

Parent-Child Interaction When Babies Have Down Syndrome

The Perceptions of Taiwanese Mothers

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This article explores Taiwanese mothers' descriptions of interactions with their babies with Down syndrome. Two themes emerging from transcripts of interviews with 16 mothers are described and illustrated. The first theme highlights the ways in which mothers talked about the abilities and limitations of their babies; the second describes what appear to be two distinct frames of reference (pessimistic and optimistic) with respect to having a baby with Down syndrome. The relationship between these two themes is explored as a potentially useful way to understand mothers' beliefs about their own roles in supporting their babies' development. **Key words:** *Down syndrome, Taiwanese mothers*

PARENT-CHILD interaction has received increasing attention in early intervention with infants and toddlers with disabilities. Early intervention, by definition, occurs within the context of the relationship between children and their primary caregivers. The assumption is that early interactions form a central and highly salient arena for early learning and development (Barnard, 1997). Interventions that set out to change the characteristics of early parent-child interaction are based on current understanding of characteristics of interaction that are related to optimal development and learning (McCollum & Hemmeter, 1997). However, perspectives about what represents good outcomes and good parenting to achieve these outcomes may vary considerably across cultures

(Greenfield & Cocking, 1994). Parenting practices that stem from these beliefs mediate the child's developmental experience (Harkness & Super, 1996). Harwood, Miller, and Irizarry (1995), quoting Keesing (1981), noted that, "Culture itself is ultimately defined as socially transmitted behaviors which are adaptive to an environment common to a specific group of people" (p. 22).

Thus, in early intervention, a critical challenge for interventionists is to look beyond any particular parenting practice to understand the meaning of the practice within the context of the culture and the family. When interventionists are from a culture that differs from that of the recipients of service, they face the added challenge of recognizing their own culturally based ethnotheories about parenting, so that these can be seen as what they are: ideas learned through a particular culture, and therefore not necessarily shared by individuals from other cultures. For example, with respect to parent-child interaction in particular, individuals from different cultures may have very different ideas about a wide range of areas such as dependence and independence, attachment behavior, appropriate sleeping arrangements, and discipline (Greenfield & Suzuki, 1998).

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Whereas “what makes sense” with regard to parent-child interaction varies across cultures, many interaction intervention models are based on what is viewed as optimal in Western cultures, using research conducted with samples of Western European origin (Greenfield & Cocking, 1994). There is little research that directly examines different approaches to interaction intervention from a cultural perspective. Further, little is known cross-culturally about how the presence of a disability may influence parents’ ideas about their interactions with their young children. Views of disability may differ across cultures (Reynolds & Ingstad, 1995; Skinner, Rodriguez, & Bailey, 1999); these views may interact with views of child rearing such that members of particular cultures may hold differing beliefs about appropriate parenting with young children with disabilities. Cross-cultural research on parents’ beliefs about children with disabilities and about intervention (e.g., Danseco, 1997; Goldbart & Mukherjee, 1999) has increased in recent years, as has cross-cultural research on parent-child interaction (e.g., Harwood, Schoelmerich, Schulze, & Gonzalez, 1999). There is as yet little research that directly examines parents’ beliefs about their own interactions with their children with disabilities. Knowledge of beliefs and practices within and across cultures is helpful for learning what is potentially important and meaningful to the parents with whom we work in early intervention; it is also important for illuminating our own assumptions and values about children, families, and intervention (Harkness & Super, 1996).

This article explores Taiwanese mothers’ beliefs about the development of their young children with Down syndrome, with a particular focus on parent-child interaction and its role in supporting the development of babies with Down syndrome. Our purpose is to begin to build an understanding of the personal ethnotheories that may guide the interactions between Taiwanese mothers’ and their babies with Down syndrome, as well as influence how they perceive and interpret any particular early intervention approach. Both of the authors came to this research from an intervention

perspective, with the ultimate goal of ensuring that early interventions validly reflect the perceptions and values of those with whom the interventions are used.

