate research assistant met to review emergent themes. Discussion continued until consensus was reached across themes by age and state (Lincoln & Guba, 1985).

Findings

Three themes were identified: expectations related to EI services, helpfulness of EI services, and importance of information-sharing. The following overview of adolescent and adult mothers' responses to interview questions is organized by theme, with representative quotes from adolescent and adult mothers from both states.

Expectations Related to EI Services

Participants in both states expressed a range of perspectives on their expectations for early intervention services their children received. Three subthemes emerged: "beyond expectations or better than expected," "did not meet expectations or needs," and "no expectations."

Beyond expectations or better than expected. The most common response from participants was that EI services exceeded their expectations. This was true for three adolescent mothers (one Midwest and two Southwest) and four adult mothers (three Midwest and one Southwest). One adult mother from the Midwestern state commented about services her daughter received: "I'm surprised at the extent that they do things with her. Some things that they do with her, I never thought that that was, you know, it didn't click in my mind as being the right thing to do." A Southwestern adult mother stated, "They are actually better than expected." One of the adolescent mothers stated, "[T]hey've surpassed all of my expectations in their dedication and their ideas they have for getting more progress done."

Another Midwest adult mother commented,

I didn't actually even think it was going to help. It has tremendously. It's a very overcoming situation, it's amazing what she has done since the first initial therapy to now to the ending of the... I mean it's not ending, it's still going, she's in the middle... almost not even all the way there, but she's in the middle of it. So it's like, it's amazing, I don't know how to explain it.

Did not meet expectations or needs. Seven adult mothers in the Midwestern state described how EI services had not met the participants' expectations. However, no adult mothers in the Southwestern state and no adolescent mothers from either state expressed this sentiment. One Midwestern state mother stated:

My service coordinator is not very good. ... I'd like to see a service coordinator who understands what's actually going on with the therapies instead of me having to call and inform her of things. She should be aware from the reports. I actually was approached about United Cerebral Palsy from somebody else, and when I asked my service coordinator why she didn't refer me, she didn't even know it existed.

Another Midwest adult mother commented,

Well, with the physical therapy, what is least helpful is that she don't tell me as much as the speech therapist. And, half the time she don't show up to her visits. So, you know, I wish I had a better physical therapist that would show up whenever she said she was going to.

Finally, another adult mother from the Midwestern state responded, "It just seems like what's the point of hanging out for an hour twice a month? How is that even helping speech development? I guess I expected more. I don't think more is an option, unless you want to pay for it."

Both the structure of the Midwest state's EI program and qualifications for EI service providers are different from those of the Southwestern state; however, it is unclear whether, or in what ways, one or both of these differences impacted mothers' perceptions of their experiences. Overall, the service providers who did not live up to the parents' expectations can be summed up by one mother's quote: "I guess I expected more."

No expectations. Some parents indicated having had no particular expectations of EI services. This was mentioned by two adolescent mothers and four of the adult mothers (three from the Midwest and one from the Southwest). It appeared that several of the mothers may have been unaware initially of what EI services entailed; one Midwest adolescent mother stated, "No, we really didn't know much in the beginning. We didn't know what to expect." A Midwestern adult participant commented, "I didn't really know what to expect. I expected some kind of speech therapy and we're getting that." Another Midwestern adult mother stated, "I didn't quite know what to expect at that time. I really didn't have any certain expectations. Just someone to work with her and just help her."

Three of the adolescent mothers indicated having had no particular expectations of EI services. Two other adolescent mothers, both from the Southwestern state, indicated that they had not been fully aware of the nature of early intervention. In fact, one commented "I forgot what...early intervention is."

Helpfulness of EI Services

Two adolescent participants (one from each state) referred to the helpfulness of EI services. The Southwestern adolescent mother said, "Everything is helpful. She even helped out with clothes that were around the office. I was really appreciative of that. I was really thankful." Comments from seven of the adult mothers (six from Midwest and one from Southwest) were also related to this theme. For example, one adult participant responded, "Everything is helpful. We use it all" [referring to information from therapist]. Another said, "They're in depth with technicalities and the information that I have no idea about. They answer any question I ask."

A third adult mother responded, "Everybody is professional, everybody cares, and everybody is very knowledgeable. You know it's just amazing that they come to the house and they cater to the child and they help the mother out."

