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The children's friendship expectancy inventory and the prediction of sociometric acceptability.

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THE CHILDREN'S FRIENDSHIP EXPECTANCY INVENTORY
AND THE PREDICTION OF SOCIOMETRIC ACCEPTABILITY

by

H. Diane Wood

B. A., University of Windsor, 1970

A Thesis
Submitted to the Faculty of Graduate Studies through the
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ABSTRACT

This study dealt with the development of the Children's Friendship Expectancy Inventory (CFEI) and its validation by means of a revised form of the "Guess Who" sociometric test. The major predictions were: (1) There are two types of socially accepted and two types of socially rejected children; (2) Friendship expectations vary as a function of sociometric type and sex; (3) There are developmental trends and sex differences in the importance assigned by children to various conceptions of friendship.

Factor analysis of the "Guess Who" test revealed the existence of one factor of social acceptability rather than the two predicted factors. Support was found, however, for the hypothesized types of rejected children: the socially withdrawn and the aggressive maladjusted. Factor analytic data were also used in the construction of the CFEI. Four scales were developed: conventional morality, mutual activities, empathic understanding, and loyalty and commitment.

The final forms of the "Guess Who" and the CFEI were administered to 402 children in grades six, seven and eight. Separate analysis of variance were conducted on the responses to the four CFEI scales by means of a 2 by 2 by 2 factorial design. Significant results were obtained in regard to all four scales, though the pattern of results varied from scale to scale. The results suggest that friendship expectations vary as a function of sociometric type and sex.

The highly accepted children rated empathic understanding as more important than did the less accepted children. A Sex by Acceptance interaction was found on both the ratings of
mutual activity and loyalty and commitment. Highly accepted males rated these two dimensions as more important than the less accepted males. The degree of acceptance, however, did not affect the female ratings of these friendship dimensions.

The findings on the friendship expectations of the aggressive children were not anticipated. High aggressives, as compared to low aggressives, assigned more importance to conventional morality, empathic understanding, and loyalty and commitment.

The socially withdrawn children deemphasized empathic understanding, whereas the aggressive and the accepted children valued this quality in their friends. The withdrawn children also placed less importance on loyalty and commitment than the accepted children.

Males emphasized mutual activities whereas females emphasized empathic understanding. Few developmental trends were found, perhaps due to the restricted age range. Grade seven females placed more importance on conventional morality and empathic understanding than the grade six females. Loyalty and commitment was assigned less importance, however, in grade eight than in grade seven by both males and females.

Finally, the results of this study support the value of the CFEI for studying children's friendships.
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CHAPTER I

INTRODUCTION

One of the most important aspects of social development is the ability of the child to get along with his peers. When children display socially desirable behaviour, they usually experience satisfying interactions, as well as receive positive treatment from their peers. In contrast, children who show maladaptive or antisocial behaviour are often the object of negative treatment and therefore experience unsatisfying interactions with other members of the group (Charlesworth and Hartup, 1967; Hartup, Glazer and Charlesworth, 1967).

In a review article dealing with nursery school children Moore (1967) has pointed out that the majority of children desire to establish friendship with at least one or two members of their classroom. A small group of these children, although highly motivated, are ineffective in their attempts to make friends and are openly rejected. There are also a small number of children who strongly avoid the formation of friendships and ignore almost all friendly overtures. These children are ignored by their classmates.

Many of the characteristics of the socially ineffective child have been identified (cf. Hartup, 1970). The present study approaches this problem in terms of the child's cognitive orientation toward interpersonal relationships. The rejected and ignored child may have atypical conceptions of the kinds of behaviour that are necessary to establish and maintain friendship.
Review of the Literature

The ability of the child to get along with his peers is often phrased in terms of the degree of acceptance or rejection achieved in his peer group. Various procedures have been developed to measure acceptance-rejection. Ausubel (1970) contends that "sociometric techniques provide the most objective and conveniently determined indices of the individual's status in or acceptance by the group (p.344)." The sociometric test is functionally a rating scale whereby the members of the group are asked to rate or order the other members of the group in terms of their social desirability for sharing certain activities (Moreno, 1934).

Early sociometric research used such conceptual labels to describe acceptance-rejection as the star, the isolate and the rejected child. The overchosen or star refers to any group member who receives a disproportionately large number of choices and fails to distribute a number of choices among themselves. Such terms as leadership, social power, and prestige are often applied to this status dimension. Each of these terms, like acceptance, implies positive evaluation of the child by his peers (Hartup, 1970). An isolate is a child who receives few or no choices and makes no choices, whereas the rejected child receives a large number of rejections from others (Remmers, 1963). As a result, the disliked child is likely to be placed near the lower end of the popularity continuum, while the isolated child will be somewhere in the middle. One of the issues of concern to recent investigators is the appropriateness of ordering
kinds of unpopular children along the same continuum of social acceptability.

A number of investigators have suggested that acceptance-rejection is not an unidimensional characteristic (Tulkin, Muller and Conn, 1969; Mitchell, 1955; Bales and Slater, 1955; Jennings, 1950). Some of the questions raised by these writers are as follows: Is rejection the opposite of acceptance? Are there two types of accepted children? How do they differ? Are there two or three types of rejected children? How do they differ?

After reviewing the literature, Hartup (1970) concluded that: "Only moderate negative correlations exist between positive choices and negative choices received on sociometric test. Low acceptance by the peer group sometimes implies indifference; only in some cases does low acceptance imply negative evaluation (p. 385)."

An ethical reason has been given as justification for defining the rejected child in terms of lack of positive choices rather than in terms of the number of negative choices. Moore (1967), however, found that children do not discuss their ratings with others. Moreover, she contends that the use of negative sociometric reports increases the probability of identifying the truly rejected child from the isolate or withdrawn child. Finally, there is some indication that rejection can be measured more reliably than acceptance. Harper (1968) had children name both their best friends and also the ones that probably would not be chosen as close friends. The reliability of rejection was .80,
whereas the reliability of acceptance was .20.

A major distinction made to account for different kinds of popularity is that of task competence and social-emotional orientation. Various labels have been used by different writers: Leadership type vs. social type (Cole & Hall, 1965); instrumental vs. social-emotional (Bales, 1951); task competence vs. affective or social popularity (Tulkin, et al., 1969).

Bales (1951) has observed that the instrumental leader and the social-emotional leader in a group are not necessarily the same person. Tulkin, et al., (1969) obtained some support for this finding in a study of fifth and sixth grade children. The results obtained from their five question sociometric test, indicated that two moderately independent clusters were present: One dealing with task competence popularity (president and quiz questions) and one dealing with an affective or social popularity (play and likes best questions). Lippitt & Gold (1959) also suggest that these two dimensions are not identical. In the fall of the school year, the correlation between affect structure and expertness structure was .40. This dropped to .21 by the latter part of the school year.

The concept of task competence has often been used as interchangeable with the concept of leadership (Hartup, 1970). A series of studies on the socially powerful children, both in the classroom and at camp, revealed that the powerful children were active, vigorous in participation and well adjusted. They were perceived by their peers as being competent in school, athletics,
as well as in camp situations and camp crafts (Lippitt & Gold, 1959; Zander & Van Egmond, 1958; Gold 1958; Polansky, Lippitt & Redl, 1950).

The number of friends a child has in class is not in itself an index of leadership. Durojaiye (1969) administered both a friendship and a leadership sociometric test to children ranging from eight to eleven years. Not all children achieving high status on the friendship test were chosen as leaders. However, the children, who rated high on leadership, were likely to be described as friends.

The social-emotional construct has been used to define a second type of popular children. These children are noted for their skills in interpersonal relationships rather than their skills in athletics or other academic activities. The children high on social-emotional are extremely sensitive to the needs and desires of others. Bell & Hall (1954) contend that this quality outweighs any other personality trait. Other social traits positively related to high sociometric status, include such things as cheerfulness (Moore, 1967; Bonney, 1944b); friendliness and sociability (Marshall & McCandless, 1957b; Gronlund & Anderson, 1957; Pope, 1953); cooperativeness, helpfulness and good natured (Moore, 1967; Van Krevelen, 1962; Elkins, 1958; Bonney & Powell, 1953; Bonney, 1947a). Finally, Klaus (1959) found that such accepted children were described as good sports, happy, well-liked and being able to take a joke.

The socially rejected child, i.e., children openly rejected
by their peers, generally display some form of aggressive behaviour. The characteristics of this type of unpopular child, include such traits as noisy, attention-seeking, demanding, rebellious, irascible, and boastful (Hartup, Glazer & Charlesworth, 1967; Moore, 1967; Dunnington, 1957b; Northway, 1944; Koch, 1933; Jenkins, 1931). Aggressive behaviours are not necessarily perceived negatively (Marshall & McCandless, 1957). The likelihood that aggression leads to rejection, depends on whether or not it was provoked. Less (1959) found that provoked physical aggression was relatively approved, whereas outburst aggression, unprovoked physical aggression and verbal aggression are progressively more disapproved. Indirect aggression was found to be the most disapproved. The correlations between indirect aggression and popularity ranged from .31 to .69. The socially isolated children, i.e., children reacted to with indifference by others, generally are shy, timid, and show withdrawal characteristics (Dunnington, 1957b; Northway, 1944; Koch, 1933). These children frequently play alone, and refuse or ignore the advances of other children (Moore, 1967). Their peers describe them as difficult to get to know (Mitchell, 1956). The isolated child appears not to be able to have fun (Peterson, 1961), to have little interest in classroom activities (Cole & Hall, 1965) and to have fewer close friends than other children (Feinberg, Smith & Schmidt, 1958).

Existing sociometric techniques fail to adequately identify various types of accepted and rejected children. The basic
sociometric test is usually limited identifying preferred persons for a given activity, e.g., work partner, play companion, seating companion. A disadvantage of this approach is that the basis for selection remains unknown. One modification of the sociometric test, the "Guess Who" test, allows children to identify certain behavioral characteristics observed in their peers. This reputation technique originated with Harshorne and May (1928) and was later modified by Tyron (1939) and Tuddenham (1951a).

Relatively few studies have attempted to isolate different behavioural patterns by means of factor analysis. Mitchell (1956) administered the "Guess Who" test to fourth grade pupils. Three factors were isolated: Leadership, aggressive maladjustment, and withdrawn maladjustment. The items loading on leadership were quite similar to what studies described above have called task competence. The items defining "aggressive maladjustment" appear to describe the rejected child, while the items defined as withdrawn maladjustment appear to describe the social isolate. Mitchell noted that the first two factors contained relatively distinct items. The social isolate factor, however, was relatively weak. Mitchell concluded that the results of the factor analysis did not warrant use of this "Guess Who" test to identify three kinds of children.

Sex differences have been found in regard to friendship behaviour (Horrocks & Bunker, 1951; Bonney, 1942b; Green, 1933). Ausubel (1954) found that girls' friendship, particularly during
early adolescence, are more personal, & more emotional. Furthermore, girls establish more intimate and confidential relationships with each other, whereas boys are usually more reserved in revealing confidences and in exhibiting overt affection.

