INTERRELATIONSHIPS BETWEEN CHILDREN'S PERCEPTIONS OF PARENTS, TEACHER RATINGS, AND HUMAN FIGURE DRAWINGS

APPROVED:

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Coakley, Barry S., Interrelationships Between Children's Perceptions of Parents, Teacher Ratings, and Human Figure Drawings. Master of Science (Clinical Psychology), December, 1971, 33 pp., 6 tables, bibliography, 29 titles.

This study investigated the relationship between children's perception of parents as loving or rejecting and the general emotional adjustment of these children. Emotional adjustment was reflected by behavior within a regular classroom as observed by the teacher and by performance on a projective personality test.

The population was composed of predominantly "middle class" fourth-, sixth-, and eighth-grade children in a predominantly white suburban school district. Three measures were obtained from each child. The first involved the child's perception of his parents as loving or rejecting (L-R), determined by summing the scores on three scales (Loving, Rejecting, Neglecting) of the Roe Siegelman Parent-Child Relations Questionnaire (PCR). The second measure involved assessment of the classroom behavior of each child by his teacher, accomplished by means of Burks' Behavior Rating Scale (BRS). The third measure obtained was a representative drawing of a human figure (HFD) by each subject, scored by means of Koppitz' (1968) scoring manual.
The study investigated the following questions: (1) are children's perceptions of their parents as L-R related to teachers' ratings of their emotional adjustment based on observations of classroom behavior; and (2) are the HFD's of the children systematically related to either the perceptions of their parents or to teachers' ratings of behavior?

Teachers' ratings and perception of mothers as L-R were significantly related for the total sample. Teachers' ratings and perceptions of fathers as L-R were not significantly related for the total sample, but considerable directional tendencies were obtained. Girls' perceptions of both parents as L-R were significantly related to teachers' ratings. Boys' perceptions were not significantly related for either parent. Emotionality as evidenced on HFD's was significantly related only to boys' perception of mothers as L-R. No relationship was obtained between teachers' ratings and emotionality on HFD's for any sample group.

HFD's appeared more indicative of repressed conflicts in boys than in girls. Also, the advisability of using HFD's to assess the emotional components involved in aberrant classroom behavior was questioned. Child-rearing practices were suggested to have more influence on classroom behavior for girls than for boys, possibly as a result of the differing expectancies accorded to each. The results suggested
that separate evaluation of data according to sex is essential to further consideration of similar variables.
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PARENTS, TEACHER RATINGS, AND HUMAN
FIGURE DRAWINGS

THESIS

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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Denton, Texas
December, 1971
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## Chapter

I. STATEMENT OF THE PROBLEM AND RESEARCH REVIEW

Research Review
   Statement of the Problem

II. METHOD

Sample
   Instruments
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III. RESULTS

IV. DISCUSSION

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Previous research has explored the effect of differing child-rearing practices on children's subsequent general emotional adjustment. Such research has shown the child's perception of his parents to be essential to his emotional well-being (Schaefer, 1965). More specifically, a child's perception of his parents as either loving or rejecting appears closely related to his behavioral adjustment.

According to holistic personality theorists, individuals demonstrate consistent adaptive behavior patterns. Assuming that behavior reflects emotional adjustment and that behavioral patterns are consistent across settings, then systematic observations of behavior in any setting should reflect a general level of emotional adjustment.

Children spend a considerable portion of their waking hours within a school setting. Observations of a child's classroom behavior should reflect his general emotional status. Since emotional stability appears strongly related to perception of parents as loving or rejecting, classroom behavior may also reflect these perceptions.

That school environments can foster both favorable and unfavorable general emotional adjustment is generally conceded. Beyond this, however, the child's interaction with
his school environment may also comprise a reflective index of his current emotional status. The most readily available means of obtaining these observations is, of course, by consulting classroom teachers. School personnel appear consistently willing to support teacher ratings as valid measures of emotional adjustment. Teachers, therefore, may potentially be capable of more than just indexing a child's academic achievement or potential. Teacher's ratings of behavior, reviewed later in this chapter, often may also be considered instruments of personality assessment.