THE RESEARCH CONTEXT

The study reported here is part of a larger program of research seeking to understand cultural perspectives on parent-child interaction (Chen, 2001; McCollum, Ree, & Chen, 2000; Chen & McCollum, 2000; McCollum & Chen, 2001). Our studies to date have focused on perspectives of mothers of typically developing infants, on the assumption that cultural views of interactions with children with disabilities can be understood only within the context of this larger framework. The common themes that guide all of our interviews include mothers’ ideas about the developmental benefits of parent-child interaction and about their own roles in achieving these benefits. The data described in this article are from our first set of interviews with mothers whose babies have a disability.

The interview protocol is structured but open-ended. Mothers are asked to describe typical interactions with their babies, to talk about what they see as the benefits of these interactions, and to describe their roles in achieving these benefits. Two picture vignettes (line drawings of a mother and child) are used to focus attention on parent-child interaction with and without objects. Probes are used to obtain further description of what the mother and baby might be doing in a particular situation, and to obtain information on other typical interaction situations throughout the day. Additional topics include who else interacts with the baby in these ways, as well as information on the mothers’ goals for the child for the future (Harwood, Miller, & Irizarry, 1995). In the current study, mothers of children with disabilities were also asked to comment on how they felt the learning and development of their child with disabilities was similar to or different from other children. The interview process is relatively unstructured so that the same questions can be used across cultures, and so that our own views as research-

ers will not influence the mothers' responses. Although all topical areas are covered during the interview, the interviewer is free to return to earlier topics for examples or clarification. Thus, the entire interview is used as a data source, irrespective of the particular section of the interview in which the response occurred. (A copy of the interview protocol can be obtained by writing to Jeanette McCollum, Professor, Department of Special Education, University of Illinois, Urbana, Illinois.)

The majority of members on the research team are faculty or doctoral students in early childhood special education, with occasional membership by doctoral students from social work and speech and hearing science. Cultural and linguistic backgrounds currently represented on the team include Caucasian-American, Mexican, Korean, Taiwanese, and Filipino; the team has also included African-American and Puerto-Rican members. We are slowly collecting and processing interviews with mothers from all of these groups. A minimum of 3 team members are present during discussion of each interview, one of whom is from the same cultural and linguistic background as the mothers. Most often this is the same individual who conducted the interview.

The general process used to approach the data has been as follows. Initially, the interviews were read using a method of constant comparison (Miles & Huberman, 1994), with codes being developed as themes emerged. Each team member read the interviews individually to derive ideas for possibly important themes. These ideas were then shared and discussed, and themes selected for a first phase of analysis. Codes representing these themes were developed over time, based on multiple readings of old and new interviews. Interviews were coded individually by each team member to identify units of thought (ranging from a few words to whole paragraphs) that exemplified the codes. Team members then met as a group to share results and to reach consensus on the appropriate placement of mothers' ideas, using the observed context and the perceptions of the interviewer for additional insight when needed. Category integrity was then further checked by

listing all units of thought under each individual category for review at a later team meeting; these category summaries were treated in the same way, beginning with individual reading followed by team discussion and consensus. As new meanings emerged for particular codes (which often happened when reading the first interviews of mothers from a different culture), definitions were expanded to accommodate these meanings.

Participants whose views are represented in the current paper were 16 mothers of 7–16 month-olds (mean age 12.2 months) with Down syndrome, recruited through the Organization of Parents of Children with Down syndrome and through the pediatric departments of four tertiary hospitals in Taiwan; the first 16 mothers who volunteered were included in the current sample. Half of the 16 children were first-born; 11 of them were males. The 16 mothers represented a range of educational levels from those completing less than 6 years of school to college graduates; their ages ranged from 21 to 45 years. Fifteen of the mothers were married. Nine of the 16 parent-child dyads lived in extended families that included grandparents or other relatives; 13 of the mothers reported being the ones who spent the most time with their children. The 16 mothers represented both rural and urban families. Early intervention services in Taiwan include both government and private-run services, and ideally reflect an integration of medical, educational, and social welfare fields. Government-run services are provided mainly in highly populated areas such as Taipei. Outside of these central areas, services are provided by private groups. However, services are not available in many areas. Thus, the mothers in the sample also represented families with differing degrees of access to early intervention services.