Developmental trends have also been reported in conceptions of friendship (Bigelow, 1971; Campbell, 1964; Ausubel, 1954 Tyron, 1939). In a review article, Douvan & Gold (1966) cite a progression in friendship:

... from a concept of friendship as a parallel partnership focused on a common activity to a concept of mutuality in which the interaction itself claims focal interest; from no or relatively little emotional exchange to intense emotional interaction; from a relationship that cannot tolerate conflict to one that can contain and personally resolve conflict (p. 492).

Bigelow (1971) examined developmental changes in what children consider important in friendship in grades one through eight. He found that primary grade children frequently mentioned the dimensions of play, sharing, and reciprocity-of-liking to describe what they expected of their best friends. Older children described their best friends along the dimensions of intimacy, genuineness, acceptance, and loyalty and commitment. These findings were interpreted as supporting the theorizing of Piaget (1932) and Flavell (1963) that there is a decrease in egocentrism as a function of age. Dymone, Hughes & Raabe (1952) also found that sixth graders shift emphasis from external friendship qualities to internal personality characteristics, such as friendliness and cheerfulness, indicating a
growth of empathy. Bigelow (1971) also found that intimacy increases in importance with age, appearing in the eighth grade and primarily among females. Much of these differences may be attributed to earlier social and sexual motivation in girls (Hurlock, 1968; Tuddenham & Snyder, 1954; Leevy, 1943).

Socially accepted and rejected children have been found to differ in personality and behaviour as a function of sex and level of development. Kuhlen & Lee (1943) found that at the sixth grade, the unaccepted boy or girl was apt to be considered restless but by the twelfth grade restless characterized the popular boy or girl. Traits such as talkativeness, attention-seeking, and bossiness become more socially accepted as age increases. Young adolescent females of high acceptability tend to be quiet, sedate, nonaggressive and show initiative in social activities (Gronlund & Anderson, 1957; Tyron, 1939). In contrast, high status males possess qualities such as aggressiveness, fearlessness, daring, and leadership in sports and games (Gronlund & Anderson, 1957; Tyron, 1939). The same characteristic may have different consequences on acceptability as a function of sex. For example, high need for approval girls were found to be most popular, while high need for approval boys were found to be the least popular (Tulkin et al., 1969).

Research in other areas than sociometry provide some support for the notion of differences among low status children.
Peterson (1961) isolated two distinct factors labelled conduct problems and personality problems. Items such as disruptiveness, attention-seeking and restlessness loaded primarily on the first factor, while social withdrawn, shyness, self-consciousness, and inability to have fun loaded on the second factor. Peterson's findings suggest the possibility of sex and developmental trends. Boys consistently displayed more severe conduct disturbances than girls, whereas the opposite was found in the expression of personality problems. Furthermore, in kindergarten boys had more personality problems than girls but from grade three on girls showed an increase which exceeded the boys and continued to climb in the fifth and sixth grade.

Personality and conduct problems were isolated as independent factors in both the seventh and eighth grade in a study seeking to replicate Peterson's findings (Quay & Quay, 1965). An additional factor labelled "immaturity" is also supported by a factor analytic study of Dielman, Cattell, & Lepper (1971). Two factors emerged: acting out and social withdrawal.

These three studies were concerned with problem children only and were limited to teachers' ratings. But the results of the factor analysis lend support to the possible identification of two kinds of rejected children by means of a sociometric technique.

Most of the sociometric studies reviewed above have been based on the Moreno choice of social rating. A typical
sociometric task using this technique is to request children to name the pupils that they would most or least like as a friend. Children high and low on sociometric ratings are then compared by means of some other measure or clinical observation. Fox & Segel (1954) concluded that the Moreno choice type of social rating has little or no relation to social adjustment. These authors imply that the "Guess Who" technique, which asks for judgment of the traits of pupils, may have higher validity.

There appears to be a need, then, to develop a "Guess Who" test that can identify different kinds of accepted and rejected children. But the development of such an instrument is not sufficient per se. The problem still remains of relating sociometric type to friendship by means of a more reliable measure than those currently used. What is usually done, as the review of the literature has indicated, is to relate sociometric choice to traits assumed to be related to the concept of friendship. A more direct approach seems essential wherein more direct measures of different aspects of friendship are measured.

Though hundreds of studies have been conducted in the field of sociometry, few investigators have attempted to identify and measure dimensions of friendship. Wright (1969) has pointed out that research on friendship as a dependent variable has been sadly neglected. Canfield & La Gaipa (1970) isolated seven dimensions of friendship by means of factor analysis. This study led to the development of the Friendship Expectancy
Inventory (FEI). A series of studies have supported the validity of this instrument for studying friendship in college students (Lischeron & La Gaipa, 1971; La Gaipa & Werner, 1971; La Gaipa, 1971). The development of a reliable and valid instrument for studying friendship in adults suggests that the same can be done for studying friendship in children. No measure of children's conceptions of friendship is currently available.

What people expect from friendship may be a function of personality factors. La Gaipa (1972) found that atypical friendship expectations were related to a variety of personality needs. Research on the adjustment and social development of children may be facilitated by the development of a children's form of the friendship expectancy inventory.

Statement of the Problem

The present study focuses on the value orientation toward friendship of accepted and rejected children rather than on personality or behavioural differences. Do socially rejected children have different conceptions of friendship than socially accepted children? An assumption implicit in this study is that children with atypical conceptions of friendship may encounter difficulties in forming close friendship ties. Beyond the scope of this study, however, is the nature of the relationship between what one considers important in friendship and the actual behaviour manifested during social interaction.
The immediate concern of this research is with the relationship between different kinds of acceptance-rejection and different kinds of friendship expectations. The literature review indicates that current sociometric tests are inadequate for identifying sociometric types. Moreover, none of the current instruments are adequate for identifying different conceptions of friendship held by children.

The two stages in the present study were: (1) to develop a "Guess Who" sociometric tests, and a Children's Friendship Expectancy Inventory, and (2) to examine the relationship between acceptance-rejection and conceptions of friendship.

Though the main concern of this study is with the relationship between children's conceptions of friendship and sociometric type, the review of the literature permits hypotheses as to the number and kind of sociometric types as well as the role of sex differences and developmental trends. A number of investigators (cf. Moore, 1967) have suggested that sociometric acceptance-rejection is not an unidimensional phenomenon. Hypothesis I is:

A factor analysis of the revised "Guess Who" test will reveal two types of accepted children (task competence and social-emotional) and two types of rejected children (aggressive maladjusted and socially withdrawn).

Sociometric studies also suggest that the personality and behavioural characteristics of socially accepted-rejected children may vary as a function of age level (cf. Quay & Quay,
1965). Furthermore, sex differences in characteristics of popular and unpopular children may vary as a function of grade level and sex (Tuddenham, 1951b; Tyron, 1938). Bigelow (1971) also found some changes in the importance assigned different friendship expectations as a function of grade level and sex. Hypotheses II & III are as follows:

A significant three way interaction is predicted between type of sociometric acceptance-rejection, grade level, and sex in affecting the importance assigned to various friendship expectations.

A significant two way interaction is predicted between grade level and sex in affecting the importance assigned to different friendship expectations.
CHAPTER II

DEVELOPMENT OF INSTRUMENTS

Construction of the CFEI

The source material used in the writing of items for the Children's Friendship Expectancy Inventory was the data originally collected by Bigelow (1971). A total of 480 children in grades one through eight wrote short essays on what they considered important in friendship. Bigelow used 21 dimensions to score these essays by means of content analysis.

The five most important dimensions identified by Bigelow for each of grades six, seven, and eight were examined. Considerable overlap existed in these dimensions. The most important dimensions across all three grades were identified (stimulation value, common activities, intimacy, loyalty commitment, ego-reinforcement, acceptance, genuineness, admiration). The essays were next re-examined in order to identify statements descriptive of each of these ten dimensions. Sixty items were written on the basis of these essays. Finally, 45 items were selected after eliminating overlapping statements, and items with poor language usage. The 45 items were divided into nine lists of five items each.

A questionnaire was developed containing these nine lists of statements and administered to 61 children in grades six and seven. The instructions were to examine each list and indicate on each list the most important and the least important characteristic essential for a best friend. The letters "M" and "L" were used to distinguish these two kinds of statements. Tabulations consisted of recording the frequency of the most
chosen and the least chosen statement by grade and sex. Three items were eliminated because they were rarely chosen as important.

A new questionnaire format was then developed for presentation of the items. The "most" vs. "least" rating procedure had various disadvantages. An intensity or Likert-type scale was deemed desirable that would permit scoring responses on various items in terms of a specific dimension or scale. But the traditional type Likert scaling technique appeared to also have some limitations for this age group. A rating format was desirable that would also be appropriate for a parallel study involving children in grades three, four and five. Children in this age group would probably encounter an even more serious problem. A format was needed, then, that could be used with children even in the third grade.

Engel and Raine (1963) developed a method that showed some promise. These authors used a five-point scale in the form of a vertical "ladder" to determine how grade three children rated their self concept along seven bi-polar dimensions. To test the application of this method to the present friendship research, 15 grade three pupils rated three groups of six statements taken from the original inventory in a similar manner. Results from these grade three pupils corresponded with the results of an earlier pretest, using the "most" vs. "least" technique. Furthermore, the test administrator observed that the children understood the instructions and were able to place
the items on the five steps of the ladder.

The 42 items were distributed among six lists, i.e., ladders, containing seven items each. Care was taken to balance the statements in each list with respect to the previously denoted friendship dimensions as well as the strength of each friendship statement as ascertained from the pretest. Next standardized instructions were constructed, similar to those employed by Engel & Raine (1963). A total of 217 children in grades six through eight completed the inventory. The inventory was administered in classrooms by the experimenter.

Procedures Used in Item Selection for CFEI. Lumsden (1961) reviewed different methods for the construction of unidimensional test. The conclusion was that "only factor analysis provides a rational procedure for item selection (p. 130)." Lumsden recommended, however, that combinations of different elements from different methods are possible and likely to optimize item selection.

The steps employed in the present study to develop unidimensional subset of items were as follows: First of all, empirical and a priori considerations were used in the initial stage. Dimensions isolated in previous research (Canfield & La Gaipa, 1970; Wright, 1969) provided some rationale grounds.

Secondly, a factor analysis was conducted of items written on the basis of Bigelow material. An implicit assumption was that items loading on a given factor would have a higher inter-
correlation with those items than items loading on different factors. In other words, a scale based on items from the same factor are more likely to manifest reliability.

The principal components method of factor analysis was used. The eigen values were examined to determine the number of factors to be rotated by the varimax technique. The criterion used to identify the number of factors was the point at which the eigen values leveled off. Five factors were subsequently rotated. Four of the five factors served as the basis for the development of the CFEI scales. The factor omitted was relatively weak, had insufficient significant items and was difficult to interpret.

Thirdly, items were selected to represent a given dimension on the basis of factor loadings. The factor analysis was conducted to identify items likely to have satisfactory reliability. The 45 items were reduced to 28 items, which then were categorized to represent four dimensions of seven scales.

Fourthly, the responses of the subjects to each of the seven items in each scale were then totalled by means of a scoring programme. Each subject, then, had four total scores.