Research Review

Cox (1966) hypothesized that a network of background factors was operative in a child's personality development. He explored the effects of four levels of variables: (1) family background, (2) parental child-rearing attitudes and practices, (3) characteristics of the child, and (4) social acceptance of the child by his peers. Among other results, Cox reported that "parental loving-rejecting showed influence on the child's personality development and social acceptance" (p. x). In a thorough review of the literature concerning child-rearing practices as related to his study, Cox reported the following:

The concept of Loving-Rejecting in addition to having linkages with the postulated family background factors above, has marked influence on the cognitive, social, and ego development of the child. The child who experiences the psychological pain of parental rejection does
not develop an adequate self-concept (Medinnus, 1965), becomes socially introverted (Siegelman, 1965), acquires aggressive patterns of behavior (Kagan & Moss, 1962), and evidences signs of maladjustment (Medinnus, 1965) such as delinquency (McCord et al., 1963; Schaefer, 1965) and incipient psychopathology (Heilbron & McKinley, 1962) (p. 40).

Assessment of parental child-rearing practices has been approached in several ways. Shoben (1949) developed a scale to assess parental attitudes and to examine their influence on the child's development. Schaefer (1961) used factor analysis to evaluate scores on questionnaires administered to parents concerning their attitudes. Roe and Siegelman (1963) developed questionnaires to determine the children's perceptions of their parents. They developed a questionnaire with ten subtests and administered it to college students and adults, both male and female, regarding their own parents' behavior toward them when they were children. Separate forms, differing only slightly, were developed for perception of mother and perception of father. Three administrations of the questionnaire yielded the same three factors for each parent: Loving-Rejecting, Casual-Demanding, and Overt Attention.

Medinnus (1965) administered the Roe-Siegelman Parent Child Relations (PCR) Questionnaire to college freshmen. He compared measures of self-acceptance, adjustment, perceived acceptance by parents, and identification with parents. Medinnus reported that adolescents high in self-acceptance
and adjustment perceived parents as loving and not as re-
jecting. Siegelman (1965) investigated the association of
introversion-extroversion and anxiety to dimensions of child-
rearing as measured by the Roe-Siegelman PCR Questionnaire.
Siegelman (1965) reported significant results regarding per-
ception of fathers. Anxious and introverted males perceived
fathers (and mothers) as rejecting, and extroverted females
perceived fathers as loving. Females' perception of mothers
as loving was not significantly related to the other vari-
able. Thus, previous studies have consistently related
perception of parents as cold, neglecting, and rejecting to
the development of maladaptive behavior patterns. Variations
have been noted, however, in the directions and severity of
the ensuing aberrant patterns of behavior.

Goldin (1969) systematically analyzed the literature in
terms of children's perception of parents as Loving-Rejecting
(L-R), Demanding, and Punitive. Significant differences
were reported in perception of mothers and fathers. Also,
perceptions seemed clearly related to sex, social class, and
behavior. Goldin found that children, not necessarily boys
alone, clearly perceive fathers as more punitive than mothers.
Boys were more afraid of fathers than were girls and con-
sidered them as more punitive and aggressive. Interaction
of age and sex was inconclusive, and a paucity of studies
was found involving the effects of sociocultural level on
children's perception of parents. Goldin was more explicit
concerning deviant groups: "All deviant groups are more likely to report parents as rejecting. While delinquents perceive parents as undercontrolling, maladjusted normal and clinic children are more apt to report parents as overcontrolling. It is patent, however, that greater heterogeneity exists in the latter two groups" (p. 234).

Concerning teacher ratings of classroom behavior, Phillips (1968) compiled a list of 72 specific problem-behavior areas. Teachers rated 600 fourth- and fifth-grade children over a two-year period by means of this list of problem areas. Five dimensions were reported as foundations of problem behavior: (1) aggression with independence strivings, (2) active withdrawal, (3) self-enhancement through derogation of others, (4) emotional disturbance with depression, and (5) diffuse hyperactivity. Echelberger (1959) studied the relationship of teacher ratings of behavior to ratings by peers. Sociometric ratings of popularity were found significantly related to teacher ratings of problematic behavior, social adjustment, and emotional adjustment. Teele, Schleifer, Corman, and Larson (1966) also reported correlations between teacher and peer ratings at all grade levels tested. Werdelin (1966) reported a close connection between teacher and peer ratings, although self-ratings differed substantially. Beal (1968) compared teacher evaluations of personality traits and pupil self-evaluation and reported a very low though positive relationship between the
two measures. Schanberger (1968) concluded that classroom teachers as a group and school psychologists as a group reveal a positive relationship in rating behavioral characteristics of children. Bower (1960) used teacher ratings as one of five elements in his definition of emotionally-handicapped children. He reported that 87 percent of the children who could be clinically identified as emotionally handicapped were rated by teachers as among the most poorly adjusted in the class group. In a study related to the one undertaken here, Cox (1970) compared responses regarding the child's perception of parents as L-R with twenty-three teacher ratings of the child's behavior. Teacher ratings were found more closely related to the child's perception of each parent than to the parents' self-report. Of special interest here was the finding that perception of the father as L-R accounted for more variance than perception of the mother as L-R.

