THE EFFECT OF SEX OF RATER IN ADULT RATINGS OF CHILD BEHAVIOUR

by

DOREEN L. KILPATRICK

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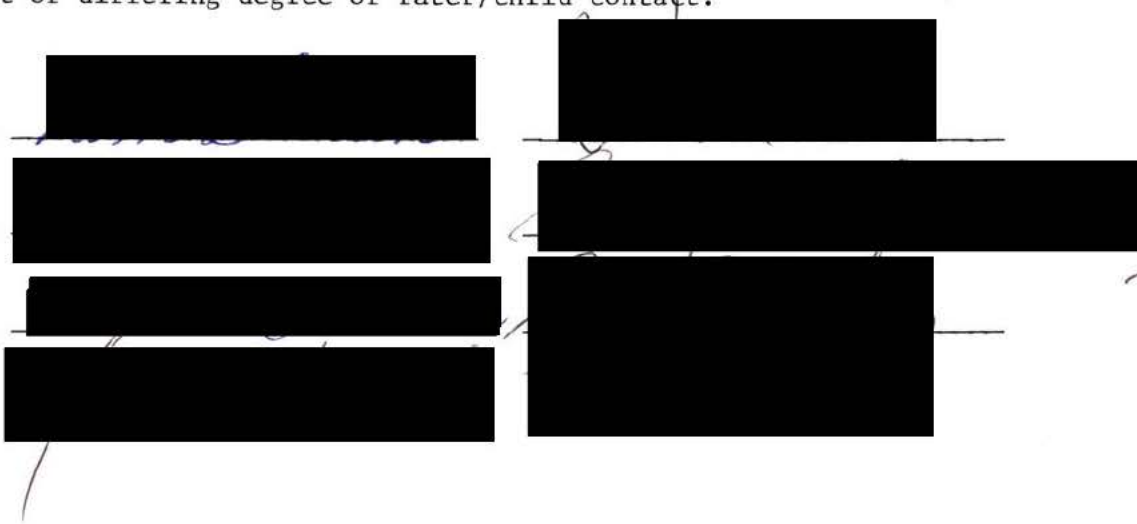
Research concerning the behaviour of children beyond the pre-school years has often relied on the use of rating scales as a means of assessing child behaviour.

In the present study, ratings by both parents of normal children, and ratings by both parents and child care workers, acting as "surrogate" parents, on maladjusted children, were analyzed. It was found that the degree to which ratings reflected favourable assessments was dependent on both the sex of rater and the sex of child. The degree of consensus obtained between male and female raters was dependent on the sex and the diagnosis of the child (normal or maladjusted).

There was a difference in rating style between male and female raters, with female raters demonstrating more frequent use of the extreme rating categories than males.

These results were discussed and interpreted in terms of a common frame of reference (sex role training) for female raters, the tendency toward idiosyncratic or individualized responses for male raters, and the effect of differing degree of rater/child contact.



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In assessing the behaviour of children, behavioural observation in naturalistic settings is frequent with young children, but from the age that children become literate through adulthood, studies involving direct behavioural observation are rare. Information regarding the behaviour of children beyond the pre-school level is more likely to be obtained from experimental situations using deliberately restricted sets of eliciting conditions and behavioural measures, or from questionnaires and rating scales. Results obtained from either of these two methods are open to criticism, i. e. in experimental studies, the artificiality of the situation may affect the responses obtained so that they bear little resemblance to the way a child may perform in a more complex, naturalistic setting; rating scales, while they may involve observation of a child in his natural environment, are affected by problems of scale construction and rater biases. The purpose of the present study is to examine some of the problems inherent in the use of rating scales in assessing child behaviour, particularly in reference to the effect of sex of rater on the degree of consensus obtained in ratings, and the interaction between sex of rater and sex of child.

Subject Characteristics Affecting Ratings

Some subject characteristics which might reasonably be expected to influence ratings of the behaviour of children are age, sex, IQ and deviance.

Age of Child

Effects due to the age of child have received attention in reported studies with child rating scales. In a longitudinal study, spanning twenty years, decrease over age in the number of reported problems in both normal boys and normal girls, in general was found (MacFarlane, Allen, & Honzik, 1962). While those problems related to biological controls (soiling, diurnal and nocturnal enuresis) showed the most rapid decrease in incidence over the age span of 2 to 16-year-old children, three other problems (destructiveness, temper tantrums and over-activity) showed a predominantly decreasing incidence after the early pre-school years. Nail-biting was the one problem that showed an increasing incidence during the entire age period.

Some problems reported in normal children tended to reach a peak, and then subside (MacFarlane et al., 1962). Among these problems were insufficient appetite (highest incidence at 4, 5 and 6 years) and lying, which showed the same age peak, but as the authors point out, lying may be simply harder to detect in older children. Other problems showed two peak elevations of frequency, often at the pre-school level and again at pubescence; such were restless sleep, disturbing dreams, physical timidity, irritability and attention-demanding. Over-dependence, sombreness and jealousy were reported to peak at school entrance and at the beginning of adolescence.

In a large scale study of the problems occurring in children aged 6 to 12 years, Lapouse and Monk (1958) found that the greatest difference in reported incidence of problem behaviour occurred between the 248 younger and 234 older children surveyed, with the children aged 6 to 8 years showing the higher incidence of problems.

With children of a similar age range (5 to 13 years), Speer (1971) found no significant age effect in ratings on the Behavior Problem Checklist (Quay & Peterson, 1967) except on the factor of Social Delinquency, in which parents expressed greated concern for their teen-age children than for younger ones.

Sex of Child

Speer (1971), in analyzing parental ratings of clinic and nonclinic children on the Behavior Problem Checklist, found that boys, in general, received significantly higher symptom ratings than did girls on the factors of Conduct Disorder, Inadequacy, and Social Delinquency.

Using abbreviated versions of the MacFarlane scales, with normal 5 to 12 year old children, Ryle, Pond, and Hamilton (1965) analyzed their data according to sex of child. Significant differences between boys and girls were found on four scales, Appetite, Destructiveness, Timidity, and Shyness. The percentage distribution of the sample on each scale item showed that girls exceeded boys only on the Timidity Scale. Boys in this study appeared to be more destructive, to have heartier appetites and to be more uneasy in social situations than girls.

Maccoby and Jacklin (1974) in an extensive review of the studies published between 1966 and 1972 in which sex had been a variable, or in which psychological sex differences had been reported, state that some widely held beliefs about sex differences are unsupported by the accumulated evidence, e. g. that girls are more "social" or "suggestible" than boys, that girls have lower self-esteem, that girls lack achievement motivation, that boys are more "analytic". The following sex differences were found to be fairly well established in the research:

(a) girls have greater verbal ability than boys in early life, and from the adolescent years onward, although the sexes differ little from the pre-school period to adolescence in verbal ability.

(b) males excel in visual-spatial ability in adolescence and adulthood, though not in the childhood years.

(c) boys excel in mathematical ability, although the two sexes are similar in their early acquisition of quantitative concepts and mastery of arithmetic during the grade school years.

(d) males are more aggressive. The sex difference in aggressiveness has been observed in cross-cultural studies, across a wide age range, with boys demonstrating more physical and verbal aggression than girls.

It is not surprising that three of the four sex differences cited by Maccoby and Jacklin are derived from measures of intellectual ability, since, during the elementary school years, the data

available concentrate on those attributes that are relevant to success in school, with much less information available on social behaviour. Furthermore, three of the four indices of differential abilities between the two sexes do not apply to children between the ages of 6 to 12 years, the age group of interest in the present study. Such information that is available concerning differences between the sexes in other areas of social behaviour is ambiguous due both to ill-defined meaning of terms such as "dependency" or "nurturance", and to the specificity of the situation in which the trait was measured, e. g. boys may appear to be more active than girls in a social stiuation when other boys are present, and yet in other situations, the sexes may not differ in activity level; boys may appear to make more dominance attempts among same-sex playmates than do girls, but in experimental situations where the sexes are combined, the evidence is ambiguous on whether either six is more successful in influencing the behaviour of the other.

Observational and experimental studies have failed to confirm many of the alleged psychological differences between the two sexes, especially in children of school age. It is likely that, when adult raters do report such differences, other factors, such as sex stereotyping, may be affecting their perceptions.

IQ of Child

Recent work on children's sex-role attitudes reveals that IQ may be closely related to the development of these attitudes (Kohlberg & Zigler, 1967). The overall results suggest that brighter children

generally express more advanced sex-role attitudes in terms of the age trends found among average subjects. Results in this extensive study also seem consistent with the view that brighter children more readily learn and display the sex-role stereotypes that they are expected to have in the culture. This finding leads to the expectation that, in rating sex-typed behaviour, adults would tend to rate brighter children more favourably than duller children, since the brighter ones conform more closely to adult sex-role stereotyped expectancies. A corollary of this view would be that duller children, being comparatively slow in learning and displaying expected sex-role stereotypes, may be rated as showing more disturbed behaviour. In both cases, intelligence of the child is assumed to affect adult perception and rating of his behaviour.

MacFarlane et al. (1962) correlated mental test scores (California Preschool Scales; Stanford-Binet) of children ages 2 to 16 years with the total number of problems reported at each age for boys and girls separately. Correlations were, for the most part, negative, indicating that the children earning high mental test scores have fewer problems. Although the trend for boys was clearer than that for girls, MacFarlane et al. conclude that a negative relationship exists between the number of behaviour difficulties and mental test scores after 3 years of age in both boys and girls.

Quay, Sprague, Shulman, and Miller (1966) report results that conflict with the above finding. With a sample of children referred to a child guidance clinic (mean age of 10.5 years) lower IQ was found to correlate significantly with ratings of conduct problems, but only for teachers' ratings. Averaged overall ratings, including those by parents, lower IQ showed no significant correlation with ratings of conduct disorder, nor with ratings on other dimensions of the Behavior Problem Checklist.

It should be noted that Quay's sample differs from the others mentioned above (Kohlberg & Zigler, 1967; MacFarlane et al., 1962) in that the children in the study had been selected from child guidance clinic referrals, while the children in the other two studies were "normal" children. It may be that, when children are seen as "problems" by their parents for one reason or another, the measured intelligence of the child does not have much bearing on the reported incidence of problem behaviour. For teachers, children of lower intelligence may well seem to present more conduct problems in the classroom learning situation.

Deviance of Child

Whether a child is considered to be "normal" or whether he is labelled as "deviant" in some way (e.g. "emotionally disturbed", "delinquent") may have an effect on the degree of consensus obtained from adult ratings. Parents of maladjusted children have been reported to demonstrate less agreement in rating their children than

parents who rate normal children. Duncan (1971), in a study investigating parental attitudes and interactions of parents with two types of delinquent and normal girls, found significantly less agreement in parents of the delinquent girls. Dreger, Lewis, Rich, Miller, Reid, Overlade, Taffel, and Flemming (1964), in a study involving parental ratings of normal and behaviour disorder/disturbed children, noted gross family instability in the background of the disturbed group of children. Speer (1971) gathered ratings of children by mothers and fathers of non-clinic and clinic children, using the Behavior Problem Checklist; a factor analysis of the obtained data showed greater interscale correlations among the ratings of non-patients than among parental ratings of children who were clinic patients. Sarason, Davidson, Lighthall, Waite, and Ruebush (1960) hypothesized that "low anxious" children would be rated more favourably by their parents than would "high anxious" children. The findings in this study demonstrated that fathers of the low anxious children rated them more favourably on a 16 item scale, but mothers of high and low anxious children rated them equally favourably. For all the children, mothers did not differentiate significantly between high anxious and low anxious children, either generally or in terms of individual items; differences were seen by fathers only, even though significant differences between the two groups of children were obtained by direct classroom observation, an experimental learning task, and other measures.

Scale Characteristics Affecting Ratings

The use and misuse of rating scales has been a source of dispute among psychologists, on the grounds that such scales reflect numerous biases on the part of raters (Digman, 1965) or that they demonstrate low reliability and uncertain validity (Taylor, 1968).

Guilford (1954) states that "the use of ratings rests on the assumption that the human observer is a good instrument of quantitative observation, that he is capable of some precision and some degree of objectivity. His ratings are taken to mean something accurate about certain aspects of the subject rated" (p. 278). However, certain characteristics of rating scales and biases of raters tend to impair the accuracy of the assessments obtained. Cronbach (1970) categorizes the major sources of error in ratings as follows:

1) ambiguity in traits or behaviours to be rated--items may have a personal meaning for each observer/rater.

2) ambiguity in response alternatives--specific definitions of behaviour are needed.

3) judgmental errors, such as generosity, individual peculiarities of response (tendency to extremes or "middle-of-the-raod" responses), limited information of raters (sample of behaviour is limited) and "halo" effect.

In recent years, rating scales designed for the purpose of assessing personality and/or behaviour problems in children have shown increased sophistication in their design. Items are more

likely to be written in behavioural terms, descriptive, in the most part, of observable behaviours that require little higher order inference on the part of raters (Kohn & Rosman, 1972; Nihara, Foster, Shellhaas, & Leland, 1971; Peterson, 1961; Ross, Lacey, & Parton, 1965; Spivak & Levine, 1964; Wirt & Broen, 1968) rather than relying on more global trait ratings (e. g. Clidewell, 1961; Patterson, 1964; Walder, Abelson, Eron, Banta, & Laulicht, 1961).

Rater Characteristics Affecting Ratings

Some rater characteristics which might reasonably be expected to influence ratings of the behaviour of children are sex of rater, role of rater in relationship to the child, cross-sex socialization practices and sex-typing.

Sex of Rater

It has been suggested that the difference between the sexes in response to rating scales may be due to sex differences in the strength of particular rating response sets, i. e. the tendency to check extremes or to give cautious responses (Mischel, 1970). Osgood, Suci, and Tannenbaum (1957) state that extreme judgments are characteristic of "more emotionally oriented" individuals such as women are supposed to be. In an experiment designed to determine sex differences in inferring personality traits (Shapiro & Tagiuri, 1959), the results supported the view that women, as a group, are more inclined than men to make positive or negative inferences of an extreme type, and that women are more ready than men to come to definite conclusions from information available about a person.

Role of Rater

Goldfried and Kent (1972) state that a person's behavioural repertoire is determined primarily by earlier learning experiences, and whether or not he performs this way depends on certain situational factors which elicit and/or reinforce the response. The observation that the variance in composite measures of adjustment is contributed by the different rating vantage points of teachers, parents, clinicians, etc. and by differing aspects of total behaviour exhibited by the child in each of these role relationships (Becker, 1960a) is congruent with this point of view.

Teachers and other professionals. Although in reviewing the literature on rating scales many more scales designed exclusively for use by teachers may be found than scales constructed with parents in mind (e. g. Emmerich, 1966; Kohn & Rosman, 1973; Ross et al., 1965; Rutter, 1967; Wiggins & Winder, 1961), ratings by teachers do not generalize to ratings of children by parents, who see the children in different situations and who may have expectations for child behaviour that differ from those of teachers (Cassel, 1964; Quay, Sprague, Shulman, & Miller, 1966). The limitations of situational context in the classroom, while providing a more homogeneous, structured situation for the observation of child behaviour, tend to give a less comprehensive picture of child behaviour and adjustment. Thus, Kohn and Rosman (1972) found that therapeutic and hospital staff rated their child patients as less deviant than did teachers

of children who were supposedly functioning at a better level. Quay (1966), employing the Behavior Problem Checklist, found that ratings by child care workers on institutionalized pre-adolescent boys correlated .38, .20, and .30 (for the three major factors, respectively) with ratings by teachers.

Parents as raters. It may be argued that only by living with a child does one get to experience the full range of his behaviour across many different situations. However, the degree of parental agreement in rating children, as reported in various studies, is generally low, ranging from around 25% to 45%. Dreger et al. (1964), in a large scale study involving child clinic parents and parents of control children, found 36% agreement in mother/father ratings. The identical percentage of agreement is reported by Rosenfeld and Novick (1964), using a scale of their own devising. Cassel (1964) reports .67 agreement with parents' ratings of primary school age children. Becker (1960) found ratings of kindergarten children by their parents to correlate .52 on the average. Sarason et al. (1960), in a study of anxiety in elementary school children, report "low parental agreement". Quay, Sprague, Shulman, and Miller (1966), in a factor analytic study of the Behavior Problem Checklist (parental ratings of children referred to a child guidance clinic) report coefficients of .78 on the Conduct Disorder factor and .67 on the Personality Disorder factor, suggesting that parents reach a greater degree of consensus in rating conduct rather than personality problems.

Eron, Banta, Valder, and Laulicht (1961), interviewing both mothers and fathers by means of a questionnaire, found that correlations on sociological variables (such as residential mobility) were in the .91 range, indicating that parents are capable of rendering reliable information, but, overall, only 10 out of 22 correlations of variables were significantly better than zero. The lower correlations were for those variables having to do with the child's behaviour, or with the parents' interactions with the child.

Cross-sex Socialization Practices

The reasons underlying the low agreement between parents' ratings of their own children remain unexplained. One possibility may be that mothers and fathers differ in the way in which they act toward their children, depending on the sex of the child, i. e. socialization of boys and girls may differ according to the sex of the socializing agent. In reviewing observational studies, or those studies employing parent interviews, it is difficult to assess such cross-sex effects because of the many various approaches to the problem, and the lack of replication studies. Many studies are restricted to parents of pre-school children (e. g. Sears, Rau, & Alpert, 1965), although one longitudinal study currently in progress has produced data on children up to the age of 7 years (Newson & Newson, 1968). Others have gathered information from one parent only, usually the mother. Tasch (1952) interviewed fathers only. Osoksy and Oldfield (1971)

observed the interactions of both parents but with female children only. In fact, few studies can be found that include mothers, fathers and children of both sexes. The findings from the studies reviewed are summarized below.

Studies in which both parents treat the child of one sex differently. Baumrind (1971) found that both parents tend to use firmer enforcement with boys than with girls at age 3 to 4 years. More "chaperonage" of girls, aged 7 years, by both parents is reported by Newson and Newson (1968). Lambert, Yackley, and Hein (1971) state that both parents tend to withhold comfort more frequently from a male child, and also react more harshly to show of temper in a boy. Sons receive more positive and more negative feedback from both parents (Bee, 1969).

Studies in which both parents tend to treat children of either sex in the same way. In the area of restrictiveness, Newson and Newson (1968) found that parents do not differ in restricting the movements both inside and outside the house for either boys or girls, at age 4 years. Similarly, at age 7 years, no difference was found in independence granting to boys and girls by either parent. Sears et al. (1965), in a reversal of earlier findings (Sears et al., 1957) state that, with pre-schoolers, parents do not differ in their permissiveness of the child's expression of aggression toward parents, or in the punishment for such behaviour. Whether the child is a girl or a boy, these parents also stated that they did not press sons more than daughters to retaliate aggressively to other childrens' aggressive acts.

Studies in which cross-sex effects were found. Mothers were found to be more tolerant of both aggressive and dependent behaviours in sons than in daughters, while fathers were more tolerant of these behaviours in daughters (Rothbart & Maccoby, 1966). This finding, for aggression only, was replicated by Lambert et al. (1971). In an interview situation, mothers of boys said that they were more tolerant of "resistive" behaviour than did mothers of girls (Baumrind & Black, 1967).

In some cases in which cross-sex effects are reported, the evidence supports the view stated by Bronfenbrenner (1960) that it is the father who is especially likely to treat children of the two sexes differently. Block (1972) reports that fathers of 3-year-old boys are less likely than fathers of girls to permit their child to show anger, while no difference between the sexes was reported for mothers. Also, fathers in this study, felt it to be more important to give comfort to a daughter than to a son, while mothers again did not differentiate between the sexes. Fathers, in an experimental study, reacted positively toward their daughters' increased dependency (defined as seeking for parental help) while mothers did not, but due to the absence of boys in this study, no cross-sex inferences re male children can be made (Osofsky & Oldfield, 1971). Emmerich (1962) found mothers to be more nurturant and less restrictive than fathers toward children of both sexes.

When children are questioned about their perceptions of parents, the data appear to support the findings from studies of parental attitudes toward children. Both pre-adolescent boys and pre-adolescent girls report that they "prefer" the mother to the father, and find her friendlier and easier to get along with (Hawkes, Burchinal, & Gardiner, 1957; Kagan, 1956; Simpson, 1935). Girls, more often than boys (in the seventh grade), report both parents to be affectionate, and less often than boys, report parents to be rejecting, hostile and ignoring (Droppleman & Schaefer, 1964).

The evidence cited is sparse and does little to clarify the issue of cross-sex socialization practices, except in isolated, and usually unreplicated, instances. However, parents do not appear to treat the sexes consistently differently to an extent that would account for the low agreement obtained from parents' ratings of child behaviour. Nor is there convincing evidence of different eliciting qualities in boys and girls, beyond the findings that boys are somewhat more resistant, at 2 years of age, than girls to parental demands (Minton, Kagan, & Levine, 1971) and that boys of 3 and 4 years of age do not comply as readily as girls to teachers (who are presumably female) (Serbin, O'Leary, Kent, & Tonick, 1973). The instances in which sex differences are confirmed when ratings by parents, teachers or other observers are used, even when such differences are not confirmed in direct observations of behaviour, suggest that the observers must be biased to some extent.

Sex-typing

The different expectations that male and female raters hold concerning the kind of behaviour expected from the two sexes may have an influence on raters' judgments.

Sex-typing may be defined from two points of view: 1) the process by which social pressures are brought to bear on the individual to make him or her conform to the social definitions of appropriate behaviour for his or her sex (the application of sex role standards), and 2) the individual's adoption of interests and behaviours related to the role that his or her sex would normally play in the society in which the individual is growing up (manifestation of sex role stereotypic behaviour).

Parents decide, as a result of their own socialization experiences within culturally accepted norms, which behaviours are sex appropriate, and these norms may differ for men and women (Mischel, 1970). When asked to describe sex role characteristics, adults state that males are expected to be "independent, sturdy, assertive, aggressive, impulsive, active, inquisitive, confident and alert", while females should be "affectionate, passive, cuddly, coy, co-operative, delicate, receptive and shy" (Maccoby, 1966). Goodenough (1957) found that not only did fathers react strongly to any indication of "femininity" in their sons, fathers, more than mothers, were interested in promoting "femininity" in their daughters, and described their young daughters in terms that, in part, may be descriptive of child behaviour, but

also reflect the fathers' perceptions of the female sex-role (e. g. "she cuddles and flatters in subtle ways", "a bit of a flirt, arch and playful with people", "a pretended coyness", "she's going to be sexy" (Goodenough, 1957, p. 310).

Most of the evidence in regard to the child's adoption of interests and behaviours appropriate to sex-role stereotypes has come from studies involving choice of toys. Presented with pictures illustrating sex-typed toys, objects, and activities, most 3, 4, and 5-year-olds prefer those commonly judged appropriate for their own sex (Brown, 1964; Fauls & Smith, 1956). Hartrup and Moore (1963) found that boys were more likely to avoid the sex-inappropriate toys than were girls, and this effect was especially marked when the experimenter was present, suggesting that there may be more pressure exerted by parents toward boys for sex-appropriate choices. Parents' concern with this aspect of child behaviour is exemplified in two studies (Fling & Manosevitz, 1972; Lansky, 1967) with parents of pre-school children, that found more social pressure against sex-inappropriate choices of toys and activities directed at boys than at girls. In the Lansky study, fathers, in particular, reacted negatively when a boy chose "girlish" activities.

Lambert et al. (1971), working with French-Canadian and English-Canadian parents, asked parents, directly, to rate both their perceptions and expectations of child behaviour. Two rating scales were used: the Perception Scale (40 items) asked the parents to

indicate whether a boy or a girl would be more likely to engage in the behaviour described, or whether neither would be more likely; the Expectation Scale (a five point rating scale) required parents to indicate how important it was for a child of each sex to have each behavioural characteristic. The parents in this study thought that the behaviour of boys and girls was different on many items, but their expectations of how boys and girls should behave were similar. The suggestion here is that parents may have similar goals in mind in socializing boys and girls (e. g. they would like either sex to be co-operative, helpful, to use reasoning rather than physical aggression, to be considerate of others, etc.), but they believe that they are dealing with different assets and liabilities in each sex. Some differences related to sex of child and sex of parent were also found, i. e. parents of boys thought sex-role differences in behaviour should exist (expectation) more than parents of girls; both mothers and fathers agreed on this point. No difference was found between boys' and girls' parents' perceptions of sex role differences in behaviour, but fathers in the French-Canadian sample perceived more sex-role differences than did French-Canadian mothers.

Rothbart and Maccoby (1966) had parents listen to taped statements of a 4-year-old child, described to one part of the sample as male, and to the remainder as female. Parents were asked to respond to the child's statements, and responses were coded on scales including permissiveness of aggression and dependency. The results from this

study demonstrated that parents are less tolerant of behaviour of same sex children; fathers allowed both more aggression and more dependency from girls than from boys, and mothers allowed more of both from boys. Lambert et al. (1971), using the same measures, found that fathers were more tolerant of insolence from daughters, mothers from sons.

Meyer and Sobieszek (1972) showed videotapes of two 17-month-old children to 85 adult middle-class subjects who then rated attributes of the children on questionnaires containing sex-role items. Each child was sometimes described as a boy and sometimes as a girl. Female subjects, especially those reporting high contact with children (i. e. mothers) described children as lower on characteristics of their described sex. Female raters, particularly mothers, showed less inclination to sex-typing in rating of children than did male raters in general. Subjects also showed a significant tendency to describe a child of their own sex as having more qualities that were non-sex-linked. This finding suggests that adults are able to define and respond more meaningfully to the behaviour of same sex children. The authors conclude that this finding may account for the earlier findings of Rothbart and Maccoby (1966). They also state that females seem to have more complete "frames of reference" to both male and female children. By this statement the authors mean that females are able to transcend traditional sex-role stereotypes in their ratings of both male and female children.

These findings could also be interpreted to mean that mothers and fathers, having incorporated appropriate sex-role standards, are more apt to notice and discourage inappropriate behaviour in a child of their own sex, that is, if the behaviour runs counter to the rater's stereotype. Although it has not been subject to research, it is also possible that parents may feel more "challenge" from a child of the same sex, and this could account, in part, for the differential parental response to aggression from boys and girls.

The statement that female raters, particularly mothers, are less influenced by sex-stereotypes in their ratings of child behaviour deserves some comment. An explanation might be found in the common-sense observation that mothers spend more time in the company of children than fathers do, and have more opportunity to observe a wide range of behaviours in both sexes. On this basis, mothers should be able to judge child behaviour from a broader based experience and would rely less on sex stereotyping than would fathers.

Summary and Implications for Present Study

A review of the literature has indicated that subject variables have an effect on adult ratings of child behaviour, although, due to the lack of homogeneity of sampling procedures and methods of measurement in various studies, the significance of variables such as age, sex, and intelligence is by no means clear. Thus Lapouse and Monk (1958) report a higher incidence of problem behaviours, according to mothers' ratings, in children aged 6 to 8 years than in

children aged 9 to 12 years, while other studies (MacFarlane et al., 1962; Ryle et al., 1965; Speer, 1971) have found few significant age trends in children between the ages of 6 to 12 years, the age range of interest in the present study. Boys and girls, within this age range, have not been found to show evidence of psychological sex differences in recent experimental and observational studies, other than in the expression of aggression, where boys have been seen, from an early age, as exhibiting more physical and verbal aggression than girls (Maccoby & Jacklin, 1974). However, studies employing rating scales have found significant trends for boys to receive higher problem ratings in general than girls (Ryle et al., 1965; Speer, 1971). The evidence for the effect of intelligence of the child on adult ratings of his behaviour suggests that brighter children may receive more favourable ratings than duller ones (Kohlbert & Zigler, 1967; MacFarlane et al., 1962) although one study found that this was true only when teachers were the raters (Quay, Sprague, Shulman, & Miller, 1966).

In the present study, no specific hypotheses were developed relative to the age of the child being rated, but in order to provide a check on possible age effects, the data were analyzed within age groupings. Sex of child was considered to be an important variable in a study employing ratings across many aspects of child behaviour, therefore the ratings obtained were analyzed separately for boys and

girls. Possible effects of intelligence of child were controlled by including in the samples only those children whose IQ, on an individually administered intelligence test, fell within the average range.

Ambiguity surrounding the items in rating scales that rely on ratings of personality traits has been cited as one of the major sources of error (Cronbach, 1970). Descriptive phrases such as "he is aggressive", "he is overly dependent", or "he is friendly" may have different connotations for raters, especially since these phrases are not situation-specific. Response alternatives that permit raters to indicate only the presence or absence of a trait further increase the unreliability of rating scales. In order to minimize these sources of error, the rating scales used in the present study consisted, for the most part, of items that were descriptive of behaviour rather than of personality traits. Frequency of the behaviour was rated on a five point continuum on one scale, and a three point continuum on the other.

The primary concern of the present study was to investigate the effects of sex of raters and sex of children upon inter-rater agreement on normal and maladjusted child behaviour. Sex of rater has been shown to have an effect when adults infer personality traits in other adults, with women, tending more than men, to make positive or negative inferences of an extreme type (Shapiro & Taguiri, 1959). In the present study, responses of adult male and female raters were analyzed separately to determine if this tendency for female raters to be more extreme in their judgments would be evident in adult ratings of both pro-social and negative child behaviours.

When parents rate their childrens' behaviour, there is, generally, a lower degree of consensus between their ratings than might be expected from two raters who presumably know the child intimately. When a child is labeled as "deviant" in some respect, the degree of parent consensus in ratings is reported to be even lower than that obtained from parents of "normal" children (Duncan, 1971; Speer, 1971). Experimental studies have demonstrated few significant differences in the way that parents actively socialize boys and girls (Maccoby & Jacklin, 1974) thus it may be hypothesized that the low agreement found in parents' ratings of child behaviour may be due to subtle biasing effects such as the different expectations and perceptions of child behaviour that male and female raters may bring to bear on their judgments.

In the present study, it was possible to compare ratings of male and female raters who rated normal and maladjusted children of both sexes. The findings in other research studies have suggested that both mothers and fathers are less tolerant of behaviour in same-sex children (Lambert et al., 1971; Rothbart & Maccoby, 1966) but that fathers, more frequently than mothers, are likely to assess childrens' behaviour on the basis of different standards they hold for behaviour of the two sexes (Lambert et al., 1971; Lansky, 1967; Meyer & Sobieszek, 1972). The inclusion, in the present study, of a sample of maladjusted children who were living in a residential treatment centre, allowed comparisons to be made between ratings of male and female child care workers (who were living with the children) as well as between mothers' and fathers' ratings of both normal and maladjusted children. Since the

differences between male and female parenting roles were modified and diminished considerably in the residential treatment centre of interest, with both sexes of child care workers being with the children throughout the day and evening, an opportunity was afforded to determine whether or not the increased amount of contact with the children, and the decreased role differentiation in interaction with them, had an effect on raters' biases.

Hypotheses

From the above discussion, the following hypotheses concerning the sex of rater and the sex of child are formulated:

Since adult males share the same sex role standards for child behaviour in general, and since these standards may differ from those held by female adults, the ratings by male pairs (M/M), or the ratings by female pairs (F/F) of child care workers should show higher agreement than ratings by male/female (M/F) pairs of raters.

