

TURKISH MOTHERS' VERBAL INTERACTION PRACTICES AND SELF-EFFICACY BELIEFS REGARDING THEIR CHILDREN WITH EXPRESSIVE LANGUAGE DELAY

Ibrahim H. Diken
Anadolu University
Ozlem Diken,
Anadolu University

The purpose of this study was to explore Turkish mothers' verbal interaction practices and their maternal self-efficacy beliefs regarding their children with expressive language delay. Participants included 33 Turkish mothers of children with expressive language delay. Results indicated that mothers in general use child directed talk strategies or practice appropriate verbal interactions with their children with expressive language delay and in general had high level of self-efficacy. Mothers who felt themselves efficacious most of the time while communication with their children with expressive language delay used verbal interaction practices more than mothers who felt themselves efficacious sometimes. Results were discussed extensively.

Parents, especially mothers as principal caregivers and first teachers, of young children have a great influence on the development of young children. Characteristics of mothers are critical at this point as cornerstone factors in influencing the overall development and future of young children. When young children have delays, disabilities, or risks for delay or disability, these characteristics are more vital and need to be considered when providing early intervention services. From early intervention literature, it is a well-known fact that in order to get positive outcomes from early intervention services provided to young children with disabilities and their families, it is a must to recognize the child's immediate context and characteristics of this context (Guralnick, 1997, 1998; Sameroff & Fiese, 2000). In this context, characteristics of parents, especially mothers, play crucial roles. Mothers' interactional behaviors and their self-efficacy beliefs regarding their young children with disability are two essential maternal characteristics that may have a great influence on the development of their children.

Recent practices in special education recognize strongly the involvement of parents in services provided to children with disabilities. For instance, it is currently a legal requirement of special education policies both in western countries (e.g. the US) and Turkey to engage parents of children with disabilities into the whole process of special education services starting from assessments and diagnosis to planning programs. In addition to legal actions, the role of child's immediate environment on the child's development has been recognized widely in some major theories focusing on child development (Bronfenbrenner, 1979; Guralnick, 1997, 1998; Sameroff & Fiese, 2000). The quality of interactions of the child with his/her immediate environment has been seen as a critical part of success for any early intervention efforts. It is currently believed that taking into account the child's socio-cultural context rather than focusing only the child and his/her problem in early intervention programs is essential to get positive outcomes from the services provided to children with disabilities and their families. It is the transactional interaction of the child, the family and the other social systems which are suggested to be embedded into the current early intervention programs. Among these interactions, the interactions between primary caregivers, especially the mother, and the child play the most crucial role in the child's overall development. Hence, the characteristics of primary caregivers need to be considered carefully while planning and providing services. Out of several characteristics of primary caregivers, primary caregivers' self-efficacy and their verbal interactions with their children with expressive language delay are two critical variables that need to be emphasized.

A mother's fundamental role in facilitating language development of young children has been widely identified (Wilcox, 1992; Wilcox & Shannon, 1998; Yoder & Warren, 1998, 1999a, 2001, 2002). The mothers' verbal interactional practice with their young children or the quality of verbal interaction between mothers and their young children has a significant influence for young children on mastering developmentally appropriate language skills. Mothers' use of appropriate verbal interaction practices such as Child Directed Talk strategies has been associated with improving young children's language

skills. Child Directed Talk has been defined as *the distinctive patterns of speech and discourse that are used by caretaking adults when interacting with young children* (Johnston & Wong, 2002; p. 916). Although the nature of Child Directed Talk is culture free, observations of mostly Western European or North American families were mainly considered while identifying Child Directed Talk strategies or approaches (Johnston & Wong, 2002). Being sensitive and responsive to a child's communication intents and efforts is the main characteristic of Child Directed Talk strategies. Following the child's lead in conversation, reading books, interactive modeling (e.g., focused stimulation, modeling with expansion, and modeling with recast), vertical structuring and expansion, using picture books of flash cards to teach new words, are some of the critical Child Directed Talk strategies that are recommended for parents to use with their young children to improve language skills.