Human Figure Drawings (HFD's) have been used by psychologists both in school and in clinic settings to evaluate personality dysfunction. Swenson (1963) comprehensively reviewed the literature concerned with empirical evaluation of HFD's. Roback (1968) published a paralleling survey assessing the utility of HFD's for personality assessment by clinical psychologists. Upon conclusion of the surveys, neither author was convinced of the reliability, validity, or necessity of using HFD's in personality evaluation.
Swenson (1968) concluded: (1) the value of a particular sign is directly related to the reliability of that sign; (2) if content and structural signs are assessed, the quality of the drawing and the difficulty of drawing the particular sign should be taken into account in the assessment; and (3) there has been a substantial increase in empirical justification for the use of the HFD as a clinical tool, but the use of structural and content signs is not likely to provide any improvement in the clinician's judgmental accuracy. Roback summarized his review as follows:

Although the studies reviewed in this manuscript generally failed to support Machover's hypotheses (1949), there is still an insufficient number of investigations from whose findings it could be concluded "the patient died" (p. 16).

Roback further emphasized the need for "standardized and validated scales for estimating personality assessment from figure drawings." He attacked the use of "intuitive," "insightful," and "impressionistic" cues from which psychologists claim to glean evaluations. He attributed these cues to reflections of the subject's artistic drawing ability.

Koppitz (1968) concurs completely concerning children's HFD's. She reviewed a number of studies and concluded: "To date studies involving HFD's by children that were designed to test Machover's hypotheses have been at best inconclusive . . ." (p. 2). Koppitz attributed the failure of these studies to ill-defined variables and the existence of many
interpretations for the same sign. Two general schools of thought make similar, conflicting claims regarding identical items on HFD's.

Goodenough (1926) originally developed, standardized, and validated a widely accepted intelligence measure by means of HFD's; the measure was so well-designed, in fact, that Harris (1963) found he could work but little improvement in his subsequent revision. Machover (1949, 1953, 1960), along with Levy (1958), Hammer (1958), and Jolles (1952), however, developed an equally-accepted and influential projective method for treating HFD's. Identical items, as Koppitz (1968) points out, were claimed by Harris to be representative of mental maturity and development on the one hand, and by Machover to indicate emotional conflict on the other. Regarding this overlapping interpretation, Koppitz (1968) stated, "In the writer's own experience, it is indeed possible for some items on HFD's to have both developmental and projective significance, but not necessarily for the same children nor at the same age level" (p. 2).

Koppitz (1968) investigated individual signs for possible valid emotional significance and derived a list of thirty-eight potential indicators from the work of Machover and Hammer, as well as from her own observations. Potential Emotional Indicators (EI's) were required to satisfy three criteria. The EI must (1) differentiate between HFD's of children with and without emotional problems, (2) occur
infrequently (less than 16 percent) on the HFD's of normal children, and (3) not increase in frequency solely on the basis of age. Through a normative study conducted on 1,856 children, Koppitz (1968) revised her original list of 38 signs to 32, all of which satisfied criteria (2) and (3) above. In a study designed to test criterion (1), Koppitz (1966a) eliminated two more items from the list. These final 30 items were found to occur more often on the HFD's of psychiatric patients than on the drawings of normals. The HFD's of children with emotional problems were also shown to contain a significantly greater number of EI's than drawings of children without such problems (Koppitz, 1966a).

In summary, research reviewed has suggested the following concerning the three variables selected for study:

1. Children who perceive their parents as rejecting, cold, or neglecting are more apt to display maladaptive behavior patterns than children who perceive their parents as warm, loving, and accepting.

2. Teachers' judgments of the general emotional adjustment of children based on classroom ratings are adequate estimates for research purposes.