With the exception of two parents who lived in remote areas, with whom interviews were conducted by telephone, interviews were conducted in the mothers' homes. Each interview lasted approximately 1 hour. For the two telephone interviews, the pictures were described to the mothers. For most of the face-to-face interviews, only the mother and her baby were

present. All interviews were conducted by Yu-Jun Chen in Mandarin Chinese or Taiwanese, depending on the mother's preference. Interviews were transcribed and then translated into English for analysis. All translations were done by Yu-Jun Chen and then checked by a second native speaker of Mandarin and Taiwanese who was also conversant in English. Transcripts of the interviews were sent to each mother for verification that these were her words and ideas. Of the 8 mothers who responded using the return envelope provided, none chose to make changes to the transcript. There were no apparent differences in educational level among those who returned or did not return the transcripts.

As the new interviews were discussed and coded using our initial themes, new themes related to mothers' ideas about having a child with a disability began to emerge (Chen, 2001). The current article pursues two of these. The same process described above was used to clarify these new themes and to develop codes, the only difference being that the new themes were formulated and coded by the two authors rather than by the whole team. The themes explored in this article include (a) these mothers' emphasis on their babies' abilities and limitations, and (b) the mothers' descriptions of what they do with their children, given the child's abilities and limitations. Mothers' words will be used to illustrate these themes. (These same interviews have also been coded using our initial themes related to developmental benefits and outcomes for children, and associated maternal roles (Chen, 2001; Chen & McCollum, in press).

THEME 1: WHAT THE CHILD IS LIKE

Thought units used for the purposes of exploring this theme were those in which mothers described some characteristic of the child. An "ability" was defined as a thought unit that described what the child could do or some characteristic that enabled the child to learn and develop. Alternatively, a "limitation" described what the child could not do or a characteristic that interfered with the child's ability to learn and develop. All mothers discussed both abili-

ties and limitations, and most of the mothers (13 of the 16) described more limitations than abilities. For the total group of 16 mothers, 61.2% of the thought units that described the child were coded as limitations. In the discussion below, the age of the child is noted in parentheses at the end of each quote.

Abilities

One common way in which mothers talked about their children's abilities was to describe how their child had more ability than might be expected. For example, one mother said, "*If his father has argued with me, he doesn't want to play with him. He won't throw toys or something, but he resists him by lying there quietly. My sister-in-law told my husband, 'Don't look down upon him, he absorbs things quickly'*" (13 months). Similarly, another mother stated:

If there are other people there, they play with him or try to attract his attention with stuff (objects). He would come and try to get the stuff, and these people would fight with him and not give the stuff to him to tease him. He would fight with the people over the stuff. But if he can't win, he would just quit and ignore them. However, when no one is paying attention to him, he would try to grab the stuff; he would play with it when no one is paying attention to him. So many people say that this kid is not really retarded. (13 months)

Mothers also talked about the ways in which their children had demonstrated that they had the ability to learn: "*He learns after you teach him...I tell him that mom uses these pillows to protect you from falling down. Don't crawl over them; otherwise you might fall... If you say something like that to him, he won't do it.*" (11 months) Another mother stated: "*I teach him clapping, waving bye-bye. He always looks at my actions. He looks at my actions very carefully.*" (12 months) Some mothers also noted their child's understanding of emotions:

Our neighbor asks him, "What did you do last night? It was very noisy," when he did not want to go to sleep. He knows she is playing with him if he sees her smiling face. And he knows that she is (really) angry if she is serious. He is able to tell by watching peoples' faces. He cries if you spank him with a serious face. But if you scold or spank him with a smile, he smiles too. He knows that you are playing with him" (12 months).