Weintraub and Wilcox (2006) state that engaging in language enhancing strategies differs from mother to mother. For some, using these strategies is easier or they are ready to use them; but for others it is not that easy or they may not be ready. Several internal and external factors identify why it is easy for some or than others. For example, Gross, Conrad, Fogg, & Wothke, (1994) acknowledged maternal depression and temperament as internal factors while Bradley and Corwyn, (2002), Elder, Eccles, Ardel, and Lord, (1995), and Teti and Gelfand, (1991) referred to social-marital support, education, socio-economic status and child temperament as external factors influencing parenting skills and parental satisfaction (as cited in Weintraub and Wilcox, 2006). These factors may influence maternal self-efficacy or mothers' perception of their parenting skills and abilities (Brody, Flor, & Gibson, 1999; Raver & Leadbeater, 1999).

Based on Social-Learning and Self-efficacy theory (Bandura, 1977, 1982, 1986), Bandura (1989) defines the self-efficacy as *people's beliefs about their capabilities to exercise control over events that affect their lives.* (p.1175). According to Bandura (1990) one's sense of efficacy directly affects behavior. In terms of parental self-efficacy, Bandura (1994) refers to parenting self-efficacy as a parent's confidence in the ability to parent and respond appropriately to her child (as cited in Guimond, 2006). Teti and Gelfand (1991) studied self-efficacy with mothers and defined maternal self-efficacy as a mother's beliefs and expectations about the degree to which a mother is able to perform competently or feels competent in her ability to effectively perform the roles of mothering. Coleman and Karraker (1998) also defined maternal self-efficacy as the degree to which mothers feel able to exert a positive influence on their children's development. In the present study, maternal self-efficacy refers to mothers' perceptions about their ability to perform parenting skills with their children with language delay and to seek or utilize resources to help their children.

According to recent research, there is a positive relationship between parenting self-efficacy beliefs and parenting behavior, and several factors regarding the child and parents have been identified as influencing both the quality of parenting and parental self-efficacy (Coleman & Karraker 1998, 2000; Raver & Leadbeater 1999; Teti & Gelfand 1991). Among these factors there are some parenting skills which have positive correlations with maternal self-efficacy. For example, mothers with higher self-efficacy have shown more responsive stimulating and non-punitive care-taking (Unger & Waudersman, 1985) and had more positive maternal-health (Kwok & Wong, 2000) while maternal perceptions of child difficulty (Coleman & Karraker, 1998) have been found to be associated with lower maternal self-efficacy (as cited in Desjardin, 2003).

Understanding mothers' verbal interaction practices and their self-efficacy beliefs is a crucial dynamic to be studied and described to better prepare and provide more appropriate programs to young children with disabilities and their families. However, there is no study exploring these two fundamental variables. Also only limited studies on parent-child interaction in special needs population in Turkey were reported (Bakkaloglu & Sucuoglu, 2000; Ozcan, 1998; Mavis, 2004; Topbas, Mavis, & Ozdemir, 2003; Uzuner, 1999). In these interactional studies, intentional communication of mothers of normally developing children and children with down syndrome (Ozcan, 1998), children with normal language development and children with delayed language development (Topbas, Mavis, & Ozdemir, 2003), communication breakdown strategies of mothers of children with hearing impairment (Uzuner, 1999), father-mother-child interactions (Mavis, 2004), and comparisons of interactions of mothers of normally developing young children and interactions of mothers of young children with mental retardation (Bakkaloglu & Sucuoglu, 2000) were explored. Diken (2007) explored mothers' style of interaction and their self-efficacy beliefs regarding their children with language delay. He explored mothers' interactional styles by videotaping mother-child interactions and analyzing data using the Maternal Behavior Rating Scale (Mahoney, 1999) assessing four dimensions of mothers' interactive style:

Responsivity (Responsiveness, Sensitivity, and Effectiveness), Affect (Acceptance, Enjoyment, Expressiveness, Inventiveness, and Warmth), Achievement Orientation (Achievement and Praise), and Directiveness (Directiveness and Pace). Results indicated that although most mothers were sensitive to the behaviors of their children, and were responsive and effective during interactions, they rarely showed warmth and affective quality in body language, voice quality and facial expression. They also rarely used verbal praise and showed very limited ways of interacting with the toys and materials. Encouragement of the sensorimotor and cognitive development of their children was observed as an important issue for most mothers. Moreover, most were found as directive during interactions. Results also indicated mothers had a significantly high level of self-efficacy beliefs. It was also observed that mothers who had higher self-efficacy scores showed more achievement oriented behaviors and used more verbal praise.