3. Studies conducted concerning both adult and children's HFD's have yielded little data validly applicable to personality assessment in either the school or clinic setting, although Koppitz (1968) selected thirty EI's which satisfied predetermined criteria.
Statement of the Problem

This study investigated the relationship between children's perception of parents as loving or rejecting and their general emotional adjustment. Emotional adjustment was reflected by behavior in the classroom and by performance on a projective type of personality test. From research reviewed and the conclusions determined above, the following hypotheses were generated:

I. Children who perceive their parents as rejecting are rated as less well-adjusted by teachers than children who perceive their parents as loving.

II. Children who perceive their parents as rejecting exhibit more emotionality on projective human figure drawings than do children who perceive their parents as loving.

III. Children whom teachers rate as relatively poorly adjusted exhibit more emotionality on projective human figure drawings than do children whom teachers rate as relatively well-adjusted.
CHAPTER II

METHOD

Sample

Ninety children were selected from two elementary and one junior high school in a predominantly middle class, white, suburban community. Classes of at least thirty pupils each in grades four, six, and eight were randomly selected; if more than thirty pupils participated in any one class, extra participants were randomly discarded. The numbers of subjects of each sex are reported in Table I. Three subjects were eliminated from the original sample due to incomplete data, reducing the sample size to eighty-seven total subjects.

TABLE I
SIZE OF SAMPLE BY SEX

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>47</td>
<td>40</td>
</tr>
</tbody>
</table>

Instruments

The Roe-Siegelman (1963) Parent-Child Relations Questionnaire (PCR) was used to measure the children's perception of parents as loving or rejecting. Three scales from
the PGR—Loving, Rejecting, and Neglecting—were used to determine a Loving-Rejecting score (L-R). In order to obtain a consistently positive L-R rating, a constant of 100 was added to the Loving scale, and the sum of the Rejecting and Neglecting scales was subtracted from this total. The result was an obtained L-R score for each subject. A high L-R score could therefore result from either a high Loving scale score, low Rejecting and Neglecting scores, or both.

A Behavior Rating Scale (BRS) devised by Burks (see Appendix) was used for teacher assessment of classroom behavior. Burks's BRS consists of thirty items, the first five of which assess only behavior associated with children having minimal brain dysfunctioning. These five items were not used in determining a teacher's BRS score. Behavior was rated by means of the remaining twenty-five items on a five-point scale.

One instrument, among many, used in personality assessment of children is the Human Figure Drawing (HFD). Investigation reported the HFD as widely accepted and considered essential by users, but improperly and incompletely researched and validated. Psychologists, both in school and clinical settings, appeared to rely heavily on both teacher ratings and HFD's in evaluation and/or diagnosis of children's emotional and school-related difficulties. Each subject was asked to draw a picture of a person. Two graduate psychology students independently scored each child's HFD, in accordance
with Koppitz' (1968) scoring manual, a copy of which is included in the Appendix. Thus, an EI found present by both scorers was designated "2"; an EI found by one scorer was "1"; and EI's found present by neither scorer were scored "0." A total HFD score was obtained for each subject by summing the thirty separate items or EI's.

Procedure

Three measures were obtained from each child: (1) his perception of his parents as L-R, (2) his teacher's assessment of his classroom adjustment on a BRS, and (3) his HFD. The study dealt with the following questions: are children's perceptions of their parents as L-R related to teachers' ratings on a BRS; and do the HFD's of the children reflect their perception of their parents, the teachers' ratings, both, or neither?

The subjects were administered the PCR for fathers and for mothers within their respective classroom groups. Items were read aloud to all subjects simultaneously, and the pupils responded silently on their individual answer sheets. During administration of the PCR, teachers remained in the classroom and evaluated the children's general behavioral patterns by means of the BRS. When the PCR was completed, normally within one or two class sessions of one hour each, pupils were administered the HFD in small groups of approximately ten students. Administration of the HFD was usually
accomplished within the regular classroom with seating appropriately arranged and spaced. No talking, comparing, or kibitzing was permitted.
CHAPTER III
RESULTS

The relationships among the variables were studied by Pearson product-moment correlation. Means and standard deviations for the total sample are reported in Table II. Table III lists correlations for the total sample. Means and standard deviations for girls and boys separately are listed in Table IV, along with t tests for differences between girls' and boys' means. Correlations for boys and girls are reported in Table V. A summary of results by hypothesis may be found in Table VI.