Another mother described her son's emotional abilities as follows: *"He doesn't bother you. Unless I scold him when he plays with paper, then he cries. Otherwise, he is very good. He is much easier for me to take care of, compared to other children."* (11 months) Another noted: *"He was angry when I took him to the hospital for physical therapy. He might think, "Why did you take me here? Why did you take me here to suffer this pain?" He started crying when he saw the people who wear glasses (physical therapists). He will be able to express his likes and dislikes when he gets older."* (12 months)

Mothers also sometimes talked about their children's abilities or positive characteristics by comparing the child to perceptions of what people with Down syndrome are like: *"It seems to me that he is not that kind of child (one with Down syndrome). In fact, he was diagnosed as a child with DS. But according to his behavior, he doesn't look like a child with DS."* (10 months) Another mother said: *"She is different, but she is not an idiot. She is not smart. But not smart is not equal to idiot."* (9 months)

Limitations

In contrast to the above, limitations focused on what the child could not do or some characteristic that the child did not have. As noted earlier, limitations were mentioned more often than abilities by 13 of these 16 mothers. For example, one mother described her daughter's attention to objects: *"She doesn't like to play with toys. If you use toys to attract her attention, she quits after looking at*

them for a short period of time." (9 months) Similarly, another mother said:

When I take him out, he just looks around...He is very curious. For example, if he sees a car, he would keep looking. But he does not pay much attention, (since) he would not notice what the car is doing. I just hold him and let him look. But then, he would not want to look anymore after a short period of time. He doesn't look around. (10 months)

Many of the mothers described physical influences on parent-child interactions as well: *"She is chronically ill, so she always needs therapy. For example, when she is at home and not hospitalized, I have to burp her to remove the phlegm from her throat before I feed her, at every meal."* (8 months) As with abilities, mothers often described their child's limitations through comparisons with other children: *"Children at her age should be able to crawl right now. Then we could crawl after her or talk to her. For example, (we could do) clapping or rolling over. But she is unable to do those now. So we have few interactions now. Our interactions are not varied either. It is useless if she doesn't know how to do it."* (9 months) Yet another mother described the influence of the disability on their interactions this way:

She is unlike other children who play with toys by themselves. For her, you have to put toys beside her for a long time. For example, I give her a squeezable toy. I squeeze it for her. But she only looks at it once. I put this toy beside her pillow. She doesn't touch it for a long time. Her grandfather says, "You don't have to buy toys for her. She won't touch it." But I found that she likes toys that are for bigger children, such as the mobile toys that make sounds. I bought a small bell for her. She refused it at first, but she was happy when she found it makes sounds. (14 months)

Sometimes these comparisons took the form of talking about what children with Down syndrome in general are like: *"I think his learning is limited to what is around him. He is not like ... he will not touch things he has never seen. He only cares about what is close around him ... like other normally developing children, they might want to interact with other children, which would help him improve his ability. But a child like him, because they are limited to their close surroundings, they tend to repeat many actions"* (14 months) Another said: *"They easily forget things. After a while they forget. Sometimes she behaves differently and doesn't meet your expectation, when you teach her something ... In fact, the differences between her and other children are getting greater and greater as she gets older. She was like the other children when she was little. Now the gap becomes greater."* (9 months)

Interestingly, many mothers paired abilities with limitations in a "yes/but" fashion as they described their children: *"Since I know that his IQ is not that high, I don't expect too much from him. However, I know that kids like this are really good at imitating. So if he is interested in certain things, he would concentrate on those things ... So if he is interested in a certain thing, he would concentrate on that thing."* (7 months) Another mother described her son this way:

He is able to understand you. But he can't understand you completely. His comprehension is incomplete. for example, he watches TV seriously. I am not sure if he understands it or not, but he likes to watch it. It means he seems to understand it. It seems like he is learning from it. We watch a program every night at 8 o'clock. When it is time, he knows it. So, I think he understands it. He just can't speak. He doesn't know how to express himself. If he can talk, he might be smarter than we are. (15 months)

In summary, the extent to which these mothers spoke of their children in terms of

their abilities and limitations was a highly salient theme in these interviews. Descriptions of abilities and limitations took similar forms, such as comparing the child to other children or to expectations for persons with Down syndrome. Although many of these mothers' characterizations described their children in general, many also referred directly to interactive contexts. The latter aspect of these descriptions is highlighted further by the second theme.