Importance of Information Sharing

A third theme emerged regarding the importance of information sharing with EI service providers. The mothers' responses to the related question were varied in ways that the researchers had not anticipated; we include them to highlight a basic tenet of EI (Dunst, 2002; Kelly et al., 2008; Woods & Lindeman, 2008). The responses reflect the range of information that parents found helpful, including child development information and how to pay bills, as well as how to gain access to other resources, such as clothing. In fact, participants reported that EI professionals sometimes directly provided items such as clothing. The adolescent mothers indicated that their EI providers answered questions and provided information and new ideas. One Midwestern adolescent mother reported, "They answer any question I ask ... [give] ideas that I might need to try."

Only Southwestern adult mothers described instructions given to parents by the EI professionals. One said, "They give suggestions...on behavior, how to get her to engage, what kind of activities to try." The adult mothers in the Southwestern group also commented on how the therapists provided handouts; one mother confirmed, "[The therapist] always has some kind of paper with activities for us to work with."

One of the Southwestern adolescent mothers stated that she received information about specific issues with her son, "... Like how to deal with his falling out and with potty trainin'." Another Southwestern adolescent said, "She [the EI professional] brings information on what she [infant receiving EI services] should be doing. Other information like how to know if she has a tummy ache." An adult participant from the Midwest group stated, "They're constantly telling me at each visit what I should work on while they're gone ... They give me different sets of exercises that I never would have guessed to do." Another adult mother from the Midwestern state described information sharing thus: "The things I learn the most is that we made a goal each time for each therapist and that's the biggest thing to do throughout that week. I have to do my homework, too."

Participants also commented on how regularly receiving information from the EI professionals assisted them in understanding their children's development. For example, a Midwestern adult mother spoke of information shared by her twin sons' developmental therapists:

What they (the twins) do, and what they've (the DT's) gotten them to say. They tell us in the report, and that is what's really helpful. I mean they do that every week. Once a week they write the report. And that's really helpful instead of going month by month. So you can see them actually doing something every week. Instead of just "Oh, well this is what they did this month." Well, I don't remember that. Why didn't you tell me that? You know what I mean. That's the best part.

Another adult mother in the Midwest remarked "The most helpful thing I think I get is with the speech therapist, she gives us a list of things [my daughter] should be working on when she's not there. She gives us a list of daily activities to work on ..."

An adult Midwestern participant described specialized strategies she learned from her daughter's EI providers:

They just know many techniques, many massages that are helpful. They have exercises that I can do for her facial muscles. I didn't know about that. There's physical therapy exercises that I do with her to strengthen her inner legs. They give me different sets of exercises that I never would have guessed to do. So, everything that they teach me, you know, pretty much, basically, in that aspect was all new to me...

Finally, a Southwestern adult mother commented on her EI providers' efforts toward knowledge-building and how she provided information in ways that that matched the mother's understanding of her child and his development: "They pretty much tell me what to do when he cries or when he is 'being a boy.' [They] teach me a lot of things. How to play with him and not to be so rough. They teach me how to let him play with books 'cause he likes to eat them and how to play with him with bubbles and outside and stuff."

Discussion

Analysis of the data suggests that adolescent mothers may not have had well-informed expectations of the services, while adult mothers were more likely to state that the EI services surpassed their expectations and were helpful. The only comments about lack of services or services that did not meet children's needs came exclusively from adult mothers in the Midwestern state.

Findings of this study expand our limited knowledge of adolescent parents' experiences in EI. Adolescent mothers in both the Southwest and the Midwest stated that the majority of EI services met their expectations and that EI providers provided assistance and instruction in caring for their children. Adult mothers appeared to have higher expectations of their EI providers. It is unclear if this is due to their greater understanding of EI services, to other experiences with specialized providers (e.g., medical), or to additional factors.

Adolescent mothers did not state expectations of EI services. From our data, it became evident that regardless of geographic location, most of the individuals in this group were not clear about the breadth and depth of EI services available which, in turn, could have impacted their expectations.

Findings of this study both converge with and diverge from findings in the limited body of research examining adolescent and adult mothers' perceptions of EI services. Overall, the majority of adolescent participants concluded that EI service providers actively involved them in working with the children. Their comments suggested a positive view of this aspect of services.

Our findings are not consistent with the sentiments expressed by adolescent mothers in the previously mentioned Lea study, who felt that they received little respect from EI service providers (2006). Adult mothers in the current study focused on the information shared by EI service providers, which reinforces recommendations by Woods and Lindeman (2008). According to one adult mother, EI service providers were very knowledgeable and were willing to answer questions and informed parents of skills to work on with their child between visits.