In order to understand some critical dynamics regarding mothers of children with special needs which might influence the outcomes of the programs provided and to expand knowledge base of parent-child interactions both nationally and internationally, more studies focusing on interactional behaviors of Turkish mothers of children with special needs were needed. Therefore, the purpose of this study was to explore Turkish mothers' verbal interaction practices and their maternal self-efficacy beliefs regarding their children with expressive language delay.

The following research questions were addressed;

1. How do Turkish mothers practice child directed talk strategies?
2. Do Turkish mothers feel themselves efficacious regarding their children with expressive language delay?
3. Is there a significant difference between verbal interaction practice scores of mothers who feel themselves efficacious most of time and mothers who feel themselves efficacious only sometimes?

Method

Participants

Participants included 33 Turkish mothers of children with expressive language delay. Mothers of children with expressive language delay who were attending playgroups of a Research, Education, and Training Center for Speech and Language Disorders (DILKOM) at Anadolu University in Turkey were contacted to voluntarily participate in the study. Following the assessment practice of the center, developmental assessments for all participant children were done at the center, and all participant children were diagnosed as having only expressive language delay. No other delays were observed or recorded. At the time the study was conducted, all participants started to attend playgroups designed to improve the language skills of young children with language delay or at-risk for delay at the center. Of all informed mothers, 33 mothers agreed to voluntarily participate. Mothers' age ranged from 22 to 44 with a mean of 31 (SD: 5.26). Seventeen mothers held a middle school diploma, 10 had high school, and 6 held a university degree. Children's ages (in months) ranged from 35 to 60 with a mean of 45 (SD: 6.99). Further information about the participants can be seen at the Table 1. (next page)

Measures

Turkish version of Survey of Child-Rearing Beliefs and Verbal Interaction Practices of Mothers (Diken & Dogramaci, 2006).

In order to explore Turkish mothers' verbal practices with their children with expressive language delay, the *Survey of Child-rearing Beliefs and Verbal Interaction Practices of Mothers* developed by Johnston and Wong (2002) translated and adapted in Turkish by Diken and Dogramaci (2006) was used.

The original survey has two sub-sections. The first section includes 20 items in which parents rate their level of agreement with statements about the independence of children's learning, the nature of language learning, and early language milestones on a 5-point rating scale (1= Strongly Disagree, 5=Strongly agree). The second section includes 12 items focusing on Child-Directed Talk literature and aims to examine mothers' verbal practices with their children. In this section, mothers rate their practices on a 4-point scale (1=Hardly ever, 2=Sometimes, 3=Very often, 4=Almost always).

For the purpose of the study, only the second sub-section of the Survey focused on mothers' verbal interaction practices was used. The reliability of the second section was explored by checking the Cronbach alpha coefficient. The Cronbach alpha coefficient was found as .71; therefore, the scale was

considered as reliable. The minimum score gathered from the scale was 12 and the maximum was 48. Higher scores indicate appropriate verbal practices used by mothers more frequently.

Turkish version of Parenting Self-Efficacy Scale-TPSES (Diken, 2007). In order to determine mothers' self-efficacy beliefs regarding parenting of their children with expressive language delay, the *Parenting Self-Efficacy Instrument for Children with Disabilities (PSICD)*, developed by Guimond, Moore, Aier, Maxon, and Diken (2005) and translated into Turkish by Diken (2007), was used.

In the original scale, there are 17 items with two subscales. The first subscale includes 8 items regarding *Seeking/Utilizing Resources* while the second subscale has 9 items regarding *Parenting Strategies*. The original scale is a seven-point Likert-type scale (1: Strongly agree, 7: Strongly disagree). Reliability coefficient for the original whole scale reported as .89, for the first subscale .86, for the second subscale .83.

In order to use the TPSES in the current study, its reliability was explored by using Cronbach's Alpha coefficient. Sixteen items of 17 were loaded with .70 alpha coefficient. Therefore, a reliable 16-item scale was used in the study. The minimum score gathered from the scale was 16 and the maximum was 112. Higher scores indicate higher self-efficacy beliefs.

Information Form. An information form was developed by the researcher to collect demographic and some descriptive information about participant mothers.

Data Collection

After children were diagnosed and became eligible for playgroups at the DILKOM and just before the playgroups started mothers were given a booklet to fill out. This booklet included an information form comprising questions to gather demographic and descriptive information about mothers' perspectives regarding their self-efficacy and two questionnaires. Table 1 shows the demographic information gathered through information form.