THEME 2: PESSIMISTIC AND OPTIMISTIC PERSPECTIVES

As we read, mothers appeared to have very different perceptions of the implications of their child's disability for their own behavior in interactive and other contexts. Specifically, whereas some mothers appeared to operate from a "he is like this, therefore I *do* this" perspective, others appeared to operate from a "he is like this, therefore I *do not* do this" perspective. Overall, "do" statements were more common than "don't" statements by a ratio of 3/1. Further, most of these action statements referred to what mothers would do in response to a limitation rather than to an ability.

To explore the relationship between mothers' descriptions of abilities and limitations and these two differing perspectives, we divided the mothers into two subsets, using a point at which mothers appeared to fall naturally into two groups based on the proportion of statements coded as limitations to the total number of statements about child characteristics. The 12 mothers falling below this point had an average of 56% of their statements coded as limitations (the more optimistic mothers), whereas the 4 mothers falling above the point had an average of 79% limitations (the more pessimistic mothers). There was a clear relationship between mothers' placement in these groups and how they described their own actions with respect to the child: the more pessimistic mothers made a total of 33 action statements, of which 58% were "do" and 42% were "don't"; the more optimistic mothers made a total of 59 action statements,

of which 86% were “do” and 14% were “don’t.” In general, the mothers with smaller percentages of statements characterized as limitations (the more optimistic mothers) were also those who used a higher proportion of “do” to “don’t” statements in describing their roles in relation to their child’s characteristics.

To illustrate the relationships between these mothers’ views of their child and descriptions of their actions with the child, we selected as exemplary case studies (Stake, 1995) the two mothers who represented extremes with respect to the ratio of limitations to total descriptive statements, i.e., the most pessimistic mother and the most optimistic mother. Each dyad is described briefly, followed by representative statements illustrating these mothers’ ideas about the relationships between the child’s characteristics and maternal actions.

Mrs. P’s Perspective

Among these 16 mothers, Mrs. P had the highest proportion of statements categorized as limitations. She was the mother of 5 children, of whom MM, a 13-month-old boy, was the youngest. Mrs. P was 38 years old and had a 6th grade education. She was pregnant at the time of the interview. Mrs. P lived alone with her son in a rural fishing village, and worked as a cook in a small family-owned restaurant. Mrs. P’s four older children, all girls, lived with Mrs. P’s mother. Based on the interview, MM seemed to be a relatively healthy child; Mrs. P had never taken him for modern medical therapies, although twice she had taken him for massage therapy in her community. She stated that she did not have enough money to take him to the larger town where other kinds of therapy (e.g., physical therapy) were available.

Mrs. P described one ability and 17 limitations during the interview. No action statements (either “do” or “don’t”) were associated with the one ability, whereas 8 action statements were associated with limitations. Of these 8 statements, only one was a “do” statement: *“It is not totally useless. You still have to put in effort even if he shows no reaction. You still need to communicate with him. Communicate emotionally. We should*

try to talk to him to see if he can understand, although he can’t understand very well.” “Don’t” statements primarily reflected Mrs. P’s perception that there was nothing she could do to influence MM’s learning and development: *“There is nothing to talk about with this kid, just holding him. He cannot understand whatever we tell him anyway, so just holding him, playing with him.”* Similarly, *“How can we play with him! He doesn’t know anything. If a kid can walk or something like that, you can teach him. But, like him, he always wants someone to hold him, so all you can do is hold him and talk to him.”*

Mrs. P’s perspective on MM’s development also influenced her perception of his play with objects, and of her role with respect to this play:

We would give him toys to play with, but he doesn’t know how to play with it because he can’t hold onto the toys. Sometimes he would want to play with the toys, but he just pushes them away. Sometimes he can pick up the toys, but sometimes he is not able to pick up the toys. Even if he picks up the toys, he does not play with them for long. He would get rid of them after a little while, so we don’t really have toys for him to play with.

Clearly, Mrs. P’s perception of her son and his disability was that there was very little that he could learn and little that could be done to change or improve his development. Instead, she appeared to limit her roles with MM to comforting and caregiving.

Mrs. O’s Perspective

Mrs. O has the lowest proportion of limitations to total descriptive statements of all of the mothers, and was one of only three mothers to describe more abilities than limitations. Mrs. O was the mother of KK, a 15-month-old boy who was her only child. She was 25 years old and had a 9th grade education. She was pregnant with a second child at the time of this interview. Mrs. O, her hus-

band, and KK lived in a small village near the ocean. Mrs. O did piece work (flower construction) in her home. Similarly to Mrs. P, she had not taken her child to the city for therapy.