As noted in Table II, little difference existed within the total group regarding perception of mothers and fathers as L-R.

TABLE II
MEANS AND STANDARD DEVIATIONS: TOTAL SAMPLE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
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<tbody>
<tr>
<td>BRS</td>
<td>38.92</td>
<td>13.21</td>
</tr>
<tr>
<td>HFD</td>
<td>4.85</td>
<td>3.88</td>
</tr>
<tr>
<td>L-R&lt;sub&gt;m&lt;/sub&gt;</td>
<td>90.13</td>
<td>25.56</td>
</tr>
<tr>
<td>L-R&lt;sub&gt;f&lt;/sub&gt;</td>
<td>88.61</td>
<td>24.51</td>
</tr>
</tbody>
</table>
No relationship was determined between BRS and HFD scores for the total sample (see Table III). Agreement between \( L-R_m \) and \( L-R_f \) was moderately high. A significant relationship was found between BRS and \( L-R_m \) scores. The relationship between the BRS and \( L-R_f \) scales was not significant, though the correlation was in the hypothesized direction. \( L-R_m \) and \( L-R_f \) scales demonstrated little relationship to HFD's, though again some directional tendencies were noted.

**TABLE III**

**CORRELATIONS: TOTAL SAMPLE**

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \text{BRS} )</th>
<th>( \text{HFD} )</th>
<th>( L-R_m )</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFD</td>
<td>.07</td>
<td>. . .</td>
<td>. . .</td>
</tr>
<tr>
<td>( L-R_m )</td>
<td>-.24*</td>
<td>-.18</td>
<td>. . .</td>
</tr>
<tr>
<td>( L-R_f )</td>
<td>-.19</td>
<td>-.15</td>
<td>.62**</td>
</tr>
</tbody>
</table>

*\( p < .05 \).*

**\( p < .01 \).**

Girls, as noted in Table IV, had significantly fewer behavior problems as rated by teachers than did boys. Girls perceived mothers and fathers similarly on L-R scales, as did boys. Also, girls as a group perceived parents in a similar manner to boys as a group.
TABLE IV
MEANS, STANDARD DEVIATIONS, AND t VALUES:
GIRLS AND BOYS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Girls</th>
<th></th>
<th>Boys</th>
<th></th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>BRS</td>
<td>33.72</td>
<td>8.95</td>
<td>45.02</td>
<td>14.82</td>
<td>3.18*</td>
</tr>
<tr>
<td>HFD</td>
<td>4.45</td>
<td>3.71</td>
<td>5.32</td>
<td>4.06</td>
<td>0.83</td>
</tr>
<tr>
<td>L-R_m</td>
<td>90.55</td>
<td>26.72</td>
<td>89.62</td>
<td>24.44</td>
<td>0.16</td>
</tr>
<tr>
<td>L-R_f</td>
<td>89.19</td>
<td>25.90</td>
<td>87.92</td>
<td>23.08</td>
<td>0.24</td>
</tr>
</tbody>
</table>

*p < .05.

No relationship was obtained between BRS and HFD scores for girls (see Table V). Significant correlations existed, however, between girls' BRS and L-R scores for perception of mother and perception of father. For girls, agreement between L-R\_m scores and HFD's was negligible; correlation between L-R\_f and HFD's was directional but did not reach a significant level.

As was the case with girls, Table V indicates no relationship between BRS and HFD scores for boys. Relationships between BRS and both L-R\_m and L-R\_f scores were in the hypothesized direction, but were not significant. L-R\_m scores were found significantly related to HFD's. L-R\_f and HFD scores showed a directional but nonsignificant relationship.

