

bed at night. Who should tuck N....in at night?" represents this last category.

In theory the test helps the child express conscious attitudes, including those very private feelings which he would find difficult to state directly. The test admittedly does not investigate unconscious attitudes. The authors believe, however, that it is important to investigate the child's phenomenal world, or as they speak of it, his "psychic reality."

Scoring is accomplished by tallying the items assigned to particular role figures, excluding the items assigned to "Nobody." The balance among proportions of items in the several degrees and directions of affect assigned to the several family roles provides the basis for interpretation. The manual offers profiles for a number of briefly described examples in each of the following personality patterns: idealizing tendency, paranoid tendency, and egocentric states, both auto-aggressive and auto-erotic. Other dynamic mechanisms revealed by the use of items include reaction formation, projection, regression, displacement, idealization and denial. The authors attach considerable significance to the child's selection and treatment of significant figures, to his deviation from a theoretical frequency of items expected to be assigned to the usual family roles, to the balance he achieves between self love and self hate items (which indicates his egocentric state), to the relationship between positive and negative outgoing and positive and negative incoming affect items used by the child (which indicates his ambivalence, or lack of it, toward family figures).

The authors rest the case for the test's validity on the concept of construct validity, on comparison of test results with extensive case history material for several small groups of children (which showed considerable correspondence), on comparisons of results of mutual feelings reported in sets of siblings, where agreement of 64 per cent satisfied the 5 per cent level of confidence, and on the congruence of test findings with predictions made independently from psychiatric diagnoses in several small samples of cases. Some data are quoted to show that results are independent of the sex of the examiner. Split-half reliabilities for combinations of affect categories vary from .68 to .90, number of cases not reported.

As is frequently the case with tests of this type, no norms are given beyond a few illustra-

tive cases and interpretations: The test is ingenious and simple, and the questions are phrased in children's language and represent common personal and family experiences; none are too threatening, on the surface at least. The device of sending "messages" should appeal to many children; the test certainly deserves further study.

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The *Family Relations Test* (FRT) is a semistandardized play situation which permits the child to express his emotional attitudes toward members of his family and the attitudes he believes that members of his family have toward him.

The test materials consist of 20 cardboard figures "representing people of various ages, shapes, and sizes, sufficiently stereotyped to stand for members of any child's family, yet ambiguous enough to become, under suggestion, a specific family." Each figure is attached to a red cardboard box into which can be inserted small cards which bear various expressions of attitudes: positive feelings, negative feelings, dependence, maternal overprotection, and paternal overindulgence, some expressed as emanating from the child toward family figures and some expressed as emanating from family figures toward the child. There are two sets of cards, 40 for use with younger children and 86 for use with older children.

The subject is asked to select from the 20 figures a figure to represent each member of his family, including himself. Another figure, Nobody, is introduced by the examiner to receive those attitudes which the child will not assign to any member of the family. The statement on each card is then read aloud by the examiner and the card given to the child, who is instructed to deposit it in the box attached to the family figure to whom it best applies. If the statement does not fit anybody, the card is put in Nobody. If the statement fits several people, the examiner makes a note of it. The cards are collected from the boxes and are tabulated on a special scoring form, the scoring consisting of counting the number of items of each kind of feeling assigned by the child to each member of his family. The test takes between 20 and 25 minutes to administer.

The test would seem to have possibilities, con-

sidering that there are few, if any, other objective techniques which serve the functions for which it is designed and that projective techniques are of doubtful validity. A good deal of clinical wisdom as well as an accumulation of experience with the FRT would, however, seem to be necessary for making judicious interpretations from the test material. Unfortunately neither the manual nor the one article (1) on the test presents any normative data. Apparently the test has never been given to normal children; at least, only clinical patients are described in the reports of the test's use. The evidence for the test's validity is too meagre and unsystematic to provide an adequate basis for evaluation. From a statistical point of view the reliability evidence is not impressive. Also some of the statistical procedures and computations in the manual and the article are both inappropriate and incorrect. For example, a 2×2 contingency table is presented in the manual (p. 48) as evidence of a significant relationship between an independent rating and the FRT regarding sibling conflicts. The "measure of agreement" is given as 64 per cent. When the appropriate test, chi square, is performed, however, it shows the results to be quite nonsignificant ($\chi^2 = .292$). In another instance (p. 46) the authors have slighted the actual significance of their data. Simply dividing the sum of the diagonal frequencies of the contingency table by the total frequencies, the authors report 64 per cent agreement and state that this result is significant at the 5 per cent level. The 5 per cent significance level was probably based on a chi square test (not given by the authors), but actually the chi square is significant at the 5 per cent level only if it is interpreted as a one-tailed test, a rather unusual procedure in the case of chi square. A more appropriate test of the significance of these data is by means of a test of trend,¹ a more refined and powerful test than chi square. When a test of trend was performed, the results show a relationship significant beyond the 0.1 per cent level.

The FRT may be a potentially useful test in the clinic, though this still remains to be demonstrated; at present it must be regarded as being in the trial stage. It can be recommended for use by those who are primarily interested in investigating the test itself. It is not a finished product about which there is sufficient informa-

¹ ARMITAGE, P. "Tests for Linear Trends in Proportions and Frequencies." *Biometrics* 11:375-86 S '55. *

tion to warrant its being recommended for routine clinical assessment of child-family relationships.

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★**The Five Task Test: A Performance and Projective Test of Emotionality, Motor Skill and Organic Brain Damage.** Ages 8 and over; 1955; 1 form; mimeographed manual; no data on reliability; \$15 per set of test materials; \$3 per manual; postpaid; (15-20) minutes; Charlotte Buhler and Kathryn Mandeville; Western Psychological Services. *

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Adequacy of standardization varies with the subtest, category of scoring, and age group. The first three tasks—cutting out a circle, heart, and star—are scored for "quality" ("edge-cutting," "form-cutting," and "symmetry") and "quantity" (number of scraps). "Quality" scores measure "manual dexterity," "artistic ability," and "level of aspiration." "Quantity" scores indicate "emotionality." These tasks have been administered to 327 Viennese girls aged 8-15 years, 233 parochial school children from one American city, 141 public school children from two cities, and 30 adults. However, the only statistical data reported for the "quality" scores are the means for 134 boys and 145 girls, aged 8-13 years, drawn from the American samples. Validation of the "quantity" scores as an indication of "emotionality" consists of one table listing the per cent of each of three "adjustmental" groups (good, average, and poor) producing 15 or more scraps. Adjustment was rated by teachers. The sample is some portion of the American groups, but the frequencies from which the percentages were derived are not given.

The fourth task, a projective cutout, has not been standardized.

The fifth task, Terman's ball and field problem, is used to assess "emotionality." Solutions are assigned to one of 10 categories (5 positive and 5 negative or "problematic"). Validation is based primarily on 165 solutions by 157 children, aged 7-15 years—65 by neurotic children and 100 by "emotionally stable" children (25 of high intelligence; 39, average; 24, low; and 12, mentally defective). The proportion of positive solutions was significantly lower for the neurotics than for any of the first three "normal" groups. Mystified that the percentage passing a subtest of the Stanford-Binet should be almost identical for these three groups, the re-