

Brief Report

The Relationship Between Mothers and Children With Down Syndrome as Reflected in Drawings

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Abstract

This study examined the relationship between mothers and children with Down syndrome as reflected in the mothers' drawings of themselves and their disabled children. A sample of 20 mothers, 10 Bedouin-Arabs and 10 Jews, participated in the study. Of these, 10 mothers of children with Down syndrome served as the study group, and a matched group of 10 mothers of children who did not have Down syndrome served as a comparison group. Findings revealed that mothers of children with Down syndrome drew a larger number of barriers between the mother and child figures, which also tended to be more abstract, as compared to the figures drawn by mothers of children who did not have Down syndrome.

Introduction

Empirical studies have shown that parents, mothers in particular, of children with disabilities experience greater levels of stress than do parents of children without disabilities (Dyson, 1997; Lam & Mackenzie, 2002). Psychologically, parents have to face the loss of the expected "normal" child, integrate the child into the family, deal with feelings of guilt about transmitting the genetic fault to the child, and shoulder the lifelong process of rearing a child who is different (Rodrigues & Murphy, 1997). Socially, the parents have to deal with the child's different looks and functions and society's discrimination, especially against those who are cognitively disabled. This is a situation that often causes the parents to withdraw from social activities and to cut off social ties (Lam & Mackenzie, 2002). Physiologically, parents, particularly mothers, have to spend most of their time, energy, and patience in taking care of their children (Barnett & Boyce, 1995). This situation often results in the mother giving up her employment and career, which has a profound effect on the family financial security

(Singhi, Goyal, Pershad, Singhi, & Walia, 1990).

This study assumes that in some regards a child is a mental and physical extension of the mother's own self. With this assumption in mind, the purpose of the study was to further understand the relationship between mothers and children with Down syndrome as reflected in the mothers' drawings of themselves and their children. Family drawings are often used for clinical purposes. The underlying assumption for the use of family drawings is that they enable individuals to express their experiences and emotional distress in a socially acceptable manner, to communicate feelings and ideas, and to explore and work through problems and anxieties (Fury, Carlson, & Sroufe, 1997; Handler & Habenichet, 1994). One very popular variation, the Kinetic Family Drawing, developed by Burns and Kaufman (1970), specifically focuses on the drawer's family and the interaction among its members. Another variation, Mother and Child Drawing, developed by Gillespie (1994), is based on object relations theory. It differs from the Kinetic Family Drawing in that the projective aspect of the Mother and Child Drawing yields a specific dimension of the self that has been developed in early childhood through the interpersonal relationship between child and mother—the child figure is assumed to be a representation of the self regardless of current age, and the mother figure represents the internal mother.

Mothering a Child with Down Syndrome

Down syndrome, a common genetic condition in which there are three copies of the 21st chromosome instead of the usual two, causes developmental disabilities and mental handicap in addition to a wide range of health problems such as heart diseases and gastrointestinal malformations (Rogers & Coleman, 1992).

The presence of a child with Down syndrome (DS) is in itself a stressor that disturbs both the mother's social and intrafamilial interactions. Studies investigating stress on families who have a child with DS indicate that rearing such a child creates the potential for disrupting and adversely affecting the well being of its members (Padelia, 1998). Parents of children with disabilities have reported experiencing chronic sorrow (Damrosch & Perry, 1989), decreased self-esteem, self-blaming, and an increased level of depression

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(Byrne & Cunningham, 1985). They may be less optimistic and self-efficacious (Cheng & Tang, 1995). Mothers of children with DS may suffer from prolonged stress (Padeliadu, 1988) resulting from everyday activities and concerns about the child's future (Bower, 1998), often leading to deterioration in their physical and mental health (Sarafino, 1994). Kromberg and Zwane (1993), for example, found that many mothers of children with DS show emotional stress severe enough to make them vulnerable to illness and to cause them to have physical or psychosomatic symptoms.

There is emerging evidence that the presence of disability can have a positive effect on a family. Bower, Chant, and Chatwin (1998), who examined the sense of hardiness and resilience in mothers of children with DS, found minimal differences between families with and without a child with a disability in relation to the mothers' perceptions, ideas, and beliefs about the hardiness and resilience of their families. Other qualitative studies have shown that compared to mothers of children who do not have DS, mothers of children with DS have significantly higher levels of marital satisfaction (Engelberg, 1995), maintain more attention to toys, spend more time in joint attention (Harris, 1995), and are more directive and supportive (Roach, Barratt, Miller, & Leavitt, 1998).

Because the relationships and influences between the child and the mother are reciprocal and circular (Cynic, 1990), it is important that professionals who treat the child with DS also provide help for the mother, who is usually the main caregiver of that child, to enhance her ability to cope with the ongoing, chronic stress.

Method

Participants

A sample of 20 mothers, 10 Bedouin-Arabs and 10 Jews with a mean age of 33.50 ($SD = 7.39$), participated in this study. Of these, 10 mothers of children with DS (5 Bedouin-Arabs, 5 Jews) served as the study group. The other 10 mothers, who had no children with DS served as the comparison group and were matched to the study group according to ethnicity, age of mothers and children, and education (5 Bedouin-Arabs, 5 Jews). The mean age of the children was 3.85 ($SD = 3.15$); the mean number of children per family was 4.95 ($SD = 3.31$). Seventy-seven percent of the participants had fewer than 12 years of education; 13% had graduated from high school. Participants for the study group were recruited from a hospital child developmental center, and for the comparison group, from a nursery. All participants were from the same city in Israel and were asked to sign a letter of consent stating their permission to use their drawings for research purposes.