The ITAN computer programme was used to determine the following kinds of data: Item-total correlations, item means and standard deviations, and alpha reliabilities of each of the scales.

The results of the item analysis revealed that all seven of the items in each of the four scales attained an adequate correlation with the subscale total score. Furthermore, the
correlations with the subscale total were higher than correlations with other criteria (scales measuring different dimensions). Though the difference between correlations with relevant and irrelevant subtotal scores was marginal for several items, a decision was made to retain all items to avoid shortening the already small number of items in each scale.

Table 1 provides the means, standard deviations and alpha reliabilities of each of the four scales. These reliabilities appear quite adequate considering the small number of items in each scale. It may be observed that the alpha reliability was highest for conventional morality and lowest for mutual activities.

Table 2 presents the intercorrelations of the four scales. Mutual activities appear to show the lowest relationship with the other scales. Examination of the correlations indicates good discriminant validity.

Description of Children's Friendship Expectancy Inventory.
Below are given descriptions of the dimensions isolated on the basis of a factor analysis.

Conventional Morality. The main characteristic of the seven items loading on this factor is that the items were all negatively worded, e.g., "Do not lie or cheat", "Never gets me in trouble", etc. Serious consideration should be given to the possibility that this factor is heavily weighted with response style. The rationale for labeling this factor as conventional morality is that most of the items suggest that such a friend
### TABLE 1

MEANS, STANDARD DEVIATIONS AND ALPHA RELIABILITIES OF CHILDREN'S FRIENDSHIP EXPECTANCY INVENTORY (CFEI)

<table>
<thead>
<tr>
<th>CFEI Scales</th>
<th>Means</th>
<th>S.D.</th>
<th>Alpha Reliabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Morality</td>
<td>27.33</td>
<td>5.75</td>
<td>.74</td>
</tr>
<tr>
<td>Mutual Activities</td>
<td>23.41</td>
<td>5.09</td>
<td>.63</td>
</tr>
<tr>
<td>Empathic Understanding</td>
<td>27.21</td>
<td>5.05</td>
<td>.70</td>
</tr>
<tr>
<td>Loyalty and Commitment</td>
<td>23.48</td>
<td>5.23</td>
<td>.70</td>
</tr>
<tr>
<td>Total CFEI</td>
<td>101.48</td>
<td>13.63</td>
<td>.79</td>
</tr>
</tbody>
</table>

### TABLE 2

INTERCORRELATION AMONG CFEI SCALES

<table>
<thead>
<tr>
<th>CFEI Scales</th>
<th>Conventional Morality</th>
<th>Mutual Activities</th>
<th>Empathic Understanding</th>
<th>Loyalty &amp; Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Morality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual Activities</td>
<td>.00</td>
<td></td>
<td>.35</td>
<td>.40</td>
</tr>
<tr>
<td>Empathic Understanding</td>
<td></td>
<td></td>
<td>.03</td>
<td>.20</td>
</tr>
<tr>
<td>Loyalty and Commitment</td>
<td></td>
<td></td>
<td></td>
<td>.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>---</td>
</tr>
</tbody>
</table>
is honest, is not a hypocrite, and does not exploit others, or say mean things about them to hurt them. The underlying theme appears to deal with the character traits of the friend as an individual, rather than the quality of the relationship itself. **Mutual Activity.** The quality of the relationship also appears to be secondary in this factor. The items with the highest loadings are "Enjoy playing the same games and sports" and "Have good ideas about things to do." This factor is also partially defined by items dealing with stimulation value. For example, such a friend is imaginative, capable of presenting one with novel and interesting activities, and helping a person to learn and extend his present knowledge. The item "Get good grades in school" is somewhat difficult to interpret within this context. One possibility is that a smart person is more likely to provide stimulation value. Possibly one can learn more from such a person.

**Empathic Understanding.** This factor is defined by items suggesting that such a friend is sensitive to one's feelings. Warmth, rapport and trust characterize such a relationship. Three of the items suggest a willingness to disclose or communicate matters of a rather personal nature. With such a friend one can talk about "personal problems", "things that I'm ashamed of" and "things that bother or worry me". Concern with one's welfare extends beyond being a good listener. This is suggested by the item "help me when I'm in trouble".

**Loyalty and Commitment.** The expectations defined by this
factor describe the friend as remaining a friend, regardless of the cost or sacrifice involved. The item with the highest loading is "Stand by me through anything". This factor appears to deal with the strength of the relationship or its resistance to dissolution. The item "Stand up for what they believe in" is somewhat difficult to interpret. Perhaps, the implication is that such a person is not only loyal and committed to a best friend but also shows integrity to his own beliefs.

**Construction of Sociometric Test**

Though the review of the literature suggests that there are at least two types of popular children and two types of unpopular children, no sociometric test presently available measures these four types. Therefore, a search was made to identify items sampling these four areas of sociometric acceptance-rejection. The source material for the items was existing sociometric tests (Klaus, 1959; Lesser, 1959; Mitchell, 1956; Cunningham, 1951), as well as research findings that provide characteristics of these four types (Dielman et.al., 1971; Cole & Hall, 1965; VanKrevlin, 1962; Peterson, 1961). Five items were written or selected to represent each of the four types. In addition, two items were selected from the Mitchell (1956) "Guess Who" test that deal with positive and negative friendship choice (items 18 & 19). The 22 item "Guess Who" sociometric test is found in Appendix F.

In scoring this sociometric test, each subject received one score on each of the 22 items on the basis of the number
of times that his name is mentioned. The scores were subjected to factor analysis in order to determine the number of independent factors tapped by this test. Information on the number of factors measured by the "Guess Who" test was essential for classifying subjects by sociometric type for the analysis of variance of the dependent variables.

**Factor analysis of sociometric test.** The "Guess Who" test containing 22 items was administered to 138 male and female subjects in grades six, seven and eight. The resulting data were subjected to exploratory factor analysis. Following the intercorrelation of the items, a principal components factor analysis was obtained in which ones were inserted in the diagonals. Four factors were extracted with eigen values over 1.00. The pattern of these eigen values suggested that it was appropriate to rotate only three of the four factors; there was a sharp drop in eigen values after the third value. Since four factors were hypothesized, however, these four factors were rotated by the varimax procedure to orthogonal simple structure. These factors did not correspond to what was hypothesized. A second rotation was then performed using only three factors. The results of this factor analysis can be found in Appendix G.

The hypothesis that task competence and social-emotional would be isolated as separate factors was not supported. The first factor had high loadings on the items designated as task competence (items 1, 6, 11, 15, 20) and the items desig-
nated as social-emotional (items 2, 5, 9, 13, 18). These items appear to represent desirable social characteristics that are high on the social scale of values for children. What is common to all of these items is the fact that they all render the individual as socially acceptable to his peers. Of particular interest is the high loading of factor one on the positive friendship item (21). This item asks for names of the ones that the subject would like as his best friends. The behavioural items, then, load on the same factor as the friendship item. Accordingly, it seems logical to designate this clear-cut but generalized factor as the factor of "social acceptability".

The second factor has high loadings on the items designated as aggressive maladjustment (items 3, 10, 16, 17) and a fifth item (8) which also loaded on the withdrawal factor. The second factor loaded highly on the negative friendship item (22). This item asks for names of the ones that he would not like for his friends, and implies rejection. This second factor was labeled as "aggressive maladjustment".

The third factor has loadings on the four items designated as withdrawal (items 4, 12, 14, 19) and a fifth item (7) that also loaded on the aggressive factor. This third factor loaded on the negative friendship item (22) indicating some rejection, but the loading (-.35) was not quite as high as the loading of factor two on this item (.59). The third factor was labeled as "social withdrawal".

A decision was made to shorten the 22 item sociometric
test. Some of the items were loading on two factors. Moreover, it did not appear necessary to include nine items to measure factor one. A major consideration, however, was the time required to administer this instrument. A shortened scale would permit the administration of both the CFEI and the sociometric test within the normal class period.

Four items were selected to tap each of the three factors. The two items (21 & 22) tapping positive and negative friendship choice were also retained. To provide a measure of social acceptability, factor one, two task competence and two social-emotional items were retained (items, 6, 9, 13, 20). To tap aggressive maladjustment, four items were retained (3, 10, 16, 17). Item 8 was eliminated because it was relatively weak and loaded on the third factor. To provide a measure of social withdrawal, four items were selected (4, 12, 14, 19). Item 7 was eliminated. Item 12 was modified to make it a more reliable estimate of withdrawal. The revised 14 item sociometric test is presented in Table 3.

The revised 14 item sociometric test was then administered to 402 subjects. The results of the rotated factor matrix are presented in Table 3. Three clearly distinct factors again emerged. The proportion of the total variance accounted for before rotation was 28.97%, 21.46%, and 12.56%. After rotation the first factor accounted for 24.36%, the second factor accounted for 22.69% and the third factor accounted for 16.86% of the total variance. The total cumulative variance accounted
for after rotation was 63.91\%.
<table>
<thead>
<tr>
<th>Sociometric Question</th>
<th>Original Number</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1. Who are the ones who are restless &amp; find it hard to sit still?</td>
<td>3</td>
<td>-.04</td>
</tr>
<tr>
<td>2. . . . . who are too shy to make friends easily?</td>
<td>4</td>
<td>-.18</td>
</tr>
<tr>
<td>3. . . . . that are sure to have good ideas for games?</td>
<td>6</td>
<td>.81</td>
</tr>
<tr>
<td>4. . . . . that show consideration &amp; understanding for others?</td>
<td>9</td>
<td>.74</td>
</tr>
<tr>
<td>5. . . . . who are disruptive, annoy &amp; bother others?</td>
<td>10</td>
<td>-.08</td>
</tr>
<tr>
<td>6. . . . . who never seem to have a good time with other children &amp; would rather stay by themselves?</td>
<td>12</td>
<td>-.21</td>
</tr>
<tr>
<td>7. . . . . who are always cheerful, jolly, good natured?</td>
<td>13</td>
<td>.78</td>
</tr>
<tr>
<td>8. . . . . that get embarrassed easily &amp; are self-conscious?</td>
<td>14</td>
<td>.08</td>
</tr>
<tr>
<td>9. . . . . who quarrel &amp; get mad easily?</td>
<td>16</td>
<td>.10</td>
</tr>
<tr>
<td>10. . . . . who are uncooperative &amp; want things their own way?</td>
<td>17</td>
<td>.05</td>
</tr>
<tr>
<td>11. . . . . that you do not notice? You just don't think about whether they are with you or not?</td>
<td>19</td>
<td>.21</td>
</tr>
<tr>
<td>12. . . . . that always work for the good of their class, or their team, or their playmates?</td>
<td>20</td>
<td>.86</td>
</tr>
<tr>
<td>13. . . . . that you would like for your best friends?</td>
<td>21</td>
<td>.80</td>
</tr>
<tr>
<td>14. . . . . that you would not like for your friends?</td>
<td>22</td>
<td>-.29</td>
</tr>
</tbody>
</table>
CHAPTER III

METHOD

Subjects

The revised versions of the Children's Friendship Expectancy Inventory and the "Guess Who" sociometric test were administered to 402 male and female students in several elementary schools in Chatham and Blenheim. The test material was administered during the regular classroom session to students in grades, six, seven, and eight.