Hypothesis 1a

In assessing the behaviour exhibited by maladjusted children, the correlation between ratings obtained from M/F pairs of raters on each of two instruments will be significantly less than the correlations obtained from either M/M or F/F pairs of raters.

In light of the finding that women are more likely to use the extreme categories in responding to rating scales, ratings by female raters should reflect this response tendency more than ratings by male raters.

Hypothesis 1b

In assessing the behaviour exhibited by normal children and the degree of maladjusted behaviour exhibited by maladjusted children, female raters will check the extreme categories in rating scales, on each of two instruments, more frequently than will male raters.

If adults are better able to define and recognize the behaviour of same sex children than of opposite sex children, and apply stricter standards to the evaluation of such behaviour in same sex children, male raters should be less stringent in their ratings of girls than of boys, and female raters should be less stringent in their ratings of boys than in their ratings of girls.

Hypothesis 2

In assessing the behaviour exhibited by maladjusted children, child care workers, rating children of the opposite sex to their own, will produce significantly higher mean ratings on scales scored for positive attributes and significantly lower mean ratings on scales scored for negative attributes than they will in rating children of the same sex.

If females are less stereotyped in their ratings of both boys and girls, the difference between ratings of boys and girls by female raters should be less than the difference between ratings of boys and girls by male raters.

Hypothesis 2a

In assessing the behaviour of maladjusted children, the difference between mean ratings of boys and girls, on each of two instruments, by female child care workers will be significantly less than the difference between mean ratings of boys and girls by male child care workers.

The following hypotheses are formulated concerning parents' ratings of normal children:

Hypothesis 3

In Assessing behaviour, significantly higher mean ratings on scales scored for positive attributes and lower mean ratings on scales scored for negative attributes, for both boys and girls, will be obtained from mothers' rather than from fathers' ratings.

Hypothesis 3a

When mothers are the raters, there will be no significant differences between the means obtained from ratings of male children and the means obtained from ratings of female children on each of two instruments.

Hypothesis 3b

When fathers are the raters, there will be a significant difference between the means obtained from ratings of male children and the means obtained from ratings of female children, on each of two instruments, with the ratings of girls being higher on scales scored for positive attributes and lower on scales scored for negative attributes.

The following hypotheses are formulated concerning the comparison of parents' ratings of normal children with parents' ratings of children who are labeled as maladjusted or "emotionally disturbed" on the basis that they are undergoing treatment in a residential treatment centre:

Hypothesis 4

Parents who rate normal children will give significantly higher mean ratings on scales scored for positive attributes and significantly lower mean ratings on scales scored for negative attributes than will parents who rate maladjusted children.

Hypothesis 4a

In comparing the ratings obtained from parents of normal children with those obtained from parents of maladjusted children, the correlation of obtained ratings from mothers and fathers of maladjusted children will be lower than the correlation of ratings obtained from mothers and fathers of normal children.

Hypothesis 4b

The difference between the means obtained from fathers' ratings of normal and maladjusted children will be greater than the difference between the means obtained from mothers' ratings of normal and maladjusted children.

METHOD

Two rating scales were employed in this study:

a) The Child Behaviour Rating Scale (CBRS) (Duncan & Kilpatrick, c. 1975, unpublished)

b) The Behavior Problem Checklist (BPC) (Quay & Peterson, 1967)

Subjects

The unit of analysis in the present study was ratings.

A total of 502 ratings (251 pairs) on the CBRS were gathered from parents, foster or surrogate parents of emotionally disturbed and normal boys and girls. In addition, a total of 372 ratings (186 pairs) were gathered from male and female child care workers who were currently working with emotionally disturbed children in a residential treatment. The sub-division of the sample by sex of child was as follows:

Parents' ratings of normal children	105 boys	105 girls
Parents' ratings of maladjusted children	28 boys	13 girls
Child care workers' ratings	114 boys	72 girls

A total of 156 ratings (78 pairs) on the BPC were gathered from parents of normal boys and girls, and a total of 240 ratings (120 pairs) on maladjusted boys and girls were gathered from male and female child care workers. The sub-division of the sample by sex of child was as follows:

Parents' ratings of normal children	37 boys	41 girls
Child care workers' ratings	75 boys	45 girls

Normal Group

Victoria sample. Rating scales were mailed to the parents of 500 children, randomly selected within specific age groups from the class lists of schools in the Greater Victoria School district, together with a letter requesting the co-operation of both parents in completing the rating scales (Appendix A). No record of the percentage of return was kept for this sample.

Duncan sample. The Superintendent of Schools in the Duncan area agreed to select two schools in Duncan for the purposes of the study, one school in a lower socio-economic area, the other more representative of the middle-class area. The principals of the two schools sent a letter home with each child in their schools describing the research project to the parents and requesting their co-operation (Appendix A).

On the days that parents came to the schools for interviews with the teachers (and to pick up the childrens' report cards), all parents, including those not suitable for the normal sample, were given rating scales. If the parents had more than one child in school, they were given two rating scales, unless they requested additional forms for all their children. The research project was explained to each parent, in the same way expressed in the letters sent by the schools, and the rating scales enclosed in a stamped, addressed envelope, together with a letter repeating the instructions and requesting that the completed forms be returned to the University of Victoria (Appendix A).

BPC forms were included in every third envelope given out until fifty BPC's had been distributed, then twenty BPC's in normal serial order, followed by fifty in every third envelope. The procedure was repeated until 120 pairs of BPC's had been distributed.

Volunteers from the University of Victoria distributed the rating scales, following a training session in which they were instructed in the procedure that they would follow, and given familiarization with the research project. The volunteers handled different grades within the schools, thus ensuring a representative age sampling of ratees. Careful notes were kept of all refusals by parents to accept the rating scales, and special characteristics of raters and ratees that might affect the sample were noted. The ratings received from those parents who demonstrated little knowledge of the English language, who were native Indians or East Indians, or whose children were enrolled in special classes were not used in the research study. Also, ratings from single parents were not included in the present study.

It was expected that not all parents would return the completed rating scales, therefore three representative grades were selected (e. g. grades 1, 4, and 7), and all non-responders whose children were in any of the classes included in those three grades were telephoned to determine the basis for non-response. There were very few refusals out of the two complete school populations, although 17 of the families contacted refused to complete the questionnaires on the basis of invasion of privacy. Most responses to the telephone

reminders were positive, with the parents claiming forgetfulness as the reason for the delay in responding. A number of families said that the forms had been destroyed in various household accidents, and these parents were sent additional forms. In a few cases, the father in the family refused to complete the questionnaires because of lack of time. Other parents delayed because of sickness in the family. In all, 363 families were contacted, 195 in one school and 168 in the other. Before the telephone calls were made, a 40% return had been received. Personal telephone calls to parents increased the return substantially, so that 61% returns were received from each of the school districts.

In addition, teachers' ratings were obtained on a number of dimensions for those children whose parents did respond, and those who did not, to determine if there were differential characteristics in each group of children (Appendix B). Teachers were not aware of which parents had or had not responded. Comparison of teachers' ratings on the children in the two groups revealed no significant differences in the behaviour problems, school problems or general adjustment of children whose parents were responders or non-responders (Table 1).

It was considered that the Duncan sample was a representative normal sample, although the Victoria sample, because personal contact was not made with the parents, was not as representative.

A normative study of the school population of the Greater Victoria district has shown the average IQ of children in the area to be 110 (Spreen & Gaddes, 1969). An additional check on the IQ of children in

Table 1

Teachers' Mean Ratings of Children in Two Groups

Scales	Groups		
	Responders (R)	Non-Responders (NR)	t
		Boys[a]	
Behaviour Problems	1.21	1.45	-1.40
School Problems	12.00	12.52	- .47
Adjustment	42.50	39.69	1.17
		Girls[b]	
Behaviour Problems	1.30	1.10	1.48
School Problems	11.70	10.41	1.59
Adjustment	43.68	43.79	- .06
		Total Sample	
Behaviour Problems	1.26	1.27	- .13
School Problems	11.82	11.46	.53
Adjustment	43.20	41.74	1.00

[a] n = 34 (R) n = 29 (NR)

[b] n = 50 (R) n = 29 (NR)

* $p < .05$

in the present study who were from the Duncan area was made on a sub-sample of children. Using a short form of the WISC (Block Design and Vocabulary) and the multiple regression formula recommended by Silverstein (1967b) IQ estimates were obtained on 90 of the Duncan children. The mean IQ was estimated to be 107 for the total number of children, and comparison of the mean IQ's (t = 1.033) obtained on those children who were in the study with the mean IQ's of those who were not showed no significant difference between the two groups (Table 2).

Maladjusted Group

Maladjusted children in this study are defined as those children, between the ages of 6 and 13 years, whose intelligence (measured by administration of the short form WISC) falls within the dull normal through bright normal range, and who are either currently in a residential treatment centre, or who have been in such a centre for emotionally disturbed children within the past six months. The average IQ of the maladjusted children was 103; comparison of the mean IQ's of the children in the normal and maladjusted groups (t = 1.617) showed no significant difference between the groups.

Rating scales (CBRS) were given to 28 parents (mother/father pairs), foster parents or surrogate parents of emotionally disturbed boys, and 13 parents, foster parents or surrogate parents of emotionally disturbed girls. The definition of "parent" was not based on a biological relationship alone, but rather on the evidence that the child had been residing with the "parents" before coming into residential treatment, or,

Table 2

IQ Measures (WISC) on Normal and Maladjusted Children

	Normal Sample	n	M	SD
(i)	Total Subjects	90	106.62	12.03
	Boys	45	108.02	11.72
	Girls	45	105.17	12.31
(ii)	Subjects in Study	70	108.24	11.58
	Boys	35	110.37	10.56
	Girls	35	106.10	12.29
(iii)	Subjects not in Study	20	105.30	9.86
	Boys	10	106.60	8.37
	Girls	10	104.00	11.46
	Maladjusted Sample			
	Total Subjects	42	103.10	11.04
	Boys	32	103.59	11.42
	Girls	10	101.50	10.11

Note. The short form of the WISC (Silverstein, 1967) was used in both samples.

in the case of post-treatment assessment, the child had been in residence with the "parents" for at least three months after the termination of residential treatment. There were no refusals to complete the questionnaires from parents on a pre-admission basis, but some parents whose children had been released from the residential treatment centre refused to respond. In other cases, ratings were available from single parents only, and these ratings were not used in the study.

In addition, pairs of ratings (CBRS) on maladjusted children were gathered from child care workers employed in a residential treatment centre, 22 male and 24 female child care workers, with an average age of 27 years. Over all child care workers in the centre, the average length of experience with the children in the centre is 2.3 years. Pairs of ratings on the BPC were also included.

The child care worker ratings are divided into three categories: male/female pairs, male/male pairs, and female/female pairs. The sample is further divided by sex of child rated. Rating categories for the emotionally disturbed group are shown in Table 3.

Procedure

Following an extensive review of the rating scale literature, a number of rating scales designed for use with children were examined in detail. Some of the bases for eliminating scales from consideration in this study were as follows:

Table 3

Rating Categories in the Maladjusted Group

Type of rating	Sex of child	
	Male	Female
CBRS		
Parental Ratings		
mother/father	28	13
Child Care Worker Ratings		
male/female	38	24
male/male	38	24
female/female	38	24
BPC		
Child Care Worker Ratings		
male/female	25	15
male/male	25	15
female/female	25	15

Note. All ratings are shown as pairs of ratings. Actual number of rating scales completed will be double the number shown above.

a) insufficient information on test construction, reliability or validity

Personality Inventory for Children	Wirt & Broen, 1958
Child Behavior Rating Scale	Cassel, 1964
Devereux Child Behavior Rating Scales	Spivak & Levine, 1964
Adaptive Behavior Scales	Nihara, Foster, Shellhaas, & Leland, 1969
Missouri Children's Behavior Checklist	Sines, Pauker, Sines, & Owen, 1969

b) scales designed for use within a narrow age range

A Social Competence Scale	Kohn & Rosman, 1972

c) scales that were so complex in design that their use would be restricted to highly trained observers

Fels Child Behavior Rating Scales	Richards & Simons, 1941
Bristol Social Adjustment Guides	Stott, 1964

Other scales were eliminated from consideration because items were stated in global trait fashion, or items contained psychological "jargon" terms, or because the scales were designed for teacher use only.

The two scales selected (CBRS and BPC) represent differing approaches in scale format, i. e. types of items, length of scale, type of response required, method of scoring, thus providing a broader base for the examination of the hypotheses in this study. Both were designed specifically to rate behaviour. While the BPC covers a more limited range of behaviours than the CBRS, construct and concurrent validity have been established for the BPC in numerous research studies.

Child Behaviour Rating Scale

The CBRS consists of 146 items describing both normal and maladjusted behaviour in children 6 through 14 years (Appendix C). The items are presented in random order, but are designed to cover 16 areas in social and personal behaviour: security, self-concept, impulse control, appropriate activity, physical concern and body awareness, moral development, general interpersonal skills, relation to adults, school problems, eating problems, sleep problems, inappropriate attention-seeking, avoidance, outer aggression, passive or inner aggression, and pathology. There are four response categories, "almost always, frequently, occasionally, almost never", requiring the rater to check the appropriate column for each item. Items were designed so that optimal behaviour is represented as falling in one of the two extreme response categories. Items that are included in the first eight above-mentioned areas are scored in a positive direction, indicating "good adjustment", and those items that are included in the latter eight areas designated as "problem" areas, are scored in a negative direction, indicating "poor adjustment". Each response category is assigned a weight, either 5, 4, 2 or 1, depending on the direction of scoring. The 16 behavioural areas contained within the CBRS comprise 16 scales that describe child behaviour. There is no total score for the CBRS. The score for each of the 16 scales is the sum of the weighted numerical ratings on that scale.

Items. From an original pool of 302 items, two child psychologists selected the 146 items of the CBRS on the basis that these items were most representative descriptions of behaviour within the 16 scales, and were observable items requiring the minimum of interpretation on the part of the raters. This latter point is important, since, while it is possible to train child care workers and other professionals in the correct use of a rating scale, it is not always possible to ensure that parents receive similar training.

The items in the original pool of 302 were derived from two main sources. The pro-social scale items (scales 1 to 8) were developed as descriptions of normal child behaviour in the age range of 6 to 13 years, according to child development literature (Mussen, Conger, & Kagan, 1972), with the expectation that ratings of these items would vary with age of the child in the normal sample. The items in the "behaviour problem" scales (scales 9 to 16) were developed from statements in case histories, assessments, and observations of emotionally disturbed children, gathered from social workers, child care workers, psychologists, psychiatrists, and parents of emotionally disturbed children in residential treatment.

Reliability. The 16 scales of the CBRS demonstrate internal consistency estimated by the odd-even split method. Spearman-Brown correlation coefficients ranged from .531 to .904. The statistical procedures in development of the scale, including the results of a factor analysis, are described in The Child Behaviour Rating Scale Manual (Duncan & Kilpatrick, unpublished).

Intra-rater reliabilities, across ratings of 24 child care workers rating the same child twice, 10 days apart, are presented in Table 4.

Validity. Ratings obtained with the CBRS will be compared with ratings obtained on the same children with the BPC, in the present study, in order to provide some measure of validity for the CBRS.

More extensive validation of the CBRS will be explored in future studies.

The Behavior Problem Checklist

The BPC consists of 55 items describing relatively frequently occurring behaviour problems in children and adolescents (Quay & Peterson, 1967). The scale is comprised of three major factors: Conduct Disorder (psychopathy, unsocialized aggression); Personality Disorder (neuroticism, anxious-withdrawn); and Inadequacy-immaturity; an additional factor, Subcultural (socialized) Delinquency, was later added (Quay & Peterson, 1967). For the purposes of the present study, the remaining items of the BPC, described as "face-valid" items intended to serve as "flag" items for possible psychoticism (Quay & Peterson, 1967) have been analyzed in ratings of the maladjusted sample. While these items are not described as a factor by Peterson and Quay, for convenience in reporting they have been called Factor V, Pathology, in this study.

Items. The items of the BPC are presented in random order, with three response categories, "0, 1, and 2" representing ratings of "no problem, mild problem, or severe problem", respectively. The Manual for

Table 4

CBRS: Intra-Rater Reliabilities

Scale		Number of items	r
1	Security	9	.89
2	Self Concept	11	.86
3	Impulse Control	6	.94
4	Appropriate Activity	12	.89
5	Physical Concern - Body Awareness	10	.91
6	Moral Development	7	.89
7	General Interpersonal	17	.92
8	Relation to Adults	6	.88
9	School Problems	8	.81
10	Eating Problems	7	.73
11	Sleep Problems	11	.82
12	Inappropriate Attention Seeking	8	.92
13	Avoidance	9	.88
14	Outer Aggression	7	.97
15	Inner Aggression	6	.89
16	Pathology	16	.84

Note. On each scale, n = 24 raters.

the scale suggests that unit weights be assigned for each item checked with a "1" or "2", thus the maximum score for any factor is the number of items contained therein.

The original pool of items was gathered from a survey of referral problems in a child guidance clinic (Peterson, 1961). The 58 most commonly referred problems, by frequency count, were selected and given to 28 teachers of 831 children. Those items checked less than 3% of the time were dropped. The items are said to be "easily observable" and to refer to "overt behaviours" (Quay, 1964; Quay & Peterson, 1967).

Reliability. The Manual for the BPC presents average factor loadings for each item in the four dimensions, obtained from as many as 10 factor analyses. Average factor loadings range from .35 to .70 (Conduct Problem; .33 to .60 (Personality Problem); .31 to .46 (Inadequacy-immaturity); .23 to .68 (Socialized Delinquency).

Intra-rater reliabilities reported from various studies with the BPC are presented in Table 5.

Validity. The validity of the BPC has been established in research studies as reported in the Manual (Quay & Peterson, 1967).

Table 5

Intra-rater Reliabilities on the BPC

	Sample	Mean Age	Raters	r		
				I	II	III
Peterson, 1961	referrals to child guidance clinic	kindergarten	2 teachers	.77	.75	
Quay, 1964	instit. delinquent males	16.6	9 male staff	.57	.32	.93
Quay & Quay, 1965	7th & 8th grade children		2 teachers			
			7th grade	.58	.31	
			8th grade	.71	.22	
Quay, 1966	instit. pre-adol. delinquent boys	12.3	teachers/child care workers	.38	.20	.30
Quay, Sprague, Shulman, and Miller, 1966	referrals to child guidance clinic	10.5	mother/father	.78	.67	
			mother/teacher	.33	.41	
			father/teacher	.23	.32	

Factor I = Conduct Disorder Factor II = Personality Disorder Factor III = Inadequacy Immaturity

ANALYSES AND RESULTS

Hypothesis 1a

In assessing the behaviour exhibited by maladjusted children, the correlation between ratings obtained from male/female (M/F) pairs of raters on each of two instruments will be significantly less than the correlations obtained from either male/male (M/M) or female/female (F/F) pairs of raters.

Child Behaviour Rating Scale (CBRS)

Over a two year period, 372 ratings of boys and girls in a residential treatment centre were obtained from male and female child care workers. Two child care workers rated a child independently within a two-week period, and at no time was a rating used more than once. The rating scales were assigned to the child care workers so that 38 pairs each of M/F, M/M and F/F ratings were obtained on boys, and 24 pairs each of M/F, M/M and F/F ratings were obtained on girls.

Behaviour Problem Checklist (BPC)

In the same manner, 25 pairs each of M/F, M/M and F/F ratings on maladjusted boys and 15 pairs each of M/F, M/M and F/F ratings on maladjusted girls were obtained from child care workers rating the children on the BPC. At no time was a rating used more than once.

The following methods of analysis were applied to the data for both the CBRS and the BPC :

a) Correlation coefficients (Pearson *r*) were computed between M/F, M/M and F/F pairs of ratings, separately for boys and girls.

b) Transformation to Fisher *z* scores was performed on the obtained correlation coefficients.

c) The significance of the difference between two independent correlation coefficients was computed (Guilford, 1965, p. 190) between the M/F and M/M pairs, and the M/F and F/F pairs, for boys and girls. In all computations, the level of significance accepted was $p < .05$ (one-tailed test).

d) Means and standard deviations for male and female raters' ratings were calculated for each of the six samples.

Correlation Coefficients

CBRS : boys. The correlations of ratings by M/F, M/M and F/F pairs of child care workers rating maladjusted boys on the 16 scales of the CBRS are presented in Table 6. Ratings by male child care workers correlated significantly with ratings by female child care workers in 12 of the 16 scales. When male child care workers' ratings were paired, 12 of the 16 correlation coefficients were significant. When female child care workers' ratings were paired, 15 of the 16 correlation coefficients were significant.

Table 6

CBRS: Correlation of Ratings by M/F, M/M and F/F Pairs of CCWs Rating Boys

Scale	Group M/F	M/M	F/F
1	.312*	.425**	.431**
2	.107	.122	.293*
3	.509***	.447**	.687***
4	.222	.445**	.439**
5	.538***	.473***	.440**
6	.451**	.334*	.665***
7	.504***	.445**	.453**
8	.313*	.268*	.381**
9	.628***	.249	.328*
10	.324*	.227	.410**
11	.251	.331*	.395**
12	.464**	.437**	.551***
13	.560***	.505***	.672***
14	.586***	.436**	.822***
15	.226	.144	.679***
16	.326*	.270*	.181

Note. In each group, n = 28 pairs.

*$p < .05$
**$p < .01$
***$p < .001$

CBRS : girls. The correlations of ratings by M/F, M/M and F/F pairs of child care workers rating maladjusted girls on the 16 scales of the CBRS are presented in Table 7. Ratings by male child care workers correlated significantly with ratings by female child care workers in 11 of the 16 scales. When male child care workers' ratings were paired, 8 of the 16 correlation coefficients were significant. When female child care workers' ratings were paired, 15 of the 16 correlation coefficients were significant.

BPC : boys. The correlations of ratings by M/F, M/M and F/F pairs of child care workers rating maladjusted boys on five factors of the BPC are presented in Table 8. Ratings by male child care workers correlated significantly with ratings by female child care workers in each of the five factors. When male child care workers' ratings were paired, four of the five correlation coefficients were significant. When female child care workers' ratings were paired, four of the five correlation coefficients were significant.

BPC : girls. The correlations of ratings by M/F, M/M and F/F pairs of child care workers rating maladjusted girls on the five factors of the BPC are also presented in Table 8. Ratings by male child care workers correlated significantly with ratings by female child care workers in two of the five factors; Factor 4 showed a negative correlation between male and female ratings. When female child care workers' ratings were paired, each of the five correlation coefficients was

Table 7

CBRS: Correlation of Ratings by M/F, M/M and F/F Pairs of CCWs Rating Girls

Scale	Group M/F	M/M	F/F
1	.406*	.043	.740***
2	.497**	.079	.689***
3	.158	.327	.897***
4	.541**	.312	.635***
5	.388*	.502**	.606***
6	.631***	.651***	.889***
7	.297	.496**	.844***
8	.338*	.213	.733***
9	.459**	.056	.415*
10	.163	.631***	.611***
11	.459**	.579***	.805***
12	.333	.205	.434*
13	.586***	.540**	.785***
14	.590***	.298	.930***
15	.076	.189	.613***
16	.475**	.393*	.311

Note. In each group, n = 24 pairs.

*p < .05
**p < .01
***p < .001

Table 8

BPC: Correlation of Ratings by M/F, M/M and F/F Pairs of CCWs

Factor	Group M/F	M/M	F/F
	Boys[a]		
I	.531**	.728***	.560**
II	.579***	.638***	.669***
III	.558**	.703***	.764***
IV	.763***	.307	.628***
V	.570***	.681***	.362
	Girls[b]		
I	.594**	.345	.896***
II	.413	.082	.712***
III	.583**	.127	.643**
IV	-.264	.131	.645**
V	.338	.076	.641**

[a] $\underline{n}$ = 25 pairs in each group.

[b] $\underline{n}$ = 15 pairs in each group.

*$\underline{p}$ < .05
**$\underline{p}$ < .01
***$\underline{p}$ < .001

significant.

Transformations

CBRS . Fisher z transformations of the correlation coefficients obtained from M/F, M/M and F/F pairs of child care workers who rated maladjusted boys on the CBRS are presented in Table 9, and those for girls in Table 10.

BPC . Fisher z transformations obtained from M/F, M/M and F/F pairs of child care workers who rated maladjusted boys and girls on the BPC are presented in Table 11.

Significance of the Difference Between Correlations

CBRS : boys. The significance of the difference between correlations (z transformations) of M/F and M/M, M/F and F/F pairs of child care workers is presented in Table 9. Comparison of the mean correlations from M/F pairs of raters with those from M/M pairs showed no significant differences in the predicted direction between the two rating samples on the 16 scales of the CBRS. When mean correlations from M/F pairs of raters were compared with those from F/F pairs, 2 of the 16 scales showed a significant difference in the predicted direction, indicating more agreement between female pairs of raters than between male/female pairs.

CBRS : girls. The significance of the difference between correlations of M/F and M/M, M/F and F/F pairs of child care workers is presented in Table 10. Comparison of the mean correlations from M/F pairs of raters with those from M/M pairs showed a significant difference in the predicted

Table 9

CBRS: Significance of the Difference Between Correlations of M/F and M/M, M/F and F/F Pairs of CCWs Rating Boys

	Group			
Scale	M/F vs M/M	Direction	M/F vs F/F	Direction
1	- .531	MF<MM	- .581	MF<FF
2	- .046	MF<MM	- .791	MF<FF
3	.326	MF>MM	-1.192	MF<FF
4	-1.037	MF<MM	-1.037	MF<FF
5	.393	MF>MM	.552	MF>FF
6	.594	MF>MM	-1.288	MF<FF
7	.322	MF>MM	.268	MF>FF
8	.184	MF>MM	- .330	MF<FF
9	2.209	MF>MM	1.665	MF>FF
10	.410	MF>MM	- .435	MF<FF
11	- .364	MF<MM	- .653	MF<FF
12	.105	MF>MM	- .506	MF<FF
13	.351	MF>MM	.745	MF<FF
14	.862	MF>MM	-2.004**	MF<FF
15	.389	MF>MM	-2.480**	MF<FF
16	.276	MF>MM	.674	MF>FF

Note. In each group, n = 38 pairs of M/F, M/M and F/F raters

*$p < .05$
**$p < .01$ one-tailed test

Table 10

CBRS: Significance of the Difference Between Correlations of M/F and M/M, M/F and F/F Pairs of CCWs Rating Girls

	Group			
Scale	M/F vs M/M	Direction	M/F vs F/F	Direction
1	1.283	MF>MM	-1.666	MF<FF
2	1.520	MF>MM	- .969	MF<FF
3	- .590	MF<MM	-4.248***	MF<FF
4	.917	MF>MM	- .444	MF<FF
5	- .444	MF<MM	- .962	MF<FF
6	- .110	MF<MM	-2.058*	MF<FF
7	- .778	MF<MM	-2.955**	MF<FF
8	.454	MF>MM	-1.863	MF<FF
9	1.416	MF>MM	.198	MF>FF
10	-1.879*	MF<MM	-1.766*	MF<FF
11	- .538	MF<MM	-1.951*	MF<FF
12	.454	MF>MM	- .379	MF<FF
13	.240	MF>MM	-1.189	MF<FF
14	1.196	MF>MM	-3.176***	MF<FF
15	- .363	MF<MM	-2.038*	MF<FF
16	.279	MF>MM	.612	MF>FF

Note. In each group, n = 24 pairs of M/F, M/M and F/F raters

*p < .05
**p < .01 one-tailed test
***p < .001

Table 11

BPC: Significance of the Difference Between Correlations of M/F and M/M, M/F and F/F Pairs of CCWs Rating Children

Factor	M/F vs M/M	Direction	M/F vs F/F	Direction
		Group		
		Boys[a]		
I	-1.124	MF<MM	- .143	MF<FF
II	- .315	MF<MM	- .491	MF<FF
III	- .776	MF<MM	-1.204	MF<FF
IV	2.239	MF>MM	.846	MF>FF
V	- .600	MF<MM	.899	MF>FF
		Girls[b]		
I	.794	MF>MM	-1.945*	MF<FF
II	.872	MF>MM	-1.105	MF<FF
III	1.303	MF>MM	- .233	MF<FF
IV	.331	MF>MM	-1.205	MF<FF
V	.671	MF>MM	- .990	MF<FF

[a] $\underline{n}$ = 25 pairs each of M/F, M/M and F/F raters

[b] $\underline{n}$ = 15 pairs each of M/F, M/M and F/F raters

*$\underline{p}$ < .05 one-tailed test

direction, indicating greater agreement between M/M pairs, on 1 of the 16 scales. When mean correlations from M/F pairs of raters were compared with those from F/F pairs, 8 of the 16 scales showed a significant difference in the predicted direction, indicating greater agreement between ratings of F/F pairs.

BPC : boys . The significance of the difference between correlations (z transformations) of M/F and M/M, M/F and F/F pairs of child care workers on the five factors of the BPC is presented in Table 11. Comparison of the mean correlations from M/F pairs with those from M/M pairs showed no significant difference in the predicted direction between the two rating samples on the five factors. There was also no significant difference between the mean correlations obtained from M/F and F/F pairs of raters.

BPC : girls . The significance of the difference between correlations of M/F and M/M, M/F and F/F pairs of child care workers on the five factors of the BPC is presented in Table 11. Comparison of the mean correlations from M/F pairs of raters with those from M/M pairs showed no significant differences in the predicted direction. When mean correlations from M/F pairs of raters were compared with those from F/F pairs, there was a significant difference in the predicted direction on one factor, Conduct Disorder.

Means and Standard Deviations

Means and standard deviations for male and female ratings of maladjusted boys and girls in three samples (M/F, M/M and F/F pairs of raters), on both the CBRS and the BPC are presented in Appendix E.

Summary

While M/F pairs of raters tended to agree less than F/F pairs in their ratings of maladjusted boys on the CBRS, the strongest indication of sex difference between pairs of child care workers' ratings was found in ratings of girls by female pairs. M/F pairs of raters demonstrated less agreement than F/F pairs in rating maladjusted girls. Little difference was found between M/F and M/M pairs of raters in rating either boys or girls.

With the BPC, no significant differences were found between M/F and M/M or F/F pairs of ratings on boys. Only when girls were rated was there slight indication of a tendency toward greater agreement in ratings on the part of F/F pairs of raters, demonstrated on one factor of the BPC.

Hypothesis 1b

In assessing the behaviour exhibited by normal children and the degree of maladjusted behaviour exhibited by maladjusted children, female raters will check the extreme categories in rating scales on each of two instruments more frequently than will male raters.

CBRS

A sample of 420 ratings (210 by fathers and 210 by mothers) was gathered from parents of normal children, aged 6 through 12 years, with 15 children of each sex in each of the seven age levels.

A sample of 109 ratings (47 by fathers and 62 by mothers) was gathered from parents of maladjusted children, aged 6 through 12 years.

A sample of 440 ratings (226 by males and 214 by females) was gathered from child care workers who rated maladjusted children aged 6 through 12 years.