About half of the adult mothers in the sample concluded that they were satisfied with their EI service providers and viewed them as knowledgeable, professional and helpful. However, several adult mothers from the Midwestern state stated that their expectations of EI services were not met and they expected more from their EI service providers. In addition, adult mothers referred to a number of issues involving service coordinators, such as unprofessional behavior and lack of knowledge of resources. It appears that these adult mothers may have experienced the kind of mismatch that has been documented in the literature as sometimes occurring between parents and EI service providers (Blue-Banning et al., 2004; Brotherson et al., 2010; Fialka, 2001; Kontos & Diamond, 2002). This may have been due to adult mothers' knowledge of EI services and community resources. Theirs may have been a more proactive approach than that of the adolescent mothers who, for the most part, were satisfied with the information and resources their EI service providers offered.

Limitations

Due to the small sample size, results cannot be generalized to larger populations. Because adolescent mothers may be at greater risk for having children who qualify for EI services (Bailey et al., 2004; Lea, 2006), the researchers had anticipated a larger sample. However, in the Midwestern state, very few of the EI professionals had adolescent mothers on their case loads. In the Southwestern sample, more adolescents were on caseloads, but the response rate was not as high as anticipated. This difficulty in recruitment of adolescent mothers has been reported in other investigations (e.g., Lea, 2006). This group was also more difficult than adult mothers to engage in the semi-structured interviews; for example, they tended to provide only brief responses even with follow-up probes, thus reducing available data for analysis.

Both groups of mothers were also asked about their perceptions at one point in time, whether soon after services began or closer to the age three transition. Longitudinal data collection would provide a more comprehensive view of expectations and overall perceptions of EI services, especially as mothers prepare to leave their EI service providers as their child approaches his or her third birthday. Experiences could be better contextualized as well to document family changes over time, for example, and its impact on EI services. Adolescent and adult fathers could also be recruited to gain their perceptions of EI services and providers.

In addition, because of the time necessary to recruit both groups of mothers, changes in the research team occurred. Two new undergraduate research assistants joined the study approximately midway through data collection. Training was the same for all research assistants. The combination of the reluctance of adolescent mothers to fully participate during interviews and changing research assistants may have affected aspects of data collection.

Implications

The results presented here provide a context to increase understanding of perceptions of adolescent and adult mothers with a child receiving EI services. Little research has focused on the former group and, as such, the information here advances the conversation on this topic by providing additional areas for investigation. In addition, the similarities and differences in

perceptions are worthy of additional study within the context of other states' EI structures. It is also important to further examine the degree to which expectations are met (or not met) across adolescent and adult mother groups and states. This is especially critical as a majority of adult mothers in the Midwestern state represented in this study stated that EI services did not meet their expectations. As noted, adult mothers had expectations, and sometimes services violated those expectations. Adolescent mothers did not have expectations, leading to fewer comments related to issues with services.

Based on the findings presented here, EI service providers should engage in ongoing reflection of their skills in providing EI services. As indicated by responses across the two groups of mothers, EI service providers must continually consider the unique strengths and needs of the parents they work with, which is a key element of family-centered service provision (Blue-Banning et al., 2004; Brotherson, et al., 2010; Dunst, 2002; Fialka, 2001). Professionals working with adolescent mothers who have young children with disabilities, especially, must reflect on their skills and competencies when working with this population (Fewell & Wheeden, 1998; Lea, 2006; Suner et al., 2003). The responses of adolescent mothers presented here concerning expectations are a starting point to review and improve practices with this unique population.

Further, each parent with an infant or toddler receiving EI services is an individual with her own priorities, concerns, and needs. EI providers must be mindful of the range in parent expectations as related to these factors. Both adolescent and adult parents discussed their expectations at length, and the data here highlight the similarities and differences to consider in EI service provision, such as knowledge of child development and need for child-specific information and resources. Bailey and colleagues (2004) and Scarborough and colleagues (2004) also emphasize being mindful of parent needs and providing services and supports to address those needs.

EI services do not always correspond with parent-identified needs (Bailey et al., 2004; Scarborough et al., 2004). Some participants in this study described discontinuity between what they hoped for from EI services and what their EI service providers offered. This discontinuity may be related to availability of services and materials but also to characteristics of individual providers. There is also a need for service providers to further focus on providing mothers, fathers, and extended family members with the support and services they identify as needs. EI services are offered to the family as stipulated in IDEIA.

These efforts to provide services must also be viewed in context. Our participants in both states lived in rural areas with limited service options. It is unclear if, or how, variability in provider qualifications (e.g., in terminal degrees) may have been associated with mothers' perceptions of their EI experiences. Thus, it is critical to learn more about EI providers' preservice training and professional development opportunities that focus on working with families, and about providers' overall attitudes toward their work with parents. Both concerns directly correspond with the relational component of family-centered service provision in EI (Dunst, 2002). EI program administrators should also be mindful of these factors in their supervision and mentoring of EI service providers (see also Brotherson et al., 2010; Kelly et al., 2008; Park & Turnbull, 2003).

