

*National  
Organization of  
Mothers  
Of  
Twins  
Clubs, Inc.*

SUBJECT:

**IOWA TWIN STUDY**

RESEARCHER:

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**PURPOSE:** The Iowa Twin Study began in June, 1990, to determine whether the differences in several aspects of children's behaviors were more closely related to shared or nonshared environmental factors.

**METHOD:** Families with same-sex twins between the ages of 5 and 12 years completed three questionnaires. The first requested demographic and environmental characteristics of the family and the other two asked about each twin's behavior and physical characteristics.

#### BACKGROUND INFORMATION:

1. 459 members of the NOMOTC, Inc. responded to an initial letter, and 79% of those provided completed data for the study.
2. 88 pairs of girls and 93 pairs of boys were monozygotic (identical).
3. 93 pairs of girls and 89 pairs of boys were dizygotic (fraternal).
4. Mean age was 6 years, 11 months.
5. Parents' responses provided measures of seven dimensions of each child's behavior: (1) Assertion/Aggression; (2) Introverted/Extroverted; (3) Activity Level/Energy; (4) Physical Complaints; (5) Prosocial Behavior; (6) Sadness/Dysphoric Mood; (7) Sleep Irregularity.
6. Families provided measures of nine features of children's psychosocial environments: (1) Encouragement of Achievement; (2) Peer Acceptance; (3) Parental Closeness; (4) Parental Supervision; (5) Variety of Change in One's Daily Life; (6) Expression of Affection; (7) Frequency of Separation from Friends and Family; (8) Social Activities of the Family; (9) Socioeconomic Status.

#### RESULTS:

1. As compared to larger groups of children on whom the several measures were normal, the twins in this study had fewer physical complaints and exhibited less sadness or dysphoria than is average in a large group of unselected children.
2. The monozygotic twins were behaviorally much more alike than the dizygotic twins, both boys and girls.

- 3. Also, as compared to larger groups of children, the twins in this study had less pressure for achievement, and their families were of somewhat higher than average socioeconomic level.
- 4. On all but two scales (Separation for boys, and Socioeconomic Status for girls), the nonshared environments of dizygotic twins were more different than the monozygotic twins.
- 5. Differences in parental closeness, change, separation and expression of affection were related to differences in the behavior of monozygotic girls.
- 6. Differences in acceptance by peers, change, and separation were related to differences in the behavior of monozygotic boys.

CONCLUSION:

While environmental experiences shared by two children in the same family don't appear to make those children more similar, unique or nonshared experience of each child are related to the behavioral differences between them.

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