It should be noted that the items on the CBRS may be checked in any one of four categories, 1, 2, 4 or 5. Categories 1 and 5 ("almost always" and "almost never") represent the extreme positive or negative positions according to the wording of the items. The first eight scales are descriptive of prosocial behaviour; items are scored so that "1" represents the extreme negative position and "5" the extreme positive response. Scales 9 to 16 are descriptive of problem behaviour; items checked in the "1" category represent extreme positive response, while those in the "5" category represent extreme negative response.

The following methods of analysis were applied to the data:

a) A frequency count was made of all items checked in categories 1 and 5, and the proportion of male extreme positive or negative responses was compared with the proportion of female extreme positive or negative responses, for each of the samples, with the test for the significance of a difference between uncorrelated proportions (Guilford, 1965, p. 186).

b) A frequency count was made on all extreme categories used by male raters, and by female raters, regardless of the social desirability direction of the answer, i.e. a total count of all "1"s and "5"s assigned by males or females. Raters were categorized as "extreme rater" if 75% or more of the items on a scale were checked in either of the extreme categories of 1 or 5 by the individual rater. The proportion of female raters who met the criterion of "extreme rater" was tested against the proportion of male raters, for each of the 16 scales of the CBRS, with the corrected chi square test for independent samples (Siegel, 1956, p. 107).

In all computations, the level of significance accepted was $p < .05$ (one-tailed test).

Extreme categories : parents of normal children. In assessing the behaviour exhibited by normal children, the proportion of total responses from mothers that fell in the extreme positive category ("5") over scales describing pro-social behaviour was not significantly greater than the proportion of total extreme positive responses from fathers, but in three of the first eight scales, mothers'

extreme positive responses exceeded fathers' significantly (Table 12). Over scales 1 to 8, the proportion of total responses from mothers that fell in the extreme negative category ("1") was not significantly greater than the proportion of total extreme negative responses from fathers. In none of the first eight scales did mothers' extreme negative responses exceed those of fathers' responses (Table 13).

In rating problem behaviours on scales 9 to 16, the proportion of total responses from mothers that fell in the extreme positive category ("1"), indicating extremely low incidence of problem behaviour, was not significantly greater than the proportion of total extreme positive responses from fathers. In one of the latter eight scales, mothers' extreme positive responses exceeded fathers', with the difference between the two proportions reaching significance ($p < .02$, one-tailed test) on scale 10 (Table 12). Over scales 9 to 16, the proportion of responses from mothers that fell in the extreme negative category ("5"), indicating extremely high incidence of problem behaviour, was not significantly greater than the proportion of extreme negative responses from fathers (Table 13).

Extreme raters : parents of normal children. In addition to examining the frequencies and proportions of extreme positive and negative responses given, an analysis was carried out to determine whether or not each parent might be classified as an "extreme rater". The criterion established for "extreme rater" was that 75% or more of a rater's responses on a scale should fall into the extreme categories of "1" or "5", regardless of the social desirability direction of the

Table 12

CBRS: Comparison of Proportion of Extreme Positive Responses by Parents of Normal Children

	Frequency		Proportion		z
Scale	Father[a]	Mother[b]	Father	Mother	
1	1,064	1,165	.56	.62	1.13
2	1,098	1,177	.47	.51	.70
3	518	603	.41	.48	1.38
4	1,165	1,413	.46	.56	2.03**
5	1,435	1,545	.68	.74	1.20
6	883	1,003	.60	.68	1.75*
7	1,651	2.021	.46	.57	2.13*
8	584	649	.46	.51	1.07
9	1,031	1,358	.77	.81	.86
10	840	982	.57	.67	2.05**
11	1,575	1,665	.68	.72	.87
12	866	908	.51	.54	.51
13	1,038	1,095	.55	.58	.62
14	1,141	1,153	.78	.78	.20
15	641	746	.51	.57	1.21
16	2,618	2,733	.78	.81	.84
1 - 8	8,398	9,576	.51	.58	1.48
9 -16	10,020	10,610	.66	.70	.86

[a] n = 210
[b] n = 210

*p < .05
**p < .02 one-tailed test

Table 13

CBRS: Comparison of Proportion of Extreme Negative Responses by Parents of Normal Children

	Frequency		Proportion		z
Scale	Father[a]	Mother[b]	Father	Mother	
1	36	55	.02	.03	.67
2	67	76	.03	.03	.24
3	45	53	.04	.04	.32
4	85	76	.03	.03	.23
5	55	75	.03	.04	.53
6	48	39	.03	.03	.36
7	74	99	.02	.03	.46
8	52	40	.04	.03	.49
9	48	30	.03	.02	.68
10	40	38	.03	.03	.06
11	85	85	.04	.04	.00
12	46	64	.03	.04	.64
13	33	52	.02	.03	.70
14	11	55	.01	.01	.33
15	34	47	.03	.04	.58
16	35	50	.01	.02	.46
1 - 8	461	513	.03	.03	.18
9 -16	332	381	.02	.03	.20

[a]n = 210
[b]n = 210

*p < .05 one-tailed test

response. The results of this analysis showed that, on 8 of the 16 scales of the CBRS, the proportion of mothers who met the criterion exceeded the proportion of fathers (Table 14).

In summary, on the CBRS, the proportion of mothers' total responses that fell in both extreme positive and extreme negative categories did not exceed significantly the proportion of fathers' total responses. The differences between the two proportions reached significance for extreme positive ratings, in the predicted direction, on three of the pro-social scales and on one of the problem behaviour scales.

On 8 of the 16 scales (5 pro-social and 3 problem behaviour) the proportion of mothers who were classified as "extreme rater" significantly exceeded the proportion of fathers. Mothers of normal children demonstrated a tendency to rate children more frequently in the extreme categories on the CBRS than did fathers.

In the analysis of the proportions of extreme responses by male and female raters who rated maladjusted children on the CBRS, the data from child care workers and from parents were pooled.

Extreme categories : parents and child care workers. In assessing the degree of maladjusted behaviour exhibited by maladjusted children, the proportions of responses from female raters that fell in the extreme positive or the extreme negative categories over the eight scales describing pro-social behaviour were not significantly greater than the proportions of extreme positive or negative responses from male raters, and no significant

Table 14

Normal Sample: Chi Square Values for Proportion of Mothers and Fathers Classified as Extreme Raters (CBRS)

Scale	n Items	Chi Square	Direction
1	9	6.288**	Mo>Fa
2	11	.610	Mo>Fa
3	6	.944	Mo>Fa
4	12	6.441**	Mo>Fa
5	10	13.653***	Mo>Fa
6	7	5.554**	Mo>Fa
7	17	9.086***	Mo>Fa
8	6	.000	Mo=Fa
9	8	.337	Mo>Fa
10	7	5.844**	Mo>Fa
11	11	2.167	Mo>Fa
12	8	4.090*	Mo>Fa
13	9	.618	Mo>Fa
14	7	.010	Mo>Fa
15	6	1.052	Mo>Fa
16	16	3.923*	Mo>Fa

Note. N = 420 ratings

*p < .02
**p < .01 one-tailed test
***p < .001

difference was found on each of the eight pro-social scales (Tables 15 & 16).

In rating problem behaviours over scales 9 to 16, the proportions of responses from female raters that fell in the extreme positive or negative categories were not significantly greater than the proportion of extreme positive or negative responses from male raters (Tables 15 & 16), either in considering total responses, or individual scale responses.

The pooled ratings obtained from child care workers and from parents who rated maladjusted children were divided into two samples.

Extreme categories : child care workers. Over both the eight scales describing pro-social behaviour and the eight scales describing problem behaviour, the proportion of extreme positive or negative responses from female child care workers did not differ significantly from those obtained from male child care workers (Tables 17 & 18).

Extreme categories : parents. In considering the proportions of extreme positive and negative responses from parents of maladjusted children, the proportions of responses from mothers that fell into either the extreme positive or negative categories did not differ significantly from the proportions obtained from fathers in either scales 1 to 8 or scales 9 to 16 (Tables 19 & 20).

Extreme raters : child care workers. In addition to the above analyses, an analysis was carried out to determine whether

Table 15

CBRS: Comparison of Proportion of Extreme Positive Responses in Male and Female Ratings of Maladjusted Children

	Frequency		Proportion		z
Scale	Male[a]	Female[b]	Male	Female	
1	1,017	952	.41	.38	.74
2	980	971	.33	.32	.15
3	429	435	.26	.26	.00
4	959	1,020	.29	.31	.38
5	1,556	1,534	.57	.56	.33
6	590	642	.31	.33	.58
7	674	824	.15	.18	.99
8	371	378	.23	.23	.00
9	1,056	1,006	.48	.46	.63
10	949	1,015	.50	.53	.68
11	1,851	1,874	.62	.62	.00
12	712	708	.33	.32	.28
13	995	976	.41	.40	.28
14	1,103	986	.53	.51	.47
15	709	702	.43	.42	.21
16	2,595	2,651	.59	.60	.14
1 - 8	6,576	6,756	.31	.31	.13
9 -16	9,880	9,912	.50	.50	.00

Note. Ratings include 47 by fathers and 62 by mothers of maladjusted children.

$^{a}n = 273$
$^{b}n = 276$

*$p < .05$ one-tailed test

Table 16

CBRS: Comparison of Proportion of Extreme Negative Responses in Male and Female Ratings of Maladjusted Children

Scale	Frequency		Proportion		z
	Male[a]	Female[b]	Male	Female	
1	97	176	.04	.07	1.64
2	189	258	.06	.09	.98
3	115	198	.07	.12	1.96*
4	256	352	.08	.12	1.13
5	125	155	.05	.06	.53
6	132	196	.07	.10	1.34
7	457	575	.10	.12	.90
8	105	166	.06	.10	1.54
9	123	188	.06	.09	1.33
10	59	80	.03	.04	.63
11	116	149	.04	.05	.57
12	127	197	.06	.09	1.39
13	215	212	.09	.09	.00
14	48	99	.03	.05	1.59
15	99	140	.06	.08	1.09
16	111	149	.03	.03	.63
1 - 8	1,476	2,076	.06	.10	1.15
9 -16	898	1,214	.04	.06	.78

Note. Ratings include 47 by mothers and 62 by fathers of maladjusted children.

$^{a}n = 273$
$^{b}n = 276$

*$p < .05$ one-tailed test

Table 17

CBRS: Comparison of Proportion of Extreme Positive Responses in CCWs' Ratings of Maladjusted Children

	Frequency		Proportion		z
Scale	Male[a]	Female[b]	Male	Female	
1 - 8	5,366	5,159	.30	.31	.11
9 -16	8,231	7,678	.51	.50	.17
1 -16	13,597	12,837	.40	.40	.04

[a] $n = 226$
[b] $n = 214$

*$p < .05$ one-tailed test

Table 18

CBRS: Comparison of Proportion of Extreme Negative Responses in CCWs' Ratings of Maladjusted Children

	Frequency		Proportion		z
Scale	Male[a]	Female[b]	Male	Female	
1 - 8	789	1,114	.04	.07	1.00
9 -16	472	647	.03	.04	.74
1 -16	1,261	1,761	.04	.05	.90

[a] n = 226
[b] n = 214

*p < .05 one-tailed test

Table 19

CBRS: Comparison of Proportion of Extreme Positive Responses in Parents' Ratings of Maladjusted Children

	Frequency		Proportion		z
Scale	Father[a]	Mother[b]	Father	Mother	
1 - 8	1,210	1,597	.33	.33	.00
9 -16	1,649	2,240	.49	.50	.15
1 -16	2,859	3,837	.40	.41	.00

[a]n = 47
[b]n = 62

*p < .05 one-tailed test

Table 20

CBRS: Comparison of Proportion of Extreme Negative Responses in Parents' Ratings of Maladjusted Children

	Frequency		Proportion		z
Scale	Father[a]	Mother[b]	Father	Mother	
1 - 8	687	962	.19	.20	.16
9 -16	426	567	.13	.13	.00
1 -16	1,113	1,529	.16	.16	.00

[a] $n = 47$
[b] $n = 62$

*$p < .05$ one-tailed test

or not each rater might be classified as an "extreme rater". The criterion accepted for "extreme rater" was the same as that established for parents of normal children. The proportion of female child care workers who met the criterion of "extreme rater" was significantly greater than the proportion of male raters on scales 3 and 10 (Table 21).

Extreme raters : parents. When parents rated maladjusted children on the CBRS, the proportion of mothers who met the criterion of "extreme rater" did not differ significantly from the proportion of fathers, on each of the 16 scales (Table 22).

BPC

A sample of 156 ratings (78 by fathers and 78 by mothers) was gathered from parents of normal children who had also rated their children on the CBRS.

A sample of 225 ratings (102 by males, 123 by females) was gathered from child care workers who rated the same maladjusted children that they had also rated on the CBRS.

It should be noted that the BPC items are descriptive of problem behaviours and may be checked in any one of three categories, 0, 1 and 2, with category "2" representing the extreme ("severe problem") response.

The following method of analysis was applied to the data: a frequency count was made of all items checked in the extreme category, and the proportion of male extreme responses was compared with the proportion of female extreme responses for both samples, with the z

Table 21

Maladjusted Sample: Chi Square Values for Proportion of Male[a] and Female[b] CCWs Classified as Extreme Raters (CBRS)

Scale	n Items	Chi Square	Direction
1	9	1.960	M > F
2	11	.015	F > M
3	6	4.302*	F > M
4	12	.742	F > M
5	10	.342	M > F
6	7	.251	F > M
7	17	2.050	F > M
8	6	1.501	F > M
9	8	.000	F = M
10	7	8.473**	F > M
11	11	.281	M > F
12	8	.025	M > F
13	9	.531	M > F
14	7	1.382	M > F
15	6	1.579	F < M
16	16	.010	F < M

[a] n = 226 ratings

[b] n = 214 ratings

*p < .02
**p < .01 one-tailed test

Table 22

Maladjusted Sample: Chi Square Values for Proportion of Fathers[a] and Mothers[b] Classified as Extreme Raters (CBRS)

Scale	n Items	Chi Square	Direction
1	9	2.502	Mo>Fa
2	11	.389	Fa>Mo
3	6	.076	Fa>Mo
4	12	2.277	Mo>Fa
5	10	.000	Fa>Mo
6	7	.196	Mo>Fa
7	17	.004	Fa>Mo
8	6	1.579	Mo>Fa
9	8	.342	Fa>Mo
10	7	.013	Mo>Fa
11	11	.092	Mo>Fa
12	8	.003	Mo>Fa
13	9	.157	Mo>Fa
14	7	.196	Mo>Fa
15	6	.444	Fa>Mo
16	16	.092	Mo>Fa

[a] n = 47 ratings
[b] n = 62 ratings

*p < .05 one-tailed test

test for the significance of a difference between uncorrelated proportions.

In all computations, the level of significance accepted was $p < .05$ (one-tailed test).

Extreme categories : parents of normal children. When a comparison was made between the proportions of male and female raters' extreme responses, the proportion of mothers' responses that fell in the extreme negative category did not exceed the proportion of fathers' responses (Table 23). The finding with the CBRS, that, in assessing the behaviour of normal children, mothers and fathers do not differ in the frequency with which they check the extreme negative responses was supported in the analysis of responses to the BPC.

Extreme categories : child care workers. When a comparison was made between the proportions of male and female raters' extreme responses obtained in ratings of maladjusted children, female child care workers did not show a greater proportion of extreme negative responses in their ratings than did male child care workers (Table 23). These findings with the BPC are in agreement with the results obtained with the same sample on the CBRS.

Summary

Hypothesis 1b received partial support in respect to mothers' ratings of normal children. Mothers rated their children in the extreme positive categories more frequently than fathers did on 4 of the 16 CBRS scales. Mothers were categorized as extreme raters more frequently than fathers in 8 of the 16 CBRS scales.

Table 23

BPC: Comparison of the Proportion of Extreme Negative Ratings by Two Groups

Group	Frequency		Proportion		z
	Male	Female	Male	Female	
Parents[a] (Normal)	58	82	.01	.02	.30
CCWs[b] (Maladjusted)	549	800	.10	.12	.50

Note. For parents, n = 78 in each group.
For male CCWs, n = 102.
For female CCWs, n = 123.

*p < .05 one-tailed test

Female child care workers who rated maladjusted children did not differ from male child care workers in their use of either the positive or the negative extreme categories, nor did parents of maladjusted children differ significantly in this respect.

Female child care workers were more frequently categorized as extreme raters than were males on 2 of the 16 CBRS scales (a finding that could be due to chance) but parents of maladjusted children did not differ in this respect.

Hypothesis 2

In assessing the behaviour exhibited by maladjusted children, child care workers, rating children of the opposite sex to their own, will produce significantly higher mean ratings on scales scored for positive attributes (CBRS) and significantly lower mean ratings on scales scored for negative attributes (CBRS and BPC) than they will in rating children of the same sex.

CBRS

Two samples of ratings on boys and girls were gathered in the following manner:

(a) Ratings were obtained from 17 male child care workers who rated 19 boys and 12 girls, and 14 female child care workers who rated 20 boys and 12 girls. While the raters were not paired, both male and female raters rated the same population of children and each rater's rating of a boy was paired with his, or her, rating of a girl, matched for age. A total of 43 pairs of boy/girl ratings was obtained from male raters, and a total of 48 pairs from female raters. Whenever more than one pair of ratings from a single rater was included in the sample, the mean of the multiple ratings was the statistic employed in the subsequent analysis.

The total number of comparisons between boys and girls was 17 pairs for male raters, 14 pairs for female raters.

(b) In the second sample, male and female raters were paired, with each of the seven pairs rating identical children,

independently, during a two week period. The mean rating for each rater, calculated for boys and girls separately, was the statistic employed in the subsequent analysis. The minimum number of boys rated by a M/F pair of raters was four, the maximum number, eight; the minimum number of girls rated was four, the maximum number, six. Means and standard deviations for each rater's ratings of boys and girls are presented in Appendix F.

Sample (a). The multivariate generalization of the *t* test for correlated samples, i.e. multivariate analysis of variance (MANOVA) program was applied to the data obtained in sample (a). The level of significance accepted, for both the multivariate *F* test (Wilks lambda) and the univariate *F* tests, was $p < .05$.

Means and standard deviations for 17 male and 14 female child care workers' ratings on the CBRS are presented in Appendix G.

Multivariate and univariate *F* values obtained with comparisons (paired *t*) of ratings on boys and girls are presented in Table 24, for male raters, and Tables 25 and 26 for female raters. Ratings obtained from female raters were analyzed in two separate analyses (scales 1 to 8 and scales 9 to 16) because the number of female raters (14) was less than the total number of variables (16).

The MANOVA results indicated no significant difference, over the 16 scales, in male raters' ratings of boys and girls, $F\ (16, 1) = 19.036$, $p < .178$. No significant difference was found in female raters' ratings of boys and girls, $F\ (8, 6) = 1.804$, $p < .244$ and $F\ (8, 6) = 2.163$, $p < .181$, for scales 1 to 8 and scales 9 to 16, respectively.

Table 24

Comparison of Ratings (CBRS) on Boys and Girls by Male Raters: Multivariate and Univariate Summaries

Multivariate Test of Significance (Wilks lambda)

F	df Hyp.	df Error	p <
19.036	16	1	.170

Univariate F Tests

Scale[a]	F (1, 16)	p <
1	.600	.450
2	.681	.421
3	9.676	.007
4	1.721	.208
5	.164	.674
6	.558	.466
7	.009	.925
8	2.269	.151
9	.063	.809
10	.096	.761
11	.128	.725
12	1.747	.205
13	.097	.799
14	2.028	.174
15	1.239	.261
16	1.011	.330

[a]Transformed Variables

Table 25

Comparison of Ratings (CBRS) on Boys and Girls by Female Raters: Multivariate and Univariate Summaries

Multivariate Test of Significance (Wilks lambda)

Scales	F	df Hyp.	df Error	p <
1 - 8	1.804	8	6	.244

Univariate F Tests

Scale[a]	F (1, 13)	p <
1	1.620	.225
2	2.610	.145
3	3.604	.080
4	.461	.509
5	.008	.930
6	4.718	.049
7	6.913	.021
8	16.491	.001

[a]Transformed Variables

Table 26

Comparison of Ratings (CBRS) on Boys and Girls by Female Raters: Multivariate and Univariate Summaries

Multivariate Test of Significance (Wilks lambda)

Scales	F	df Hyp.	df Error	p <
9 -16	2.163	8	6	.181

Univariate F Tests

Scale[a]	F (1, 13)	p <
9	7.034	.020
10	1.183	.297
11	1.715	.213
12	4.578	.052
13	6.558	.024
14	3.261	.094
15	5.145	.041
16	.108	.748

[a]Transformed Variables

The hypothesis of a cross-sex effect in child care workers' ratings of maladjusted children was not supported with sample (a) on the CBRS.

Sample (b). The seven pairs of M/F raters, did not allow sufficient degrees of freedom for multivariate analysis, therefore t tests for correlated samples were calculated on the data obtained on boys and girls on each of the 16 scales of the CBRS. No claim can be made for complete independence of the 16 scales, therefore the actual probability of experiment-wise error rate is likely to be unknown (Hummel and Sligo, 1971). An estimate of the probability of experiment-wise error rate for multiple comparisons was obtained from the formula $1 - (1-a)^C$, where "C" refers to the number of comparisons. Applying this formula, the level of significance accepted for each of the 16 comparisons was $p < .003$. Since directional hypotheses were stated, t tests were one-tailed.

The t-test results from the comparisons of mean ratings of boys and girls by male and female child care workers are presented in Table 27. On the eight scales scored in the positive direction, male raters gave significantly higher mean ratings to girls than to boys on Scale 3 (Impulse Control), $t(7) = -2.409$, $p < .003$ and Scale 6 (Moral Development), $t(7) = -2.479$, $p < .003$. On the eight scales scored in the negative direction, girls received significantly lower mean ratings than boys on Scale 10 (Eating Problems), $t(7) = 2.192$, $p < .003$. Female raters, contrary to the predicted direction of differences, gave significantly higher mean ratings to girls than to

Table 27

CBRS: Differences between CCWs' Mean Ratings of Boys and Girls

(Paired *t*)

	Male Raters			Female Raters		
Scale	Difference between *M*	*SE*	*M*	Difference between *M*	*SE*	*M*
1	.360	1.486	.242	-1.770	1.755	-1.008
2	-1.020	1.672	- .610	- .944	1.533	- .616
3	-3.141	1.304	-2.409*	-4.910	1.298	-3.783*
4	-1.396	2.418	- .577	- .606	2.364	- .256
5	- .981	1.888	- .520	- .714	1.796	- .397
6	- .405	1.572	-2.579*	-4.551	2.346	-1.940*
7	-5.303	4.429	-1.197	-7.285	5.385	-1.353
8	-2.066	1.367	-1.511	-4.616	1.675	-2.756*
9	- .191	1.665	- .115	3.091	1.692	1.827
10	2.156	.984	2.192*	2.438	1.600	1.524
11	1.257	1.802	.697	2.646	2.814	.940
12	1.968	1.511	1.303	3.893	2.092	1.860
13	2.050	1.780	1.152	3.750	2.828	1.326
14	1.034	1.542	.670	2.692	1.920	1.402
15	.231	1.527	.151	2.020	1.437	1.405
16	- .137	1.025	- .134	- .128	1.793	- .072

*$p < .003$ one-tailed test

boys on 3 of the 8 scales scored in the positive direction : Scale 3 (Impulse Control), t (7) = -3.783, $p < .003$; Scale 6 (Moral Development), t (7) = -1.940, $p < .003$; Scale 8 (Relation to Adults), t (7) = -2.756, $p < .003$. None of the comparisons between mean ratings of boys and girls on the eight scales scored in the negative direction reached significance when female child care workers were the raters.

With sample (b), partial support for the hypothesis of a cross-sex effect in child care workers' ratings of children was found in ratings by male child care workers.

BPC

Ratings were obtained from seven M/F pairs of child care workers. Within each pair of raters, male and female raters rated identical children, independently, during a two-week period. Prior to analysis, the central tendency for each male and female rater was calculated. Means and standard deviations for male raters, rating boys and girls, are presented in Appendix H; those for female raters are also presented in Appendix H. The minimum number of boys rated by a M/F pair of raters was four, the maximum number, nine; for girls, the minimum number was three, the maximum, six.

The multivariate generalization of the t test for correlated samples (MANOVA) was applied to the data obtained on five factors of the BPC. The level of significance accepted, for both the multivariate F test (Wilks lambda) and the univariate F tests, was $p < .05$.

Means and standard deviations for M/F pairs of raters rating boys and girls are presented in Appendix I. On each of the five factors, both male and female raters gave higher mean scores to boys than to girls, i.e. both male and female raters perceived boys as exhibiting more problem behaviours than girls.

Multivariate and univariate F values obtained with comparisons (paired t) of ratings on boys and girls are presented in Table 28 (male raters) and Table 29 (female raters). Over all five factors MANOVA results showed no significant difference in male raters' ratings of boys and girls, $F\ (5, 2) = 2.522$, $p < .308$. Female raters, however, gave significantly higher mean ratings over all five factors to boys, $F\ (5, 2) = 25.025$, $p < .039$. Two of the univariate F tests showed significant results : Factor I (Conduct Disorder), $F\ (1, 6) = 6.357$, $p < .045$ and Factor III (Inadequacy-immaturity), $F\ (1, 6) = 25.270$, $p < .012$. While these results may appear to show a cross-sex effect, they were not in the predicted direction, nor were they in agreement with the results obtained from the CBRS. When the CBRS was the instrument employed, female raters did not demonstrate significant differences in their ratings of boys and girls on the eight scales descriptive of problem behaviours.

Summary

No support for the hypothesis of a cross-sex effect was found in child care workers' ratings on the BPC, or on the CBRS, with sample (a). Partial support for the hypothesis was found on the CBRS with sample (b).

Table 28

Differences Between Ratings of Boys and Girls on the BPC by Male CCWs: Multivariate and Univariate Summaries

Multivariate Tests of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	2.522	5	2	.308	.929

Univariate F Tests

Factor[a]	F (1, 6)	MS	p <	SDFC
I	2.480	17.601	.166	-2.344
II	2.322	16.356	.178	.180
III	11.827	23.406	.014	3.698
IV	6.158	10.566	.048	-1.151
V	3.410	5.316	.114	- .160

[a]Transformed Variables

Table 29

BPC: Differences Between Ratings of Boys and Girls by Female CCWs: Multivariate and Univariate Summaries

Multivariate Tests of Significance (Wilks lambda)

Tests of Roots	F	df Hyp.	df Error	p <	R
1 through 1	25.025	5	2	.039	.992

Univariate F Tests

Factor[a]	F (1, 6)	MS	p <	SDFC
I	6.357	54.880	.045*	27.531
II	3.027	31.291	.133	- 5.646
III	12.871	25.270	.012**	1.495
IV	3.163	8.916	.126	-20.857
V	5.233	5.143	.062	- 3.710

[a]Transformed Variables

* p < .05
** p < .01
*** p < .001

Hypothesis 2a

In assessing the behaviour of maladjusted children, the difference between mean ratings of boys and girls on each of two instruments by female child care workers will be significantly less than the difference between mean ratings of boys and girls by male child care workers.

CBRS

Sample (a). Prior to analysis, the difference between each rater's ratings of boys and girls was calculated for sample (a). Difference scores for male and female raters are presented in Appendix J.

The multivariate generalization of the *t* test for correlated samples (MANOVA) was applied to the obtained difference scores for scales 1 to 8, and scales 9 to 16, separately.

Means and standard deviations for the difference scores obtained between ratings of boys and girls by male raters, and female raters, are presented in Appendix K. Female raters demonstrated larger mean differences in rating boys and girls than did male raters in 15 of the 16 scales.

Table 30 summarizes the results from the multivariate and univariate *F* tests. Over scales 1 to 8, and 9 to 16, no significant differences were found, $F\ (8, 6) = .739$, $p < .663$ and $F\ (8, 6) = 1.127$, $p < .455$, respectively. The differences obtained in comparing ratings of boys and girls by male raters in sample (a) did not differ significantly from those obtained in comparing ratings by female

Table 30

CBRS: Comparison of Mean Differences in Ratings of Maladjusted Boys and Girls by 17 Male and 14 Female CCWs

Multivariate Test of Significance (Wilks lambda)

Scales	F	df Hyp.	df Error	p <
1 - 8	.739	8	6	.663
9 -16	1.127	8	6	.455

Univariate F Tests

Scale[a]	F (1, 13)	p <
1	1.446	.351
2	.562	.467
3	.089	.771
4	.616	.446
5	.003	.960
6	1.256	.283
7	3.582	.081
8	6.345	.026
9	5.422	.037
10	.326	.578
11	.484	.499
12	1.069	.320
13	4.299	.059
14	1.225	.288
15	2.463	.141
16	.251	.625

[a]Transformed Variables

raters.

Sample (b). Ratings from seven M/F pairs of raters were analyzed with the t test for correlated data on each of the 16 scales.

The differences between mean ratings of boys and girls are presented in Appendix L for male and female raters.

Results obtained from paired t tests, together with mean differences between male and female raters, are presented in Table 31. Female raters demonstrated larger differences in rating boys and girls than did male raters on 11 of the 16 scales; in the 8 scales scored in the negative direction female raters showed consistently larger mean differences than did male raters. However, with the conservative level of significance established for multiple t tests ($p < .003$), no significant differences between mean difference scores were found.

BPC

Prior to analysis, the difference between each rater's ratings of boys and girls was calculated. Difference scores for male and female raters are presented in Appendix M.

The multivariate generalization of the t test for correlated samples (MANOVA) was applied to the obtained difference scores on the five factors of the BPC.

Mean differences in ratings of boys and girls by male and female raters are also presented in Appendix M. On Factors I to IV, female raters demonstrated larger mean differences in rating boys and girls than did male raters.

Table 31

CBRS: Comparison of Mean Differences in Ratings of Maladjusted Boys and Girls by M/F Pairs of Raters

Scale	Difference between M	SE	t	Direction of Difference
1	2.115	1.273	1.661	M > F
2	- .076	1.072	- .071	F > M
3	1.768	.652	2.714	M > F
4	- .790	2.199	- .359	F > M
5	- .267	1.595	- .167	F > M
6	2.926	2.399	1.219	M > F
7	1.982	1.603	1.237	M > F
8	2.693	.899	2.994	M > F
9	-3.282	1.456	-2.255	F > M
10	- .283	1.039	- .272	F > M
11	-1.388	1.612	- .861	F > M
12	-1.924	1.450	-1.327	F > M
13	-1.700	1.420	-1.197	F > M
14	-1.658	.993	-1.669	F > M
15	-1.788	.913	-1.958	F > M
16	- .008	1.100	- .008	F > M

Note. n = 7 M/F Pairs of Raters

*p < .003 one-tailed test

Summaries of multivariate and univariate F tests results are presented in Table 32. Over the five factors, no significant difference between male and female raters' difference scores was found, F (5, 2) = .726, p < .666.

Summary

For both the CBRS and the BPC, results from analyses of difference scores (from the comparison of ratings on boys and girls) show no significant differences in male and female child care workers' ratings. Therefore, no support for the hypothesis was found in this study.