Conclusion

There is a need to expand the knowledge base to better inform EI service providers of the needs of adolescent and adult mothers who have young children with disabilities. It is also essential to share these findings with practicing EI providers during preservice preparation and through ongoing professional development related to meeting expectations in the provision of services and resources. In particular, EI professionals may need to make special efforts to view adolescent mothers with infants or toddlers receiving EI services as having needs and experiences that are both unique and similar to those of adult mothers. These efforts can positively affect the mothers with children in EI and their receipt of optimal services and supports.

References

- Barn, Ravinder, & Mantovani, Nadia. (2007). Young mothers and the care system: Contextualizing risk and vulnerability. *British Journal of Social Work, 37*, 225–243.
- Bailey, Donald B.; Hebbeler, Kathleen; Scarborough, Anita; Spiker, Donna; & Mallik, Sangeeta. (2004). First experiences with early intervention: A national perspective. *Pediatrics, 113*, 887–896.
- Barratt, Marguerite Stevenson, & Roach, Mary A. (1995). Early interactive processes: Parenting by adolescent and adult single mothers. *Infant Behavior and Development, 18*, 97–109.
- Barratt, Marguerite Stevenson; Roach, Mary A.; Morgan, Kari M.; & Colbert, Karen K. (1996). Adjustment to motherhood by single adolescents. *Family Relations, 45*, 209–215.
- Blue-Banning, Martha; Summers, Jean Ann; Frankland, H. Corine; Nelson, Louise Lord; & Beegle, Gwen. (2004). Dimensions of family and professional partnerships: Constructive guidelines for collaboration. *Exceptional Children, 70*, 167–184.
- Bronfenbrenner, Urie. (1993). The ecology of cognitive development: Research models and fugitive findings. In Robert H. Wozniak & Kurt W. Fischer (Eds.), *Development in Context: Acting and thinking in specific environments* (pp. 3–44). Hillsdale, NJ: Lawrence Erlbaum.
- Bronfenbrenner, Urie, & Morris, Pamela A. (1998). The ecology of developmental processes. In William Damon & Richard M. Lerner (Eds.), *Handbook of Child Psychology: Volume 1. Theoretical Models of Human Development* (5th ed., pp. 993–1028). New York: John Wiley & Sons.
- Brotherson, Mary Jane; Summers, Jean Ann; Naig, Lisa A.; Kyzar, Kathleen; Friend, Anna; Epley, Pamela; . . . Turnbull, Ann P. (2010). Partnership patterns: Addressing emotional needs in early intervention. *Topics in Early Childhood Special Education, 30*, 32–45.

Bruder, Mary Beth. (2010). Early childhood intervention: A promise to children and families for their future. *Exceptional Children*, 76, 339–355.

CDC (2011, April 8). Vital Signs: Teen Pregnancy—United States, 1991–2009. *Morbidity and Mortality Weekly Report*, 60(13), 414–420. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6013a5.htm?s_cid=mm6013a5_w

Corbin, Juliet, & Strauss, Anselm. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Duncan, Simon. (2007). What's the problem with teenage parents? And what's the problem with policy? *Critical Social Policy*, 27, 307–334.

Dunst, Carl J. (2002). Family-centered practices: Birth through high school. *Journal of Special Education*, 36, 141–147.

Fewell, Rebecca R., & Wheeden, C. Abigail. (1998). A pilot study of intervention with adolescent mothers and their children: A preliminary examination of child outcomes. *Topics in Early Childhood Special Education*, 18, 18–25.

Fialka, Janice. (2001). The dance of partnership: Why do my feet hurt? *Young Exceptional Children*, 4(2), 21–27.

Furstenberg, Frank F.; Levine, Judith A.; & Brooks-Gunn, Jeanne. (1990). The children of teenage mothers: Patterns of early childbearing in two generations. *Family Planning Perspectives*, 22, 54–61.

Hanson, Marci J., & Bruder, Mary Beth. (2001). Early intervention: Promises to keep. *Infants & Young Children*, 13(3), 47–58.

Huberman, A. Michael, & Miles, Matthew B. (1994). Data management and analysis methods. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), *Handbook of Qualitative Research* (1st ed., pp. 428–444). Thousand Oaks, CA: Sage.

