ABSTRACT: The role of familial emotional stress has been recognized as a significant factor in the life of children with diabetes. The Kinetic-Family-Drawing was used to study 52 children with diabetes, as a projective technique to delineate environmental factors. An equal number of K-F-Ds of otherwise normal children were matched to the experimental group by age, sex, and race. The children with diabetes showed more examples of isolation in their drawings, and this finding correlated with examples of aggression. These findings suggest important dynamics that may exist in the family that has a child with diabetes.

The emotional aspects of diabetes mellitus in childhood have received much attention and been the source of much controversy throughout previous literature. The possible role of emotions as a factor in the onset of diabetes has long been suspected [1]. Recent findings from a well-controlled study implicate family trauma as an antecedent to the onset of diabetes in children [2]. Emotions have been considered a definite determinant in the course and management of diabetes [3, 4, 5, 6]. The personality structure of a child with diabetes has been studied by many authors [3, 4, 6-11]. The effect of a
diabetic child upon the family interrelationships has also been observed [12, 13].

The use of artwork of children in personality assessment is a popular projective technique. In 1926, Florence Goodenough described the “Draw-a-Person” test [14]. Subsequent modifications of this test included the “House-Tree-Person” test by Buck [15] and family drawings by Hulse [16] in 1951. Karen Machover [17], in 1949, described analytical interpretations that can be made when evaluating human figures. In 1968, Koppitz [18] gave data from large studies about the significance of children’s drawings in relationship to their illnesses. Recently, Burns and Kaufman [19] have added a new dimension to personality assessment in children. Their “Kinetic-Family-Drawing” (K-F-D) offers many advantages that are especially desirable when working with children: (a) it is an enjoyable task for most children; (b) it is brief and relatively simple to administer; and (c) it is easy for children to “tell a story” about their family.

The K-F-D is an open-ended, projective technique that can reveal many aspects about family dynamics and interactions. The goal of this experiment was to use the K-F-D as a projective technique to gain insight into the personality and emotional characteristics of children with diabetes and their perception of family dynamics.

Findings of previous research have suggested various factors that might be important to children with diabetes. These included family interrelationships [4, 12, 20], food [21], body image [22], and sexual anxiety [10].

By analyzing the K-F-Ds of diabetic children and matched controls, the authors sought to: (a) gain insight into the dynamics of families with a child who has diabetes; (b) observe body image distortions that a child with diabetes might have; and (c) evaluate the K-F-Ds for any “loaded” factors such as food, eating, cooking, and sexual emphasis reported as significant concepts to children with diabetes.

**Method**

Kinetic-family-drawings were obtained from 52 insulin-requiring children with diabetes and from an equal number of children who gave no personal history of diabetes or of diabetes in the immediate family.

The children with diabetes were attending one-week sessions of a summer camp sponsored by the local diabetic association. Children attending the camp were seen by private doctors or in the outpatient clinic of a large children’s hospital. Camp scholarships were provided for many of the children. These children were predominantly white, with only 2 black children in the group of 52.