Hypothesis I stated that children who perceive their parents as rejecting will be rated as less well-adjusted by teachers than children who perceive their parents as loving.
This hypothesis was partially confirmed (see Table VI). Behavior ratings and perception of mother as L-R were significantly related for the total sample; the relationship between behavior ratings and perception of fathers as L-R was in the hypothesized direction but did not reach a significant level. Girls, when considered as a group, present quite another picture. Ratings of behavior and perception of both parents as L-R were significantly related; behavior ratings and perception of mother, in fact, yielded a significant, moderately high correlation ($r = .47$, $p < .05$). The relationships between behavior ratings of boys and their perceptions of both parents, however, were not found to be significant; these relationships displayed only marginal, directional tendencies. Thus, concerning the first hypothesis, the results suggest that ratings of girls' behavior

### Table V

**Correlations: Girls and Boys**

<table>
<thead>
<tr>
<th>Variable</th>
<th>BRS</th>
<th>HFD</th>
<th>L-R_m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>HFD</td>
<td>.01</td>
<td>.04</td>
<td>. .</td>
</tr>
<tr>
<td>L-R_m</td>
<td>-.46*</td>
<td>-.11</td>
<td>-.05</td>
</tr>
<tr>
<td>L-R_f</td>
<td>-.31*</td>
<td>-.13</td>
<td>-.15</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.
TABLE VI
SUMMARY OF RESULTS BY HYPOTHESIS

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variable</th>
<th>Total Sample</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative correlation between teacher's ratings and perceptions of parents</td>
<td>BRS &amp; L-R&lt;sub&gt;m&lt;/sub&gt;</td>
<td>-.24*</td>
<td>-.46*</td>
<td>-.11</td>
</tr>
<tr>
<td></td>
<td>BRS &amp; L-R&lt;sub&gt;f&lt;/sub&gt;</td>
<td>-.19</td>
<td>-.31*</td>
<td>-.13</td>
</tr>
<tr>
<td>Negative correlation between perception of parents and number of EI's of HFD's</td>
<td>L-R&lt;sub&gt;m&lt;/sub&gt; &amp; HFD</td>
<td>-.18</td>
<td>-.05</td>
<td>-.35*</td>
</tr>
<tr>
<td></td>
<td>L-R&lt;sub&gt;f&lt;/sub&gt; &amp; HFD</td>
<td>-.15</td>
<td>-.15</td>
<td>-.15</td>
</tr>
<tr>
<td>Positive correlation between teacher's ratings and number of EI's on HFD's</td>
<td>BRS &amp; HFD</td>
<td>.07</td>
<td>.01</td>
<td>.04</td>
</tr>
</tbody>
</table>

were much more highly related to their perception of parents, particularly the mother, than was true of boys. Results suggest that separate evaluation of boys and girls is a prerequisite for further consideration of any similar hypotheses.

Hypothesis II stated that children who perceive their parents as rejecting exhibit more EI's on HFD's than children who perceive their parents as loving. The hypothesis was not confirmed for the total sample. The relationship between the number of EI's on HFD's and perception of either mother or father for the total group was only marginal and directional at best. The relationship between perception of fathers as L-R and HFD scores remained consistently low and nearly identical across sex. However, perception of mother
as compared with HFD scores was not consistent for boys and girls. For girls, the relationship between perception of mother as L-R and HFD scores is negligible; the relationship for boys is significant ($r = .35, p < .01$). Boys' HFD's contain only slightly more EI's than do girls'; the increase seems insufficient to account for the discrepancy in the relationships. From these indications, it seems that boys who perceive their mothers as rejecting include more EI's on their HFD's than do boys who perceive their mothers as loving.

Hypothesis III stated that children whom teachers rate as relatively poorly adjusted exhibit more EI's on their HFD's than do children whom teachers rate as more well-adjusted. This hypothesis was not supported by results obtained for any group. No relationship existed between BRS and HFD scores for girls, boys, or the total sample. From these results, the presence of EI's on HFD's of children is not related to teachers' ratings of their behavior.

In summary, the following significant relationships were obtained: BRS scores were related to L-R scores for both parents for girls; and HFD scores were related to $L-R_m$ scores for boys. The obtained relationships differed considerably in degree across the variables studied, and marked sex differences were noted.
The results of this study indicated that "acting out" behavior as observed by teachers in the classroom was not associated with EI's as evidenced on HFD's. The possibility of unreliable scales was offered in explanation. Coefficient alpha, a measure of internal consistency, was computed for both the BRS and HFD scales. The BRS provided a comfortably high level of internal consistency ($r = .89$), but the HFD evidenced only moderate reliability ($r = .53$). The unreliability present within both scales was controlled by use of product-moment correlation corrected for attenuation. The corrected correlation obtained was insignificantly greater than zero ($r = .10$). This finding indicates that only approximately 1 percent of the reliable variance was shared as common variance by teacher's ratings and HFD's. School psychologists often rely on HFD's in identifying emotional components operative in problematic classroom behavior. However, the small amount of common variance discovered between BRS and HFD's in the present study suggests little relationship existed between the two scales. Emotional indicators identified by HFD's are apparently unrelated to teacher ratings of behavior within the classroom.
Therefore, the use of HFD's (as scored by Koppitz) as an instrument by which to assess the emotional components associated with aberrant classroom behavior would appear questionable at best.