Measure and Procedure

Participants were given a blank sheet of paper sized 8" x 11" and a pencil and were asked to draw themselves and their child. No further instructions were given. When drawing, some of the participants asked questions such as,

"Should the figures drawn be human?" The answer to such questions was that it was up to them to decide.

Following completion, the drawings were given to two social workers (who were also art therapists) for independent assessment. The therapists were asked to estimate the level of obviousness ranging from very obvious (rated 4) to not at all obvious (rated 1) for the following indicators:

1. Distance between figures—the degree to which figures are drawn close together is thought to indicate the drawer's perception of the extent to which there is emotional closeness or attraction between the two people (Abraham, 1989).
2. Facial expression of the mother figure (e.g., sadness, a sense of helplessness, depression, anxiety)—may help the therapist to reach a fuller understanding of the drawer's feelings (Furth, 1988).
3. Abstract instead of human figure—usually represents either something that is hard to understand or avoidance (Furth, 1988). According to Furth, when a person draws humans as abstractions, he or she may be avoiding something or perhaps unconsciously resenting something.
4. Barriers between figures (e.g., a person, an object)—may indicate blocking the figures drawn from communicating (Furth, 1988).

These indicators were selected according to Hammer's (1997) guidelines for family drawing analysis having to do with dominance, dependence, aggression, and isolation. Drawings may reflect family dynamics such as physical intimacy or distance through the actual distance between drawn figures, or feelings of isolation and hostility through barriers between figures (Lev-Wiesel & Samson, 2001).

The final score was determined by averaging the assessments for the study and comparison groups. Interrater reliability for each measure was as follows: (a) distance between the mother and child figures, $r = .90$; (b) facial impression of the mother figure, $r = .94$; (c) abstract instead of human figures, $r = .94$; and (d) barriers between figures, $r = .93$.

Results

A multiple analysis of variance (MANOVA) was conducted in order to compare the extent of similarities or differences among the groups. Table 1 presents a general description of means, standard deviations, F values, and significance of each indicator. Significant differences between the groups' drawings were found in the following indicators: abstract instead of human figures, $F(2, 18) = 4.04$, $p < .05$, and barriers between figures, $F(2, 18) = 36.11$, $p < .001$. The drawings did not differ significantly in the distance between figures and the facial expression of the mother's figure (see Figures 1 and 2).

Discussion

Comparisons were made between drawings by mothers whose children had Down syndrome and drawings by a matched group of mothers whose children were not dis-

Table 1
Means, Standard Deviations, and *F* Values for
Drawing Indicators.

Indicators	Study group (<i>n</i> = 10)	Comparison group (<i>n</i> = 10)	<i>F</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	
Distance between figures	1.30 (0.48)	1.60 (0.52)	0.75
Facial expression of the mother figure	3.50 (0.70)	1.50 (0.89)	0.36
Abstract instead of human	1.90 (1.19)	1.30 (0.48)	4.04*
Barriers between figures	2.20 (1.39)	1.10 (0.32)	36.11***

****p* < .001; **p* < .05

abled. It was revealed that a higher number of barriers were drawn between the mother and child figures in the drawings by mothers of children with DS when compared to drawings by mothers whose children did not have DS. In addition, the figures drawn by mothers of children with DS tended to be more abstract than figures drawn by the mothers in the control group.

In spite of the fact that the facial expression of the mother figures drawn by those whose children had DS did not differ from those drawn by the matched group, the barriers between the mother and child figures might indicate difficulties in communication and the possible existence of negative feelings of the drawer toward the child. It is possible that the mothers of children with DS felt resentful of either their own child or the disability itself. This line of thought is strengthened by the findings of Atkinson et al. (1995) that mothers of children with Down syndrome reported higher levels of avoidance in relation to coping with stress resulting from parenting the child with DS.

Another explanation is that it may be harder for mothers to reach out and communicate with their children with DS as compared to children who are not disabled. The barrier may represent not only emotional difficulties or negative feelings but also concrete, everyday obstructions. As mentioned earlier, a child with Down syndrome is a source of continual psychological, social, and instrumental stressors that may be hard to deal with.

Drawing the figures in a more abstract way may represent, on one hand, the mother's wish to avoid acknowledging her child's different physical appearance, or on the



Figure 1 On the left, B, age 25, a Jewish mother of a 4-year-old; on the right, A, age 25, a Jewish mother of a 4-year-old child with Down syndrome

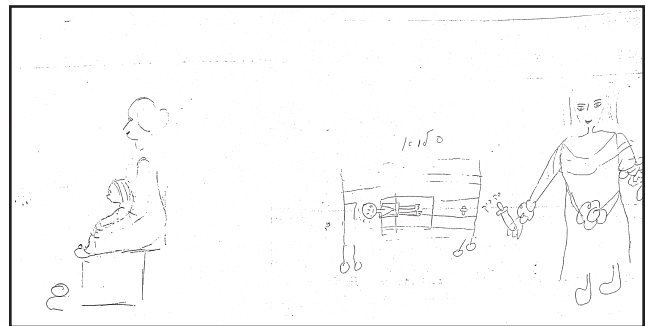


Figure 2 On the left, D, age 28, a Bedouin-Arab mother of a 6-year-old child; on the right, C, age 27, a Bedouin Arab mother of a 6-year-old child with Down syndrome

other hand, her capacity to see the child beyond his or her disability. The use of drawings for this specific population might help both the mother and the professionals who treat the child with DS through enabling the mother to express her inner, hidden feelings regarding her motherhood, her child and the child's disability.

The study was limited by the small size sample, which was due to the difficulty in collecting participants. In addition, although the matching of the two groups was successful with regard to the demographic variables, other differences existed between them such as material, social, and psychological variables.

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