Table 1.
Results of demographic information about participant mothers

	Range	M	SD
<i>Age</i>			
Children (in months)	35-60	45.67	6.99
Mothers (in years)	22-44	31.36	5.26
	f	%	
<i>Gender (Children)</i>			
Male	12	36.4	
Female	21	63.6	
<i>Educational Background</i>			
Elementary degree	17	51.5	
High School degree	10	30.3	
Undergraduate degree	6	18.2	
<i>Feeling efficacious while communicating with the child at home and other social settings</i>			
Never	0	0	
Rarely	0	0	
Sometimes	13	39.4	
Most of the time	20	60.6	
<i>Understanding what the child says</i>			
Never	0	0	
Rarely	0	0	
Sometimes	8	24.2	
Most of the time	25	75.8	

Results

Turkish mothers' verbal interaction practices

Results indicated that mothers in general used child directed talk strategies or practiced appropriate verbal interactions with their children with expressive language delay. Mothers' verbal interaction scores gathered from the scale ranged from 22 to 45 with a mean of 34.96 (SD: 5.1) while the minimum score that could be gathered from the scale was 12 and the maximum was 48 with a mean of .30. In order to describe mothers' verbal interaction practices, frequency and percentages were used to examine items of the scale individually. The frequency and percentage results of mothers who practiced child directed talk strategies *very often* or *almost always* can be seen at the Table 2.

As can be seen in Table 2, results revealed that most mothers feel they use child directed talk strategies very often or almost always at home. For example, out of thirty-three mothers, twenty-eight (85 %) indicated that they tell their children if s/he uses the wrong word, twenty-seven (82 %) stated that they follow along with the child's topic of conversation, twenty-nine (88 %) pointed out that they tell their children when s/he leaves some words out of sentence, and thirty-one (95 %) expressed that they do not ignore the fact that they do not understand something their child says. However, results revealed that almost all of mothers (31 mothers) stated that they do not read a book to their children at bedtime or naptime. Moreover, only nineteen mothers (58 %) pointed out that they use picture books or flash cards to teach their child new words.

Self-efficacy beliefs and relationship results

Results indicated that mothers in general had high level of self-efficacy. Mothers' self-efficacy scores ranged from 58 to 105 with a mean of 89.54 (SD: 9.6) while the minimum score could be gathered from the scale was 16 and the maximum was 112 with a mean .59.

Table 2.

The frequency and percentage results of mothers who practiced *very often* or *almost always*

	f	%
1. Tell my child if s/he uses the wrong word.	28	85
2. Read a book to my child at bedtime or naptime*	31	95
3. Ignore the fact that I do not understand something my child says*	31	95
4. Follow along with my child's topic of conversation.	27	82
5. Repeat what my child says, adding new words.	21	64
6. Talk about what is going on when my child and I are playing or doing things together. Example: When playing tea party "Now, I am pouring my tea. You are eating a tea cake. Is it good?"	23	70
7. Tell my child if s/he leaves some words out of sentence.	29	88
8. Change my words or sentence when my child does not understand me.	21	64
9. Talk with my child about what happened that day when I was not there. Example: at preschool, or at home while I was at work.	27	82
10. Use picture books or flash cards to teach my child new words.	19	58
11. Ask my child to repeat a sentence after me.	25	76
12. Ask my child to tell another family member about something that we did together.	20	61

* Frequency and percentages are for "hardly ever" or "sometimes" .

Through the information form, mothers' perspectives on their self-efficacy were gathered by asking them to rate their feelings of efficacy while communicating with their children with expressive

language delay at home and in other social settings. As can be seen at Table 1 above, out of thirty-three participants, twenty mothers feel efficacious most of the time while communicating with their children whereas thirteen mothers only feel efficacious themselves sometimes.

A nonparametric Mann-Whitney U-Test was conducted to compare verbal interaction practice scores of mothers who feel themselves efficacious most of time and mothers who feel themselves efficacious only sometimes. Results revealed that there was a significant difference between verbal interaction practice scores of mothers who felt themselves efficacious most of time and mothers who felt themselves efficacious sometimes ($U= 54.00$, $z=-2.80$, $p=.00$, $p< .05$). More specifically, mothers who felt themselves efficacious most of the time used verbal interaction practices more than mothers who felt themselves efficacious sometimes.