Administration of Test Material

The material was administered by the present investigator in each of the classes. The experimenter was introduced to the class by the teacher as coming from the University of Windsor. The experimenter told the class that she wanted to find out what children consider important in choosing their best friends. The CFEI was given to each of the children. The experimenter then provided verbal instructions on how to fill out the CFEI. To ensure that the students understood the instructions, the experimenter presented an example of the ladder-type rating scale on the blackboard and showed the students how to record their choices. (See verbal instructions in Appendix D).

After the students completed the CFEI, the experimenter provided additional instructions for the sociometric test. The oral instructions were as follows: "You have just finished telling us what you consider important in friendship. It would also be helpful to me if I could obtain some descriptions of children of your own age. Children often say that they don't
have as many friends as they would like. Perhaps it is because there are not enough children of your own age that possess certain qualities that you consider important. Now, I would like to find out how many children possess such qualities. In order to do this, I will ask you such questions as: Who are the ones that hand in the best projects in the classroom? You will be asked to write the names of the children that most fit this description. Since you have just finished describing friends of your own sex, I am going to ask you to do the same with these word-pictures. In other words, if you are a boy, put down only boy's names. If you are a girl, put down only girl's names."

After administering the sociometric test, the E said:

"Here are word-pictures of some children you may know. Read each statement carefully and see if you can guess who it is about. There may be more than one picture for the same person. Several boys and girls may fit one picture. Read each statement. Think over your classmates in this room, and write after each statement the names of any boys or girls who may fit it. Write down on the lines below each statement, the names of boys, if you are a boy, and the names of girls, if you are a girl. If the picture does not seem to fit anyone in your class, put down no name, but go on to the next statement."

**Preliminary Analyses of Data**

The independent variables consisted of (a) the three factor scores representing social acceptability, aggressive maladjustment and social withdrawal; (b) grade level, and
(c) sex. The dependent variables measured by the CFEI consisted of four scores: Conventional morality, mutual activities, empathic understanding, and loyalty and commitment. The four CFEI scores were subjected to transformation in order to make comparisons across scales. T scores were computed for each scale. The mean score for the total sample then was 50 and the standard deviation was 10. These T scores were used in subsequent analyses.

Different stages were involved in the analysis of the data. It was necessary to make some changes from the original design as a consequence of examining the nature of the data obtained. The different combinations of variables involved in each of the analyses and the reasons for the modifications are given below.

**Sociometric type by grade by sex.** In order to conduct the first analysis, it was necessary to identify subjects with extreme scores on each of the sociometric dimensions by grade level and sex. A decision was arbitrarily made that a minimum of five males and five females were required for each condition in the analysis of variance. For example, five males and five females were needed that were high on aggressive withdrawal, and five males and five females that were low on aggressive withdrawal. Twenty subjects were needed with these extreme scores on each of the three dimensions for grades six, seven, and eight for a total of 180 subjects. Difficulties were encountered in finding sufficient subjects to fill each of the cells. It proved impossible to find subjects with extreme scores on all three sociometric dimensions at all three grade levels. The total sample of 402
subjects proved to be inadequate. Some of the individual cells were examined that were complete. It was apparent that the variability of the responses on the dependent variables was such that a much larger number of subjects would be needed to demonstrate statistical significance. A further condition was to maintain homogeneity by age level within each grade: (Grade 6, 11.6 – 12.6; Grade 7, 12.7 – 13.7; Grade 8, 13.8 – 15.1). The elimination of overage and underage children significantly reduced the available pool of subjects. It was concluded that a sample three times as large as that obtained would be necessary to perform the analysis. Accordingly, further attempts to examine sociometric type by grade and by sex were discontinued.

Grade level by sex. The second analysis was limited to grade level and sex. An examination of the distribution of age within each grade level indicated considerable overlap from grade to grade. To make each grade level homogeneous, age ranges were specified for each grade level. Subjects that were above or below the specified range were eliminated from the sample. The total sample was reduced by about one third. Means and standard deviations were computed on the remaining subjects by grade level and sex. This analysis provided an estimate of development changes in CFEI responses.

Sociometric type by sex. In the third analysis the independent variables consisted of sociometric type and sex. The elimination of grade level made it possible to use nearly 100 subjects that had been deleted because of age. The objective
of this analysis was to determine whether sociometric type and sex affected friendship expectations. The major concern of the present study, then, was limited to answering this question.

The preparation of the data for the analysis of variance involved the classification of the subjects on the basis of their factor scores. The factor scores themselves were not analysed, but the responses of the subjects on the dependent measures. Each subject's factor scores were plotted on bipolar axis. This made it possible to visualize his position on each of the three sociometric dimensions. Bipolar axis were drawn on graph paper for each pair of factor scores: Social acceptability - aggression; aggression - withdrawal, and social acceptability - withdrawal. Six diagrams were drawn, then, to present graphically the three pairs of factor scores as a function of sex. The distribution of factor scores on the four quadrants was examined. Of particular interest was the number of subjects that were high on both dimensions, low on both dimensions, and high on one dimension and low on the other dimension.

The factor scores were fairly evenly distributed on the social acceptability - aggression axis, and on the aggression - withdrawal axis. A problem was encountered in regard to the social acceptability - withdrawal axis. Few cases were found where the subject was high on social acceptability and high on withdrawal. A high social acceptability score indicates that the subject manifested behavioural characteristics that are considered desirable and preferred by the raters. It would be contradictory for a child to be rated as possessing these high
status qualities and also being withdrawn. In view of the limited number of highly acceptable - withdrawn subjects, no further attempt was made to select subjects with this combination of scores. Rather, subjects were identified in terms of their acceptability and aggression scores, and in terms of their aggression and withdrawal scores.

The next step was to record the CFEI scores of each of the subjects in the four quadrants. The original sample of 402 subjects was reduced to 388 after the elimination of cases where data were not available on both the friendship measure and the sociometric test. Complete data were available on 215 males and 173 females.

The distribution of factor scores was then examined to decide on the percentage of subjects to be selected to represent extreme sociometric types. It appeared that it would be possible to maximize differences and still maintain an adequate number of cases by selecting the top 20% and the bottom 20% of the Ss. Table 4 presents the number of male and female Ss selected that were high on both acceptability and aggression, high on acceptability and low on aggression, low on acceptability and high on aggression, and low acceptability and aggression. It should be noted that no sex differences were observed in the factor scores of Ss designated to represent each of the types.

A further consideration in selecting subjects was that the third factor score was not extreme but average. For example, a subject was not considered for the high aggressive - low social acceptability cell if his score on withdrawal was high.
### TABLE 4

DISTRIBUTION OF SUBJECT ON SOCIAL ACCEPTABILITY AND AGGRESSION DIMENSIONS AS A FUNCTION OF SEX

<table>
<thead>
<tr>
<th>Social Acceptability</th>
<th>Aggression</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>High</td>
<td>M</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Low</td>
<td>M</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>
CHAPTER IV
RESULTS

This chapter is organized around the findings dealing with two major questions. The first question is whether there are developmental trends and sex differences in the importance attached to different conceptions of friendship. The second question is whether there are differences in these friendship expectations as a function of sociometric type and sex.

Grade Level by Sex Differences

Table 5 presents data relevant to the first question. The means and standard deviations of raw CFEI scores by grade and sex are presented.

An examination of the mean conventional morality scores reveals no sex differences. The only significant finding was that grade 7 females place more importance on this dimension than grade 6 females \( t = 2.04, \text{df} = 88, p < .05 \). With males and females combined no developmental differences are apparent.

Sex differences in the importance attached to mutual activities are evident in Table 5. Males assigned more importance to this dimension than females in grade 6 \( t = 2.07, \text{df} = 91, p < .05 \); in grade 7 \( t = 1.72, \text{df} = 90, p < .10 \); and in grade 8 \( t = 1.95, \text{df} = 106, p < .10 \). No developmental trends were indicated by the data.

A significant sex difference on empathic understanding was obtained in grade 8. Females assigned more importance to this dimension than males \( t = 3.39, \text{df} = 106, p < .01 \). A developmental change is suggested between total scores in grades 6 and 7. Grade 7 children placed more importance on this dimension than grade 6 \( t = 2.60, \text{df} = 183, p < .01 \).
### TABLE 5
MEANS AND STANDARD DEVIATIONS OF RAW CFEI SCORES BY GRADE AND SEX.

<table>
<thead>
<tr>
<th>CFEI Scales</th>
<th>Sex</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Conventional Morality</td>
<td>Male</td>
<td>25.10</td>
<td>5.57</td>
<td>25.00</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24.47</td>
<td>5.77</td>
<td>26.80</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24.80</td>
<td>5.64</td>
<td>25.88</td>
</tr>
<tr>
<td>Mutual Activities</td>
<td>Male</td>
<td>25.58</td>
<td>5.57</td>
<td>24.83</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>23.24</td>
<td>5.17</td>
<td>23.27</td>
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<td></td>
<td>Total</td>
<td>24.45</td>
<td>5.48</td>
<td>24.08</td>
</tr>
<tr>
<td>Empathic Understanding</td>
<td>Male</td>
<td>25.52</td>
<td>5.11</td>
<td>27.36</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27.04</td>
<td>5.12</td>
<td>28.96</td>
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<td></td>
<td>Total</td>
<td>26.47</td>
<td>5.14</td>
<td>28.14</td>
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<tr>
<td>Loyalty &amp; Commitment</td>
<td>Male</td>
<td>24.48</td>
<td>4.57</td>
<td>24.94</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24.47</td>
<td>4.06</td>
<td>23.91</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24.48</td>
<td>4.31</td>
<td>24.43</td>
</tr>
</tbody>
</table>
Loyalty and commitment was rated as significantly less important in the eighth grade than in the seventh grade for males and females combined (t = 3.14, df = 198, p < .01). This decrease was significant for the males (t = 2.56, df = 104, p < .05, and of borderline significance for the females (t = 1.86, df = 92, p < .10).

**Sociometric Type by Sex**

The next major question deals with the contribution of sociometric type and sex to the rated importance of the four friendship expectations measured by the CFEI. A 2 X 2 X 2 factorial design was used in two similar kinds of analyses. The first set of analysis involved the combinations of aggression, social acceptability, and sex. The second set of analysis involved aggression, withdrawal and sex. It should be noted that social acceptability, aggression and withdrawal were not included in the same analysis of variance design. The reader will recall that the design required the identification of subjects high on two dimensions, low on two dimensions and high on one and low on the other. It was impossible to identify sufficient subjects high on both social acceptability and withdrawal. This combination will be treated in additional analyses described later in this chapter.

The dependent variables in the analysis of variance (conventional morality, mutual activities, empathic understanding, and loyalty & commitment) were subjected to four separate analyses of variance. Since an unequal n design was used, the
BALANOVA analysis of variance computer program was used. Individual comparisons between means were examined by the Newman-Keuls test following the procedure outlined by Winer (1971, pp. 216-218, and p. 387).