Of the 8 action statements that described Mrs. O's roles with respect to her child, three related to KK's abilities and five to his limitations. (Of interest in the following statements is that all of Mrs. O's abilities statements also contained references to a limitation; however, the action portion of the statements appear to be responses to the limitations rather than to the abilities.)

Taking action in relation to KK's abilities is illustrated in the following statement:

I think he will learn it because he stays with you all the time. You teach him actions, play with him, and talk to him. Humans learn after practicing. Maybe he doesn't know how to do it at the beginning, but he may accept it gradually. It is impossible for him to accept it immediately if you don't provide him opportunities for learning. For a normally developing child, he might be able to accept it right after your teaching. But for him, I think it is not possible for him to learn it after you teach him once. For a normally developing child, he learns how to clap after you teach him when he is one year of age. But if you teach him (KK) clapping when he is one, you have to keep teaching him clapping until he two years of age because he learns things slowly. So I teach him early.

A second example even more clearly illustrates Mrs. O's perception that she could influence KK's learning and development:

I have no idea about the details of a child with Down syndrome. But the doctor told me that his mental age might stay at 11 or 12 years of age in the future and be unable to develop later on. But I am thinking that although his mental age stays at 11 or 12, he can learn. He is able to learn.

But he learns slowly if you teach him something difficult. But he is able to learn. His mental age is not at 4 or 5 years of age, those who might not be able to learn things... He is capable of learning things. He learns if you teach him. He (will be) able to work if his boss is willing to teach him patiently.

Limitations were responded to similarly, as shown in the following:

His learning is indeed slower than others. So I teach him very early. For example, you are supposed to teach him this when he is one year old. But I teach him when he is 6 or 7 months old. I teach him in advance. Because he has an inborn deficiency, we have to make it up using the environment. I teach him in advance since his learning is slower than others. I teach him early because he learns slowly. I let him contact and accept information as early as possible.

Mrs. O clearly believed that KK's development and learning could be influenced, and that she had a role in making this happen. She also had developed specific strategies that she felt worked with him (e.g., beginning early, using repetition).

DISCUSSION AND IMPLICATIONS

The research described in this article began with the assumption that parent-child interaction forms a salient context for understanding and influencing children's early development and learning, and that understanding parents' views of this context is a necessary framework for conducting interaction intervention. This article examined two themes that emerged from interviews with 16 Taiwanese mothers of babies with Down syndrome. One theme that characterized these mothers' descriptions, in contrast to mothers in our past interviews, was an emphasis on the abilities and limitations of their children. The second theme was the

differing ways in which mothers in this study described their own roles with respect to these characteristics of their children. Two exemplary cases were selected to illuminate these two themes and to illustrate the relationship between them. These cases clearly indicated that Mrs. P and Mrs. O thought of and entered interactions with their children from two very different perspectives. These differing perspectives both influenced and were revealed in how they viewed their children, and in how they perceived their own roles in relation to their children's abilities and limitations. It is clear that these two mothers would enter early intervention with very different perspectives on its purposes and on their own involvement.

It is not possible or even desirable in this type of qualitative research to draw conclusions with respect to demographic factors that may differentially influence mothers' perceptions. Construction of meaning at an individual level, the focus of this article, transcends commonly studied demographic variables. Nevertheless, it is important for policy makers and early interventionists to be aware of factors that may influence mothers' perceptions and behaviors. A careful visual inspection of the demographic characteristics of these mothers in relation to the themes described in this study revealed no clear patterns. That is, mothers of neither boys nor girls or first and second born children, appeared to be either more or less pessimistic. This was somewhat surprising given the value that Taiwanese parents often place on first-born sons. Dependent on where they lived, these mothers also differed considerably with respect to the resources available to them and their children, yet this demographic difference did not appear to be related to mothers' characterizations of their children; one might expect that an opportunity to talk with professionals and obtain information early intervention services for their child would influence how mothers described their children's abilities and limitations (Cho, Singer, & Brenner, 2000). It was particularly interesting that the two mothers selected as exemplary cases based on their representation of two subgroups of mothers were quite similar in rela-

tion to potentially important demographic variables such as education, employment, and access to resources. There were, of course, other differences between these two mothers on other potentially significant variables such as age, number of children and marital status.