Discussion

The current study intended to explore Turkish mothers' verbal interaction practices and their maternal self-efficacy beliefs regarding their children with expressive language delay. Results regarding Turkish mothers' verbal interaction practices revealed that most mothers pointed out that they use most of the child directed talk strategies stated in the questionnaire very often or almost always although mothers indicated that they rarely read a book to their children at bedtime or naptime. Regarding Turkish parents interactions with their children with special needs, Mavis (2004) compared the language functions of Turkish fathers and mothers directed to their young children in the naturalistic home environment. Results indicated both fathers and mothers used high proportions of regulative-directive language use, but only moderate proportions of social regulative language in their directed speech to their children even though they did not differ in terms of language functions directed to their children during interaction (Mavis, 2004). In another study conducted by Diken (2007), Turkish mothers' interactions with their children with language delay were recorded and analyzed. However, rather than specifically investigating mothers' use of child directed talk strategies, Diken intended to explore mothers' style of interactional behaviors and found that most mothers were actually sensitive and responsive to the behaviors of their children with language delay.

Results regarding mothers' self-efficacy beliefs indicated that mothers in general had high level of self-efficacy beliefs. This finding was parallel with findings of a study conducted with parents of children with language delay. Diken (2007) found in his study that mothers had significantly high level of self-efficacy beliefs. The TPSES originally comprises two sub-scales exploring mothers' self-efficacy beliefs on parenting strategies and seeking/utilizing services for their children. The mothers in the current study recognized the delay on language development of their children early and had sought or utilized help for it. They ended up at the Research, Education, and Training Center for Speech and Language Disorders (DILKOM) at Anadolu University which is a unique center which prepares speech and language pathologists and provides a variety of services to individuals with speech and language problems and their families. It could be considered then, that mothers in the current study were very well motivated to deal with the language problem of their children. This might well influence their self-efficacy beliefs and might result in their having higher level of maternal self-efficacy beliefs than the general population.

Another finding was that mothers who felt themselves efficacious most of the time used verbal interaction practices more than mothers who felt themselves efficacious only sometimes. As found in the current study, several scholars studying parental self-efficacy and results of various studies on parental efficacy have also found that higher levels of maternal self-efficacy is associated with positive parenting attitudes and strategies (Bugental, & Cortez, 1988; Coleman & Karraker, 1998, 2000; Desjardin, 2003; Guimond, 2005; Stifter & Bono, 1998; Teti & Gelfand, 1991; Tucker, Gross, Fogg, Delaney, & Lapporte, 1998; Unger & Wandersman, 1985). For example, Desjardin (2003) points out that self-efficacy is linked to positive parenting practices and states *Parents who feel efficacious-that is, who perceive they have both knowledge and competence in their roles as parents- may formulate appropriate developmental goals for their children and carry out prescribed intervention strategies* (p. 393). Teti and Gelfand (1991) also found evidence that mothers' parenting performances were mediated by self-efficacy.

Research indicates that maternal self-efficacy has a direct influence on the quality of care provided to children and has been associated with the quality of mother child interactions, maternal sensitivity, warmth, use of coercive discipline, responsiveness, and child self-esteem (Bugental, & Cortez, 1988; Stifter & Bono, 1998; Teti & Gelfand, 1991; Tucker, Gross, Fogg, Delaney, & Lapporte, 1998).

Studies conducted with parents of typically developing children also support that mothers with high self-efficacy tend to be more responsive (Unger & Wandersman, 1985) and have greater parental satisfaction (Coleman & Karraker, 2000). According to Coleman & Karraker, (1998), mothers report feeling efficacious if they know how to respond to their children, feel comfortable with their ability to respond to their children, feel that their children will respond accordingly to them, and feel supported by their family and peers.

The current study has several limitations. First of all, the sample size is too small to make wide generalizations about Turkish mothers' verbal interaction practices and their self-efficacy beliefs regarding their children with expressive language delay. Therefore, more studies with higher sample sizes will add greater insights into this aspect. Secondly, although mothers in the current study found that they frequently or almost always use child directed strategies, these results should be considered cautionary because of the data collection procedures. In the current study, reports of mothers' verbal interactions were based solely on mothers' own judgments. As indicated in the literature, judgment-based measures can be sometimes retrospective and highly subjective (Bondurant-Utz, 2002). Therefore, in addition to judgment-based instruments, observations of Turkish mothers' verbal interaction practices should be also examined both quantitatively and qualitatively to provide greater confidence in the results. Another limitation of the current study concerns the recruitment of participants. Participant mothers were recruited from only one center (DILKOM). Participants from various other settings including different centers and schools should be included in the following studies.

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