Table 32

BPC: Comparison of Mean Differences in Ratings of Maladjusted Boys and Girls by Seven M/F Pairs of CCWs

Multivariate Tests of Significance

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	.726	5	2	.666	.803

Univariate F Tests

Factor[a]	F (1, 6)	MS	p <	SDFC
I	2.673	10.370	.153	1.722
II	.517	3.458	.499	.641
III	.020	.046	.892	.013
IV	.011	.024	.920	- .792
V	.007	.004	.934	-1.214

[a]Transformed Variables

Hypothesis 3

In assessing behaviour, significantly higher mean ratings on scales scored for positive attributes (CBRS) and lower mean ratings on scales scored for negative attributes (CBRS and BPC), for both boys and girls, will be obtained from mothers' than from fathers' ratings.

CBRS

A pool of 568 ratings on the CBRS was gathered from mothers and fathers of normal children. From this pool, 420 ratings were selected from age groups (6 through 12 years) of 15 subjects per age, for boys and girls, in order to examine possible age effects (in cases where there were more than 15 subjects per age group, subjects included in the sample were randomly selected). No pattern of age effects was evident (see Appendix N). No single parent ratings were included in the sample. Some parents, however, had rated more than one child in the family, while others had rated only one child. The sample was divided on this basis, and the multivariate generalization of the t test (MANOVA) was applied to the data for boys and girls to determine if parents who had rated one child differed significantly in their ratings from those parents who rated more than one child. Results indicated that, over the 16 variables, the two groups differed significantly for boys, F (16, 193) = 1.801, $p < .033$, and for girls, F (16, 193) = 2.501, $p < .002$. Therefore, two subsamples were formed to test hypothesis 3: (a) ratings from parents who rated one child in the family, N = 364 ratings (91 boys and 91 girls, rated by both

parents).

(b) ratings from parents who rated two boy-girl siblings per family, N = 100 ratings (25 boys and 25 girls rated by both fathers and mothers). Parents who rated two children of the same sex were not included in the sample.

Parents rating one child. The multivariate generalization of the t test (MANOVA) for correlated samples was applied to the data obtained from parents who rated one child per family, sample (a). The level of significance accepted for both multivariate and univariate F tests, in this and all other anlayses for Hypothesis 3, was $p < .05$.

Means and standard deviations are presented in Appendix O for boys and girls.

Multivariate and univariate F values obtained from the comparison of mothers' and fathers' ratings are presented in Table 33, for boys and Table 34 for girls.

For parents who rated boys, the multivariate test showed no significant difference in mean ratings by mothers and fathers over the 16 scales, $F\ (16, 75) = 1.711$, $p < .063$. For parents who rated girls, the multivariate test indicated a significant difference in mothers' and fathers' ratings over the 16 scales, $F\ (16, 75) = 2.194$, $p < .012$. Reference to the tables of mean ratings for mothers and fathers (Appendix Q) shows that mothers gave girls higher mean ratings on each scale scored in the positive direction, and lower mean ratings on each scale scored in the negative direction, than did fathers.

Univariate F test results show significant differences in

Table 33

CBRS: Comparison of Mothers' and Fathers' Ratings of Normal Boys, Sample (a)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	1.711	16	75	.063	.517

Univariate F Tests

Scale[a]	F (1, 90)	MS	p <	SDFC
1	3.099	47.868	.082	.892
2	.215	8.011	.644	.262
3	.011	.176	.916	.109
4	.038	1.330	.845	- .017
5	.002	.044	.962	- .003
6	4.009	55.395	.048	- .523
7	2.644	206.252	.107	- .287
8	.318	3.176	.574	- .288
9	.928	11.967	.338	- .545
10	.995	12.703	.321	- .093
11	.002	.044	.966	.168
12	.089	1.857	.766	- .267
13	.342	6.868	.560	.495
14	4.558	28.582	.035	.529
15	.776	6.330	.381	- .110
16	.601	11.967	.440	- .431

[a]Transformed Variables

Table 34

CBRS: Comparison of Mothers' and Fathers' Ratings of Normal Girls, Sample (a)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	2.194	16	75	.012	.565

Univariate F Tests

Scale[a]	F (1, 90)	MS	p <	SDFC
1	1.545	30.868	.217	.115
2	.954	34.461	.331	- .355
3	11.332	174.460	.001***	.628
4	4.083	109.890	.046*	.067
5	2.288	27.472	.134	- .016
6	18.746	209.273	.001***	.827
7	5.059	484.612	.027*	- .387
8	3.545	43.615	.063	.139
9	1.489	10.560	.226	- .005
10	6.067	73.890	.016*	- .118
11	1.550	16.714	.216	.232
12	4.539	65.154	.036*	.032
13	.005	.099	.941	- .752
14	1.561	11.253	.215	- .070
15	.855	8.011	.358	- .033
16	8.622	125.813	.004**	.547

[a]Transformed Variables

* $p < .05$
** $p < .01$
*** $p < .001$

mean ratings of fathers and mothers on 7 of the 16 scales (df 1, 90): Scale 3 (Impulse Control), $p < .001$; Scale 4 (Appropriate Activity), $p < .046$; Scale 6 (Moral Development), $p < .001$; Scale 7 (General Interpersonal), $p < .027$; Scale 10 (Eating Problems), $p < .016$; Scale 12 (Inappropriate Attention-seeking), $p < .036$; Scale 16 (Pathology), $p < .004$.

Partial support for hypothesis 3 was found in sample (a) in that, when fathers and mothers rate girls, mothers give significantly more favourable ratings to girls than do fathers.

Parents rating siblings. The multivariate generalization of the t test for correlated samples (MANOVA) was applied to the data obtained from parents who rated two opposite-sex siblings per family, sample (b).

Means and standard deviations are presented in Appendix P, for boys and girls.

Multivariate and univariate F values obtained from the comparison of mothers' and fathers' ratings are presented in Table 35, for boys and Table 36, for girls.

When mothers' and fathers' ratings on boys were compared, no significant difference was found over the 16 scales, $F(16, 9) = .652$, $p < .782$.

When mothers' and fathers' ratings on girls were compared, no significant difference was found over the 16 scales, $F(16, 9) = 2.278$, $p < .106$.

Table 35

CBRS: Comparison of Mothers' and Fathers' Ratings of Normal Boys, Sample (b)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	.652	16	9	.782	.733

Univariate F Tests

Scale[a]	F (1, 24)	MS	p <	SDFC
1	.278	6.760	.603	- .425
2	.247	10.240	.624	- .043
3	.631	12.960	.435	- .487
4	2.055	99.999	.165	1.892
5	.016	.360	.900	- .117
6	.917	19.360	.348	.641
7	2.641	190.440	.117	.103
8	2.830	43.560	.105	.559
9	.153	1.440	.700	.292
10	.878	14.440	.358	.583
11	.065	1.000	.802	.410
12	3.718	70.560	.066	- .175
13	.086	1.440	.771	-1.044
14	.324	1.000	.574	.179
15	.151	1.960	.701	.152
16	.681	16.000	.417	1.894

[a]Transformed Variables

Table 36

CBRS: Comparison of Mothers' and Fathers' Ratings of Normal Girls, Sample (b)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	2.278	16	9	.106	.896

Univariate F Tests

Scale[a]	F (1, 24)	MS	p <	SDFC
1	.149	2.560	.703	.634
2	7.828	184.959	.010	.026
3	.002	.040	.964	-1.020
4	7.649	231.039	.011	-1.492
5	.016	.360	.899	1.346
6	2.457	57.760	.130	1.924
7	2.039	163.840	.166	- .552
8	1.882	21.160	.183	.457
9	4.918	25.000	.036	1.316
10	6.262	112.359	.020	.958
11	4.646	139.240	.041	.204
12	7.302	116.639	.012	1.513
13	8.487	84.640	.008	- .670
14	.565	4.000	.460	- .489
15	1.441	14.440	.242	- .800
16	6.080	60.840	.021	.699

[a]Transformed Variables

BPC

Parents of normal children responded with ratings on 37 boys and 41 girls on the BPC. Those parents who had agreed to rate more than one child in the family on the CBRS were not given BPC forms, therefore all parents who rated children on the BPC rated one child only per family.

The multivariate generalization of the *t* test for correlated samples (MANOVA) was applied to the data obtained on four factors of the BPC.

Means and standard deviations for parents' ratings of boys and girls are presented in Appendix Q.

Multivariate and univariate *F* values obtained from the comparisons of mothers' and fathers' ratings are presented in Table 37, for boys, and Table 38, for girls. No significant differences were found in mothers' and fathers' ratings of either boys or girls.

Summary

When mean ratings on the CBRS by parents (rating one child per family) were compared, mothers tended to give more favourable ratings to girls than did fathers, but no significant differences were found in mean ratings of boys. Parents did not differ significantly in rating their children on the BPC. When parents rated opposite-sex siblings, no significant difference over the 16 scales was found for either boys or girls.

Table 37

BPC: Comparison of Mothers' and Fathers' Ratings of Normal Boys

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	.687	4	33	.606	.277

Univariate F Tests

Factor[a]	F (1, 36)	MS	p <	SDFC
I		6.081	.486	.174
II	.859	7.811	.360	.974
III	.031	.108	.861	- .358
IV	.859	.676	.360	- .830

[a]Transformed Variables

Table 38

BPC: Comparison of Mothers' and Fathers' Ratings of Normal Girls

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	.585	4	37	.676	.244

Univariate F Tests

Factor[a]	F (1,40)	MS	p <	SDFC
I	.001	.024	.971	.421
II	2.137	7.049	.152	-1.042
III	.544	1.195	.465	.067
IV	.109	.024	.743	- .307

[a]Transformed Variables

Hypothesis 3a

When mothers are the raters, there will be no significant differences between the means obtained from ratings of male children and the means obtained from ratings of female children on each of two instruments.

CBRS

The two samples considered in Hypothesis 3, (a) mothers who rated one child per family, and (b) mothers who rated two opposite-sex siblings, were used in testing Hypothesis 3a.

Mothers rating one child. The multivariate generalization of the *t* test for independent samples (MANOVA) was applied to the data obtained in sample (a).

Means and standard deviations for mothers' ratings of 91 boys and 91 girls are presented in Appendix O.

Multivariate and univariate *F* tests results are summarized in Table 39. Over all 16 scales, the comparison of mean ratings by mothers indicated a significant difference between mean ratings of mothers who rated girls and mean ratings of mothers who rated boys, F (16, 165) = 2.323, $p < .004$. Reference to Appendix O shows that the mean ratings for mothers who rated girls are higher on scales scored in the positive direction and lower on scales scored in the negative direction than are the mean ratings for mothers who rated boys, on each of the 16 scales. The univariate *F* test results show that on 11 of the 16 scales these differences are significant: Scale 2 (Self Concept), $p < .017$; Scale 3 (Impulse Control), $p < .001$;

Table 39

CBRS: Comparison of Mothers' Ratings of Normal Boys and Girls, Sample (a)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	2.323	16	165	.004	.429

Univariate F Tests

Scale	F (1, 180)	MS	p <	SDFC
1	.203	4.622	.653	- .541
2	5.838	186.039	.017*	.631
3	11.191	176.056	.001***	.226
4	7.397	374.302	.007**	- .084
5	8.298	190.097	.004**	.290
6	12.016	166.363	.001***	.508
7	2.381	224.208	.124	- .924
8	9.257	117.126	.003**	.147
9	15.139	153.235	.001***	- .658
10	7.484	95.736	.007**	- .259
11	.699	18.482	.404	.177
12	5.192	117.119	.024*	.171
13	4.355	88.619	.038*	.197
14	11.966	104.637	.001***	- .185
15	3.263	30.088	.072	- .033
16	1.422	21.806	.235	.062

* $p < .05$
** $p < .01$
*** $p < .001$

Scale 4 (Appropriate Activity), $p < .007$; Scale 5 (Physical Concern), $p < .004$; Scale 6 (Moral Development), $p < .001$; Scale 8 (Relation to Adults), $p < .003$; Scale 9 (School Problems), $p < .001$; Scale 10 (Eating Problems), $p < .007$; Scale 12 (Inappropriate Attention-Seeking), $p < .024$; Scale 13 (Avoidance) $p < .038$; Scale 14 (Outer Aggression), $p < .001$.

Mothers rating siblings. The multivariate generalization of the t test for correlated samples (MANOVA) was applied to the data obtained in sample (b).

Means and standard deviations for mothers' ratings of 25 boys and 25 girls are presented in Appendix P.

Multivariate and univariate F test results are summarized in Table 40. Over all 16 scales, the comparison of mean ratings by mothers indicated no significant difference in ratings of boy/girl siblings, F (16, 9) = 1.034, $p < .500$.

In summary, mothers who rated girls gave them more favourable ratings than mothers who rated boys (sample a); however, when mothers rated opposite-sex siblings no significant difference between ratings of boys and girls was found in the CBRS.

BPC

Ratings on 37 boys and 41 girls were obtained from parents who had rated one child per family.

The multivariate generalization of the t test for independent samples was applied to the data.

Table 40

CBRS: Comparison of Mothers' Ratings of Normal Boys and Girls, Sample (b)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	1.034	16	9	.500	.805

Univariate F Tests

Scale[a]	F (1, 24)	MS	p <	SDFC
1	.034	1.960	.856	1.206
2	.252	12.960	.620	.457
3	.368	10.240	.610	1.177
4	.132	11.560	.720	- .248
5	2.019	77.440	.168	- .277
6	.024	.640	.878	.986
7	.157	59.160	.696	- .071
8	.015	.360	.904	.222
9	4.219	88.360	.051	1.920
10	.523	4.840	.477	.103
11	1.587	64.000	.220	.171
12	.560	17.640	.461	1.372
13	3.000	81.000	.096	- .017
14	.779	6.760	.386	.435
15	.075	1.440	.787	- .361
16	.453	21.160	.507	- .091

[a]Transformed Variables

Means and standard deviations for mothers' ratings of boys and girls are presented in Appendix Q.

Multivariate and univariate F test results are summarized in Table 41. Although reference to Appendix Q shows that mothers gave lower mean ratings to girls in three of the four factors, comparison of mean ratings by mothers indicates no significant differences in ratings of boys and girls, F (4, 73) = 1.164, $p < .334$.

Summary

The hypothesis of no significant difference between mothers' ratings of boys and girls was not rejected when mothers rated siblings on the CBRS. Results from mothers who rated one child of either sex did reject the hypothesis with both the CBRS and the BPC.

Table 41

BPC: Comparison of Mothers' Ratings of Normal Boys and Girls

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	1.164	4	73	.334	.245

Univariate F Tests

	F (1, 76)	MS	p <	SDFC
Factor				
I	.272	5.517	.604	- .261
II	.279	3.322	.599	- .187
III	2.439	8.250	.123	1.103
IV	1.118	.147	.294	- .675

Hypothesis 3b

When fathers are the raters, there will be a significant difference between the means obtained from ratings of male children and the means obtained from ratings of female children on each of two instruments, with the ratings of girls being higher on scales scored for positive attributes and lower on scales scored for negative attributes.

CBRS

The two samples considered in Hypothesis 3 were used in testing Hypothesis 3b.

Fathers rating one child. The multivariate generalization of the *t* test for independent samples (MANOVA) was applied to the data obtained in sample (a).

Means and standard deviations for fathers' ratings of 91 boys and 91 girls are presented in Appendix O.

Multivariate and univariate *F* test results are summarized in Table 42. Over all 16 scales, the comparison of mean ratings by fathers indicated a significant difference between mean ratings of fathers who rated girls and mean ratings of fathers who rated boys, F (16, 165) = 2.841, $p < .001$. Reference to Appendix O shows that the mean ratings for fathers who rated girls are higher in 7 of the 8 scales scored in the positive direction and lower in 7 of the 8 scales scored in the negative direction than are the mean ratings for fathers who rated boys. The univariate *F* test results show that on 5 of the 16 scales these differences are significant: Scale 4 (Appropriate

Table 42

CBRS: Comparison of Fathers' Ratings of Normal Boys and Girls, Sample (a)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	2.841	16	165	.001	.465

Univariate F Tests

Scale	F (1, 180)	MS	p <	SDFC
1	2.238	44.504	.136	.875
2	2.104	56.052	.149	- .510
3	.707	13.195	.402	.178
4	3.756	162.555	.054*	- .415
5	6.937	98.676	.009**	- .436
6	3.740	62.911	.055*	.043
7	1.070	91.441	.302	.452
8	3.890	54.949	.050*	- .046
9	16.916	156.927	.001***	.743
10	2.522	38.769	.114	.264
11	.094	2.423	.759	- .334
12	1.632	36.945	.203	.039
13	3.047	53.850	.083	.113
14	1.862	16.621	.174	.050
15	.317	2.907	.574	- .153
16	.039	.665	.843	- .232

* p < .05
** p < .01
*** p < .001

Activity), $p < .054$; Scale 5 (Physical Concern), $p < .009$; Scale 6 (Moral Development), $p < .055$; Scale 8 (Relation to Adults), $p < .050$; Scale 9 (School Problems), $p < .001$.

Fathers rating siblings. The multivariate generalization of the t test for correlated samples (MANOVA) was applied to the data obtained in sample (b).

Means and standard deviations for fathers' ratings of 25 boys and 25 girls are presented in Appendix P.

Multivariate and univariate F test results are summarized in Table 43. Over all 16 scales, the comparison of mean ratings by fathers indicated no significant difference in ratings of boy/girl siblings, F (16, 9) = 1.136, $p < .438$.

BPC

Ratings on 37 boys and 41 girls were obtained from parents who had rated one child per family.

The multivariate generalization of the t test for independent samples (MANOVA) was applied to the data.

Means and standard deviations for fathers' ratings of boys and girls are presented in Appendix Q.

Multivariate and univariate F test results are summarized in Table 44. Although reference to Appendix Q shows that fathers gave lower mean ratings to girls on each of the four factors, comparison of mean ratings by fathers indicates no significant differences in ratings of boys and girls, F (4, 73) = 1.820, $p < .134$.

Table 43

CBRS: Comparison of Fathers' Ratings of Normal Boys and Girls, Sample (b)

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	1.136	16	9	.438	.818

Univariate F Tests

Scale[a]	F (1, 24)	MS	p <	SDFC
1	.158	7.840	.695	.462
2	.933	46.240	.344	-1.836
3	.018	.360	.893	.606
4	.033	3.240	.857	- .091
5	6.061	99.999	.021	1.223
6	.311	5.760	.582	- .301
7	.301	40.960	.588	- .886
8	.137	1.960	.714	1.040
9	1.559	31.360	.224	- .990
10	1.841	21.160	.187	- .314
11	.227	7.840	.638	1.714
12	.059	3.240	.810	.792
13	.036	.160	.906	-1.113
14	.014	.160	.906	- .595
15	1.047	12.960	.316	1.118
16	2.933	51.840	.100	- .518

[a]Transformed Variables

Table 44

BPC: Comparison of Fathers' Ratings of Normal Boys and Girls

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	1.820	4	73	.134	.301

Univariate F Tests

	F (1, 76)	MS	p <	SDFC
Factor				
I	.009	.206	.923	- .468
II	.396	2.641	.531	- .482
III	5.387	11.470	.023	1.337
IV	.225	.102	.637	- .002

Summary

Support for the hypothesis of a significant difference between fathers' ratings of boys and girls, with girls receiving higher positive and lower negative mean ratings than boys on the CBRS was found with sample (a). No support for the hypothesis was found when fathers rated boy/girl siblings, sample (b), or when fathers rated children on the BPC.

Hypothesis 4

Parents who rate normal children will give significantly higher mean ratings on scales scored for positive attributes and significantly lower mean ratings on scales scored for negative attributes than will parents who rate maladjusted children.

Since parents of maladjusted children were not given BPC forms, results for Hypotheses 4, 4a and 4b refer to the CBRS only.

Ratings were obtained from parents of 28 maladjusted boys and 13 maladjusted girls, and parents of 94 normal boys and 91 normal girls.

The multivariate generalization of the t test for independent samples (MANOVA) was applied to the data obtained from parents' ratings of normal and maladjusted children. In each analysis, the level of significance accepted was $p < .05$ for both multivariate and univariate tests.

Parents of Boys

Comparison of mean ratings by fathers on 94 normal and 28 maladjusted boys is presented in Table 45. Over the 16 scales a significant difference was found, F (16, 105) = 5.840, $p < .001$, with fathers rating normal boys more favourably than maladjusted boys. Univariate F test results were consistent with the direction of the multivariate F, and each was significant.

Comparison of mothers' ratings on 94 normal and 28 maladjusted boys is presented in Table 46. Over the 16 scales a significant difference was found, F (16, 105) = 9.567, $p < .001$, with mothers rating

Table 45

CBRS: Comparison of Fathers' Ratings of 94 Normal Boys and 28 Maladjusted Boys

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	5.840	16	105	.001	.686

Univariate F Tests

Scale	F (1, 120)	MS	p <	SDFC
1	16.801	393.597	.001***	- .237
2	40.880	1,408.163	.001***	.180
3	30.553	684.168	.001***	- .379
4	28.017	1,812.719	.001***	- .108
5	18.836	377.803	.001***	- .248
6	34.555	935.538	.001***	- .346
7	66.574	8,735.488	.001***	.890
8	29.812	504.994	.001***	.030
9	38.404	754.385	.001***	- .210
10	7.103	117.176	.009**	- .065
11	6.224	214.018	.014**	.016
12	20.140	628.829	.001***	.380
13	38.011	1,063.077	.001***	- .028
14	62.061	1,065.150	.001***	- .797
15	32.626	359.218	.001***	- .403
16	28.024	718.177	.001***	- .006

* p < .05
** p < .01
*** p < .001

Table 46

CBRS: Comparison of Mothers' Ratings of 94 Normal Boys and 28 Maladjusted Boys

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	9.567	16	105	.001	.770

Univariate F Tests

Scale	F (1, 120)	MS	p <	SDFC
1	28.717	846.837	.001***	.124
2	74.827	2,494.592	.001***	.235
3	45.649	909.360	.001***	- .376
4	52.603	3,704.228	.001***	.130
5	12.438	388.874	.001***	- .626
6	63.135	1,703.779	.001***	.404
7	114.837	14,120.508	.001***	.624
8	50.768	841.088	.001***	.082
9	71.224	1,333.122	.001***	- .286
10	7.340	125.257	.008**	.101
11	10.165	381.080	.002**	- .170
12	31.277	1,014.843	.001***	.279
13	46.019	1,274.247	.001***	.114
14	56.392	1,111.257	.001***	- .290
15	38.080	427.911	.001***	- .111
16	59.665	1,250.418	.001***	- .081

* p < .05
** p < .01
*** p < .001

normal boys more favourably than maladjusted boys. Univariate F test results were consistent with the direction of the multivariate F, and each was significant.

Parents of Girls

Comparison of mean ratings by fathers on 91 normal and 13 maladjusted girls is presented in Table 47. Over the 16 scales a significant difference was found, F (16, 87) = 8.610, $p < .001$, with fathers rating normal girls more favourably than maladjusted girls. Univariate F test results were consistent with the direction of the multivariate F, and each was significant.

Comparison of mean ratings by mothers on 91 normal and 13 maladjusted girls is presented in Table 48. Over the 16 scales a significant difference was found, F (16, 87) = 9.900, $p < .001$, with mothers rating normal girls more favourably than maladjusted girls. Univariate F test results were consistent with the direction of the multivariate F, and each was significant.

Summary

Support for Hypothesis 4 was found with ratings of both boys and girls. Parents who rated normal children gave them significantly higher mean ratings on scales scored for positive attributes and significantly lower mean ratings on scales scored for negative attributes than did parents who rated maladjusted children.

Table 47

CBRS: Comparison of Fathers' Ratings of 91 Normal Girls and 13 Maladjusted Girls

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	8.610	16	87	.001	.783

Univariate F Tests

Scale	F (1, 102)	MS	p <	SDFC
1	12.452	321.780	.001***	- .523
2	37.547	1,063.751	.001***	.043
3	28.419	629.578	.001***	.182
4	61.425	2,612.190	.001***	.264
5	45.731	752.225	.001***	- .101
6	43.580	620.307	.001***	.205
7	61.088	5,789.660	.001***	.345
8	38.234	614.786	.001***	- .474
9	99.739	1,011.212	.001***	- .754
10	5.685	99.396	.019*	.186
11	11.032	354.482	.001***	.169
12	46.071	1,130.009	.001***	- .221
13	42.065	983.125	.001***	.225
14	37.702	487.932	.001***	.021
15	30.189	297.011	.001***	- .045
16	61.138	1,392.923	.001***	- .449

* p < .05
** p < .01
*** p < .001

Table 48

CBRS: Comparison of Mothers' Ratings of 91 Normal and 13 Maladjusted Girls

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	9.900	16	87	.001	.803

Univariate F Tests

Scale	F (1, 102)	MS	p <	SDFC
1	12.688	308.621	.001***	- .403
2	26.906	916.908	.001***	- .279
3	37.520	517.857	.001***	- .015
4	52.847	2,540.716	.001***	.308
5	44.622	827.193	.001***	.041
6	55.350	591.133	.001***	.631
7	57.391	5,632.801	.001***	.213
8	33.463	415.524	.001***	- .407
9	88.240	905.689	.001***	- .885
10	14.161	162.459	.001***	.100
11	6.849	197.308	.010**	- .024
12	47.135	962.314	.001***	.018
13	29.987	573.232	.001***	.069
14	37.203	299.571	.001***	.154
15	33.727	313.851	.001***	- .309
16	54.125	1,477.159	.001***	- .241

* $p < .05$
** $p < .01$
*** $p < .001$

Hypothesis 4a

In comparing the ratings obtained from parents of normal children with those obtained from parents of maladjusted children, the correlation of obtained ratings from mothers and fathers of maladjusted children will be lower than the correlation of ratings obtained from mothers and fathers of normal children.

Ratings were obtained from parents of 28 maladjusted boys and 13 maladjusted girls, and parents of 91 normal boys and 91 normal girls.

Correlation coefficients (Pearson r) were computed between ratings by mothers and fathers who rated normal boys and girls and between those who rated maladjusted children.

Transformation to Fisher z scores was performed on the obtained correlation coefficients, for both the normal and maladjusted samples, and the standard error of the difference between two independent z scores was computed for parents' ratings of normal and maladjusted children. The level of significance accepted for all computations was $p < .05$, (one-tailed test).

Ratings on Boys

Results from the comparison between parents' ratings of 91 normal and 28 maladjusted boys are presented in Table 49. On Scale 15 (Outer Aggression) only, parents of maladjusted boys showed significantly less agreement in their ratings than did parents of normal boys. On the remaining 15 scales of the CBRS, results were not in the direction predicted in the hypothesis.

Table 49

CBRS: Significance of the Difference Between Correlations of Parents' Ratings on 91 Normal and 28 Maladjusted Boys

Scale	Normal z_r	Maladjusted z_r	z
1	.709	.867	- .697
2	.354	.996	-2.833
3	.678	.758	- .353
4	.848	1.099	-1.108
5	.709	.908	- .878
6	.811	.950	- .613
7	.678	1.333	-2.890
8	.758	.775	- .075
9	.563	.929	-1.615
10	.648	.829	- .799
11	.678	.793	- .507
12	.709	1.099	-1.721
13	.604	.848	-1.077
14	.950	.775	.772
15	.693	.060	2.793**
16	.343	.867	-2.312

**$p < .01$ one-tailed test

Ratings on Girls

Results from the comparison between parents' ratings of 91 normal and 13 maladjusted girls are presented in Table 50. On Scale 12 (Inappropriate Attention-seeking) only, parents of maladjusted girls showed significantly less agreement in their ratings than did parents of normal girls. On the remaining 15 scales, results were not in the predicted direction.

Summary

Support was not found for the hypothesis that parents of maladjusted children would agree less in their ratings than parents of normal children. Results were in the opposite direction to that predicted except in ratings of Outer Aggression for boys and Inappropriate Attention-seeking for girls, where parents of maladjusted children showed less agreement than parents of normal children.

Table 50

CBRS: Significance of the Difference Between Correlations of Parents' Ratings on 91 Normal and 13 Maladjusted Girls

Scale	Normal z_r	Maladjusted z_r	z
1	.648	.424	.671
2	.424	.829	-1.214
3	.549	.663	- .342
4	.741	1.528	-2.358
5	.663	.867	- .611
6	.472	.725	- .758
7	.472	1.071	-1.795
8	.590	.973	-1.148
9	.472	.908	-1.307
10	.618	1.221	-1.807
11	.996	1.221	- .674
12	.758	.121	1.909*
13	.472	.590	- .354
14	.485	.829	-1.031
15	.448	.725	- .830
16	.678	.725	- .141

*p < .05 one-tailed test

Hypothesis 4b

The difference between the means obtained from fathers' ratings of normal and maladjusted children will be greater than the difference between the means obtained from mothers' ratings of normal and maladjusted children.

Ratings were obtained from parents of 28 maladjusted boys and 13 maladjusted girls.

For normal children the sample consisted of ratings by parents of 28 normal boys and 13 normal girls, selected from the larger normal sample and matched for age and sex with the maladjusted boys and girls.

MANOVA (2 x 2 factorial analysis) was applied to the data on boys and girls obtained from fathers who rated normal and maladjusted children, and to the data obtained from mothers of the same children (n = 56 boys; n = 26 girls).

The MANOVA results, summarized in Table 51, indicate a significant main effect of diagnosis (normal or maladjusted), F (16, 63) = 3.784, p <.001, for fathers' ratings; no significant effect for sex of child or interaction of sex by diagnosis were found.

When mothers were the raters, MANOVA results, reported in Table 52, were similar to those reported for fathers' ratings. A significant main effect of diagnosis was found, F (16, 63) = 6.337, p <.001; no significant effects for sex of child or interaction of sex by diagnosis were found.

Disregarding the sex of child, difference scores were computed between fathers' ratings of normal and maladjusted children, and the

Table 51

2 X 2 MANOVA Summary: Fathers Rating Matched Normal and Maladjusted Boys and Girls over 16 Scales of the CBRS

Multivariate Tests of Significance (Wilks lambda)

(Test of Roots 1 through 1)

Source	F (16, 63)	p <	R
Sex of Child	1.325	.211	.502
Diagnosis	3.784	.001***	.700
Sex X Diagnosis	.931	.540	.437

Table 52

2 X 2 MANOVA Summary: Mothers Rating Matched Normal and Maladjusted Boys and Girls over 16 Scales of the CBRS

Multivariate Tests of Significance (Wilks lambda)

(Tests of Roots 1 through 1)

Source	F (16, 63)	p <	R
Sex of Child	1.594	.097	.537
Diagnosis	6.337	.001***	.785
Sex X Diagnosis	1.018	.451	.453

multivariate generalization of the *t* test for correlated samples (MANOVA) was applied to the obtained mean difference scores.

Results for the multivariate and univariate *F* tests are presented in Table 53. The multivariate *F* test failed to reach significance, $F\ (16, 25) = .688$, $p < .779$.

Summary

With separate analyses of mothers' and fathers' ratings of normal and maladjusted children, the *F* value obtained from comparison of mothers' ratings was larger ($F = 6.337$) than that obtained from comparison of fathers' ratings ($F = 3.784$). However, when the difference between mothers' ratings of normal and maladjusted children were compared with the differences obtained between fathers' ratings, the multivariate *F* value failed to reach significance.