Table 6 presents a summary of the first four analysis of variance of the CFEI scores as a function of aggression, social acceptability, and sex. This table includes only the F values; the more complete tables can be located in Appendix J. It can be seen from Table 6 that aggression, social acceptability, and sex yielded insignificant main effects on conventional morality. A significant Aggression X Social Acceptability interaction was obtained (F = 4.62, df = 1/152, p < .05). This interaction, shown in Figure 1, appears to be due primarily to the importance ratings of children low in aggression. The high acceptance, low aggressive children did not differ in their ratings, regardless of their acceptance level.

For mutual activities, sex had a main effect (F = 7.08, df = 1/152, p < .01). More importance was assigned by the males (X̄ = 52.30) than by the females (X̄ = 48.19). The finding of a significant Social Acceptability X Sex interaction (F = 5.29, df = 1/152, p < .05) indicates the need to examine further the nature of this sex difference. Figure 2 shows that the difference between males and females exists only for the subgroup of high acceptance children. It may be noted also that the high acceptance males rate mutual activities higher than the low acceptance males (p < .05). Differences in acceptance among females, however, does not appear to influence their ratings.
<table>
<thead>
<tr>
<th>Source</th>
<th>Loyalty and Commitment</th>
<th>Empathic Understanding</th>
<th>Mutual Activities</th>
<th>Conventional Morality</th>
<th>Aggression (A)</th>
<th>Acceptability (B)</th>
<th>Sex (C)</th>
<th>A X B</th>
<th>A X C</th>
<th>A X B X C</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td>4.57*</td>
<td>7.60**</td>
<td>5.12*</td>
<td>10.39**</td>
<td>2.00</td>
<td>.28</td>
<td>.19</td>
<td>.04</td>
<td>.26</td>
<td>.00</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>.13</td>
<td>10.56**</td>
<td>10.80**</td>
<td>.02</td>
<td>.04</td>
<td>.66</td>
<td>.03</td>
<td>.25</td>
<td>.28</td>
<td>.12</td>
<td>.05</td>
</tr>
</tbody>
</table>

*P < .05
**P < .01
Fig. 1. Mean CFEI conventional morality scores as a function of aggression and acceptability.

Fig. 2. Mean CFEI mutual activities scores as a function of sex and acceptability.
Aggression had a main effect on empathic understanding 
\((F = 7.60, \text{df} = 1/52, p < .01)\); high aggressives \((\bar{X} = 52.65)\) 
rated this dimension as more important than low aggressives 
\((\bar{X} = 48.85)\). The main effect of social acceptability was also 
significant \((F = 5.12, \text{df} = 1/152, p < .05)\); high acceptance Ss 
\((\bar{X} = 52.31)\) had higher scores than low acceptance Ss \((\bar{X} = 49.19)\). 
The Aggression X Social Acceptability interaction was significant 
\((F = 10.56, \text{df} = 1/52, p < .01)\). Figure 3 depicts the nature of 
this interaction. For children high in aggression, the level 
of acceptability does not appear to be related to their import-
tance ratings. For children low in aggression, the Ss high in 
acceptance consider empathic understanding as more important 
than those low in acceptance \((p < .01)\). In addition, a main 
effect was found for sex \((F = 4.08, \text{df} = 1/52, p < .05)\). The 
females \((\bar{X} = 52.29)\) attach more importance to empathic under-
standing than the males \((\bar{X} = 49.49)\). No significant interaction 
effects were found between sex and social acceptability or sex 
and aggression.

Aggression had a main effect on the importance assigned 
to loyalty and commitment \((F = 4.57, \text{df} = 1/52, p < .05)\); high 
aggressives \((\bar{X} = 51.70)\) rated it higher than low aggressives 
\((\bar{X} = 48.56)\). The main effect of social acceptability \((F = 10.39, 
\text{df} = 1/52, p < .01)\) is due to the higher value assigned by Ss 
high in acceptance \((\bar{X} = 52.50)\) than Ss low in acceptance 
\((\bar{X} = 47.76)\). A significant Social Acceptability X Sex inter-
action was found \((F = 5.28, \text{df} = 1/52, p < .05)\). It may be ob-
served in Figure 4 that this interaction is due primarily to 
the male ratings. The high acceptance males rated loyalty and
Fig. 3. Mean CFEI empathic understanding scores as a function of aggression and acceptability.

Fig. 4. Mean CFEI loyalty and commitment scores as a function of sex and acceptability.
commitment higher than the low acceptance males (p < .01). High and low acceptance females do not differ in their ratings.

Table 7 presents a summary of the second four analyses of variance of the CFEI scores as a function of aggression, withdrawal and sex. This table includes only the F values; the more complete table can be located in Appendix J. It can be seen in Table 7 that aggression had a significant main effect on conventional morality scores (F = 5.31, df = 1/52, p < .05; high aggressives (X̄ = 51.44) rated this characteristic in friendship as more important than low aggressives (X̄ = 47.96). No other significant main effects or interaction effects were obtained. It may also be observed that no main effects or interaction effects were found on ratings of mutual activity.

Aggression had a main effect on empathic understanding (F = 13.95, df = 1/52, p < .001) with high aggressives (X̄ = 52.88) assigning a higher value than low aggressives (X̄ = 47.60). Withdrawal also had a main effect (F = 15.37, df = 1/52, p < .001). High withdrawals (X̄ = 47.46) rated empathic understanding as less important than low withdrawals (X̄ = 53.02). A significant main effect was also found for sex (F = 3.27, df = 1/52, p < .001). Females (X̄ = 52.49) perceived empathic understanding in a friend as more important than males (X̄ = 48.40). No significant interaction effects were detected.

Aggression had a main effect on loyalty and commitment (F = 4.57, df = 1/52, p < .05) with high aggressives (X̄ = 51.32) placing more value on this characteristic than low aggressives (X̄ = 48.08).
### TABLE 7

**SUMMARY OF F VALUES OF CFEI SCORES**

**BY AGGRESSION, WITHDRAWAL, AND SEX**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Conventional Morality</th>
<th>Mutual Activities</th>
<th>Empathic Understanding</th>
<th>Loyalty and Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression (A)</td>
<td>1</td>
<td>5.31*</td>
<td>.04</td>
<td>13.95***</td>
<td>4.57*</td>
</tr>
<tr>
<td>Withdrawal (B)</td>
<td>1</td>
<td>.54</td>
<td>.95</td>
<td>15.37***</td>
<td>2.71</td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>3.19</td>
<td>1.70</td>
<td>8.27**</td>
<td>.01</td>
</tr>
<tr>
<td>A X B</td>
<td>1</td>
<td>.55</td>
<td>.36</td>
<td>.40</td>
<td>.24</td>
</tr>
<tr>
<td>A X C</td>
<td>1</td>
<td>.94</td>
<td>.58</td>
<td>.56</td>
<td>2.07</td>
</tr>
<tr>
<td>B X C</td>
<td>1</td>
<td>.37</td>
<td>.96</td>
<td>.77</td>
<td>.73</td>
</tr>
<tr>
<td>A X B X C</td>
<td>1</td>
<td>2.81</td>
<td>.10</td>
<td>2.96</td>
<td>2.13</td>
</tr>
<tr>
<td>Error</td>
<td>152</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* * p < .05  
** * p < .01  
*** * p < .001
No significant main effects were found for withdrawal or sex. None of the interaction effects were significant.

The results described above dealt with aggression and social acceptability in the first analysis, and with aggression and withdrawal in the second analysis. In order to compare all three sociometric types by means of the same factorial design, three of the subgroups were isolated. The high acceptance, low aggressive group was defined as the highly accepted Ss. The high aggressive, low acceptance group was defined as the aggressive group. The high withdrawal, low aggressive group was defined as the withdrawn group. Essentially, what was done was to include the three subgroups containing subjects with extreme scores in the same factorial design. A 3 X 2 factorial design was used (sociometric type by sex). Separate analyses of variance were performed on the four dependent CFEI measures.

Table 8 presents a summary of the F values. The mean CFEI scores of highly accepted, aggressive, and withdrawn sociometric types can be found in Appendix K. Figure 5 presents the mean scores of the highly accepted, aggressive and withdrawn females. Figure 6 presents the same kind of data based on the male sample.

For conventional morality, no main or interaction effects were found for either sociometric type or sex. Sex had a main effect on mutual activities \( (F = 4.19, \text{ df } = 1/114, p < .05) \). The Sex X Sociometric type interaction was of borderline significance \( (p < .10) \). An examination of Figures 5 and 6 suggests that much of the sex difference might be due to ratings of the
TABLE 8
SUMMARY OF F VALUES OF CFEI SCORES
BY SOCIOMETRIC TYPE, AND SEX

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Conventional Morality</th>
<th>Mutual Activities</th>
<th>Empathic Understanding</th>
<th>Loyalty and Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociometric Type (A)</td>
<td>2</td>
<td>.66</td>
<td>.61</td>
<td>10.90**</td>
<td>3.61*</td>
</tr>
<tr>
<td>Sex (B)</td>
<td>1</td>
<td>1.28</td>
<td>4.19*</td>
<td>1.61</td>
<td>.41</td>
</tr>
<tr>
<td>A X B</td>
<td>2</td>
<td>1.02</td>
<td>2.54</td>
<td>.78</td>
<td>2.22</td>
</tr>
<tr>
<td>Error(within cell)</td>
<td>114</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

**p < .01
Fig. 5. Mean friendship expectations of highly accepted, aggressive, and withdrawn females.
Fig. 6. Mean friendship expectations of highly accepted, aggressive, and withdrawn males.
highly accepted children. A post hoc analysis was conducted of this difference. The highly accepted males were found to assign more importance to mutual activities than the highly accepted females ($p < .01$).

Sociometric type had a significant main effect on empathic understanding ($F = 10.90, df = 1/114, p < .001$). This friendship dimension was rated higher by the aggressive than by the withdrawn children ($p < .01$). Furthermore, the highly accepted children assigned more importance to empathic understanding than the withdrawn children ($p < .01$). The difference between highly accepted and aggressive children was not significant. Sex had no main or interaction effects.

Sociometric type also had a significant main effect on loyalty and commitment ($F = 3.61, df = 1/114, p < .05$). The highly accepted children rated this characteristic higher than the withdrawn children ($p < .05$). Of borderline significance ($p < .10$) was the higher rating by the aggressive children than by the withdrawn children. Sex had no main or interaction effects.
CHAPTER V

DISCUSSION

The first hypothesis of the present study was that a factor analysis of the revised "Guess Who" test will reveal two types of accepted children (task competence and social-emotional) and two types of rejected children (aggressive maladjusted and socially withdrawn). The results of the factor analysis provided only partial support for this hypothesis. The items designated as "task competence" and the items designated "social-emotional" loaded on the same factor, and appears to tap a generalized social acceptability dimension. The items designated as "aggressive maladjusted" and "socially withdrawn", however, loaded on two different factors. This study, then, supported only the hypothesis of two types of rejected children.

Various interpretations can be made for the failure to support studies suggesting that there are two kinds of highly accepted children. Firstly, it is necessary to consider methodological differences between the present study and other studies. For example, direct observations of different groups led Bales (1951) to conclude that the instrumental leader and the social-emotional leader are not necessarily the same person. This study used the pupil rating technique.