Interestingly, these mothers' descriptions of their children's characteristics were remarkably consistent with what has been described in past research on parent-child interaction when babies have Down syndrome (Marfo, 1991). For instance, these mothers described their children as less responsive to interaction and as less likely to maintain interest in objects. Nevertheless, despite similar child characteristics and similar backgrounds, the two mothers presented as exemplary cases described very different visions of their children and of their roles with respect to their children's development. Individual variations within culture stem from many sources, and represent a combination of each individual's experience and history within the larger cultural framework. As mothers gain access to additional resources such as television and parenting magazines, many of which are influenced by Western cultures, their views of disability and of their roles with their children may also change.

When a child has a disability, parental theories are also informed by cultural views of disability (Reynolds & Ingstad, 1995). What do parents believe are appropriate outcomes for children with disabilities? How do they see their own roles in the process of helping these outcomes to come about? As illustrated in this study, multiple perspectives may be apparent within a common overarching culture (Schweder & Sullivan, 1993). For instance, the two mothers contrasted above differed considerably in the specificity of their observations about their children. Whereas Mrs. P's descriptions tended to be general and in terms of "children like this", Mrs. O's descriptions contained many details about what her son did and how he responded to different situations. This greater sensitivity to her son's individuality may have provided her with more information upon which she could base her own interactions. An important implication for early intervention may be the importance of assisting parents to

gain knowledge and understanding of their own child as a means for influencing perceptions of the child's abilities and of parent-child interactions.

The two themes described in this article did not emerge as important from previous interviews of Taiwanese mothers whose babies were developing normally, nor have they emerged from our interviews with mothers of typically developing children from other cultures. The extent to which the themes that emerged in this study might also be found among mothers from other cultural backgrounds is unknown. These themes appear to hold promise for gaining further understanding of parent-child interactions when children have disabilities. Cross-cultural comparisons with other mothers of babies with disabilities, as well as further within-culture comparisons of mothers whose babies are developing normally, will be necessary in order to highlight cultural differences that may be important for intervention. For instance, do developmental scripts such as independence and interdependence (Greenfield, 1994) inform parenting of children with disabilities in the same ways that they do parenting of other children? In what ways might religious beliefs be interwoven with ideas about the future for a child with a disability (Skinner et al., 1999)?

The major implication of this study for the practice of early intervention is that the parents in the study had definite theories about their children and their own roles with respect to their children (Rodrigo & Triana, 1996); further, each parent's theories included not only parent-child social and object interaction, but also other daily events and routines. These parents' theories clearly influenced

their interactions with their children (Greenfield & Suzuki, 1998), demonstrating the powerful relationship between beliefs and behavior. How mothers perceive the child and parent-child interaction will influence the value that she places on early intervention and her own roles in it (Danseco, 1997). The two mothers highlighted as case studies each constructed meaning of their interactions with their children, based on their own unique histories and life circumstances. In this article, the selection of exemplary cases allowed us to look for coalescences and differences in these mothers' understandings. Interventionists must learn to approach each parent from an understanding of that parent's theories about their child and their own parenting (Ogbu, 1994).

Within as well as across cultures, sensitive interventionists will find parenting practices that may differ significantly from those in their own cultures. An understanding of potential influences on the personal theories that guide these practices will inform their ability to perceive and interpret each parent's interactions with their child from that parent's perspective (Harry, Rueda, & Kalyanpur, 1999). It is also incumbent on interventionists to make explicit their own theories of how change in children's development comes about, so that mutual understanding is possible. Given such insight, interventionists will be better prepared to determine whether interaction intervention is an appropriate avenue (Booth, 1997), and which approach to interaction intervention may be most congruent with the parent's own theories of parenting, based on the content and the processes that different approaches espouse (McCollum & Yates, 2001).

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