Karraker, Katherine Hildebrandt, & Evans, Suzanne L. (1996). Adolescent mothers' knowledge of child development and expectations for their own infants. *Journal of Youth and Adolescence*, 25, 651–666.

Kelly, Jean F.; Zuckerman, Tracy; & Rosenblatt, Shira. (2008). Promoting first relationships: A relationship-focused early intervention approach. *Infants & Young Children*, 21, 285–295.

Kirkman, Maggie; Harrison, Lyn; Hillier, Lynne; & Pyett, Priscilla. (2001). 'I know I'm doing a good job': Canonical and autobiographical narratives of teenage mothers. *Culture, Health & Sexuality*, 3, 279–294.

Kontos, Susan, & Diamond, Karen. (2002). Measuring the quality of early intervention services for infants and toddlers: Problems and prospects. *International Journal of Disability, Development and Education*, 49, 337–351.

Larson, Nancy C. (2004). Parenting stress among adolescent mothers in the transition to adulthood. *Child & Adolescent Social Work Journal*, 21, 457–476.

Lea, Davenia. (2006). ‘You don’t know me like that’: Patterns of disconnect between adolescent mothers of children with disabilities and their early interventionists. *Journal of Early Intervention*, 28, 264–282.

Lincoln, Yvonna S., & Guba, Egon G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Lloyd, Chrishana M., & Rosman, Elisa. (2005). Exploring mental health outcomes for low-income mothers of children with special needs: Implications for policy and practice. *Infants & Young Children*, 18, 186–199.

Martin, Joyce A.; Hamilton, Brady E.; Sutton, Paul D.; Ventura, Stephanie J.; Mathews, T. J.; & Osteman, Michelle J. K. (2010, December 8). Births: Final data for 2008. *National Vital Statistics Reports*, 59(1). Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_01.pdf.

Hamilton, Brady E.; Marting, Joyce A.; & Ventura, Stephanie J. (2013). Births: Preliminary data for 2011. *National Vital Statistics Reports*, 61(5). Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_05.pdf.

Park, Jiyeon, & Turnbull, Ann P. (2003). Service integration in early intervention: Determining interpersonal and structural factors for its success. *Infants & Young Children*, 16, 48–58.

Patton, Michael Quinn. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Rolfe, Alison. (2008). ‘You’ve got to grow up when you’ve got a kid’: Marginalized young women’s accounts of motherhood. *Journal of Community & Applied Social Psychology*, 18, 299–314.

Rutman, Deborah; Strega, Susan; Callahan, Marilyn; & Dominelli, Lena. (2002). ‘Undeserving’ mothers? Practitioners’ experiences working with young mothers in/from care. *Child & Family Social Work*, 7, 149–159.

Ryan-Krause, Patricia; Meadows-Oliver, Mikki; Sadler, Lois; & Swartz, Martha K. (2009). Developmental status of children of teen mothers: Contrasting objective assessments with maternal reports. *Journal of Pediatric Health Care*, 23, 303–309.

Scarborough, Anita A.; Spiker, Donna; Mallik, Sangeeta; Hebbeler, Kathleen M.; Bailey, Donald B.; & Simeonsson, Rune J. (2004). A national look at children and families entering early intervention. *Exceptional Children*, 70, 469–483.

Suner, Janet; Nakamura, Sharon; & Caulfield, Rick. (2003). Kids having kids: Models of intervention. *Early Childhood Education Journal*, 31, 71–74.

Tamis-Lemonda, Catherine S.; Shannon, Jacqueline; & Spellman, Mark. (2002). Low-income adolescent mothers' knowledge about domains of child development. *Infant Mental Health Journal*, 23, 88–103.

Woods, Juliann J., & Lindeman, David P. (2008). Gathering and giving information with families. *Infants & Young Children*, 21, 272–284.

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Appendix

Interview Protocol

- How old was your child when you were referred for early intervention services?
- How did you find out about early intervention services?
- Are you the main person who meets with early intervention professionals? If not, then who does?
- Tell me about why your child qualified for early intervention services.
- Does your child have a specific medical diagnosis?
- What is the extent of your child's delay?
- In what areas is your child's development affected most? (physical, language, cognition, self-help, socio-emotional)
- Were there areas of concern on the developmental evaluation that you were not concerned about before evaluation?
- How would you rate your knowledge of typical development?
- Would you have known that there may be a problem with your child before others mentioned it to you?
- Did you have expectations about the services you would receive?
- How are the services similar to what you expected?
- How are the services different than what you expected?
- What information do you get at each early intervention visit that is most helpful?
 - What information is least helpful?

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