Secondly, the nature of the sociometric task may be important. The most popular approach, the Moreno technique, consists of asking children to name the most preferred person in terms of different criteria, such as most preferred friend.
The questions are usually limited to less than six. In contrast, the "Guess Who" technique in the present study used 14 items to measure acceptability in terms of behavioural characteristics. The Moreno choice type and the "Guess Who" may be measuring different aspects of social status (Fox & Segel, 1954).

Thirdly, a common practice is to compute simple correlations between the responses to the sociometric questions rather than subjecting the intercorrelations to factor analysis. Durojaiye (1966) reported a distinction between friendship choice and leadership choice. This conclusion was based on the wide variation found between the correlations between the items measuring friendship and leadership (.35 to .92). Similarly, Tulkin et al. (1969) correlated five sociometric measures and concluded that two clusters emerged, one dealing with task competence and one dealing with affective popularity. It should be noted, however, that all of the correlations reported by Tulkin et al. were beyond the .01 level of significance. Suggestions that there are two kinds of accepted children, then, have been made on the basis of data indicating only moderate correlations between sociometric measures tapping task competence and social-emotional. It is conceivable, however, that a factor analysis of these intercorrelations would reveal only one factor. The differences found in the present study and earlier studies might cease to exist if the same statistical treatment was used.

Fourthly, the rational approach also has been the basis for making distinctions between two kinds of accepted children.
Cole & Hall (1965) made a distinction between leadership type and social type from an examination of the kinds of traits found to characteristic children with high sociometric choice. Needless to say, the rational approach provides a less vigorous test than factor analysis.

Another possibility is that the sociometric ratings used in the present study were not sufficiently reliable. One source of low reliability among judges is the opportunity to observe. Researchers who have found two types of highly accepted children have used children from camp situations (Polansky, et al., 1950; Gold, 1958; Lippitt & Gold, 1959). In these studies, children observed each other in a variety of situations. We suspect that the children in the present study based their ratings on fewer and less varied observations. The children were from a rural population. They were on a complete rotary system, where they changed classes every 40 minutes. Their observations may have been limited largely to academic activities. It is conceivable that distinct task competence and social emotional leaders did not emerge or that the sufficient numbers of children in a given classroom were not able to identify them with sufficient consensus for differences to appear.

Furthermore, there may be differences in the reliability of the ratings of the social acceptance and social rejection. Harper (1968) has reported reliabilities of .20 for measures of social acceptance and .80 for measures of social rejection. Harper suggests that "...the attributes of the individual that lead to social rejection are more clearly defined than those that
lead to acceptance (p. 226)."

Finally, the distinction may be a function of grade level. An older sample of children may be needed to demonstrate this difference.

Support was found in the present study for the hypothesis that there are two kinds of rejected children. The isolation of two distinct factors (aggressive maladjusted and socially withdrawn) is consistent with studies suggesting that two types of rejected children exist: The openly rejected, aggressive child and the socially withdrawn child (Koch, 1933; Northway, 1944; Mitchell, 1956; Peterson, 1961; Quay & Quay, 1965; Moore, 1967, Hartup, 1970).

The factor analytic study by Mitchell (1956) of a "Guess Who" test has the most direct bearing to the present investigation. Mitchell also isolated three factors: Social acceptability, aggressive maladjustment, and social isolation. Mitchell had hypothesized a withdrawn factor but relabeled it as "social isolation" after examining the factor analysis results. Mitchell reported that: "The items that were originally considered to be indicative of withdrawn behavior have so little commonality that 'withdrawnness' as a behavior pattern may be suspect .... (p. 384)." Mitchell concluded that these items lacked sufficient unity and consistency to warrant their use as a separate scoring category. These problems elucidated by Mitchell have been largely overcome in the present study. The resulting sociometric test has proved to have both construct validity and predictive validity.

Gronlund & Anderson (1957) found that the "Guess Who" is a useful method for obtaining descriptions of aggressive
children, but that this instrument has little value for studying the neglected or socially withdrawn child. The latter type child was found to seldom receive either positive or negative ratings as these neglected children did not attract the attention of their classmates.

The present findings fail to support Mitchell or Gronlund as to the limitation of the "Guess Who" for studying the withdrawn child. The revised "Guess Who" developed for this study was sensitive to differences between different sociometric types. The present study's contribution goes beyond that of demonstrating that two types of rejection exist. An instrument has been developed that appears to provide a more reliable measure of these differences than existing instruments.

**Sociometric Type by Grade Level by Sex.** The second hypothesis predicted a three way interaction between types of sociometric acceptance-rejection, grade level and sex in affecting the importance assigned to various friendship expectations. No test was made of this hypothesis. Sufficient subjects could not be identified to meet the requirements of the proposed factorial design. A cursory examination of the data suggests that between 1,000 and 2,000 children are needed to determine the validity of this hypothesis.

**Grade Level by Sex.** Relatively little support was found for the effect of sex and developmental changes on friendship expectations. The increase in the importance assigned to conventional morality from grade six to grade seven occurred only
for the females. Boys, however, did not vary in the importance attached to this dimension. This finding, for the male sample, is consistent with prior research. Kohlberg (1968) found that for the ages of 10 through 16 the "good boy" morality viewpoint was most prevalent and remained fairly constant.

The lack of developmental trends in the importance given mutual activities is somewhat consistent with prior research (Davitz, 1955). Bigelow (1971) also found no significant change in the value placed on this variable for the grade levels examined in the present study.

The expected increase in the value placed on empathic understanding was found for children in grades six and seven. Dymond, et al. (1952) also found that a growth of empathy emerges during the sixth grade.

The decrease for both males and females in loyalty and commitment from grades seven to eight is contrary to previous research (Bigelow, 1971; Van Krevelin, 1962; Douvan & Anderson, 1966). These researchers have noted that the feelings associated with loyalty and commitment become increasingly important in maintaining close friendships. It should be noted that when the grade eight sample was reduced to an equivalent grade seven age range the significant decrease was still observed.

The lack of major changes as a function of grade level could be due to the nature of the items. Only those items rated as important in the pretest for these grade levels were finally included in the CFEI. The task assigned to the children was essentially that of differentiating among friendship
prescriptions within a narrow range of importance.

The restricted grade and age range is perhaps of more significance. Data are lacking on how children in grades below six would have rated the CFEI items. Furthermore, it is conceivable that there would be an upward trend after the eighth grade. Several studies on altruism have failed to find developmental differences, using a similar age restriction (Grusec & Skubinski, 1970; Rosenhan & White, 1967; Staub, 1968). Studies employing a broader age range have found significant developmental changes in altruism (Green, 1971; Handlon & Gross, 1959; Midlarsky & Bryan, 1967). Thus, it may be necessary to examine changes in conceptions of friends over six or seven grades.

**Sex Differences.** Sex differences in friendship are often ascribed to the earlier social and sexual maturation in girls (cf. Horrocks, 1969). Bigelow (1971) found a developmental change in intimacy for females but not for males. The onset of intimacy occurred for females in the eighth grade. In the present study sex differences in empathic understanding, lacking in the sixth and seventh grades, emerged in the eighth grade.

Douvan & Adelson (1966) offer an explanation in terms of the different psychology of males and females. The girl's psychology centers around interpersonal relations as a way to gain love, reassurance and support. For the boy, assertiveness, autonomy, and authority are more important. The male is less likely to value sensitivity or empathy. These authors also note that the adolescent girl is particularly likely to turn to friends to share forbidden and disturbing feelings, especially
sexual ones. Other investigators also have found that girls' friendships in comparison to boys are more highly personal, and more intense and emotional (Douvan & Gold, 1966). The fact that females attach more importance than males to empathic understanding in a best friend was clearly shown in the present study. It is also noteworthy that this sex difference was a main effect; sociometric factors were not involved. Sex differences in empathic understanding were rather clearcut and not affected by social acceptability.

Sex differences were particularly noteworthy in regard to the ratings of the importance attached to mutual activities. The fact that males place more value on this than females is consonant with various researchers (Douvan & Kaye, 1957; Klaus, 1959; Tyron, 1939; Gronlund & Anderson, 1957). These findings, however, may need some qualification in view of the interaction found between sex and social acceptability. The highly accepted male assigns more importance to mutual activities than the male who is less accepted by his classmates. In contrast, the level of acceptability achieved by females does not affect their ratings of mutual activities.

The present data on the role of mutual activities in friendship may have some bearing on research on similarity of attitudes (Byrne, 1969) and interests (Ausubel, 1970) as antecedent conditions. Barclay (1966) found significant differences in the interest patterns of children with high and low sociometric status. The present study was limited to the importance of having common interests, rather than the actual
interests per se. It is interesting to note that few differences by sociometric type were found in the value placed on common activities in friendship.

Sociometric Type by Sex. Sociometric studies on popularity and leadership in children are supported by the overall finding. A positive relationship was found between social acceptability and the value placed on the dimensions of the CFEI. Children high on social acceptability rated empathic understanding and loyalty and commitment as more important than children low in social acceptability. Interaction effects were also found for conventional morality and mutual activities.

Previous researchers have identified personality and behavioural characteristics of children high and low in social acceptability (Glick, 1969; Pope, 1953). For example, Bell & Hall (1964) found that highly accepted children were particularly sensitive to the needs of others. The approach this study used was somewhat different. It identified children with certain behavioural characteristics, such as consideration and understanding. These were incorporated into the sociometric instrument itself, and then related to friendship expectations.

Aggressiveness. The findings obtained by the sociometric measure of aggressiveness are not easily interpreted in terms of existing literature. The data are subject to multiple interpretations. The main and interaction effects of aggression on conventional morality was not anticipated. Why high aggressives rated this friendship dimension as more important than the low aggressives is not clear.
A reexamination of the item content tapped by the conventional morality dimension was of some help. Perhaps children who feel rejected are sensitive to the character traits in a best friend included under this dimension: "Does not hurt people"; "does not talk about me behind my back"; does not pretend to like me"; does not take advantage of me"; and "does not get me into trouble". In contrast, an accepted and more secure child may be less concerned about these qualities and focus on other traits in a best friend.

A limitation of this study is the problem of ascertaining the direction of the relationship between aggressiveness and their conceptions of friendship. Are aggressives rejected because of their expectations or does their aggressiveness itself contribute to their expectations? If we assume that aggressives desire approval and recognition (Moore, 1967), then their rejection implies that they are experiencing affiliative deprivation. Deprivation theory (Homans, 1950) postulates that deprivation enhances the value of an object. The higher ratings of importance, then, could be a product of this deprivation. Expectations could conceivably lead to rejection. Those expectations above the norm for a group may lead to rejection, if there is an attempt to enforce higher standards or by demanding certain kinds of behaviour.

A further interpretation is possible in terms of the relationship between values and behaviour. Lischeron & La Gaipa (1971) found that differences in friendship expectations were not directly related to acceptance or friendship. The degree of
agreement among roommates on what was important in friendship was unrelated to the closeness of the relationship. An essential condition, rather, was the confirmation of expectations. The growth of friendship varied with the congruency between what one person expected and the behaviour manifested by the other.