Table 53

CBRS: Differences Between Fathers' Ratings of 41 Normal and 41 Maladjusted Children Compared with the Differences Between Mothers' Ratings

Multivariate Test of Significance (Wilks lambda)

Test of Roots	F	df Hyp.	df Error	p <	R
1 through 1	.688	16	25	.779	.553

Univariate F Tests

Scale[a]	F (1, 80)	MS	p <	SDFC
1	6.433	345.389	.015	.598
2	1.048	116.121	.312	.035
3	1.467	608.877	.233	.207
4	2.151	2,886.247	.150	.337
5	.774	31.610	.384	- .440
6	1.856	1,301.486	.181	1.322
7	2.430	4,488.801	.127	.663
8	1.640	253.756	.308	- .762
9	1.866	60.796	.180	.189
10	1.138	548.779	.292	.353
11	1.189	351.219	.282	- .345
12	2.295	936.974	.138	1.223
13	.831	51.610	.367	- .231
14	.860	339.609	.359	-2.678
15	.002	.098	.963	- .246
16	5.218	311.438	.028	.438

[a]Transformed Variables

DISCUSSION

In the following discussion the obtained results will be related to the specific hypotheses formulated in the Introduction, and implications for future research will be considered.

Hypothesis 1a

The first hypothesis was formulated to explore the variable influence of sex of rater on the extent of agreement between two raters who rate the same maladjusted children. The suggestion has been made that differences in rater personnel may account for more variance than differences in sampling of subjects (Richards & Simons, 1941). Other studies have reported low agreement when parents rate their children (Becker, 1960; Dreger, Lewis, Rich, Miller, Reid, Overlade, Taffel, & Fleming, 1964; Rosenfeld & Novick, 1964), and Speer (1971) stated that interrater correlations were of such an order as to suggest that ratings of the same children by different adults constitute almost orthogonal measures. One possibility that might be considered in parental ratings is that differences between mothers' and fathers' ratings may arise because of the varying amount of contact that mothers and fathers have with their children. While many variables may affect the amount of agreement obtained from parents' ratings, some control over one of these, amount of contact with children, should be gained by having child care workers rate children in their care. Child care workers act collectively as "surrogate parents" in the residential treatment centre

of concern in the present study, and are with the children all through the day and evening. Male and female workers share in the household chores, child care routines and recreational activities, more or less equally.

The age of the child care workers ranged from 21 to 33 years, in the present study, and thus these young workers were raised during the late nineteen forties and early fifties when sex role differentiation was more strongly adhered to than it is today. The question arises as to whether or not the training that child care workers receive, and the blurring of traditional sex role stereotyped responsibilities in their daily work, would override the sex role stereotyping experienced by the workers in their earlier years and be reflected in their ratings of maladjusted boys and girls. If training and experience should predominate, then it would be expected that there would be little difference in the way that male and female child care workers perceive the children in their care. If, on the other hand, the sex role standards incorporated by each sex have a greater effect on their judgments, then ratings by same sex pairs of raters should show higher agreement than ratings by opposite sex pairs.

Correlational Evidence

Two rating scales, the CBRS and the BPC, were employed in testing the hypothesis.

Male raters. The results obtained when ratings by male pairs of raters were compared with ratings by male/female pairs, indicated that male raters do not reach higher agreement in rating boys than do male/female pairs of raters on either of the two instruments. Nor did male raters agree to a greater degree than male/female pairs in rating girls on the BPC; a significant difference in favour of girls was found on one scale (Eating Problems) of the CBRS. It may be concluded from these findings that, with the two instruments used in the present study, no higher degree of consensus in ratings of either boys or girls would be obtained from pairs of male child care workers than from male/female pairs of child care workers.

Female raters. Significant differences were found in agreement when ratings by female child care workers were compared with ratings by male/female pairs, particularly when girls were rated. On 8 of the 16 scales of the CBRS, pairs of female raters agreed to a significantly greater degree than did male/female pairs in rating girls; this finding was supported on one of the major factors of the BPC (Conduct Disorder). When boys were rated, pairs of female raters agreed in their ratings to a greater extent than male/female pairs on two CBRS scales, Inner Aggression and Outer Aggression; this finding was not supported with the BPC, on which no significant difference in degree of agreement was found between female and male/female pairs.

Comparison of male and female raters. In view of the finding that pairs of female child care workers show more consensus in their ratings of girls than do male/female pairs on both instruments used in the study, (and to a limited extent in rating boys on the CBRS) while male pairs did not demonstrate this effect, the results were examined more closely to identify areas of higher agreement. On the CBRS, female pairs of raters reached a high degree of agreement in rating both girls and boys in those areas that are generally thought to reflect the effect of sex stereotyping, i. e. Outer Aggression, Impulse Control, and Moral Development. Male raters did not demonstrate significant agreement in their ratings on these scales when rating boys, and only on Moral Development (42% agreement, one-half of the percentage of agreement achieved by female pairs) in rating girls. Contrary to other reported research findings that females are less influenced by sex role stereotyping in rating children than are males (Meyer & Sobieszek, 1972), female child care workers in the present study demonstrated more effect on sex role stereotyping in their judgments than did males, a possible explanation for the agreement found between ratings by female child care workers on both the CBRS and BPC.

The results obtained from male raters were not so consistent: With the CBRS, ratings of boys or girls did not suggest that male raters were influenced by sex stereotyping, but rather that male raters were more individualistic in their ratings. With the BPC, male raters demonstrated approximately the same average degree of consensus in

rating boys as did male/female or female pairs of raters, but in rating girls, male pairs of raters agreed so little that it was hard to believe that they were rating the same children.

An alternative explanation of the higher agreement found in ratings by female child care workers may lie in the children themselves. In the residential treatment setting, it is the female workers who maintain the more traditional (and probably, the more stereotyped) role of mother from the child's point of view, even though male and female workers share duties that are usually role-assigned in the family. For most children, it is an unusual experience to have young men, acting as "surrogate fathers", interacting with them throughout the day and evening. It could be hypothesized that these children, themselves, tend to regard the female workers more readily as "mothers" while the male workers may be seen more as individual males than as fathers. In most cases, the child will have a clearer model with which to match the female child care workers' behaviour than the male workers'. These differing expectations on the part of the child may affect girls' more than boys' behaviour, since it might be expected that girls will have had less experience with males in general than will boys. To complete this circular argument, if one accepts the hypothesis (Lynn, 1969) that the female role is more clearly delineated and "learned" from an early age while the male role is more ambiguous and presents a "problem solving" situation, then the female workers may be said to have more understanding of what it means to be a "mother" than the male workers

have of what it means to be a "father", thus females should be more stereotyped in their performance and expectations in fulfilling the "mother" role; males, on the other hand, having less clear role delineation, may act in a more individualistic way toward the children.

Summary

Reference to Tables 9 and 10 in the text points out the wide differences in agreement between male pairs and male/female pairs of child care workers when compared with the agreement between female and male/female pairs in their ratings of Inner and Outer Aggression scales on the CBRS, for both boys and girls. It was mentioned earlier in this discussion that the female workers may show greater consensus in rating these scales because of the effects of sex stereotyping. However, in line with the reciprocal rater-child effects discussed above, it may also be considered that the children acted differently toward male and female workers. Perhaps female child care workers do encounter more aggressiveness in general from these children. Future research should be directed toward clarifying this issue by 1) ascertaining the differing degree of aggressiveness perceived, or expected, by male and female child care workers in considering child behaviour and 2) observational recording of the number of these behaviours emitted in the presence of male and female child care workers.

Hypothesis 1b

An additional facet to be explored in investigating the effect of sex of rater on responses to rating scales is that of possible sex differences in the strength of particular rating response sets,

defined by Mischel (1970) as the tendency to check extremes or to give cautious responses. Hypothesis 1a stated that, in assessing the behaviour exhibited by normal children and the degree of maladjusted behaviour exhibited by maladjusted children, female raters would check the extreme categories on each of two rating scales more frequently than would male raters. The basis for this hypothesis was the finding by Shapiro and Tagiuri (1959) that women, as a group, are more inclined than men to make positive or negative inferences of an extreme type when asked to infer personality traits in adults. In exploring the hypothesis, male and female raters were more explicitly defined as mothers and fathers of both normal and maladjusted children, and male and female child care workers living with children in a residential treatment centre. Although Speer (1971) noted that mothers of both non-clinic children and those referred to a child guidance clinic tended more than fathers to produce higher (i. e. more severe) ratings on the BPC, this aspect of rater difference has received little attention in the literature concerning rating scales.

In the present study, two rating scales (CBRS and BPC) were selected to determine the extent to which males and females tend to use extreme categories in rating normal and maladjusted children. Since the CBRS consists of 16 scales, 8 of which describe pro-social behaviours and 8 of which describe problem behaviours, it was possible to examine the frequency with which raters checked the extreme categories ("almost always" or "almost never") when rating positive attributes and to compare these results with the frequencies observed in rating negative attributes.

Parents of Normal Children

It was found that mothers of normal children tended to check the extreme categories on the CBRS more frequently than fathers. A greater proportion of mothers than fathers were classified as "extreme raters", when all responses were considered and the social desirability of the response was disregarded (see Table 14). However, when the frequencies of positive and negative extreme responses were examined separately, it was evident that only in the use of the extreme positive categories did mothers' responses exceed fathers'. The finding that mothers are more inclined than fathers to be extremely positive in their assessments was not surprising in view of the reports from research on parent perception. Both boys and girls report that mothers are friendlier and easier to get along with, and pre-adolescent children generally "prefer" mothers to fathers (Kagan, 1965; Hawkes, Burchinal, & Gardiner, 1957; Simpson, 1935). When parents are asked to rate their children, mothers may be more willing than fathers to use the extreme positive categories because, having more daily contact with children, they may have a broader understanding of child behaviour. It may be easier for mothers, on this basis, to accept the behaviour problems that their children occasionally present and still maintain a generally positive attitude toward their children. An interpretation of these findings might also be made in reference to a previous report that mothers appear to have a more "complete frame of reference" in judging the behaviour of both boys and girls and are less likely than fathers to rely on sex-role stereotypes in judging child behaviour (Meyer & Sobieszek, 1972).

Parents and Child Care Workers Rating Maladjusted Children

Parents and child care workers in the present study rated the same maladjusted children, but in different settings. Child care workers rated the children while they were living in a residential treatment centre, parents rated them in their own homes. No significant differences were found between male and female raters' use of the extreme positive or negative categories in either sample.

Before a child is admitted to a treatment centre, numerous conferences and interviews with his parents take place, consequently aspects of the child's behaviour are brought to the attention of parents; parents of such a child may be expected to reach a consensus in rating the extreme qualities in his behaviour. In addition, parents of maladjusted children, having agreed to the removal of the children from the home, may feel a need to justify the removal by presenting a "united front" in rating his behaviour, resulting in a willingness for both mothers and fathers to use the extreme categories with the same relative frequency.

While the comparison of the proportions of extreme positive and negative responses in male and female child care workers' ratings failed to reach significance (with a significant difference found between the proportions of "extreme raters" on two CBRS scales only), female child care workers demonstrated a tendency toward more frequent use of the extreme negative categories, in ratings on both the CBRS and the BPC, than did male child care workers. Unlike parents, child

care workers have an equal opportunity to interact with the children in their care, therefore differences in the amount of daily contact with children cannot be assumed to be a factor in this case. In addition, child care workers, in a similar way to parents of referred maladjusted children, have ample opportunity to review the children's behaviour in discussion with other professionals, thus it might be expected that they would differ little in the use of extreme response categories. Possibly, other variables, related to the sex of rater and the role of child care worker may have had an effect on child care workers' ratings. Among those variables, the following are suggested as providing a basis for future research: a) differences between male and female workers' perceptions of normal child behaviour, b) marital status (i. e. male child care workers are more likely than females to be married, with children of their own, giving some male workers a standard of normal child behaviour with which to compare the behaviour of maladjusted children), perhaps leading to more tolerant assessments on the part of male workers, c) differential effect of experience and training in child care work on males and females, d) differing frequencies of maladjusted behaviour on the part of the child according to whether he is interacting with male or female child care workers.

Summary

The findings obtained with parents of normal children lent support to the view that mothers are more likely than fathers to use the extreme positive categories on child rating scales. Parents of

maladjusted children did not demonstrate a significant difference in the frequency with which they employed the extreme response categories in their ratings. Female child care workers did not differ significantly from male child care workers in this respect, but there was a tendency for female workers, when compared with males, to rate maladjusted children more frequently in the extreme negative categories.

In the author's view, when child care workers interact constantly with maladjusted children, their perspective of normal child behaviour may be altered; thus it is important to provide workers with opportunities to observe and interact with normal children. Future research should be directed toward clarifying the issues regarding child care workers' expectations of normal child behaviour, and the differential effect of training on male and female workers. Observational studies in the natural environment would provide information regarding differing frequencies of maladjusted child behaviour directed toward male and female raters.

Hypotheses 2 and 2a

Hypothesis 2 stated that both male and female child care workers rating maladjusted children would give significantly higher mean ratings on the CBRS scales scored for positive attributes and lower mean ratings on scales scored for negative attributes (CBRS and BPC) to children of the opposite sex to their own. The corollary hypothesis (2a) was that female raters would show less difference between ratings of boys and girls than would male raters. The two hypotheses were

formulated on the basis of research concerning the development of differential sex roles in males and females, and the significance of sex role stereotypes in the standards by which adults judge others (Kagan, 1964; Maccoby, 1966). Two studies (Meyer & Sobieszek, 1972; Rothbart & Maccoby, 1966) found that parents are better able to define the behaviour of same sex children, but are also inclined to be less tolerant of same sex child behaviour, especially in the areas of aggression and dependency. Other investigators have reported that fathers are more apt to promote sex typing in their children, and thus are more likely than mothers to treat the two sexes differently (Brofenbrenner, 1960; Goodenough, 1957; Lambert, Yackley & Hein, 1971; Lansky, 1967). The question under investigation in the two hypotheses in the present study was whether male and female child care workers would demonstrate similar patterns in rating maladjusted children as those reported for parents and other adults who rate normal children.

MANOVA Results

Two samples of ratings were used in testing the hypotheses. In sample (a), male and female raters rated boys and girls, matched for age, on the CBRS. In cases where the raters had rated more than one pair of children, the rater's central tendency in rating was calculated, with the result that the *n* for ratings equalled the *n* for raters, a reduction in the number of cases available for analysis. Using a multivariate analysis of variance, the multivariate *F* obtained indicated that there were no significant differences between mean

ratings of boys and girls for either male or female raters. For male raters, only 1 of the 16 univariate tests gave a significant difference, a finding that could be due to chance with the large number of variables. For female raters, univariate test results showed significant differences in the direction of more favourable ratings for girls on 8 of the 16 scales (Moral Development, $p < .05$; General Interpersonal Relationships, $p < .02$; Relationships to Adults, $p < .001$; School Problems, $p < .02$; Inappropriate Attention-seeking, $p < .05$; Avoidance, $p < .02$ and Inner Aggression, $p < .04$). While these results may not be interpreted because the multivariate F value failed to reach significance, they may be considered to be beyond the level of chance, indicating a trend for female child care workers to rate girls more favourably (i. e. less maladjusted) than boys.

Correlated t Test Results

Sample (b) was formed from seven pairs of male and female child care workers who rated the identical children within the same time period, on both the CBRS and the BPC. If these paired workers should perceive differences in the behaviour of boys and girls, then, under the more stringent conditions in the sample the differences obtained could be regarded as indicative of sex biases. The results (correlated t tests on each of the 16 CBRS scales) demonstrated that girls were rated significantly more favourably than boys on two scales (Impulse Control and Moral Development) by both male and female raters. In addition, female raters gave significantly higher mean ratings to girls on the

Relationship to Adults scale. Ratings on problem behaviours obtained from the BPC supported the finding that female child care workers give more favourable ratings to girls: the multivariate F value for the difference between ratings of boys and girls by female raters was significant ($p < .03$), with two BPC factors (Conduct Disorder and Inadequacy-immaturity) showing significant differences in favour of girls.

The results obtained from two different samples within the residential treatment centre did not support the hypothesis of a cross-sex effect in child care workers' ratings of maladjusted children. They do suggest that both male and female child care workers, when paired in assessing children, find a higher degree of adjustment with girls than with boys in two areas on the CBRS (Impulse Control and Moral Development); female workers rated girls more favourably on an additional scale, Relationship to Adults. When a scale describing only problem behaviours (BPC) was given to the pairs of raters, female child care workers found significantly fewer problem behaviours in girls. Across ratings by all male and female raters on all children, female raters demonstrated a marked tendency to rate girls more favourably than boys on the CBRS.

Summary

Because of the small sample of child care worker raters in the study, and the large number of variables (necessitating a multivariate technique with an inadequate number of subjects) interpretation of

these findings must, at best, be tentative. The cross-sex effects obtained from ratings of normal children by parents and other adults did not hold for ratings of maladjusted children by child care workers. The most plausible explanation may lie in the interactions between male and female child care workers and children of both sexes. It may be that female workers, in general, find disturbed boys in this age range (6 through 12 years) more difficult to manage than girls, and may rate them less favourably on this basis. It is particularly interesting that, in rating problem behaviours on the BPC, male workers did not differentiate significantly between boys and girls, while female workers found that boys demonstrated a significantly higher incidence of problem behaviours. Girls, themselves, may find more nurturance, as well as more fulfillment of sex role expectations, from female child care workers, and thus interact more positively with them. If girls in the treatment centre exhibited less maladjusted behaviour than boys in general, then the incidence of positive ratings for girls by male child care workers should have been greater than that obtained. Therefore, it would seem that a sex bias is more evident in female than in male child care workers' ratings.

The corollary hypothesis (2a) stated that female raters would demonstrate less difference between ratings of boys and girls than would male raters. From the discussion of the findings with Hypothesis 2, it is obvious that male child care workers, and not female child care

workers, appear to differentiate less between boys and girls in their ratings. However, when the differences were tested, they failed to reach statistical significance for either male or female raters on the CBRS or on the BPC.

Hypothesis 3

In Hypothesis 3 (and corollary hypotheses 3a and 3b) the ratings from parents of normal children only were considered. Previous research findings have suggested that mothers are likely to be more nurturant and less restrictive toward both boys and girls than fathers (Emmerich, 1962), and research concerning children's perceptions of their parents has shown that both boys and girls "prefer" mother to fathers (Hawkes, Burchinal, & Gardiner, 1957; Kagan, 1956; Simpson, 1935). Other research studies have concluded that there is little difference in the way that mothers and fathers act toward children of pre-school age in certain experimental situations, but few research studies have been concerned with the interaction between parents and children beyond the pre-school level. The question under investigation in Hypothesis 3 of the present study was whether mothers, when asked to assess the behaviour of their children (aged 6 through 12 years) would give more favourable ratings to both boys and girls than would fathers.

Two samples were formed for Hypothesis 3 (and the corollary hypotheses): 1) ratings from parents of 91 boys and parents of 91 girls, who rated one child per family, and 2) ratings from parents of 25 boy/girl siblings, who rated both children in the family.

Parents Who Rated One Child per Family

When parents rated their sons, no significant differences were found between mothers' and fathers' mean ratings on the CBRS. However, when parents rated their daughters, over all 16 scales of the CBRS mothers gave significantly more favourable ratings to their daughters than did fathers ($p < .01$). On the following seven scales, mothers showed significant differences in favour of girls: Impulse Control, Appropriate Activity, Moral Development, General Interpersonal Relationships, Eating Problems, Inappropriate Attention-seeking and Pathology. The content of these scales seems to be related to conformity to parental demands and co-operativeness, traits that are commonly assigned to girls. Mothers of normal girls gave significantly more weight to ratings in these areas than did fathers, a possible reflection of differing sex role standards held by men and women in regard to girls.

Parents who rated one child per family on the CBRS were also given the BPC scale. No significant differences between parents' ratings of either boys or girls were found with the BPC. The results were not unexpected since the 55 items on the BPC are descriptive of problem behaviours that are characteristic of maladjusted children, thus allowing parents of normal children little scope in describing normal child behaviour.

Parents Who Rated Opposite-Sex Siblings

In 25 of the families contacted, parents submitted ratings on two children who were opposite-sex siblings, providing an opportunity to compare parents' ratings on both sexes of children in the family. No significant differences between mothers' and fathers' ratings of either sons or daughters were found on the CBRS. However, the ratings on girls deserve further mention. While the multivariate F value obtained over all 16 scales of the CBRS was not significant, 8 of the 16 univariate F values reached significance ($p < .05$) (Table 36), suggesting that, in rating girls, mothers do give more favourable ratings than fathers. Once more, interpretation of MANOVA results was hampered by the small number of subjects (25) in comparison with the number of variables (16). Had the sample been larger, indications are that the multivariate F value would have reached significance.

Summary

The results suggest that when parents of normal children are asked to assess the behaviour of their sons and/or daughters on a rating scale that includes both pro-social and problem behaviour items, they are more likely to agree concerning their sons', rather than their daughters', behaviour. Mothers tended to rate their daughters more favourably than do fathers, and this may be, considering the results of previous research studies (e. g. Meyer & Sobieszek, 1972) because female raters, particularly mothers, have a more complete "frame of reference" in assessing the behaviour of both boys and girls. Fathers have less opportunity than

mothers to interact with their children, and likely share fewer interests and activities with daughters, particularly, than mothers do. For this reason, in judging their daughters' behaviour from the opposite-sex point of view, fathers may tend to give more cautious (i. e. less definitive) responses. The discussion of the findings in Hypothesis 1b points out that mothers do check the positive extreme categories more frequently than fathers, and this effect on the CBRS may act to increase the difference between mothers' and fathers' ratings of girls.

Hypothesis 3a

With the expectation that mothers would give more favourable ratings to both boys and girls than would fathers, Hypothesis 3a stated that there would be no significant difference found between mothers' ratings of normal boys and girls.

Mothers Who Rated One Child

The results obtained in ratings by mothers who rated only one child of either sex per family failed to support the hypothesis. Mothers who rated girls gave them significantly more favourable ratings than did mothers who rated boys ($p < .004$). The differences were significant on 11 of the 16 CBRS scales: Self Concept, Impulse Control, Appropriate Activity, Physical Concern, Moral Development, Relationship to Adults, School Problems, Eating Problems, Inappropriate Attention-seeking, Avoidance, Outer Aggression. The areas in which mothers of girls gave more favourable ratings fit the sex-role stereotypes described by Maccoby (1966), i. e. that boys show less impulse control, are more active, assertive and aggressive than girls, while girls are said to

be more receptive, co-operative and conforming than boys. Those mothers who rated girls on the CBRS described their daughters' behaviour as less problematic than did mothers who rated boys. When rating on the BPC, there was a consistent trend for mothers of girls to give less severe ratings, but the differences between the ratings of boys and girls did not reach the level of significance. While this finding may appear to support the hypothesis of no significant difference, it may be confounded by the differences in item content in the BPC when compared with the CBRS. Items on the BPC are more apparently pathological and less applicable to normal child behaviour.

Mothers Who Rated Siblings

In 25 families, mothers rated opposite-sex siblings on the CBRS, and when their ratings of both sexes were compared, the expectation of no significant differences between ratings of boys and girls was supported, i. e. mothers who rate both girls and boys (in contrast with those mothers who rate either girls or boys) demonstrate no significant differences in judging the behaviour of their daughters when compared with that of their sons.

Hypothesis 3b

Reports of research concerning the relationship of fathers to their children, i. e. that fathers are more likely to treat children of both sexes differently and that girls receive more attention and praise than boys from their fathers (Bronfenbrenner, 1960) suggested the hypothesis that when fathers rate boys and girls, they will give significantly more favourable ratings to girls than to boys.

Fathers Who Rated One Child

Support was found for the hypothesis when fathers rated one child per family. Fathers of girls gave them significantly more favourable ratings over the entire CBRS than did fathers of boys ($p < .001$), but while scales showing significant differences in fathers' ratings were the same as some of those found for mothers' ratings, mothers demonstrated significant differences on 11 of the 16 CBRS scales, fathers on only 5 of them. On the following scales, the differences between fathers' ratings of boys and girls were significant in the predicted direction: Appropriate Activity, Physical Concern, Moral Development, Relations to Adults, and School Problems. The ratings obtained from the BPC showed no significant differences between ratings of boys and girls, although the trend was toward fathers' ratings to be less severe in rating problem behaviours in girls.

Fathers Who Rated Siblings

As was the case when mothers rated opposite-sex siblings, fathers' ratings showed no significant differences between ratings of boys and girls.

Summary

Summarizing the findings for Hypotheses 3a and 3b, the results obtained from parents who rated one child per family indicated that both mothers and fathers of girls gave significantly more favourable ratings to their daughters than parents of boys gave to their sons. The evidence supports previous research findings reporting that parents perceive

different assets and liabilities in each sex (Lambert, Yackley, & Hein, 1971) and suggests that sex stereotyping has an influence on parents' judgments when they rate only a child of either sex. Contrary to expectations, mothers rating one child per family adhered more closely to sex stereotypes in rating their children than did fathers. In most cases, parents who rated one child only did not have opposite-sex children within the 6 to 12 year range.

The results obtained from parents who rated opposite-sex siblings differed from those obtained from parents who rated either boys or girls. No significant differences were found between ratings of boy/girl siblings by either mothers or fathers. The results lend support to those research studies which have found that boys and girls demonstrate few psychological differences in the age group 6 through 12 years (Maccoby & Jacklin, 1974), and that parents with children of both sexes tend to treat them in much the same way (Sears, Rau, & Alpert, 1965).

The findings suggest that research reports of sex stereotyping or differences in parents' ratings of boys and girls should give more details of sampling procedures. Because the CBRS contains items descriptive of both pro-social and problem behaviours, it was possible to gain information on aspects of child behaviour that are often designated as sex-stereotyped, and both fathers and mothers showed evidence of the effect of sex-stereotyping in rating either boys or girls. However, when parents rated opposite-sex siblings, there were no apparent effects of sex-stereotyping, and neither parent rated

girls significantly more favourably than boys. Therefore, it should not be assumed that the results obtained from parents who rate either boys or girls are equivalent to those obtained from parents who rate both boys and girls.

Hypothesis 4

Hypothesis 4 was formulated to assess the efficiency of the CBRS in differentiating normal from maladjusted children so that comparisons could be made between parents' ratings of normal and maladjusted children, matched for age and sex.

Parents of Normal vs Parents of Maladjusted Children

The mean ratings obtained from parents of 94 normal boys and 91 normal girls proved to be significantly higher on each scale scored in the positive direction, and significantly lower on each scale scored in the negative direction than those obtained from parents of maladjusted children (28 boys and 13 girls), indicating that the CBRS is effective in differentiating normal from maladjusted children.

Matched Sample: Normal vs Maladjusted

Because of the small sample size in the maladjusted group in comparison with the normal group, ratings of boys and girls in the maladjusted sample were matched for age and sex with ratings of children in the normal sample, and the data re-analyzed. Even with this considerable reduction of the sample size, parents of normal boys rated them significantly more favourably than did parents of maladjusted boys. However, because of the small number of ratings available on maladjusted girls (13), the number of variables (16) exceeded the number

of subjects, and it was necessary to analyze the data obtained on girls separately for the eight pro-social and eight problem behaviour scales. Fathers of normal girls rated them significantly more favourably over the entire CBRS than did fathers of maladjusted girls, although the univariate tests on three scales (Security, Eating Problems, Sleep Problems) failed to reach significance. Reference to the table of means (Appendix R) shows that fathers of both normal and maladjusted girls rated them as slightly above average on the Security scale, and below average on the Eating Problem and Sleep Problem scales. Mothers' mean ratings of normal girls were significantly higher than those for maladjusted girls on each of the eight pro-social scales, but the multivariate F test on the eight problem behaviour scales failed to reach significance, despite the fact that all eight of the univariate tests were significant ($p < .01$ or better). Under these circumstances, with the multivariate F failing to reach significance, the univariate results may not be interpreted as significant, but due to the severely limited number of subjects, these findings are worth mentioning.

Hypothesis 4a

Reports in the literature have suggested that when mothers and fathers rate normal children, agreement between parents' ratings is likely to be low (Becker, 1960; Dreger, Lewis, Rich, Miller, Reid, Overlade, Taffel, & Fleming, 1964; Eron, Banta, Walder, & Laulicht, 1961; Sarason, Davidson, Lighthall, Waite, & Ruebush, 1960) but

comparisons across various studies are confusing since the samples are not well defined and the data not analyzed by sex of child. Parents of normal children have been found to show a higher consensus in their ratings than parents of maladjusted children (Duncan, 1971; Quay & Peterson, 1967; Sarason et al., 1960). The expectation in hypothesis 4a was that parents of normal children would demonstrate significantly more agreement in their ratings of boys and girls than would parents of maladjusted children.

Three samples were available for testing the hypothesis with the CBRS: parents' ratings on 91 normal boys and 91 normal girls, parents' ratings on 28 maladjusted boys and 13 maladjusted girls, and a small normal sample, derived from the larger one, matched for age and sex with the maladjusted children.

Percentage of Agreement

The percentage of agreement was calculated as r^2, the percentage of variance accounted for in correlating parents' ratings.

Large sample. Examining the results obtained with the large normal sample, the percentage of agreement between parents who rated normal boys ranged from 11% (Pathology) to 55% (Outer Aggression), and, in general, the percentage of agreement was within the 25% to 45% range reported in other studies, with the following scales showing agreement of at least 35%: Outer Aggression (55%); Appropriate Activity (48%); Moral Development (45%); Relations to Adults (41%); Inappropriate Attention-seeking (37%); Physical Concern and Body Awareness, Security,

Inner Aggression (36% each); Impulse Control, General Interpersonal Relationships and Sleep Problems (35% each). The percentage of agreement between parents who rated normal girls ranged from 16% (Self Concept) to 58% (Sleep Problems), with only three scales showing a percentage of agreement greater than 35%: Appropriate Activity (40%); Inappropriate Attention-seeking (41%); Sleep Problems (58%). Mothers of girls were found, previously, to rate their daughters more favourably than did fathers, and the percentage of agreement between parents' ratings of girls further demonstrates this effect.

Matched small sample. Turning to the sample of parents' ratings on 28 maladjusted boys and 13 maladjusted girls, it is evident that these parents, in general, showed more agreement in their ratings (when all 16 scales of the CBRS were considered) than did parents of normal children. The percentage of agreement for maladjusted boys ranged from .4% (Inner Aggression) to 76% (General Interpersonal Relationships), with agreement of 35% or better on 15 of the 16 scales. For ratings of maladjusted girls, the percentage of agreement between parents' ratings ranged from 1% (Inappropriate Attention-seeking) to 83% (Appropriate Activity) with agreement of 35% or better on 12 of the 16 CBRS scales.