Roback (1968) concluded his literature survey of human figure drawings (as used with adults) as follows: "Thus, only competent, future research will determine the specific utility of figure drawing tests in the clinical psychologist's armamentarium" (p. 17). This study suggested that the HFD's of children are of limited value in assessing their classroom behavior. Swenson (1968) concluded his literature review concerning the empirical evaluation of HFD's with a statement supporting the value of "global" assessment of figure drawings:

Since global ratings include all of the drawing behavior contained in a given DAP, global ratings are the most reliable, and therefore the most useful aspect of the DAP. The other signs on the DAP, such as structural and content variables have reliabilities that are probably too low for making reasonably reliable clinical judgments (p. 40).

The method of scoring HFD's used in the present study is essentially a global method. These results would therefore question even the reliability and validity of global means of assessing HFD's.

The influence of child-rearing practices on classroom adjustment was found to differ according to the sex of the child. Girls' perception of mothers ($r = .46, p < .01$), and
of fathers (r = .31, p < .05), as L-R were significantly related to teacher ratings of their classroom behavior. Boys' perceptions of parents as L-R were not related (r = .15, r = .13). Teachers generally regard boys as more problematic than girls and did so in the present study. However, the boys' aberrant behavior was not related to their perception of parents as L-R; i.e., those boys who perceived their parents as more rejecting did not act out more in the classroom. Girls were not regarded as the behavior problem boys were. However, those girls who were more of a problem, as rated by teachers, perceived their parents as more rejecting, and those whom teachers regarded as more well-behaved perceived their parents as more loving. From these results, child-rearing practices have more influence on the observable classroom behavior of girls than on that of boys.

These results differ slightly from those of Cox (1970). Cox compared teacher ratings and perception of parents as L-R, and reported,

The data in this study strongly support the observation that father's affectional behavior has more influence than the mother's affectional behavior on the child's behavior, provided the measures of parental affectional behavior are based on the child's perception of those parental behaviors (p. 446).

The present study found a significant difference in the influence of perception of parents as L-R on behavior only according to the sex of the child. No significant difference
existed between the influence of fathers' as opposed to mothers' affectional patterns on classroom behavior. The types of behavior observations obtained from teachers in the present study, and the methods used in obtaining them, differ somewhat from those of Cox. Possibly, therefore, the results of the studies are not directly comparable.

Possibly these findings result from the differential expectancies accorded to girls and boys. Girls are encouraged to become more susceptible to parental attitudes and controls. Boys are encouraged, or at least possibly not reprimanded as severely for, expressing themselves openly. Boys would therefore be more apt to act out in the classroom, regardless of child-rearing practices, due to peer pressures and adult (teacher) expectancies. Girls, operating under "sugar and spice" types of expectancies, might tend to act out only if they were perceiving parental rejection at home.

The relationship of child-rearing practices to HFD's was limited in scope and differed by sex. Findings indicated that the relationship of EI's on HFD's to perception of parents L-R was significant only for boys' perception of mothers \( r = .35, \ p < .05 \). Boys' perceptions of fathers as L-R \( r = .15 \), and girls' perceptions of either parent \( r = .05, \ r = .15 \), failed to relate to EI's on HFD's. Boys who perceived their mothers as more rejecting exhibited more EI's, and those who perceived their mothers as more loving included fewer EI's. EI's on HFD's may be considered
manifestations of repressed anxieties. These repressed anxieties are in turn considered results of perceived rejection. The influence of mothers' attitudes on their sons' manifestations of repressed anxieties (mothers:sons) was found greater than any other combination (i.e., mothers:daughters, fathers:sons, fathers:daughters). HFD's, then, should be considered more indicative of repressed conflicts when used with boys than when used with girls.