Further research is needed to determine if the differences between aggressive children and other children is in terms of the discrepancy between values and behaviour. Are the socially accepted children more congruent in this regard than the aggressives? The rejection experienced by the aggressives may reflect a role enactment problem rather than role expectations. Aggressives may be inept in providing the kinds of reinforcements to others essential for friendship. Similarly, the aggressives may have made friendship overtures which were not reinforced. Perhaps, their conduct problem affects how such overtures were perceived. The validity of this interpretation would require data on the reinforcement history of aggressives. Have they received relatively fewer positive reinforcements in their attempts of overtures of friendship?

An unanticipated finding was the lack of any significant differences in friendship conceptions of children rated high in social acceptability and children rated high in aggressiveness. Previously cited research (cf. Quay & Quay, 1965) has identified personality and behavioural differences of accepted and rejected children. The results of the present study, rather, are in agreement with Klaus (1959), who also dealt with perceptions of
children rather than personality and behavioural characteristics. Klaus found that accepted and rejected children did not differ in perceiving their classmates in terms of the adult system of values (well-liked, leader at games, friendly, takes a joke, etc.). The accepted and rejected aggressive child differed in his or her emphasis on the means used to gain recognition and approval.

Social Withdrawal. Previous research has identified differences in the behavioural characteristics of highly accepted and withdrawn children (cf. Cole & Hall, 1965). We identified highly accepted and withdrawn children and further showed that these behavioural differences were related to conceptions of friendship.

The lower value placed on loyalty and commitment and empathic understanding by the withdrawn children requires some explanation. Some of these socially isolated children may have attempted to establish positive contacts but have been rebuffed and no longer make social overtures (Werner, 1970). For these children, the low value placed on loyalty and understanding may represent a "sour grapes" reaction as a way of coping with dissonance (Festinger, 1957). Other withdrawn children with inadequate socialization may be unaware of the importance of this friendship dimension. A child with limited peer interaction may not have acquired knowledge of these role prescriptions (Moore, 1967). Both personality factors and social learning, then, could contribute to the withdrawn child's conception of what is important in friendship.
It is somewhat more difficult to account for the differences in value orientation of the aggressive and the withdrawn children. Why do aggressives assign higher ratings to these dimensions than the withdrawn children? This difference could reflect the higher participation rate of aggressives in social interaction and the concomitant familiarity with social norms, or the continued motivation of the aggressives to gain social approval and acceptance (Glick, 1969).

Implications and recommendations for the classroom teacher. In the course of the date analysis of this study, it was found that three distinct sociometric types of children emerged...... highly accepted, aggressive, and withdrawn. Comparisons among these children indicated that the highly accepted and aggressive children hold many similar values with respect to the criterion they use in evaluating best friends. It should be emphasized, however, that the behavioural manifestations as measured by the sociometric test were radically different for these children. The aggressive child, although outgoing and initiating peer interactions is often incompetent in his social behaviour with other children. His lack of these social skills has been determined by the rejection assigned to him by his peers on the "Guess Who" test. It would appear then that these aggressive children, who are perceived by their peers as exhibiting mala-adaptive behaviour, would profit from a change in their classroom setting. Since these children have basically learned to value the appropriate social learning principles but have encountered
difficulties in actual social interaction, a setting where they can observe appropriate behaviour is both necessary and desirable. Classroom teachers can assist these pupils by placing them near models, who are socially successful. In a similar fashion, this approach has been carried out by Hansen, Niland & Zani (1969). Over a two month period, they found that children with low sociometric status in a model reinforcement group made significantly more gain in social acceptance than either those receiving counseling without models or the control group.

In addition to changing the behaviour of the rejected child, a teacher must make a special effort to change that child's reputation. Changes in behaviour are not automatically followed by changes in reputation. Thus, casual comments by the teacher, concerning his improved behaviour, may help. However, it should be recognized that the classroom teacher is incapable of giving the rejected child social acceptance among his peers. She is limited to helping him develop the characteristics and arranging for the necessary social interaction to take place.

The analysis of this study indicates that the withdrawn child differs not only in his actual behaviour from the highly accepted child but also in the degree of importance he places on the various friendship expectations. For example, he deemphasizes the importance of empathic understanding and the loyalty and commitment friendship dimensions. This would seem to imply that the underlying basis for his unacceptance is more deepseated and thus requires different and more intense types of therapy than the therapy outlined for the aggressive child.
The first objective a teacher must have in mind when dealing with socially neglected children is to bring them to the attention of their peers. There are many avenues open to her. For example, interaction with classmates may be facilitated through small group work, through working on class projects and through minor positions of responsibility in the classroom. It is important that the introduction to group activities be gradual and that the pupil's social skills are sufficient to cope with the new social activity. One must remember that increased aggressiveness, can also lead to social rejection as well as social acceptability.

In addition to the introduction of these children to social interaction, the teacher can assist in changes and modifications of their values regarding peer interactions. One effective method would be to present to these pupils a list of the various friendship expectations that are valued by peers which are socially accepted. This could be followed by a discussion of such factors which may serve to motivate these withdrawn children to learn about what other children value in an interpersonal relationship.

In summary, then, the aggressive and withdrawn child cannot be placed in a single category. Each type of child has different values regarding friendships and each has different behavioural manifestations which are unacceptable by his classmates. Thus, different methods for improving the social acceptability of these individuals has been advocated. The identification of these children is relatively simple and straightforward, while in contrast,
the gaining of social acceptability for these children is a more
difficult task.

The aggressive child's friendship expectations are rather
similar to those of the highly accepted child, while the atti-
tudes of the withdrawn child are quite different than either.
Before attempting to change the behaviour of the withdrawn child,
it may be necessary to aid him in the acquisition of the more
commonly held friendship expectations. The task in making the
aggressive child more accepted, may involve closing the gap
between his expectations and his behaviour. Needless to say,
research is needed to demonstrate that the rejection experienced
by the aggressive child reflects a disparity between his value
system and his friendship behaviour.

Conclusion. The validity of sociometric measures has been
demonstrated in many studies. An attempt was made in the present
study to develop an improved version of the "Guess Who" test
with satisfactory construct validity by means of factor analysis.
The major reason for the construction of this sociometric test was
to obtain relevant criterion data for validating the CFEI. The
sum total of the findings suggest that the CFEI may be a potentially
useful instrument for predicting an external criterion. It should
be noted, however, that most of the findings cannot be related
directly or deduced from existing theory about friendship in
children. This is due, in part, to the lack of an adequate theory
in this area. Further research with this measure may lay some of
the empirical foundation for the development of the needed theory.
APPENDICES
WHAT IS IMPORTANT TO YOU IN CHOOSING YOUR BEST FRIENDS?
Some ideas are given on these pages to help you decide. Everyone has their own ideas. There are no right or wrong answers.

Look at the ladder on this page. At the top of the ladder is drawn a figure of a "best friend." Think of your best friends: boyfriends - if you are a boy; girlfriends - if you are a girl.

Look at the list of sentences next to the ladder. Read each sentence and decide how important it is to you in choosing your best friends. You are to write the number of each sentence on one of the five lines of the ladder.

Write the number of a sentence close to the top of the ladder (on line A) if you think the idea is very important.

Write the number near the bottom of the ladder (on line E) if you think the idea is not really important.

Write the number on a line between the top and bottom of the ladder (B or C or D) if you think the idea is somewhere between important and not important.

Remember that the higher up the ladder, the more important is the idea; and the lower down the ladder, the less important it is to you.

The numbers may be written on any of the five lines. Two or more numbers may be placed on the same line. Now start on the first list. When you finish the first ladder, work on the others.

1. Do not hurt my feelings.
2. Enjoy spending a lot of time together.
3. Are loyal to me.
4. Do not lie or cheat.
5. Would do anything for me.
6. Can talk about my personal problems.
7. Think my ideas are important.
Best Friends

1. Can fight and still be friends.
2. Have good ideas about things to do.
3. Can be myself with them.
4. Enjoy playing the same games and sports.
5. Do not cut people up.
6. Can tell them things I'm ashamed of.
7. Stand by me through anything.

Best Friends

1. Do favours for me.
2. Have no secrets from each other.
3. Wait for me after school.
4. Cheer me up when I am sad.
5. Honest with me.
6. Do not forget me for someone else.
7. Can tell them things that bother or worry me.
1. Go places together.

2. Help me when I'm in trouble.

3. Can take a joke.

4. Do not show off or act smart.

5. Enjoy talking with them.

6. Praise me when I do something well.

7. Do not talk about me behind my back.

---

1. Can keep a secret.

2. Do not pretend to like me.

3. Feel secure and relaxed with them.

4. Have fun together.

5. Do not swear.

6. Share and share alike.

7. Stand up for what they believe in.
1. Do not take advantage of me.

2. Share their experiences with me.

3. Never get me into trouble.

4. Can trust and depend upon them.

5. Have a good sense of humour.


7. Go to each others' house.
WHAT IS IMPORTANT TO YOU IN CHOOSING YOUR BEST FRIENDS? Everyone has their own ideas. There are no right or wrong answers. This is not a test.

Look at the ladder on this page. At the top of the ladder is drawn a figure of a "best friend." Think of your best friends: Boyfriends - if you are a boy; girlfriends - if you are a girl.

Look at the list of sentences beside the ladder. Read each sentence and decide how important it is to you in choosing your best friends. Place the letter in front of each sentence on one of the five lines of the ladder.

If you think the idea is very important, write the letter at the top of the ladder (line 1). If you think the idea is not really important, write the letter at the bottom of the ladder (line 5).

If you think the idea is somewhere between important and not important, write the letter somewhere between the top and bottom of the ladder (lines 2, 3, or 4). Remember that the higher up the ladder, the more important is the idea, and the lower down the ladder, the less important it is to you.

The letters may be written on any of the five lines. Two or more letters may be placed on the same line. Make sure that all seven letters are written on the ladder. Now start on the first ladder. Please complete all four ladders.

A. Go places together.
B. Do not talk about me behind my back.
C. Can trust and depend upon them.
D. Do not lie or cheat.
E. Stand up for what they believe in.
F. Have fun together.
G. Are loyal to me.
A. Feel secure and relaxed with them.