Correlational Evidence

The correlation coefficients obtained from parents' ratings of maladjusted children were compared with those from parents of normal children, using both the large normal sample and one derived from it,

matched by age and sex with the maladjusted children. Significant differences in the direction of higher agreement were found in ratings by parents of normal children over parents of maladjusted children in assessing both Inner Aggression and Outer Aggression in boys, and in Inappropriate Attention-seeking, Security and School Problems in girls. The available sample of parents of maladjusted children was limited, but these results do suggest considerable disparity in the perception of maladjusted child behaviour in some important diagnostic areas on the part of these parents. It is worth noting that when child care workers rated the same maladjusted boys, male and female pairs of raters did not agree as strongly as female pairs of raters in their ratings of Inner Aggression and Outer Aggression. Possibly, adult males and females, both child care workers and parents, differ in their perceptions of, and tolerance for, the highly aggressive behaviours exhibited by maladjusted boys. Parents of normal boys, however, may agree more readily that their sons do not display an abnormal degree of aggressive behaviour. The same reasoning may be applied to the finding on the Inappropriate Attention-seeking scale for girls, since male/female pairs of child care workers, as well as parents, showed little agreement in rating maladjusted girls in this area.

Summary

The results gave little support to the hypothesis, in that few significant differences in favour of more agreement between parents' ratings of normal children were found, but, rather, in the comparison

of both normal samples with the maladjusted sample, parents of maladjusted children showed more agreement in their ratings of boys and girls than did parents of normal children. One possible explanation for this finding could be the different motivation to respond existing for parents of normal and maladjusted children in the present study. Parents of normal children were volunteer responders, requested to co-operate in a research study, while parents of maladjusted children were required to respond as part of the referral process in the residential treatment centre. Thus, parents of maladjusted children may have been more suspicious of the purpose of the research, perhaps suspecting that any disparity in their responses might reflect on their capabilities as parents. In addition, a previous finding in the present study was that mothers of normal children tend to use more of the positive extreme categories in rating than do fathers, while mothers and fathers of maladjusted children do not differ significantly in their use of extremes. Judging from this tendency with parents of normal children, it might be expected that mothers and fathers of maladjusted children would demonstrate more agreement in their ratings.

The implications for future research that may be construed are that parents of normal and maladjusted children may differ in the areas in which mothers and fathers share a perspective on their children's behaviour, and that parents may differ in the degree of consensus in rating children, according to the sex of the child. Therefore, researchers should take both sex of parent and sex of child, as well

as diagnosis of child, into account when they analyze data concerning ratings of children. Also, in future research, when ratings by parents of maladjusted children are required, more reliable results might be obtained if parents responded separately, under supervision.

Hypothesis 4b

In view of the findings that mothers are more nurturant and less restrictive toward children than fathers (cf. Emmerich, 1962), and, also, that mothers do not differentiate significantly between high anxious and low anxious children in their ratings (Sarason et al., 1960), it was hypothesized that mothers, in rating normal and maladjusted children, would show less difference in rating the two groups than would fathers. Although "anxiety" is a wide term that may be defined in many ways, it is not illogical to assume that maladjusted children, due to the instabilities in their life experiences, may be defined as "high anxious" when compared with normal children.

The normal sample used in testing the hypothesis consisted of normal boys and girls, matched for sex and age with the maladjusted children. No significant differences were found between the mean differences obtained from fathers' ratings of normal and maladjusted children when compared with the mean differences between mothers' ratings of the two groups. The hypothesis was not supported, and the larger F value (see p.126) resulting from the analysis of mothers' ratings suggested that mothers are more likely than fathers to show

larger differences between their ratings of normal and maladjusted children. These results may have been influenced, in part, by the frequency with which mothers of normal children rated them in the extreme positive categories. Since fathers gave fewer positive extreme responses in rating normal children, the differences between their ratings of normal and maladjusted children might tend to be less than mothers'.

Summary of Findings

A survey of theory and research has suggested that certain factors may affect adult ratings of child behaviour. The current research has found:

Sex of Rater

Sex of rater appeared to be related to the degree of consistency obtained when two raters rate a child, and on rating style, reflected as the tendency to use extreme categories, inherent in ratings by mothers of normal children.

Consistency. Paired female raters showed more agreement in rating children than paired male and female raters. Paired male raters showed less agreement than paired male and female raters. This finding was interpreted in terms of a common frame of reference (sex role training) for females and a tendency toward idiosyncratic responses for male raters.

Extremes. Mothers of normal children checked the positive extreme categories to a greater extent than the negative extremes, while female child care workers showed a tendency toward using the negative extreme categories more frequently. This finding was interpreted in terms of higher child contact on the part of mothers, and the differential effect of training and experience on the part of child care workers.

Sex of Rater X Sex of Child

Sex of rater and sex of child appeared to be related to the degree to which ratings tended to be favourable, and possibly on the manifestation of sex stereotyping in ratings.

Degree of favourableness. There was a tendency for female raters to give more favourable ratings to girls than to boys. This finding was interpreted in terms of more clearly defined sex role expectations and sex role training on the part of both female raters and female children.

Sex stereotyping. There was a trend for male raters to show less sex role stereotyping in rating boys and girls. This finding was interpreted in terms of less clearly defined sex role expectations and training on the part of male raters.

Parent Raters

It was found that sex of parent and sex of child appeared to be related to the extent to which ratings reflected favourable assessments. Sex of child appeared to be related to the degree of consistency obtained in parents' ratings.

Sex of parent x sex of child. Mothers gave more favourable ratings to girls than did fathers, and mothers of girls gave them more favourable ratings than did mothers of boys. These findings were interpreted in terms of a greater amount of contact between mothers and daughters as compared with fathers and daughters, and the effect of more clearly defined sex role expectations on the part of mothers.

Consistency. Parents who rated boys showed more agreement in their ratings than parents who rated girls.

Parents of Maladjusted Children vs Parents of Normal Children

It was found that parents of normal children assigned them more favourable ratings than did parents of maladjusted children.

The diagnosis of the child as normal or maladjusted had an effect on the degree of consistency obtained in parents' ratings. Parents of maladjusted children demonstrated more agreement in their ratings than did parents of normal children. This finding was interpreted in terms of the situational demands on parents of maladjusted children.

Although this research has provided some support for the preceding conclusions, the following problems relating to more explicit definition of the sample in child assessment remain:

1) characteristics of the rater, particularly when raters other than parents are concerned, should be defined in terms of age, sex, role relationship to ratee, sex role expectations for ratee, amount of contact with children, training and experience.

2) characteristics of the child rated should be defined in terms of sex, age, diagnosis (normal or maladjusted), perception of adult male and female sex roles.

3) reliance on volunteer responders tends to decrease the reliability and validity of responses, unless supervision is provided.

In future research, it would be useful to gather demographic data on the families of normal and maladjusted children. The number of children in the family may have an effect on parents' ratings, and ratings of both normal and maladjusted siblings should be compared. Since the present research suggests that the amount of contact with children may also have an effect on parents' ratings, a comparison might be made between families in which fathers have longer periods in the home during the day, and those in which fathers, or fathers and mothers, are away from home during much of the day. Additionally, if responses to a sample of items on a rating scale could be verified by observation in a natural setting, the validity of rating scales should be increased.

BIBLIOGRAPHY

Ackerson, L. Children's behavior problems, Vol. 2. Chicago: University of Chicago Press, 1942.

Alberle, T. F., & Naegele, K. D. Middle class fathers' occupational role and attitudes toward children. American Journal of Orthopsychiatry, 1952, 22, 366-378.

Anthony, J. E. The behaviour disorders of childhood. In P. Mussen (Ed.) Carmichael's manual of child psychology. New York: Wiley, 1970, 667-764.

Baumrind, D. Current patterns of parental authority. Developmental Psychology Monograph, 1971, 4.

Baumrind, E., & Black, A. E. Socialization practices associated with dimensions of competence in preschool boys and girls. Child Development, 1967, 38, 291-327.

Becker, W. C. The matching of behavior rating and questionnaire personality factors. Psychological Bulletin, 1960, 57, 201-212. (a)

Becker, W. C. The relationship of factors in parental ratings of self and each other to the behavior of kindergarten children as rated by mothers, fathers and teachers. Journal of Consulting Psychology, 1960, 24, 507-527.

Becker, W. C., Peterson, D. B., Luria, Z., Shoemaker, D. J., & Hellmer, L. A. Relations of factors derived from parent-interview ratings to behavior problems in five-year-olds. Child Development, 1962, 33, (3), 509-535.

Bee, H. L. Parent-child interaction and distractibility in 9-year-old children. Merrill-Palmer Quarterly, 1967, 13, 175-190.

Bieri, J. Parental identification, acceptance of authority and within-sex differences in cognitive behavior. Journal of Abnormal & Social Psychology, 1960, 60, 76-79.

Block, J. H. Conceptions of sex role: some cross-cultural and longitudinal perspectives. American Psychologist, 1972.

Brofenbrenner, U. Some familial antecedents of responsibility and leadership in adolescents. In L. Petrullo and B. M. Bass (Eds.) Studies in leadership. New York: Holt, 1960. (b)

Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosendkrantz, P. S., & Vogel, S. R. Sex-role stereotypes and clinical judgments of mental health. Journal of Clinical and Consulting Psychology, 1971, 70, 1-7.

Brown, D. G. Masculinity-feminity development in children. Annals New York Academy Science, 1964, 105, 890-896.

Cassell, R. N. A comparison of teacher and parent ratings on the Child Behavior Rating Scale for 800 primary pupils. Journal of Educational Research, 1964, 57, 437-439.

Cheek, R. E. Family socialization techniques and deviant behavior. Family Process, 1966, 5, (2), 199-217.

Cooper, J. B. Two scales for parent evaluation. Journal of Genetic Psychology, 1966, 108, (1), 49-53.

Cronbach, L. J. Essentials of psychological testing. (3rd ed.) New York: Harper Row, 1970.

Davidson, K. S., Sarason, S. B., Lighthall, F. F., Waite, R. R., & Sarnoff, I. Differences between mothers' and fathers' ratings of low anxiety and high anxiety children. Child Development, 1958, 29, 155-160.

Digman, J. M. Child behavior ratings: further evidence of a multiple factor model of child personality. Educational and Psychological Measurement, 1965, 25, 787-799.

Dreger, R. M., Lewis, P. M., Rich, T. A., Miller, K. S., Reid, M. P., Overlade, D. C., Taffel, C., & Flemming, E. L. Behavioral classification project. Journal of Consulting Psychology, 1964, 28, 1-13.

Droppleman, L. F., & Schaefer, E. S. Boys' and girls' reports of maternal and paternal behavior. Paper read at American Psychological Association, New York City, August 31, 1964.

Duncan, P. Parental attitudes and interactions in delinquency. Child Development, 1971, 42, 1751-1765.

Duncan, P., & Kilpatrick, D. L. The Child Behaviour Rating Scale. Unpublished, c. 1975. (Available from P. Duncan, Psychology Depart., University of Victoria, Victoria, B. C.).

Duncan, P., & Kilpatrick, D. L. The Child Behaviour Rating Scale Manual. Unpublished manuscript, 1975.

Eisenman, R. Birth order and sex differences in aesthetic preference for complexity-simplicity. Journal of General Psychology, 1967, 77, 121-126.

Emmerich, W. Continuity and stability in early social development. II. Teachers' ratings. Child Development, 1966, 37, 17-27.

Emmerich, W. Variations in the parental role as a function of the parent's sex and the child's sex and age. Merrill-Palmer Quarterly, 1962, 8, 3-11.

Endler, N. S., & Hunt, J. McV. Sources of behaviour variance as measured by the S-R Inventories of Anxiousness. Psychological Bulletin, 1966, 65, 336-346.

Eron, L. D., Banta, T. J., Valder, L. O., & Laulicht, J. H. Comparison of data obtained from fathers and mothers on child-rearing practices and their relation to child aggression. Child Development, 1961, 32, 457-472.

Fauls, L. B., & Smith, W. D. Sex-role learning of five-year-olds. Journal of Genetic Psychology, 1956, 89, 105-117.

Fish, B., & Shapiro, T. A descriptive typology of children's psychiatric disorders: II: a behavioral classification. In Jenkins, R. L., & Cole, J. O. (Eds.) Psychiatric Research Reports, 1964, 18, 75-86.

Fisher, R. L. Social schema of normal and disturbed school children. Journal of Educational Psychology, 1967, 58, 88-92.

Fling, S., & Manosevitz, M. Sex typing in nursery school children's play interests. Developmental Psychology, 1972, 7, 146-152.

Glidewell, J. C. (Ed.). Parental attitudes and child behavior. Springfield, Illinois: Charles C. Thomas, 1961.

Goldberg, L. R. Objective diagnostic tests and measures. Annual Review of Psychology, 1974, 343-366.

Goldfried, M. R., & Kent, R. N. Traditional versus behavioral personality assessments: a comparison of methodological and theoretical assumptions. Psychological Bulletin, 1972, 77, 409-420.

Goodenough, E. W. Interest in persons as an aspect of sex difference in the early years. Genetic Psychology Monographs, 1957, 55, 287-323.

Guilford, J. P. Psychometric methods. (2nd ed.) New York: McGraw-Hill, 1954.

Guilford, J. P. Fundamental statistics in psychology and education. (3rd ed.) New York: McGraw-Hill, 1965.

Gurin, G., Veroff, J., & Feld, S. Americans view their mental health. New York: Basic Books, 1960.

Hart, H., & Olander, E. Sex differences in character as indicated by teachers' ratings. School and Society, 1924, 20, 381-382.

Hartrup, W. W., & Moore, S. G. Avoidance of inappropriate sex-typing by young children. Journal of Consulting Psychology, 1963, 27, 467-473.

Hawkes, G. R., Burchinal, L. G., & Gardner, B. Pre-adolescents' views of some of their relations with their parents. Child Development, 1957, 28, 393-399.

Hummel, T. J., & Sligo, J. R. Empirical comparison of univariate and multivariate analysis of variance procedures. Psychological Bulletin, 1971, 76, (1), 49-57.

Jenkins, R. L. Diagnoses, dynamics and treatment in child psychiatry. In Jenkins, R. L., & Cole, J. O. (Eds.) Psychiatric Research Reports, 1963, 18, 91-117.

Jenkins, R. L., & Glickman, S. Patterns of personality organization among delinquents. Nervous Child, 1947, 6, 329-339.

Johnson, M. M. Sex role learning in the nuclear family. Child Development, 1963, 34, 319-333.

Johnson, O. G., & Bommarito, J. W. Tests and measurements in child development: a handbook. San Francisco: Jossey-Bass, 1971.

Kagan, J. The child's perception of the parent. Journal of Abnormal and Social Psychology, 1956, 53, 257-258.

Kagan, J. Acquisition and significance of sex-typing and sex-role identity. In Hoffman, M., & Hoffman, L. (Eds.) Review of child development research. Vol. 1. New York: Russell Sage, 1964, 137-167.

Kagan, J., & Lemkin, I. The child's differential perception of parental attributes. Journal of Abnormal and Social Psychology, 1960, 61, 440-447.

Kagan, J., & Moss, H. A. Birth to maturity. New York: Wiley, 1962.

Katz, M. M., & Lyerly, S. B. Methods for measuring adjustment and social behaviour in the community: I. Rationale, description, discriminative validity and scale development. Psychological Reports, 1963, 13, 503-535.

Kearsley, R., Snider, M., Ritchie, R., Crawford, J. D., & Talbot, N. B. Study of relations between psychologic environment and child behaviour. American Journal of Disturbed Children, 1962, 104, (1), 12-20.

Kinder, V. S. Through our own looking glass. School and Society, 1925, 22, 533-536.

Kohlberg, L., & Zigler, E. The impact of cognitive maturity on the development of sex-role attitudes in the years 4 to 8. Genetic Psychology Monographs, 1967, 75, 84-165.

Kohn, M., & Rosman, B. L. A social competence scale and symptom check-list for the pre-school child: factor dimensions, their cross-instrument generality and longitudinal persistence. Developmental Psychology, 1972, 6, 430-444. (a)

Kohn, M., & Rosman, B. L. A two-factor model of emotional disturbance in the young child: validity and screening efficiency. Journal of Child Psychology and Psychiatry, 1973, 14, 31-56.

Lambert, W. E., Yackley, A., & Hein, R. N. Child training values of English Canadian and French Canadian parents. Canadian Journal of Behavioural Science, 1971, 3, 217-236.

Langord, W. S. Reflections on classification in child psychiatry as related to the activities of the Committee on Child Psychiatry of the Group for the Advancement of Psychiatry. In Jenkins, R. L., & Cole, J. O. (Eds.) Diagnostic Classification in child psychiatry. Psychiatric Reports, 1964, 18, Whole Monograph, 1.

Lansky, L. M. The family structure also affects the model: sex-role attitudes in parents of preschool children. Merrill-Palmer Quarterly, 1967, 13, 139-150.

Lapouse, R., & Monk, M. A. Behavior deviations in a representative sample of children: variation by sex, age, race, social class and family. American Journal of Orthopsychiatry, 1964, 34, 436-446.

Lorr, M. Rating scales and checklists for the evaluation of psychopathology. Psychological Bulletin, 1954, 51, 119-127.

Lorr, M. Classification of the behavior disorders. Annual Review of Psychology, 1961, 12, 195-216.

Lynn, D. B. Parental and sex role identification. Berkeley: McCutchan, 1969.

Lytton, H. Three approaches to the study of parent-child interaction: ethological, interview and experimental. Journal of Child Psychology and Psychiatry, 1973, 14, 1-17.

Maccoby, E. The development of sex differences. Stanford: Stanford University Press, 1966.

Maccoby, E. E., & Jacklin, C. N. The psychology of sex differences. Stanford: Stanford University Press, 1974.

Maccoby, E. E., & Rau, L. Differential cognitive abilities. Final report, U. S. Office of Education, Cooperative Research Project No. 1040, 1962.

MacFarlane, J. W., Allen, L., & Honzik, M. P. A developmental study of the behavior problems of normal children. Berkeley: University of California Press, 1954.

Maier, H. W., & Campbell, S. G. Routines: a pilot study of three selected routines and their impact upon the child in residential treatment. American Journal of Orthopsychiatry, 1957, 27, 701-710.

Meyer, J. W., & Sobieszek, B. I. Effect of a child's sex on adult interpretation of its behavior. Developmental Psychology, 1972, 6, (1), 42-48.

Milton, G. A. The effects of sex-role identification upon problem-solving skill. Journal of Abnormal and Social Psychology, 1957, 55, 208-212.

Minton, C., Kagan, J., & Levine, J. A. Maternal control and obediance in the two-year-old. Child Development, 1971, 42, 1873-1894.

Mischel, W. Sex typing and socialization. In Mussen, P. (Ed.) Carmichael's manual of child psychology. (3rd ed.) Vol. 2. New York: Wiley, 1970, 3-72.

Moos, R. H. Sources of variance in responses to questionnaires and in behavior. Journal of Abnormal Psychology, 1969, 74, 405-412.

Mussen, P. H., Conger, J. J., & Kagan, J. Child development and personality. (4th ed.), New York: Harper Row, 1972.

Mussen, P., & Distler, L. Masculinity, identification and father-son relationships. Journal of Abnormal and Social Psychology, 1959, 59, 350-356.

Mussen, P., & Rutherford, E. Parent-child relations and parental personality in relation to young children's sex-role preferences. Child Development, 1963, 34, (3), 589-607.

Nash, J. The father in contemporary culture and current psychological literature. Child Development, 1965, 36, (1), 261-297.

Newson, J., & Newson, E. Four year olds in an urban community. Harmondsworth, England: Pelican Books, 1968.

Nihara, K., Foster, R., Shellhaas, M., & Leland, H. The Adaptive Behavior Scale. Adaptive Behavior Project, Parsons State Hospital and Training Center, 1969.

Norman, W. T., & Goldberg, L. R. Raters, ratees and randomness in personality structure. Journal of Personality and Social Psychology, 1966, 4, (6), 681-691.

Novick, J., Rosenfeld, E., & Bloch, D. A. Situational variation in the behavior of children. Journal of Consulting Psychology, 1966, 30, 488-493.

Novick, J., Rosenfeld, E., Bloch, D. A., & Dawson, D. Ascertaining deviant behavior in children. Journal of Consulting Psychology, 1966, 30, 230-238.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana: University of Illinois Press, 1957.

Osofsky, J. D., & Oldfield, S. Children's effects upon parental behavior: mothers' and fathers' responses to dependent and independent behaviors (summary). Proceedings of the 79th Annual Convention of the American Psychological Association, Washington, D. C., 1971.

Patterson, G. R. An empirical approach to the classification of emotionally disturbed children. Journal of Clinical Psychology, 1964, 20, 326-337.

Peterson, D. R. Behaviour problems of middle childhood. Journal of Consulting Psychology, 1961, 25, 205-209.

Peterson, D. R., Becker, W. C., Helmer, L. A., Shoemaker, D. J., & Quay, H. C. Parental attitudes and child adjustment. Child Development, 1959, 30, 119-130.

Peterson, D. R., Becker, W. C., Shoemaker, D. J., Luria, Z., & Hellmer, L. A. Child behavior problems and parental attitudes. Child Development, 1961, 32, 151-162.

Peterson, D. R., Quay, H. C., & Cameron, G. R. Personality and background factors in juvenile delinquency as inferred from questionnaire responses. Journal of Consulting Psychology, 1959, 23, 395-399.

Quay, H. C. Personality dimensions in delinquent males as inferred from the factor analysis of behavior ratings. Journal of Research in Crime & Delinquency, 1964, 1, 33-37.

Quay, H. C. Personality problems in pre-adolescent delinquent boys. Educational & Psychological Measurement, 1966, 26, 96-110.

Quay, H. C., & Peterson, D. H. Behavior problem checklist manual. Children's Research Center, University of Illinois, 1967.

Quay, H. C., Morse, W. C., & Cutler, R. L. Personality patterns of pupils in special classes for the emotionally disturbed. Exceptional Children, 1966, 32, 297-301.

Quay, H. C., & Quay, L. C. Behavior problems in early adolescence. Child Development, 1965, 36, 216-220.

Quay, H. C., Sprague, R. L., Shulman, H. S., & Miller, A. L. Some correlations of personality disorders and conduct disorders in a child guidance clinic sample. Psychology in the Schools, 1966, 3, 44-47.

Raush, H. L. On the locus of behavior observations in multiple settings within residential treatment. American Journal of Orthopsychiatry, 1959, 29, 235-241.

Raush, H. L., Dittman, A. T., & Taylor, T. J. The interpersonal behavior of children in residential treatment. Journal of Abnormal and Social Psychology, 1959, 58, 9-27.

Raush, H. L., Dittman, A. T., & Taylor, T. T. Personality setting and change in social interaction. Human Relations, 1959, 12, 361-378.

Raush, H. L., Farbman, I., & Llewellyn, L. G. Personality, setting and change in social interaction: II. A normal control study. Human Relations, 1960, 13, 205-332.

Richards, T. W., & Simons, M. P. The Fels behavior scales. Genetic Psychology Monographs, 1941, 24, 259-309.

Richman, N. The prevalence of psychiatric disturbance in a hospital school. Unpublished D. P. M. dissertation, University of London, 1964.

Roe, A., & Siegelman, M. A parent-child relations questionnaire. Child Development, 1963, 34, (3), 355-369.

Rosenfeld, E., & Novick, J. The deviant behavior profile: validity of behavior changes and the analysis of changes. Paper presented at workshop on Current Developments in Clinical Assessment of Children, Michigan State University, 1964.

Rosenthal, J. J., Ni, E., Finklestein, M., & Berkwitz, G. K. Father-child relationships and children's problems. Archives of General Psychiatry, 1962, 7, 360-373.

Ross, A. O. The issue of normality in clinical child psychology. Mental Hygiene, 1963, 47, 267-272.

Ross, A. O., Lacey, H. M., & Parton, D. A. The development of a behavior checklist for boys. Child Development, 1965, 36, 1013-1027.

Rothbart, M. K., & Maccoby, E. E. Parents' differential reactions to sons and daughters. Journal of Personality & Social Psychology, 1966, 4, 237-243.

Rutter, M. A children's behaviour questionnaire for completion by teachers: preliminary findings. Journal of Child Psychology & Psychiatry, 1967, 8, 1-11.

Ryle, A., Pond, D., & Hamilton, M. The prevalence and patterns of psychologic disturbance in children of primary age. Journal of Child Psychology & Psychiatry, 1965, 6, 101-113.

Sarason, S. B., Davidson, K. S., Lighthall, F. F., Waite, R. R., & Ruebush, B. K. Anxiety in elementary school children. New York: Wiley, 1960.

Schaeffer, D. L. Sex differences in personality: readings. Belmont, California: Brooks, Cole, 1971.

Sears, P. Doll play aggressions in normal young children: influence of sex, age, sibling status, father's absence. Psychological Monographs, 1951, 65, (6).

Sears, R. R., Maccoby, E. E., & Levin, H. Patterns of child rearing. Evanston, Illinois: Row, Peterson, 1957.

Sears, R. R., Rau, L., & Alpert, R. Identification and child rearing. Stanford: Stanford University Press, 1965.

Serbin, L., O'Leary, D. K., Kent, R. N., & Tonick, I. J. A comparison of teacher response to the pre-academic and problem behavior of boys and girls. Child Development, 1973, 44, 796-804.

Shapiro, D., & Taguiri, R. Sex differences in inferring personality traits. Journal of Psychology, 1959, 47, 127-136.

Sherman, R. C., & Smith, F. Sex differences in cue-dependency as a function of socialization environment. Perceptual & Motor Skills, 1967, 24, 599-602.

Siegel, S. Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill, 1956.

Silverstein, A. B. Validity of WISC short forms at three age levels. Journal of Consulting Psychology, 1967, 31, (6), 635-666. (a)

Silverstein, A. B. Estimating Full Scale IQs from WISC short forms. Psychological Reports, 1967, 20, (3), (Part 2), 1264. (b)

Simpson, M. Parent preferences of young children. Teachers College of Columbia University contributions to education, 1935, No. 652.

Simpson, W. H., & Bridges, C. C. A short form of the Wechsler Intelligence Scale for Children. Journal of Clinical Psychology, 1959, 15, 424.

Sines, J. O. Actuarial methods as appropriate strategy for the validation of diagnostic tests. Psychology Review, 1964, 71, (6), 517-523.

Sines, J. O., Pauker, J. D., Sines, L. K., & Owen, D. R. Identification of clinically relevant dimensions of children's behavior. Journal of Consulting and Clinical Psychology, 1969, 33, (6), 728-734.

Speer, D. C. Behavior Problem Checklist (Peterson-Quay) baseline data from parents of child guidance and non-clinic children. Journal of Consulting and Clinical Psychology, 1971, 36, (7), 221-228.

Spivak, G., & Levine, M. The Devereux Child Behavior Rating Scales: A study of symptom behavior in latency age atypical children. American Journal of Mental Deficiency, 1964 68, 700-717.

Spivak, G., & Spotts, J. The Devereux Child Behavior Scale: symptom behaviors in latency age children. American Journal of Mental Deficiency, 1965, 69, 839-853.

Spreen, O. S., & Gaddes, W. H. Developmental norms for 15 neuro-phychological tests age 6 to 15. Cortex, 1969, 5, 171-191.

Stone, F. B., & Rowley, V. Children's behavior problems and parental attitudes. Journal of Genetic Psychology, 1965, 107, (2), 281-287.

Stone, F. B., Wison, M. A., Spence, M. E., & Gibson, R. C. A survey of elementary school children's behavior problems. American Journal of Orthopsychiatry, 1969, 39, 289-290.

Stott, D. H. Bristol Social Adjustment Guides. Manual (3rd ed.) London: University of London Press, 1964.

Tasch, R. J. The role of the father in the family. Journal of Experimental Education, 1952, 20, 319-361.

Van Alstyne, D. A new scale for rating behavior and attitudes in the elementary school. Journal of Educational Psychology, 1936, 27, 677-693.

Walder, L. O., Abelson, R. P., Eron, L. D., Banta, T. J., & Laulicht, J. H. Development of a peer-rating measure of aggression. Psychology Reports, 1961, 9, 497-556.

Walker, R. N. Body build and behaviour in young children. I. Body build and nursery school teacher's ratings. Monograph of the Society for Research in Child Development, 1962, 27, (3).

Walker, R. N. Body build and behavior in young children. II. Body build and parent's ratings. Child Development, 1963, 34, 1-23.

Wiggins, J. S. Personality prediction: principles of personality assessment. Reading, Massachusetts: Addison-Wesley, 1973.

Wiggins, J. S., & Winder, C. L. The Peer Nomination Inventory: an empirically derived sociometric measure of adjustment in pre-adolescent boys. Psychological Reports, 1961, 9, 643-677.

Wight, B. W., & Sandry, M. Short form of the Wechsler Intelligence Scale for Children. Journal of Clinical Psychology, 1962, 18, 1966.

Winder, C. L., & Wiggins, J. S. Social reputation and social behavior. Journal of Abnormal and Social Psychology, 1964, 68, (7), 681-684.

Wirt, R. D., & Broen, W. E. Personality Inventory for Children. Minnesota: University of Minnesota, 1968.

Zax, M., Cowan, E. L., Izzo, L. D., & Trust, M. A. Identifying emotional disturbance in the school setting. American Journal of Orthopsychiatry, 1964, 34, 447-454.

Zunich, M. The relation between parental attitudes toward child rearing and child behavior. Journal of Consulting Psychology, 1962, 26, (2), 197.

Appendix A

Dear Parents

Recently we have designed a questionnaire that we believe will be useful in determining the effectiveness of treatment programs for those children in our community who are in need of help. But in order to help these children, we need to know what problems exist for the normal child, since most children do experience problems of one kind or another. Most of the research in child behaviour has been done with American children. We have reason to believe that there are differences between American and Canadian families, and therefore our questionnaire has been developed to provide a basis for research in Canadian families.

We would like to ask you as concerned parents to answer our questionnaire giving an honest appraisal of your own child, not as if he were an "ideal" child, but just as you see him normally, from day to day. We do not want your name to appear anywhere on the questionnaire, but we will ask for the age, birthdate and sex of your child. If, by chance, you have more than one child who brings home this request, and you are willing to take the time to respond for that child as well, we would be most appreciative.

We hope that you will want to help us in this research project which has, as its aim, the provision of better treatment facilities for children. Should you decide to participate, please sign the

form below and return it to you child's teacher. A questionnaire for each of you to fill out individually, together with return postage, will be mailed to you.

Thank you very much for your help in this project.

Sincerely yours,

We are interested in helping in this research project.

_____ Only one parent will be able to fill out the questionnaire.

_____ Both parents will be able to fill out the questionnaire.

Mailing Address: (Name) _____

(Address) _____

_____

_____

Dear Parents,

The University of Victoria is conducting a survey at our school and we are asking for your cooperation. When you come to the school on Parents Day, you will be met by a research team from the university who will give you a questionnaire to complete about your child. It is important that both parents fill out this questionnaire, so if only one of you is able to come on Parents Day, a questionnaire will be sent home for the other.

You are being asked as concerned parents to answer the questionnaire, giving an honest appraisal of your own child, not as if he were an "ideal" child, but just as you seem him normally from day to day.

The questionnaire is also being used to determine the effectiveness of treatment programmes for those children in our community who are in need of help. But in order to help these children it is essential to know what problems exist for the normal child since most children do experience problems of one kind or another. This is why your cooperation is important.