In conclusion, this study could perhaps be improved by focusing on individual item (and factor) analysis, rather than by relying solely on item totals. Obtained HFD data could be further examined to determine if specific EI's or combinations of EI's were more related to BRS and L-R variables than was the combined EI score. The BRS might be further examined for the presence and interactive influence of "behavior patterns" involving combinations of BRS items. These patterns might then be compared with L-R and HFD totals and patterns. Koppitz evaluated HFD's by choosing particular groups of children with special problems. She evaluated the HFD's of groups of children who were stealing (1966a), shy (1966b), aggressive (1966b), brain-injured (1966a), special class members (1966c), and exhibiting emotional problems (1966a). Specific clusters of EI's were found related to each of these groups. Possibly the present sample could comprise a "normal" group with varying behavior patterns as determined above.
The present study represents, then, possibly only a limited evaluation of the variables examined based on item totals. Obtained results, therefore, while considered accurate and of value, may in fact compose an incomplete and slightly misleading interactive picture. Exploration of the suggestions entailed above would perhaps yield more information and a more complete means of interpreting the complex interactions under study.
APPENDIX

BEHAVIOR RATING SCALE
(Devised by Harold F. Burks, Ph.D.)

Name of Child_________________________ Age____ Grade____
Teacher_____________________________ School________________
Date_______________________________

Please rate each and every statement by putting an X in the appropriate square after the statement. The squares are numbered from 1 to 5 and represent the degree to which you have noticed the described behavior. The bases for making a judgment are given below:

(1) You have not noticed this behavior at all.
(2) You have noticed the behavior to a slight degree.
(3) You have noticed the behavior to a considerable degree.
(4) You have noticed the behavior to an uncomfortable (large) degree.
(5) You have noticed the behavior to a very large degree.

Rating Scale

1. Seemingly not affected by extremes of heat or cold . . . . . . .
2. Poor coordination in large muscle activities (games, etc.) . . .
3. Confusion in spelling and writing (jumbled) . . . . .
4. Inclined to become confused in number processes: gives illogical responses . . . .
5. Reading is poor . . . . . . . . . .
6. Hyperactive and restless . . . . .
7. Behavior goes in cycles . . . . .
8. Quality of work may vary from day to day . . . . . . . . . .
9. Daydreaming alternating with hyperactivity
10. Excessively meticulous, exacting, formalistic or pedantic
11. Erratic, flighty or scattered behavior
12. Lacks a variety of responses, repeats himself in many situations
13. Easily distracted, lacks continuity of effort and perseverance
14. Cries often and easily
15. Explosive and unpredictable behavior
16. Often more confused by punishment
17. Upset by changes in routine
18. Confused in following directions
19. Tends to be destructive, especially of the work of others
20. Demands much attention
21. Many evidences of stubborn uncooperative behavior
22. Often withdraws quickly from group activities, prefers to work by self
23. Cannot seem to control self (will speak out or jump out of seat, etc.)
24. Constant difficulty with other children and/or adults (apparently purposeless)
25. Shallow feeling for others
26. Seems generally unhappy
27. Confused and apprehensive about rightness of response: indecisive
28. Often tells bizarre stories
29. Classroom comments are often "off the track" or peculiar
30. Difficulty reasoning things out logically with others

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<thead>
<tr>
<th>Rating Scale</th>
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<td>(1)</td>
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### EMOTIONAL INDICATORS

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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Poor integration of parts</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Shading of face</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>Shading of body and/or limbs (Boys, 9; Girls, 8)</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>Shading of hands or neck</td>
<td>24</td>
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<tr>
<td>5</td>
<td>Gross asymmetry of limbs</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>Slanting figures</td>
<td>26</td>
</tr>
<tr>
<td>7</td>
<td>Tiny figure</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>Big figure (Boys &amp; Girls 8)</td>
<td>28</td>
</tr>
<tr>
<td>9</td>
<td>Transparencies</td>
<td>29</td>
</tr>
<tr>
<td>10</td>
<td>Tiny head</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>Crossed eyes</td>
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</tr>
<tr>
<td>12</td>
<td>Teeth</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Short arms</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Long arms</td>
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</tr>
<tr>
<td>15</td>
<td>Arms clinging to body</td>
<td></td>
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<tr>
<td>16</td>
<td>Big hands</td>
<td></td>
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<tr>
<td>17</td>
<td>Hands cut off</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Legs pressed together</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Genitals</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Monster or grotesque figures</td>
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REFERENCES