Please try to return the questionnaire promptly. You may receive a reminder by telephone if your form has not been returned by the first of December.

November 18, 1974

Dear Parents:

May I bring two items to your attention:

1. The University of Victoria is conducting a survey at our school and we are asking for your cooperation. When you come to the school on Reporting Day, you will be met by a research team from the university who will give you a questionnaire to complete about your child. It would be appreciated if parents could take the questionnaire home to be filled out independently by each parent and returned to the University no later than December 1st in the stamped envelope which will be provided by the university.

   You are being asked as concerned parents to answer the questionnaire, giving an honest appraisal of your own child, not as if he were an "ideal" child, but just as you see him normally from day to day.

   The questionnaire is also being used to determine the effectiveness of treatment programmes for those children in our community who are in need of help. But in order to help these children it is essential to know what problems exist for the normal child since most children do experience problems of one kind or another. This is why your cooperation is important.

   Please try to return the questionnaire promptly. You may receive a reminder by telephone from the survey team if your form has not been returned to the university by the first of December.

2. We are having our usual problems with cleated shoes and the tracking of dirt into the school. Some children are wearing cleated or deep tread running shoes for indoor and outdoor use when the shoe was designed for gym use. We would very much appreciate your checking to see that the shoes your child is wearing to school can be wiped clean of mud before entering the school. May we also request that your youngster have one pair of gym shoes exclusively for indoor use in the gym.

Today, one of your children is bringing home a blue slip with appointment time(s) for reporting day.

Yours sincerely,

T. B. Good
Principal

:gm

November 19th, 1974.

Dear Parents:

It is important in this study to ask that BOTH of you fill out the 146 questions, and that you do it independently.

For those of you who have two different kinds of questionnaires in your folder, we would be grateful if you would take the little extra time to fill out the small one as well as the big one.

While a form letter like this seems very impersonal, we wish to thank you both for giving your time to help in this reserach project. We hope, in turn, to be able to help children who are in need from the knowledge we gain from this study.

Thank you again.

Sincerely,

P. Duncan, Ph.D.,
Assistant Professor.

PD/tg

APPENDIX B

Child's Name: _____

Is this child a behaviour problem in class? _____

As a student this child's academic performance is:

	Below Average	Average	Above Average

From your knowledge of this child in the classroom you would estimate his intelligence to be:

	Almost Always	Frequently	Occasionally	Almost Never
He seems to like going to school				
In school, he asks for help when he needs it in doing his work				
He is reasonably happy at school				
He is afraid of failing in school				
He complains that the teacher picks on him				
He completes school assignments				
He skips school				

	High	Moderately High	Moderately Low	Low
How secure does this child seem to be?				
How would you rate this child's self-concept?				
How good is this child's impulse-control?				
How would you rate this child in appropriate activity?				
How trustworthy is this child?				
How well does this child get along with other children?				
How well does this child get along with adults?				
How would you rate this child's inappropriate attention-seeking?				
How aggressive is this child toward others?				
How destructive is this child of his own things?				

Appendix C

Today's Date .....

Child's Age ..... Sex .....

Child's Birthdate .....

My relationship to the child is (circle one):-

Mother
Father
Step-mother
Step-father
Foster-mother
Foster-father
Other .....

INSTRUCTIONS

Below are a series of statements to be rated according to how frequently each applies to the child.

The categories used are :-

Almost always
Frequently
Occasionally
Almost never

Please place an "X" in the appropriate box for each statement. If a statement does not apply at all, check "almost never"

		Almost All Ways	Frequently	Occasionally	
1.	He behaves well during meal time				
2.	Between meals he takes food without permission				
3.	He is willing to share food, such as fruit, candy				
4.	He goes to bed willingly at bedtime				
5.	He delays, makes excuses, avoids going to bed.				
6.	He wets the bed at night				
7.	He is frightened by "bad" dreams				
8.	He can plan an activity and carry it out successfully.				
9.	He can share an adult's attention				
10.	He says that he "feels sick" to get out of doing unpleasant duties				
11.	He steals money or other things at home				
12.	He seems to like going to school				
13.	In school, he asks for help when he needs it in doing his work				
14.	He appears untidy and unclean due to his own indifference				
15.	His speech is clear and easy to understand				
16.	He feels sorry when he has done something wrong				
17.	He has realistic concern for his own safety				
18.	He wants more than his share at meal time				
19.	He eats what is put before him				
20.	Once he is in bed at night he talks, sings loudly, disturbs others.				
21.	He settles down very quickly at night				
22.	He wants to have someone with him until he falls asleep at night				
23.	He says he is afraid of the dark				
24.	Once he begins an activity he will stay with it for a reasonable length of time				
25.	He throws things when he gets angry				

		Almost Always	Frequently	Occasionally
26.	He lies under pressure			
27.	He steals in the neighbourhood or at school			
28.	He is reasonably happy at school			
29.	He asks for help when he needs it			
30.	He cares about his appearance			
31.	When speaking, his statements are rambling or confused			
32.	He worries about unrealistic things that might happen to him			
33.	When others are in difficulty he shows sympathy			
34.	He gets very upset over slight physical injuries			
35.	He eats with good appetite at meal time			
36.	He obeys rules			
37.	He has to be "pushed" into joining activities			
38.	He sleeps soundly all night			
39.	He is jealous of attention paid to others			
40.	He bites his nails			
41.	He is afraid of failing in school			
42.	He is restless			
43.	He has temper tantrums			
44.	He "makes up stories" to explain events			
45.	He complains that the teacher picks on him			
46.	When angry he destroys property			
47.	He says he is sick, when he is obviously not, to avoid going to school			
48.	He flies into a rage when frustrated			
49.	He is very fussy or over-particular			
50.	He stands up for himself			
51.	He seems depressed			
52.	He will admit it when he is at fault			

		Almost Always	Frequently	Occasionally	Almost
53.	He ignores injuries even when they require medical attention				
54.	He complains that other kids pick on him				
55.	A change in routine upsets him				
56.	He flies into a rage when frustrated				
57.	He "talks back"				
58.	He balks at trying anything new				
59.	He is over-concerned about his health				
60.	He picks fights with other children				
61.	He gets upset if there is a change in the order of doing routine tasks.				
62.	He acts without thinking of the consequences				
63.	He feels that he is stupid				
64.	He thinks a lot about death				
65.	He eats at least one good meal each day				
66.	Other children find him easy to get along with				
67.	He runs away from home				
68.	He sits around doing nothing				
69.	He will listen to reason				
70.	When angry he withdraws from others				
71.	He completes school assignments				
72.	He says that no one likes him				
73.	He shows an interest in other people				
74.	He tends to blame others when things go wrong				
75.	He is reasonably talkative				
76.	He says that he "feels sick" to gain attention				
77.	He gets very upset over small matters				

		Almost Always	Frequently	Occasionally	
78.	He pays attention when others talk to him				
79.	He seems to think that everyone is smarter, more capable than he is				
80.	He shows appropriate emotions				
81.	He likes to help others				
82.	He worries continually about things that might happen in the future				
83.	He can resist temptation				
84.	He complains of unfair treatment from adults				
85.	He complains that he is unlucky				
86.	He threatens to kell himself				
87.	He has many accidents				
88.	He respects others' opinions on the best course of actions				
89.	He "clowns" to gain attention				
90.	He sucks his thumb or fingers				
91.	He can wait for things he wants				
92.	He threatens other children physically e.g. with knives or fists				
93.	He is overly sensitive to having his feelings hurt				
94.	He has tried to kill himself				
95.	He respects others' opinions about his own actions				
96.	He walks in his sleep				
97.	He wets or soils himself at night				
98.	He respects another person's point of view				
99.	He skips school				
100.	He destroys his own toys or belongings				
101.	He finds it hard to make a decision				
102.	He mutilates himself (cuts, bites, pulls out hair)				
103.	He plays co-operatively with other children				
104.	He "Makes up stories" to gain attention				

		Almost Always	Frequently	Occasionally	Almost Never
105.	He "picks on" weaker or smaller children				
106.	When frustrated he breaks into tears				
107.	He complains of being tired much of the time				
108.	He destroys things belonging to others				
109.	Having made a choice, he is happy with it				
110.	He cries frequently when alone				
111.	When he is given a job to do he does it without being nagged				
112.	He spends a good part of his time playing with other kids				
113.	He cries frequently when others are around				
114.	He prefers to be with children younger than himself				
115.	He refuses to compete if there is a possibility he may fail				
116.	He is unaware of the feelings of others				
117.	He cannot bear any criticism				
118.	He is cruel to animals				
119.	He is affectionate.				
120.	He becomes so upset by changes in routine, such as changing residences or schools, or when expecting visitors, that he may vomit or report feeling sick				
121.	He can amuse himself for long periods				
122.	He insists on having his own way				
123.	He swears or curses				
124.	He attempts to do things that are beyond his capabilities without seeking help				
125.	He tends to give up easily				
126.	He has twitches or tics or unusual mannerisms of the face or body				
127.	There is a manipulative tone to his relationship				
128.	He worries about many things				

		Almost Always	Frequently	Occasionally	Almost
129.	He ignores people when they speak to him				
130.	He is stubborn				
131.	He demands to be the centre of attention				
132.	He discusses his problems with others				
133.	He is easily led by others				
134.	He says that he is bored, doesn't know what to do				
135.	He wets or soils himself in the daytime				
136.	He is liked by other children				
137.	He chatters a lot and interrupts conversations				
138.	His moods change very quickly				
139.	He stumbles and falls easily				
140.	He has close friendships with a few children				
141.	He changes from one activity to another every few minutes				
142.	He is easily distractible				
143.	He is very awkward physically				
144.	He acts as if he thinks he is smarter than anyone else				
145.	He sets fires				
146.	He starts an activity but loses interest before it is finished				

Please check the appropriate statement:-

..... He is normally interested in and aware of sex for his age

..... He is overly interested in sex

..... He has problems in the general area of sex. (Please specify and give an example.)

If he displays bizarre or unusual ideas that extend beyond being "creative", please give examples:-

Other major problems not tapped by this questionnaire. Please list:-

Other major assets not tapped by this questionnaire. Please list:-

Listed below are some of the fears that children display. Considering the child you are rating, please mark "3" beside the most important fears, a "2" beside the next most important fears, and a "1" beside fears that are known but do not affect his life in any way.

..... Fear of the dark
..... Being alone in the dark
..... Imaginary creatures
..... Animals (real, e.g. dogs)
..... Insects
..... Remote animals (e.g bears, tigers)
..... Heights
..... Fire
..... Water
..... Traffic
..... Death
..... Parents/others dying
..... Being left alone
..... Being abandoned
..... New situations
..... Speaking in front of a group
..... Ridicule
..... Punishment
..... Mechanical noise (e.g Sirens, machinery)
..... Loud voices
..... Others fighting
..... Bigger children
..... Strangers

..... Being hurt physically
..... Robbers
..... Ghosts, witches
..... Medical treatment
..... Doctors, dentists
..... Thunder
..... Lightning
..... Failure
..... Falling
..... People wearing masks
..... Characters - TV, stories
..... Bad dreams
..... Dying
..... Ill health
..... Being confined
..... Being followed by strangers
..... Performing in a group
..... Rapidly approaching objects
..... Deformed people
..... Drunks
..... Being attacked
..... Getting lost

Please specify any other fears observed:- .....
.....

How would you rate your child on fearfulness?

Fearful
More fearful than most children his age
Average
Less fearful than children his age
Not afraid

Code _____ Age ___ Sex Sample Rater _____ Rel. _____ Date _____ Type Rating _____

Security			Self-Concept			Impulse Control			Appropriate Activity			Phy. Concern Body-Awarenes			Moral Development			General Interpers			Relation to Adults		
ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES
55	-		50	+		25	-		8	+		14	-		11	-		54	-		9	+	
58	-		52	+		48	-		24	+		17	+		16	+		66	+		29	+	
61	-		63	-		62	-		37	-		30	+		27	-		72	-		45	-	
77	-		79	-		69	+		42	-		34	-		33	+		73	+		57	-	
90	-		85	-		91	+		68	-		40	-		36	+		78	+		84	-	
117	-		93	-		122	-		75	+		53	-		83	+		81	+		111	+	
120	-		109	+					107	-		59	-		116	-		88	+				
115	-		114	-					121	+		87	-					95	+				
128	-		124	-					134	-		139	-					98	+				
			125	-					141	-		143	-					103	+				
			144	-					142	-								112	+				
									146	-								119	+				
																		127	-				
																		132	+				
																		133	-				
																		136	+				
																		140	+				
TOTALS																							

School Problems			Eating Problems			Sleep Problems			Inappropriate Attention Seeking			Avoidance			Outer Aggression			Passive or Inner Aggression			Pathology		
ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES	ITM	SC	RES
12	-		1	-		4	-		9	-		5	+		25	+		43	+		15	-	
13	-		2	+		5	+		39	+		10	+		46	+		70	+		31	+	
28	-		3	-		6	+		76	+		26	+		60	+		100	+		32	+	
41	+		18	+		7	+		89	+		44	+		92	+		102	+		49	+	
45	+		19	-		20	+		104	+		47	+		105	+		106	+		51	+	
47	+		35	-		21	-		113	+		67	+		108	+		130	+		64	+	
71	-		65	-		22	+		131	+		74	+		123	+					80	-	
99	+					23	+		137	+		101	+								82	+	
						38	-					129	+								86	+	
						96	+														94	+	
						97	+														110	+	
TOTALS																					118	+	
																					126	+	
																					135	+	
																					138	+	
																					145	+	

APPENDIX D

Date: _____

Behavior Problem Checklist

Donald R. Peterson, Ph.D. and Herbert C. Quay, Ph.D.

Children's Research Center
University of Illinois
Champaign, Illinois

Col. No.

Please complete items 1 to 6 carefully.

(1-8) 1. Name (or identification number) of child

_____

(9-10) 2. Age (in years)_____

(11) 3. Sex_____(Male = 1; Female = 2)

(12) 4. Father's Occupation_____

_____

(13) 5. Name of person completing this checklist

_____

(14) 6. Relationship to child (circle one)

a) Mother b) Father c) Teacher d) Other_____
(Specify

Please indicate which of the following constitute problems, as far as this child is concerned. If an item does <u>not</u> constitute a problem, encircle the zero; if an item constitutes a <u>mild</u> problem, encircle the one; if an item constitutes a <u>severe</u> problem, encircle the two. Please complete every item.

Behavior Problem Checklist (cont.)

Col.	No.				
(15)	0	1	2	1.	Oddness; bizarre behavior
(16)	0	1	2	2.	Restlessness, inability to sit still
(17)	0	1	2	3.	Attention-seeking, "show-off" behavior
(18)	0	1	2	4.	Stays out late at night
(19)	0	1	2	5.	Doesn't know how to have fun; behaves like a little adult.
(20)	0	1	2	6.	Self-consciousness; easily embarrassed
(21)	0	1	2	7.	Fixed expression, lack of emotional reactivity
(22)	0	1	2	8.	Disruptiveness: tendency to annoy and bother others
(23)	0	1	2	9.	Feelings of inferiority
(24)	0	1	2	10.	Steals in company with others
(25)	0	1	2	11.	Boisterousness, rowdiness
(26)	0	1	2	12.	Crying over minor annoyances and hurts
(27)	0	1	2	13.	Preoccupation; "in a world of his own"
(28)	0	1	2	14.	Shyness, bashfulness
(29)	0	1	2	15.	Social withdrawal, preference for solitary activitie
(30)	0	1	2	16.	Dislike for school
(31)	0	1	2	17.	Jealousy over attention paid other children
(32)	0	1	2	18.	Belongs to a gang
(33)	0	1	2	19.	Repetitive speech
(34)	0	1	2	20.	Short attention span
(35)	0	1	2	21.	Lack of self-confidence
(36)	0	1	2	22.	Inattentiveness to what others say
(37)	0	1	2	23.	Easily flustered and confused
(38)	0	1	2	24.	Incoherent speech
(39)	0	1	2	25.	Fighting
(40)	0	1	2	26.	Loyal to delinquent friends
(41)	0	1	2	27.	Temper tantrums
(42)	0	1	2	28.	Reticence, secretiveness
(43)	0	1	2	29.	Truancy from school
(44)	0	1	2	30.	Hypersensitivity; feelings easily hurt
(45)	0	1	2	31.	Laziness in school and in performance of other tasks
(46)	0	1	2	32.	Anxiety, chronic general fearfulness
(47)	0	1	2	33.	Irresponsibility, undependability
(48)	0	1	2	34.	Excessive daydreaming
(49)	0	1	2	35.	Masturbation
(50)	0	1	2	36.	Has bad companions
(51)	0	1	2	37.	Tension, inability to relax
(52)	0	1	2	38.	Disobedience, difficulty in disciplinary control
(53)	0	1	2	39.	Depression, chronic sadness
(54)	0	1	2	40.	Uncooperativeness in group situations
(55)	0	1	2	41.	Aloofness, social reserve
(56)	0	1	2	42.	Passivity, suggestibility; easily led by others
(57)	0	1	2	43.	Clumsiness, awkwardness, poor muscular coordination
(58)	0	1	2	44.	Hyperactivity; "always on the go"
(59)	0	1	2	45.	Distractibility
(60)	0	1	2	46.	Destructiveness in regard to his own &/or other's pro pert^
(61)	0	1	2	47.	Negativism, tendency to do the opposite of what's
(62)	0	1	2	48.	Impertinence, sauciness requested
(63)	0	1	2	49.	Sluggishness, lethargy
(64)	0	1	2	50.	Drowsiness
(65)	0	1	2	51.	Profane language, swearing, cursing
(66)	0	1	2	52.	Nervousness, jitteriness, jumpiness; easily startle
(67)	0	1	2	53.	Irritability; hot-tempered, easily aroused to anger
(68)	0	1	2	54.	Enuresis, bed-wetting
(69)	0	1	2	55.	Often has physical complaints, e.g. headaches, stom ach ache.

Appendix E

CBRS: Means and Standard Deviations for Three Samples of CCWs Rating Maladjusted Boys[a]

	Sample											
	Male and Female				Male and Female				Male and Female			
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	34.92	4.94	33.24	5.77	36.05	4.32	37.21	4.54	34.87	5.93	35.03	6.94
2	39.89	5.43	40.40	5.90	40.81	4.31	42.81	3.98	40.45	5.10	40.97	5.91
3	19.47	4.46	18.76	5.82	19.79	4.96	21.16	4.36	20.39	4.77	20.24	5.75
4	42.34	7.24	44.05	8.17	45.08	7.47	46.10	6.25	44.50	8.36	45.63	8.01
5	42.24	4.21	41.60	6.92	42.05	4.48	42.95	4.21	43.08	4.88	42.08	6.14
6	24.26	4.74	24.00	5.18	23.63	5.12	25.45	4.86	23.89	5.81	25.10	5.80
7	51.60	10.02	51.60	11.85	53.24	9.60	54.63	12.46	51.76	12.32	52.39	10.82
8	20.31	3.59	19.05	4.69	20.66	4.08	21.05	3.73	20.05	4.51	20.45	4.95
9	16.74	5.32	17.55	5.78	15.68	4.44	15.79	4.43	16.92	5.06	17.55	5.52
10	14.08	2.84	13.79	4.42	13.05	3.19	12.81	2.85	13.60	4.02	13.31	3.74
11	20.42	6.14	18.84	5.15	18.53	5.96	18.81	5.24	18.37	5.71	18.50	5.95
12	19.66	5.29	20.18	6.66	18.34	5.13	17.76	4.46	19.50	5.15	18.47	6.43
13	19.81	4.55	20.53	5.47	18.60	4.26	17.81	4.04	19.47	5.73	19.26	6.24
14	13.63	5.75	14.45	6.73	12.76	5.38	11.84	3.90	12.45	6.19	12.60	5.96
15	13.45	3.58	13.58	3.58	12.63	4.00	11.92	3.41	13.13	4.10	12.39	4.14
16	26.58	4.91	26.76	5.33	26.37	4.48	25.68	5.11	25.74	5.75	26.63	6.46

[a] n = 38 pairs in each sample.

CBRS: Means and Standard Deviations for Three Samples of CCWs Rating Maladjusted Girls[a]

	Sample											
	Male and Female				Male and Female				Male and Female			
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	35.42	6.71	35.00	6.22	38.45	3.48	40.00	4.36	34.46	7.42	34.79	6.62
2	42.12	6.24	39.71	8.03	45.17	2.85	45.37	5.51	41.58	7.34	42.08	6.51
3	23.33	3.20	22.46	3.99	23.92	3.20	24.33	3.68	21.62	6.74	22.92	5.70
4	43.58	8.53	41.04	9.69	48.04	5.00	47.83	7.55	45.04	10.29	45.08	8.13
5	42.12	5.69	39.79	6.10	44.92	5.06	44.50	4.81	40.75	5.93	41.83	5.47
6	27.21	6.13	26.79	5.79	27.04	4.69	27.96	4.11	26.87	7.43	26.67	7.24
7	53.50	11.87	54.33	11.54	56.71	10.60	58.41	11.39	56.33	16.68	56.67	15.68
8	22.75	4.34	21.96	4.48	23.29	2.69	24.21	2.62	22.83	5.53	22.96	5.09
9	15.21	5.34	14.92	4.94	13.33	2.99	12.87	3.66	14.75	5.69	15.25	5.20
10	12.00	3.55	12.50	3.46	11.75	3.42	10.42	2.75	11.75	4.32	11.71	3.43
11	17.12	3.90	18.42	6.18	15.50	5.32	16.25	5.52	19.42	7.40	17.21	6.16
12	16.92	3.93	19.12	5.54	15.17	3.13	15.12	4.09	18.33	6.91	16.54	5.99
13	18.29	4.96	19.54	6.44	16.29	4.61	15.33	4.30	19.71	8.17	17.41	6.36
14	10.42	3.59	10.96	4.73	10.17	2.44	9.17	2.76	11.79	4.82	11.29	5.50
15	11.79	3.20	12.83	3.93	11.42	2.70	10.96	3.53	12.12	3.63	11.75	3.38
16	27.96	6.54	28.17	6.33	25.25	4.35	23.71	4.45	28.04	8.12	27.96	6.06

[a] n = 24 pairs in each sample.

BPC: Means and Standard Deviations for Three Samples of CCWs Rating Maladjusted Children

	Sample											
	Male		Female		Male		Male		Female		Female	
Factor	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
						Boys[a]						
I	4.96	3.40	6.56	3.77	5.76	4.10	5.08	3.78	6.84	3.34	6.12	3.89
II	5.76	4.66	6.76	4.93	6.20	4.93	5.96	4.68	8.00	4.03	8.08	5.33
III	2.88	2.30	3.60	2.69	3.48	2.48	3.32	2.17	3.84	1.97	3.56	2.47
IV	2.92	2.56	3.28	2.52	2.92	2.38	2.60	1.89	3.80	5.67	3.80	2.65
V	2.16	2.13	2.84	1.97	2.48	4.51	1.92	2.10	2.40	1.71	2.24	1.59
						Girls[b]						
I	1.86	1.85	4.40	3.11	3.20	2.34	2.73	3.26	4.93	3.83	4.73	3.43
II	3.86	2.44	6.93	5.93	4.53	2.75	3.47	3.54	7.87	5.25	5.80	3.28
III	0.87	1.12	2.13	6.98	1.13	1.73	1.20	2.14	3.13	2.47	2.33	2.35
IV	1.13	0.91	3.40	2.90	2.27	1.49	1.33	1.34	3.20	1.70	2.80	1.47
V	0.87	1.19	1.87	1.55	1.00	0.93	0.80	1.01	1.73	1.75	1.87	1.30

[a] n = 25 pairs in each sample.

[b] n = 15 pairs in each sample.

Appendix F

CBRS: Means and Standard Deviations for Seven Male CCWs' Ratings of Boys

	Raters													
	1 (7)[a]		2 (4)		3 (5)		4 (8)		5 (5)		6 (6)		7 (7)	
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	37.86	5.37	41.25	1.26	36.20	1.79	37.25	2.71	37.20	.84	37.33	8.29	38.14	4.14
2	41.43	5.88	44.75	3.77	39.40	6.31	39.25	3.92	41.60	1.52	42.50	7.79	44.86	2.97
3	20.57	5.09	22.75	3.69	23.00	2.24	20.50	4.34	18.80	4.97	18.67	7.87	24.57	3.15
4	43.57	8.77	43.50	7.05	44.20	8.53	37.00	8.00	43.60	3.13	41.67	11.98	50.29	5.74
5	43.57	4.61	39.75	6.75	39.60	3.98	42.38	2.78	42.80	1.64	43.00	3.63	46.71	2.56
6	23.57	3.60	23.00	7.12	26.00	7.52	23.88	4.55	22.40	3.78	21.50	6.09	27.43	4.47
7	56.43	7.61	49.25	8.85	53.00	10.51	49.38	7.03	43.60	11.04	47.50	13.90	62.71	8.20
8	21.86	4.60	21.50	1.73	20.40	4.04	20.75	3.54	18.80	1.64	18.67	5.85	24.86	3.39
9	14.29	5.12	12.25	3.77	16.60	4.45	17.13	3.72	16.40	4.45	18.17	6.24	11.43	2.77
10	12.71	3.86	12.25	2.99	13.00	1.73	14.63	3.34	15.80	1.10	14.00	2.76	11.00	2.24
11	17.14	6.47	18.00	3.56	17.60	6.95	20.25	5.78	22.80	3.83	20.83	5.56	15.29	3.86
12	16.29	5.59	15.00	4.08	19.60	6.11	19.63	4.07	17.60	2.07	19.67	5.61	15.43	4.24
13	17.14	5.46	17.75	2.22	19.60	3.78	18.63	2.92	19.60	4.67	9.83	8.38	16.14	3.32
14	11.29	6.73	10.00	2.45	9.20	2.68	11.25	3.45	13.40	4.77	14.00	8.29	9.86	2.85
15	11.29	3.77	11.25	1.50	10.80	1.30	11.63	2.88	13.60	3.29	13.67	5.13	9.00	1.91
16	26.43	5.29	23.25	4.99	28.00	5.10	25.38	3.74	24.40	3.05	22.50	6.77	24.29	3.35

[a]Numbers in parentheses indicate number of children rated.

CBRS: Means and Standard Deviations for Seven Female CCWs' Ratings of Boys

	Raters													
	1 (7)[a]		2 (4)		3 (5)		4 (8)		5 (5)		6 (6)		7 (7)	
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	39.43	5.13	34.25	4.43	38.80	3.49	36.38	2.50	29.60	10.78	29.33	4.27	33.57	5.19
2	44.14	6.54	38.00	3.56	42.80	1.92	43.00	3.02	38.80	7.76	41.00	3.79	36.43	4.43
3	22.0	7.75	19.75	3.40	23.20	2.17	20.88	3.31	14.40	6.15	15.67	5.85	18.71	5.74
4	48.86	7.47	45.50	9.98	45.00	10.00	41.86	5.64	39.80	6.72	44.50	11.40	46.71	8.85
5	46.00	6.51	38.75	6.50	44.00	2.55	44.50	2.14	37.40	5.32	41.50	7.09	40.71	6.73
6	24.86	6.47	22.50	5.51	26.00	6.32	25.50	2.33	17.80	7.40	22.17	9.83	25.57	3.41
7	56.00	9.27	45.50	15.86	50.20	9.55	54.13	6.31	46.60	17.95	52.67	21.57	53.86	9.48
8	22.43	3.99	17.50	4.04	23.40	3.65	20.75	2.49	14.80	6.31	18.00	9.01	21.14	3.58
9	17.43	5.19	22.50	8.81	13.20	2.49	19.00	4.00	19.40	7.83	14.17	5.64	18.00	4.36
10	10.86	2.79	14.50	3.79	11.80	.84	11.25	.89	15.80	3.56	12.83	3.76	12.71	2.43
11	14.57	3.60	23.25	8.34	18.00	3.94	14.25	3.65	26.80	6.76	22.17	7.03	17.14	3.80
12	15.57	5.62	24.50	6.76	16.60	4.62	19.38	4.53	22.60	7.64	25.50	7.09	19.86	3.98
13	16.14	5.27	22.50	7.51	20.40	5.46	17.50	3.21	28.20	8.20	27.67	8.31	18.29	4.23
14	10.29	5.02	13.00	3.56	8.00	1.00	10.50	2.07	18.60	9.29	18.67	10.07	12.43	6.02
15	9.29	4.11	13.50	2.89	9.20	1.30	11.13	1.73	17.20	4.44	17.83	4.40	13.57	3.87
16	22.71	3.20	29.00	11.34	23.40	3.58	23.25	2.25	28.60	7.70	28.50	4.23	25.14	3.67

[a]Numbers in parentheses indicate number of children rated.

CBRS: Means and Standard Deviations for Seven Male CCWs' Ratings of Girls

	Raters													
	1 (4)[a]		2 (4)		3 (4)		4 (6)		5 (5)		6 (6)		7 (6)	
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	31.75	4.79	44.00	.82	33.00	4.40	35.00	5.83	38.80	1.64	42.83	2.40	37.33	2.66
2	37.50	9.15	46.75	3.86	35.25	4.65	42.17	6.18	44.60	1.67	50.83	3.19	43.83	1.47
3	18.50	1.91	27.50	1.73	24.25	1.71	25.50	1.76	23.60	2.30	26.67	2.50	24.83	1.94
4	37.50	10.34	50.00	6.68	39.00	10.89	42.83	7.08	44.60	3.85	52.17	4.17	47.50	2.59
5	38.50	5.26	46.00	2.16	36.75	8.54	44.50	1.22	45.60	4.51	50.50	3.83	42.83	4.26
6	19.50	6.45	31.25	2.06	29.75	1.71	30.17	4.12	26.00	2.83	29.00	5.40	28.50	3.27
7	44.50	13.30	70.25	6.60	60.00	9.83	52.00	9.19	52.40	10.33	63.67	15.36	56.17	6.55
8	17.75	6.55	26.50	1.73	23.25	1.50	23.00	2.76	20.80	2.68	25.67	2.73	24.33	.82
9	20.50	7.77	11.50	1.73	18.50	4.36	18.67	2.94	13.60	1.82	10.67	1.86	14.17	.75
10	14.50	2.65	8.75	1.50	10.25	2.99	9.50	2.35	12.80	2.28	10.33	1.86	12.17	.98
11	25.00	9.09	15.25	4.35	17.50	2.65	15.83	2.32	18.20	4.27	14.83	4.07	16.50	3.33
12	22.00	3.65	11.50	1.91	15.00	3.16	17.67	4.55	15.60	3.05	12.67	3.98	15.00	1.26
13	24.00	7.53	13.25	4.65	15.75	2.75	16.17	1.60	15.00	4.00	12.67	6.06	17.50	.84
14	17.50	3.87	7.75	.96	9.75	3.10	8.83	.09	9.60	2.30	7.50	.84	10.83	1.33
15	17.75	2.36	7.50	.58	12.50	3.32	13.67	1.51	9.20	2.17	9.67	2.66	9.33	1.63
16	27.00	3.16	21.00	3.46	33.25	9.18	25.83	3.06	22.80	1.48	19.83	2.48	25.50	3.51

[a]Numbers in parentheses indicate number of children rated.

CBRS: Means and Standard Deviations for Seven Female CCWs' Ratings of Girls

	Raters													
	1 (4)[a]		2 (4)		3 (4)		4 (6)		5 (5)		6 (6)		7 (6)	
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	40.25	1.26	37.00	1.83	33.00	4.69	35.83	1.94	37.40	9.04	36.17	8.16	34.00	3.03
2	42.25	1.50	39.00	6.06	38.50	.58	42.33	1.97	46.20	9.88	46.17	8.13	36.33	6.65
3	21.50	3.87	26.50	3.11	28.25	1.26	26.33	.82	23.40	5.98	23.17	4.49	19.83	3.92
4	44.25	11.93	55.75	3.40	39.75	8.85	45.67	4.46	46.40	12.50	42.67	12.21	42.00	11.24
5	42.75	3.20	42.25	4.65	41.00	3.56	43.00	2.53	47.20	5.22	43.33	5.92	38.33	5.24
6	21.25	2.87	34.25	1.50	30.00	4.97	30.83	1.94	28.60	9.10	29.33	8.73	22.00	4.98
7	45.50	2.65	73.25	3.86	62.25	7.50	62.33	8.98	58.80	24.38	66.50	19.14	43.33	5.85
8	20.75	2.06	27.00	2.16	27.25	1.89	25.00	1.26	24.00	6.28	25.50	4.42	20.83	4.12
9	19.75	2.22	12.50	2.38	12.75	2.36	17.33	2.42	11.40	6.07	10.33	4.41	18.00	6.51
10	15.00	.00	7.00	.00	9.50	1.29	9.17	1.83	9.00	2.12	8.67	1.97	14.33	1.37
11	23.00	10.23	14.75	2.22	16.75	2.87	13.00	.63	14.00	2.45	14.83	1.94	21.33	5.28
12	18.50	1.91	13.75	4.27	12.75	2.50	16.50	2.26	14.60	6.15	17.33	1.97	23.33	6.68
13	22.50	4.80	12.50	1.29	16.25	2.36	14.50	2.07	17.20	8.56	17.17	6.24	24.33	4.63
14	12.75	2.36	7.75	.96	8.00	1.41	8.17	.75	9.80	4.66	10.00	4.29	16.17	2.64
15	10.75	1.71	10.50	1.29	10.50	1.73	9.33	1.03	10.00	4.42	11.17	2.71	15.33	2.80
16	25.50	3.11	23.00	3.16	29.50	7.59	27.50	3.51	23.00	7.11	26.67	5.82	26.33	1.86

[a]Numbers in parentheses indicate number of children rated.

Appendix G

CBRS: Means and Standard Deviations for Male CCWs Ratings of Maladjusted Children

	Boys		Girls	
Scale	M	SD	M	SD
1	37.37	2.25	38.04	4.04
2	41.74	3.63	42.85	4.92
3	19.71	3.31	22.87	3.41
4	46.35	5.05	43.85	6.03
5	42.16	3.93	42.68	6.03
6	24.29	4.11	25.46	4.62
7	52.98	7.85	52.65	10.38
8	21.22	2.59	22.78	3.21
9	14.81	2.59	14.58	3.63
10	12.96	1.76	12.69	3.34
11	17.21	3.79	16.76	4.02
12	17.52	4.11	16.24	3.56
13	17.93	2.62	18.27	4.66
14	12.14	4.51	10.55	2.84
15	17.30	21.15	11.65	3.23
16	25.29	3.72	26.55	5.90

Note. N = 17 male CCWs.

CBRS: Means and Standard Deviations for Female CCWs' Ratings of Maladjusted Children

	Boys		Girls	
Scale	M	SD	M	SD
1	32.92	5.65	34.97	3.98
2	38.39	5.98	41.40	5.00
3	19.03	4.26	22.38	4.31
4	43.03	7.40	44.44	5.70
5	40.32	7.29	40.54	4.02
6	23.20	3.36	26.60	4.55
7	47.62	8.91	57.35	8.08
8	17.77	3.74	23.11	2.78
9	18.53	5.17	14.56	3.18
10	13.69	2.60	12.60	3.06
11	20.21	4.65	17.91	5.20
12	20.47	6.14	17.07	3.57
13	22.29	4.34	18.41	4.47
14	13.68	5.43	10.51	3.02
15	14.36	3.25	12.61	2.29
16	28.23	5.12	27.69	3.68

Note. N = 14 female CCWs.

Appendix H

BPC: Means and Standard Deviations for Seven Male CCWs Rating Boys and Girls

Raters

Boys

	1 (5)[a]		2 (5)		3 (4)		4 (4)		5 (5)		6 (7)		7 (9)	
Factor	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
I	6.60	3.91	8.20	4.32	2.00	1.41	3.50	1.00	1.40	.55	3.29	2.21	3.11	3.95
II	7.60	3.36	8.60	4.62	3.25	2.06	4.50	2.08	.80	.84	6.71	3.55	4.44	4.30
III	3.80	2.17	5.60	3.21	1.25	.96	2.00	1.41	1.40	.55	4.00	2.08	2.22	1.86
IV	3.00	1.87	4.80	2.17	3.25	2.06	3.00	1.41	.40	.55	2.71	1.25	1.11	1.62
V	3.20	2.39	3.40	2.41	1.00	.82	1.50	1.73	.00	.00	1.86	1.86	1.22	1.48

Girls

	1 (4)		2 (5)		3 (4)		4 (6)		5 (5)		6 (4)		7 (3)	
Factor	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
I	2.50	2.08	2.60	3.78	2.00	1.15	2.17	1.83	1.00	1.00	5.75	3.86	1.00	1.00
II	3.25	3.30	3.00	3.74	2.75	1.71	5.33	.82	.40	.55	8.25	2.22	2.33	.58
III	.50	.58	1.40	2.19	.25	.50	.33	.52	.00	.00	3.75	3.20	1.33	.58
IV	.75	.96	1.40	1.52	1.50	1.00	2.00	.63	.20	.45	2.50	1.29	1.33	1.19
V	.50	1.00	1.00	1.22	1.25	.96	1.00	.89	.60	.89	1.50	1.00	.33	.58

[a]Numbers in parentheses indicate number of boys/girls rated.

BPC: Means and Standard Deviations for Seven Female CCWs Rating Boys and Girls

Raters

Boys

	1 (5)[a]		2 (5)		3 (4)		4 (4)		5 (5)		6 (7)		7 (9)	
Factor	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
I	10.60	3.21	11.00	5.39	3.25	2.06	4.25	2.75	7.20	1.79	4.57	2.37	4.22	2.49
II	11.60	5.77	14.40	6.58	5.00	.82	6.75	2.06	9.00	3.08	4.14	2.04	4.78	3.15
III	5.00	1.87	5.60	2.97	3.25	1.26	3.25	2.22	3.80	2.28	2.43	1.62	2.11	1.83
IV	5.80	3.70	6.20	3.35	3.75	.96	2.75	.96	5.00	1.58	2.43	2.07	2.22	1.56
V	4.00	2.45	3.00	1.41	1.00	.00	1.25	1.50	2.60	1.14	2.27	2.21	2.11	1.69

Girls

	1 (4)		2 (5)		3 (4)		4 (6)		5 (5)		6 (4)		7 (3)	
Factor	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
I	3.50	4.73	5.60	4.51	1.50	1.73	2.33	1.75	2.80	.84	5.75	4.11	4.00	1.73
II	5.50	8.54	10.20	8.64	5.50	.58	3.83	1.17	5.00	2.92	7.50	2.52	3.33	1.15
III	1.75	3.50	4.00	3.67	.25	.50	.83	.75	1.00	1.22	3.00	2.83	1.33	.58
IV	2.50	5.00	3.60	2.97	2.75	.96	2.00	.89	2.80	1.30	3.50	1.29	3.00	1.00
V	1.25	2.50	1.60	1.14	1.25	1.50	1.00	.89	1.80	2.05	1.75	.96	1.67	.58

[a]Numbers in parentheses indicate number of boys/girls rated.

Appendix I

BPC: Means and Standard Deviations for M/F Pairs Rating: Boys and Girls

Male Raters

	Boys		Girls	
Factor	M	SD	M	SD
I	4.014	2.473	2.429	1.584
II	5.114	2.708	3.586	2.494
III	2.886	1.620	1.057	1.284
IV	2.600	1.450	1.371	.765
V	1.743	1.214	.871	.423

Female Raters

	Boys		Girls	
Factor	M	SD	M	SD
I	6.429	3.230	3.629	1.598
II	7.943	3.895	5.829	2.356
III	3.614	1.292	1.714	1.335
IV	4.000	1.666	2.871	.559
V	2.314	1.033	1.457	.315

Note. $n = 7$ for male and female raters.

Appendix J

CBRS: Difference scores for 14 male raters

Raters								
1	-1.5	-1.1	-4.2	2.0	3.0	-1.2	1.0	-1.0
	-1.5	-0.3	-1.8	1.3	-0.3	1.2	0.5	-0.7
2	2.0	-3.0	-5.0	-5.8	-1.8	-7.0	-6.2	-4.3
	0.0	5.3	2.5	3.3	3.6	5.0	-1.4	0.4
3	2.7	2.0	-2.0	5.7	2.0	-4.7	-5.5	-2.7
	-1.0	3.8	0.5	4.2	4.0	0.5	-0.3	-3.7
4	-3.0	-6.0	-7.0	-6.3	-4.0	-4.7	-8.8	-4.5
	2.8	3.5	4.3	5.0	4.0	4.5	3.5	0.3
5	-1.5	-4.2	-5.0	-2.0	-0.8	-1.3	-5.5	-1.2
	0.5	2.0	2.0	1.7	3.7	4.2	2.5	2.8
6	0.0	-1.0	-3.4	-3.7	-0.3	-0.7	-3.6	-1.8
	0.3	2.0	2.0	1.0	0.6	-0.7	0.0	-2.7
7	6.3	9.0	2.3	12.0	4.0	6.3	13.7	5.4
	-10.3	-2.7	-14.0	-6.7	-9.3	-8.7	-6.7	-1.7
8	-0.5	0.0	4.0	-4.5	4.5	-1.5	7.0	-4.0
	2.0	-4.0	-5.5	-5.0	-2.5	-2.5	-3.5	-9.5
9	-2.5	-6.0	-6.0	-5.0	-12.0	-9.5	-30.5	-7.0
	2.1	5.0	2.5	5.0	7.0	1.0	4.0	5.5
10	-5.5	-7.5	-0.5	-4.0	2.5	-0.5	-4.0	-0.5
	3.0	-2.0	0.0	3.0	-1.5	-2.5	-1.5	1.0
11	8.0	8.0	0.0	6.0	7.0	9.0	24.0	3.0
	-4.0	-5.0	1.0	3.0	-7.0	3.0	-2.0	-3.0
12	-2.0	1.0	-4.0	-5.0	3.0	8.0	-2.0	2.0
	-1.0	-6.0	11.0	9.0	-5.0	-5.0	0.0	-3.0
13	-3.0	-12.0	-3.0	12.0	-7.0	-11.0	-4.0	-6.0
	5.0	3.0	3.0	-5.0	-2.0	2.0	3.0	9.0
14	-1.0	-1.0	-6.0	3.0	-1.0	-2.0	16.0	1.0
	1.0	0.0	2.0	-1.0	1.0	11.0	3.0	-3.0

CBRS: Difference scores for 14 female raters

Raters								
1	-2.7	-2.2	-1.2	-2.4	-2.4	2.8	7.7	0.1
	-0.4	0.6	-2.5	-2.2	-4.2	-4.7	-1.1	-1.3
2	0.7	0.5	-3.7	1.6	1.3	-5.5	-7.0	-4.7
	3.2	1.7	0.6	2.5	1.8	2.1	2.2	-5.1
3	-5.7	-6.0	-7.3	-3.5	-6.8	-7.2	-9.5	-8.3
	7.5	5.0	10.0	7.0	7.9	6.0	5.3	2.5
4	-2.4	-0.2	-2.8	0.6	0.8	0.0	2.2	-0.2
	-1.0	-2.8	-4.8	-1.0	-2.6	-0.4	-0.8	-0.2
5	-6.4	-5.8	-7.6	-3.6	-3.4	-9.2	-17.0	-9.0
	4.4	5.0	7.8	9.8	11.8	10.2	7.0	2.2
6	5.6	4.6	-5.8	8.8	2.8	-5.0	-10.6	-4.4
	0.8	1.2	0.2	4.0	5.8	1.2	0.4	-6.0
7	2.7	5.0	-2.0	-4.3	1.4	-6.0	-15.0	-2.3
	8.0	3.6	6.3	5.0	3.3	-1.0	-1.0	4.0
8	-2.0	-7.5	-2.5	-8.0	8.5	2.5	0.0	-1.0
	3.0	-3.0	1.5	5.5	2.5	0.0	2.5	2.0
9	2.5	3.5	-8.0	-3.0	4.0	-8.0	-1.0	-7.0
	12.0	2.0	-2.0	-2.0	1.0	16.0	1.0	-9.5
10	-1.0	0.0	-1.0	-3.0	-1.0	-7.0	-10.0	-3.0
	-5.0	3.0	12.0	1.0	7.0	2.0	3.0	-2.0
11	2.0	-3.0	16.0	13.0	6.0	10.0	7.0	1.0
	-4.0	-5.0	-9.0	-8.0	-3.0	-4.0	-1.0	3.0
12	-19.0	-9.0	-9.0	-21.0	-27.0	-7.0	-40.0	-15.0
	6.0	7.0	9.0	16.0	12.0	0.0	6.0	17.0
13	-5.0	-23.0	-12.0	6.0	3.0	-10.0	-34.0	-13.0
	14.0	2.0	8.0	8.0	12.0	16.0	3.0	3.0
14	2.0	1.0	0.0	2.0	10.0	2.0	-9.0	-8.0
	7.0	-5.0	-5.0	2.0	-1.0	1.0	-2.0	-2.0

Appendix K

CBRS: Mean Differences in Ratings of Maladjusted Boys and Girls for Male and Female Raters

	Male Raters		Female Raters	
Scale	M	SD	M	SD
1	- .107	3.711	-2.050	6.026
2	-1.577	5.671	-3.007	7.247
3	-2.843	3.253	-3.350	6.603
4	.314	6.477	-1.414	7.796
5	- .064	5.019	- .214	8.932
6	-1.486	6.002	-3.400	5.857
7	- .600	13.069	-9.729	13.844
8	-1.543	3.539	-5.343	4.923
9	- .079	3.699	3.964	5.593
10	.329	3.759	1.093	3.760
11	.679	5.528	2.293	6.551
12	1.343	4.418	3.400	5.946
13	- .264	4.650	3.879	5.667
14	.929	4.813	3.171	6.571
15	.079	3.014	1.750	2.887
16	- .593	4.447	.543	6.117

Note. n = 14 for each group.

APPENDIX L

CBRS: Difference Scores (Boys - Girls) for M/F Pairs of Raters

	Raters[a]													
	1		2		3		4		5		6		7	
Scale	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	6.11	- .82	-2.75	-2.75	3.20	5.80	2.25	.55	-1.60	-7.80	-5.50	-6.84	.81	- .43
2	3.93	1.89	-2.00	-1.00	4.15	4.30	-2.92	.67	-3.00	-7.40	-8.33	-5.17	1.03	.10
3	2.07	.50	-4.75	-6.75	-1.25	-5.05	-5.00	-5.45	-4.80	-9.00	-8.00	-7.50	- .26	-1.12
4	6.07	4.61	-6.50	-10.25	5.20	5.25	-5.83	-3.79	-1.00	-6.60	-10.50	1.83	2.79	4.71
5	5.07	3.25	-6.25	-3.50	2.85	3.00	-2.12	1.50	-2.80	-9.80	-7.50	-1.83	3.88	2.38
6	4.07	3.60	-8.25	-11.75	-3.75	-4.00	-6.29	-5.33	-3.60	-10.80	7.50	-7.16	-1.07	3.57
7	11.93	12.50	21.00	-27.75	-7.00	-12.05	-2.62	-8.20	-8.80	-12.20	-16.17	-13.83	6.54	10.53
8	4.11	1.68	-5.00	-9.50	-2.85	-3.85	-2.25	-4.25	-2.00	-9.20	-7.00	-7.50	1.53	.31
9	-6.21	-2.32	.75	10.00	-1.90	.45	-1.54	1.67	2.80	8.00	7.50	3.84	-2.74	.00
10	-1.79	-4.14	3.50	7.50	2.75	2.30	5.13	2.08	3.00	6.80	3.67	4.16	-1.17	-1.63
11	-7.86	-8.43	2.75	8.50	.10	1.25	4.42	1.25	4.60	12.80	6.00	7.34	-1.21	-4.19
12	-5.71	-2.93	3.50	10.75	4.60	3.85	1.96	2.88	2.00	8.00	7.00	8.17	.43	-3.47
13	-6.86	-6.36	4.50	10.00	3.85	4.15	2.46	3.00	4.60	11.00	7.16	10.50	-1.36	-6.04
14	-6.21	-2.46	2.25	5.25	- .55	.00	2.42	2.33	3.80	8.80	6.50	8.67	- .97	-3.74
15	-6.46	-1.46	3.75	3.00	-1.70	-1.30	-2.04	1.80	4.40	7.20	4.00	6.66	- .33	-1.76
16	- .57	-2.79	2.25	6.00	-5.25	-6.10	- .45	-4.25	1.60	5.60	2.67	1.83	-1.21	-1.19

[a] $\underline{n}$ = 7 pairs

APPENDIX M

BPC: Difference Scores (Boys - Girls) for M/F Pairs of Raters

	Factor I		Factor II		Factor III		Factor IV		Factor v	
Raters	M	F	M	F	M	F	M	F	M	F
1	4.10	7.10	4.35	6.10	3.30	3.25	2.25	3.30	2.70	2.75
2	5.60	5.40	5.60	4.20	4.20	1.60	3.40	2.60	2.40	1.40
3	.00	1.75	.50	- .50	1.00	3.00	1.75	1.00	- .25	- .25
4	1.34	1.92	- .83	2.92	1.67	2.42	1.00	.75	.50	.25
5	.40	4.40	- .40	4.00	1.40	2.80	.20	3.20	- .60	.80
6	-2.46	-1.18	-1.54	-3.46	.25	- .57	.21	-1.07	.36	.54
7	2.11	.22	2.11	1.45	.89	.78	- .22	- .78	.89	.34

BPC: Mean Differences in Ratings of Maladjusted Boys and Girls for Male and Female Raters[a]

	Male Raters		Female Raters	
	M	SD	M	SD
Factor				
I	1.584	2.679	2.801	2.949
II	1.399	2.724	2.101	3.235
III	1.816	1.417	1.897	1.388
IV	1.227	1.309	1.286	1.809
V	.857	1.258	.833	.987

[a] n = 7 for Each Group

Appendix N

CBRS: Mean Scores for Normal Boys Aged 6 through 12 Years

	Age													
	6		7		8		9		10		11		12	
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	41.43	2.54	38.30	4.84	40.40	3.09	41.07	3.30	38.13	4.12	40.67	3.09	38.33	5.82
2	45.46	4.59	45.23	6.79	46.43	5.18	45.60	4.98	42.57	4.79	46.77	4.12	44.67	6.28
3	25.23	2.62	23.50	4.90	24.93	3.98	24.63	3.95	20.93	5.11	24.93	3.43	23.17	4.32
4	53.03	4.64	50.63	6.69	50.97	6.30	51.30	5.78	44.77	8.22	50.33	6.89	46.23	10.38
5	45.70	3.90	44.93	4.52	44.63	4.08	44.00	4.88	41.60	5.20	43.57	4.38	43.10	4.94
6	30.27	3.14	30.10	4.29	29.90	3.40	29.40	4.77	26.67	6.37	31.57	3.10	30.83	3.96
7	72.10	7.73	69.17	11.83	69.90	8.52	71.93	8.97	62.20	10.25	72.83	10.67	69.40	11.80
8	25.80	2.80	23.47	4.45	24.67	3.64	23.50	3.88	21.83	4.48	25.37	3.22	23.43	3.43
9	9.90	2.18	12.60	4.77	11.90	2.63	12.23	3.60	12.60	3.35	10.83	3.13	12.47	3.94
10	11.90	4.04	11.33	3.42	12.00	4.03	12.23	3.46	12.77	3.53	11.27	3.28	13.23	4.52
11	17.43	6.06	17.77	5.08	16.37	4.44	19.53	6.66	19.07	5.38	15.47	3.91	14.93	3.36
12	14.10	3.64	15.07	5.52	13.43	4.41	14.70	4.64	15.77	5.48	11.77	2.79	15.07	5.88
13	15.03	3.00	16.70	6.42	14.43	3.01	15.63	4.17	18.07	5.27	13.60	2.94	15.30	5.24
14	8.90	2.01	10.10	4.08	8.53	2.22	9.30	3.34	11.33	4.69	8.50	1.89	9.83	3.01
15	9.43	1.70	10.87	4.10	10.37	2.72	10.10	2.38	12.90	3.79	8.90	2.04	10.93	3.34
16	20.20	2.98	21.73	5.02	21.00	3.48	20.60	3.07	23.73	4.12	19.77	3.20	20.73	5.04

Note. N = 210 boys.

CBRS: Mean Scores for Normal Girls Aged 6 through 12 Years

	Age													
	6		7		8		9		10		11		12	
Scale	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1	39.80	3.74	39.90	5.01	39.77	3.94	38.33	4.44	40.03	3.73	39.33	4.33	39.80	3.35
2	46.50	4.34	47.83	4.96	46.47	4.91	44.73	5.61	46.23	5.10	45.40	7.54	46.80	3.78
3	23.93	4.79	25.93	2.95	24.23	4.15	24.40	4.12	26.50	4.51	24.97	4.53	24.83	4.28
4	50.63	5.68	53.87	4.90	50.63	6.97	50.13	7.10	53.33	6.08	48.53	8.46	51.67	4.40
5	45.63	3.84	46.10	4.01	45.50	3.53	45.50	3.72	46.00	3.56	45.50	4.58	46.40	2.69
6	31.50	2.66	31.23	3.11	30.43	3.99	31.43	4.01	32.13	3.01	31.27	3.80	29.97	4.24
7	72.10	8.45	74.13	6.80	71.47	10.08	71.33	9.39	75.53	8.70	71.37	10.25	70.60	7.46
8	25.17	3.29	26.07	2.78	24.57	4.31	24.93	3.63	26.43	3.32	24.27	4.95	24.03	3.99
9	10.33	2.81	9.53	1.79	10.17	2.10	10.23	2.74	9.77	2.05	11.03	2.88	10.23	2.76
10	13.40	4.37	11.57	4.13	11.87	3.81	10.90	2.89	9.67	3.23	11.33	3.65	9.90	2.71
11	18.60	5.29	15.77	4.14	19.40	5.44	17.40	4.43	14.90	4.51	17.17	6.46	14.67	2.94
12	15.37	4.60	12.47	3.82	14.47	4.08	13.77	4.34	11.90	3.96	13.40	6.50	11.40	2.14
13	15.03	3.51	13.87	4.44	14.77	3.43	14.23	3.30	13.33	4.77	14.60	4.36	13.87	3.42
14	8.67	3.72	8.10	1.47	9.23	2.34	8.20	1.58	7.87	1.48	9.17	4.00	8.87	2.58
15	10.90	3.13	9.67	3.04	10.37	3.16	10.20	2.90	9.93	2.98	10.83	3.63	9.90	2.64
16	20.47	2.50	19.33	3.29	20.47	3.16	20.57	2.99	21.23	3.90	21.77	4.34	20.80	3.13

Note. N = 210 girls.

APPENDIX O

Means and Standard Deviations for Parents' Rating of Normal Boys and Girls: Sample (a) CBRS

	Boys				Girls			
	Father		Mother		Father		Mother	
Scale	M	SD	M	SD	M	SD	M	SD
1	40.00	4.06	39.27	4.75	39.01	4.82	39.59	4.79
2	45.25	5.09	44.96	5.54	46.36	5.23	46.98	5.74
3	23.98	4.29	23.93	4.52	24.52	4.35	25.90	3.32
4	49.11	7.14	49.23	7.85	51.00	5.97	52.10	6.30
5	44.04	4.08	44.02	5.44	45.52	3.44	46.07	4.02
6	29.44	4.59	30.22	4.56	30.61	3.54	32.13	2.62
7	69.60	9.30	71.11	10.12	71.02	9.19	73.33	9.27
8	24.10	3.63	24.29	3.83	25.20	3.88	25.89	3.26
9	11.97	3.51	11.60	3.72	10.11	2.50	9.77	2.53
10	12.27	3.83	11.90	3.87	11.35	4.01	10.45	3.26
11	17.03	5.31	17.01	5.52	16.80	4.82	16.37	4.73
12	14.55	4.65	14.41	5.50	13.65	4.86	12.80	3.85
13	15.33	4.35	15.60	4.95	14.24	4.06	14.21	4.03
14	9.29	3.03	9.85	3.73	8.68	2.94	8.33	1.88
15	10.30	3.17	10.56	3.25	10.04	2.88	9.75	2.81
16	21.35	3.92	20.99	3.77	21.47	4.31	20.30	4.06

Note. In each group, $n = 91$

APPENDIX P

Means and Standard Deviations for Parents Rating Normal Boys and Girls: Sample (b) CBRS

	Boys				Girls			
	Father		Mother		Father		Mother	
Scale	M	SD	M	SD	M	SD	M	SD
1	38.88	5.22	39.40	4.75	39.44	5.24	39.12	5.40
2	44.76	6.25	45.40	6.14	43.40	5.72	46.12	5.13
3	24.08	3.76	24.80	4.19	24.20	5.26	24.16	4.41
4	50.08	6.68	52.08	7.11	49.72	7.83	52.76	6.35
5	43.84	4.75	43.96	5.47	45.84	3.79	45.72	4.00
6	30.04	3.76	30.92	4.21	29.56	4.43	31.08	3.76
7	68.96	11.70	71.72	10.94	70.24	9.70	72.80	8.85
8	23.52	3.95	24.84	4.14	23.80	3.77	24.72	3.89
9	12.00	4.31	11.76	3.60	10.88	2.88	9.88	2.54
10	12.08	2.97	11.32	2.95	13.00	4.48	10.88	2.45
11	17.76	4.65	17.56	5.36	18.32	6.45	15.96	3.62
12	15.00	5.12	13.32	4.06	14.64	5.18	12.48	4.24
13	15.56	3.90	15.32	4.96	15.36	4.48	13.52	3.15
14	8.76	2.17	8.96	2.05	8.84	2.58	8.44	1.68
15	10.60	2.52	10.32	3.06	11.32	3.20	10.56	3.32
16	20.36	2.93	21.16	2.97	21.80	3.08	20.24	3.32

Note. In each group, $n = 25$

Appendix Q

BPC: Means and Standard Deviations for Parents Rating Normal Boys and Girls

	Boys				Girls			
	Father		Mother		Father		Mother	
	M	SD	M	SD	M	SD	M	SD
Factor								
I	4.05	4.35	4.46	5.00	3.95	4.93	3.93	4.01
II	3.03	2.93	3.49	3.96	2.66	2.22	3.07	2.01
III	1.62	1.67	1.68	2.08	.85	1.26	1.02	1.59
IV	.24	.86	.11	.31	.17	.44	.19	.40
	n = 37 Boys				n = 41 Girls			

APPENDIX R

Means and Standard Deviations for Parents Rating Maladjusted Boys and Girls

	Boys[a]				Girls[b]			
	Father		Mother		Father		Mother	
Scale	M	SD	M	SD	M	SD	M	SD
1	35.75	7.00	33.10	7.39	33.69	6.71	34.38	5.87
2	37.36	7.89	34.21	6.51	36.69	5.95	38.00	6.49
3	18.46	6.04	17.57	4.29	17.08	6.82	19.15	5.87
4	40.04	10.29	36.43	9.90	35.85	9.70	37.15	10.55
5	39.96	5.69	39.89	6.21	37.38	7.16	37.54	6.02
6	23.00	6.91	21.46	6.97	23.23	5.20	24.92	6.28
7	49.75	16.95	45.71	14.11	48.46	13.12	51.07	13.78
8	19.32	5.51	18.11	4.87	17.85	4.88	19.85	5.06
9	17.79	6.72	19.39	6.03	19.54	6.28	18.69	6.26
10	14.61	4.92	14.25	4.91	14.31	5.30	14.23	4.25
11	20.11	7.48	21.07	7.89	22.38	9.95	20.54	8.77
12	19.75	7.90	21.07	6.26	23.61	5.58	22.00	7.89
13	22.29	7.80	23.14	6.22	23.54	8.68	21.31	6.39
14	16.25	6.72	16.96	6.38	15.23	6.71	13.46	6.48
15	14.36	3.92	14.96	3.78	15.15	4.62	15.00	4.47
16	27.04	7.86	28.46	6.62	32.54	7.39	31.69	10.41

$^{a}n = 28$
$^{b}n = 13$

Mean Difference Scores (Normal - Maladjusted Children) for Fathers' and Mothers' Ratings on the CBRS

	Father		Mother	
Scale	M	SD	M	SD
1	2.951	7.074	5.854	7.722
2	7.390	8.402	9.073	10.859
3	6.220	8.144	10.073	19.885
4	9.854	13.145	18.244	34.779
5	4.732	7.884	5.610	8.231
6	7.341	7.908	12.976	27.707
7	20.146	17.951	30.610	43.408
8	5.366	6.020	7.854	12.644
9	- 7.317	6.728	- 8.537	7.018
10	- 3.024	6.338	- 6.683	21.903
11	- 4.927	10.031	- 7.854	18.805
12	- 6.024	8.187	-10.805	20.880
13	- 7.220	8.027	- 8.341	7.809
14	- 6.951	7.297	- 9.829	20.348
15	- 4.122	5.066	- 4.073	5.062
16	- 6.707	8.112	- 9.463	8.942

Note. In each group, $n = 41$

Surname : KILPATRICK Given Names : DOREEN LEILA

Place of Birth : WESTON, ONTARIO Date of Birth : 5 Feb., 1925

Educational Institutions Attended, with Dates of Entering and Leaving :

VICTORIA COLLEGE, VICTORIA	1941 to 1942
CARLETON UNIVERSITY, OTTAWA	1962 to 1963
DALHOUSIE UNIVERSITY, HALIFAX	1963 to 1964
UNIVERSITY OF VICTORIA, VICTORIA	1964 to 1969
UNIVERSITY OF VICTORIA, VICTORIA	1972 to 1976

Degrees. Diplomas, Etc., Awarded, with Dates and Names of Institutions :

B.A.	1967	University of Victoria
M.A.	1969	University of Victoria

Honors and Awards :

University of Victoria Graduate Fellowship, 1972/1973

Canada Council Scholarship, 1973/1975

Publications :

Kilpatrick, D. L. and Spreen, O. A revision of the Halstead Category Test for children age 9 to 15. Psychology in the Schools, 1973, 10, 101 - 108.

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THE EFFECT OF SEX OF RATER IN ADULT

RATINGS OF CHILD BEHAVIOUR

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May 6, 1976
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