B. Enjoy spending a lot of time together.

C. Share and share alike.

D. Do not show off or act smart.

E. Can talk about my personal problems.

F. Never get me into trouble.

G. Have good ideas about things to do.

A. Do not say mean things or cut people up.

B. Can tell them things I'm ashamed of.

C. Get good grades in school.

D. Praise me when I do something well.

E. Enjoy playing the same games and sports.

F. Would do anything for me.

G. Can tell them things that bother or worry me.
A. Do not forget or desert me for someone else.
B. Can be myself with them.
C. Do not take advantage of me.
D. Stand by me through anything.
E. Help me when I'm in trouble.
F. Enjoy spending a lot of time together.
G. Do not pretend to like me.
APPENDIX C

CONVENTIONAL MORALITY

1-4 Do not lie or cheat
2-12 Do not say mean things or cut people up
3-25 Do not show off or act smart
4-28 Do not talk about me behind my back
5-30 Do not pretend to like me
6-36 Do not take advantage of me
7-38 Never get me into trouble

MUTUAL ACTIVITIES

1-2 Enjoy spending a lot of time together
2-9 Have good ideas about things to do
3-11 Enjoy playing the same games and sports
4-22 Go places together
5-32 Have fun together
6-37 Share their experiences with me
7-41 Get good grades in school

EMPATHIC UNDERSTANDING

1-6 Can talk about my personal problems
2-10 Can be myself with them
3-13 Can tell them things I'm ashamed of
4-21 Can tell them things that bother or worry me
5-23 Help me when I'm in trouble
6-31 Feel secure and relaxed with them
7-39 Can trust and depend upon them

LOYALTY AND COMMITMENT

1- 3 Are loyal to me
2-5 Would do anything for me
3-14 Stand by me through anything
4-20 Do not forget me for someone else
5-27 Praise me when I do something well
6-34 Share and share alike
7-35 Stand up for what they believe in
APPENDIX D

TEST INSTRUCTIONS FOR CFEI

Good morning, I'm Mrs. Wood from the University of Windsor and am interested in the area of friendship with boys and girls of your age. In other words, what I'd like to discuss with you is "What is a Best Friend?"

I have a questionnaire that contains some ideas about friendships. Very shortly, I would like you to rate these ideas according to how important they are to you in choosing best friends. Since this questionnaire is probably different from other questionnaires I will first explain on the blackboard the manner in which to answer the questionnaire. (At this point the E drew a five rung ladder on the blackboard and to the right of the ladder she made a list of seven fruits--A apples, B pears, C grapes, D lemons, E limes, F oranges, G peaches)

As you can see we have a five rung ladder here and seven fruits on the right labelled A through G (The E used a pointer to outline statement) Let's look at the first fruit--apples. Now suppose I like apples very much and think they are really important. Where will I put the letter A? Good. Write the letter A on line 1 of the ladder. Let's look at pears. Suppose I think pears are not important at all. Where will I put the letter B? Good. Write B on the fifth or bottom line.

Now that you know where to put important and not important things let's look at things that are in between. Many of the ideas about friendship may be neither very important or not
important, but somewhere in between. Where should such ideas go? Remember this. (point to the ladder) Four is more important than 5; 3 is more important than 4; and 2 is more important than 3. The higher up the ladder, the more important it is, the lower down the less important it is to you. (At this point the E made sure that the children understood the principle of the five point scale)

Another thing to remember is that there are seven ideas and only five lines on the ladder. Make sure that you read and rate each idea on the ladder. You don't have to write a letter on each line. You may leave one or two lines blank. Also more than one letter can be written on the same line. (Again the E gave an example on the blackboard to illustrate the point)

Any questions? Begin.
**APPENDIX E**

**TABLE 2**

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* Items eliminated in final version of CFEI.
APPENDIX F

WHO ARE THE GOOD LEADERS? THEY ARE THE LEADERS IN SEVERAL THINGS?

WHO ARE THE ONES THAT CAN ENJOY A JOKE AND SEE THE FUN IN IT EVEN WHEN THE JOKE IS ON THEMSELVES?

WHO ARE THE ONES WHO ARE RESTLESS AND FIND IT HARD TO SIT STILL?

WHO ARE THE ONES WHO ARE TOO SHY TO MAKE FRIENDS EASILY?

WHO ARE THE ONES WHO ARE ALWAYS WILLING TO HELP PEOPLE OUT?

WHO ARE THE ONES THAT ARE SURE TO HAVE IDEAS FOR GAMES?

WHO ARE THE ONES WHO HAVE NO INTEREST IN CLASSROOM ACTIVITIES?
WHO ARE THE ONES WHO TATTLE TO THE TEACHER ABOUT THINGS OTHER CHILDREN DO?

WHO ARE THE ONES THAT SHOW CONSIDERATION AND UNDERSTANDING FOR OTHERS?

WHO ARE THE ONES WHO ARE DISRUPTIVE, ANNOY AND BOTHER OTHERS?

WHO ARE THE ONES THAT SEEM TO UNDERSTAND THINGS MOST EASILY, IN AND OUT OF SCHOOL?

WHO ARE THE ONES WHO NEVER SEEM TO HAVE A GOOD TIME, WHO NEVER SEEM TO ENJOY VERY MUCH ANYTHING THAT THEY DO?

WHO ARE THE ONES WHO ARE ALWAYS CHEERFUL, JOLLY AND GOOD NATURED?

WHO ARE THE ONES THAT GET EMBARRASSED EASILY AND ARE SELF CONSCIOUS?
WHO ARE ESPECIALLY GOOD IN GAMES?

WHO ARE THE ONES WHO QUARREL AND GET MAD EASILY?

WHO ARE THE ONES WHO ARE UNCOOPERATIVE AND WANT THINGS THEIR OWN WAY?

WHO ARE THE ONES THAT ARE ALWAYS SOCIABLE AND FRIENDLY?

WHO ARE THE ONES THAT YOU DO NOT NOTICE? YOU JUST DON'T THINK ABOUT WHETHER THEY ARE WITH YOU OR NOT?

WHO ARE THE ONES THAT ALWAYS WORK FOR THE GOOD OF THEIR CLASS, OR THEIR TEAM, OR THEIR PLAYMATES?

WHO ARE THE ONES THAT YOU WOULD LIKE FOR YOUR BEST FRIENDS?

WHO ARE THE ONES YOU WOULD NOT LIKE FOR YOUR FRIENDS?
APPENDIX G

GUESS WHO?

WHO ARE THE ONES WHO ARE RESTLESS AND FIND IT HARD TO SIT STILL?

WHO ARE THE ONES WHO ARE TOO SHY TO MAKE FRIENDS EASILY?

WHO ARE THE ONES THAT ARE SURE TO HAVE IDEAS FOR GAMES?

WHO ARE THE ONES THAT SHOW CONSIDERATION AND UNDERSTANDING FOR OTHERS?

WHO ARE THE ONES WHO ARE DISRUPTIVE, ANNOY AND BOTHER OTHERS?

WHO ARE THE ONES WHO NEVER SEEM TO HAVE A GOOD TIME WITH OTHER CHILDREN, AND WOULD RATHER STAY BY THEMSELVES?

WHO ARE THE ONES WHO ARE ALWAYS CHEERFUL, JOLLY AND GOOD NATURED?
WHO ARE THE ONES THAT GET EMBARRASSED EASILY AND ARE SELF CONSCIOUS?

WHO ARE THE ONES WHO QUARREL AND GET MAD EASILY?

WHO ARE THE ONES WHO ARE UNCOOPERATIVE AND WANT THINGS THEIR OWN WAY?

WHO ARE THE ONES THAT YOU DO NOT NOTICE? YOU JUST DON'T THINK ABOUT WHETHER THEY ARE WITH YOU OR NOT.

WHO ARE THE ONES THAT ALWAYS WORK FOR THE GOOD OF THEIR CLASS, OR THEIR TEAM, OR THEIR PLAYMATES?

WHO ARE THE ONES THAT YOU WOULD LIKE FOR YOUR BEST FRIENDS?

WHO ARE THE ONES YOU WOULD NOT LIKE FOR YOUR FRIENDS?
SOCIAL ACCEPTABILITY

1 - 3  Who are the ones that are sure to have ideas for games?
2 - 4  Who are the ones that show consideration and understanding in others?
3 - 7  Who are the ones who are cheerful, jolly and good natured?
4 - 12 Who are the ones that always work for the good of their class, or their team, or their playmates?

AGGRESSIVE-MALADJUSTED

5 - 1  Who are the ones who are restless and find it hard to sit still?
6 - 5  Who are the ones who are disruptive, annoy, and bother others?
7 - 9  Who are the ones who quarrel and get mad easily?
8 - 10 Who are the ones who are uncooperative and want things their own way?

SOCIAL WITHDRAWAL

9 - 2  Who are the ones who are too shy to make friends easily?
10 - 6 Who are the ones who never seem to have a good time with other children, and would rather stay by themselves?
11 - 8 Who are the ones that get embarrassed easily and are self-conscious?
12 - 11 Who are the ones that you do not notice? You just don't think about whether they are with you or not?
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APPENDIX J

TABLE 11

ANALYSIS OF VARIANCE OF CFEI CONVENTIONAL MORALITY SCORES

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APPENDIX J

TABLE 12

ANALYSIS OF VARIANCE OF CFEI MUTUAL ACTIVITIES SCORES

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## APPENDIX J

### TABLE 13

**ANALYSIS OF VARIANCE OF CFEI EMPATHIC UNDERSTANDING SCORES**

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APPENDIX J

TABLE 14

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### APPENDIX J

#### TABLE 15

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** p < .01
APPENDIX J

TABLE 16

ANALYSIS OF VARIANCE OF CFEI
MUTUAL ACTIVITIES SCORES

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression (A)</td>
<td>1</td>
<td>3.61</td>
<td>.04</td>
</tr>
<tr>
<td>Withdrawn (B)</td>
<td>1</td>
<td>96.38</td>
<td>.95</td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>180.41</td>
<td>1.70</td>
</tr>
<tr>
<td>A X B</td>
<td>1</td>
<td>36.21</td>
<td>.36</td>
</tr>
<tr>
<td>A X C</td>
<td>1</td>
<td>5.85</td>
<td>.58</td>
</tr>
<tr>
<td>B X C</td>
<td>1</td>
<td>96.72</td>
<td>.96</td>
</tr>
<tr>
<td>A X B X C</td>
<td>1</td>
<td>9.92</td>
<td>.10</td>
</tr>
<tr>
<td>Error</td>
<td>152</td>
<td>100.54</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
** p < .01
### APPENDIX J

#### TABLE 17

ANALYSIS OF VARIANCE OF CFEI EMPATHIC UNDERSTANDING SCORES

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>Aggression (A)</td>
<td>1</td>
<td>1119.91</td>
<td>13.95 ***</td>
</tr>
<tr>
<td>Withdrawn (B)</td>
<td>1</td>
<td>1232.61</td>
<td>15.37 ***</td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>663.83</td>
<td>8.27 **</td>
</tr>
<tr>
<td>A X B</td>
<td>1</td>
<td>31.70</td>
<td>.40</td>
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<tr>
<td>A X C</td>
<td>1</td>
<td>44.77</td>
<td>.56</td>
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<tr>
<td>B X C</td>
<td>1</td>
<td>61.72</td>
<td>.77</td>
</tr>
<tr>
<td>A X B X C</td>
<td>1</td>
<td>237.54</td>
<td>2.96</td>
</tr>
<tr>
<td>Error</td>
<td>152</td>
<td>80.22</td>
<td></td>
</tr>
</tbody>
</table>

* * p < .05

** ** p < .01

*** *** p < .001
## APPENDIX J

### TABLE 18

**ANALYSIS OF VARIANCE OF CFEI LOYALTY AND COMMITMENT SCORES**

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression (A)</td>
<td>1</td>
<td>420.91</td>
<td>4.57 *</td>
</tr>
<tr>
<td>Withdrawn (B)</td>
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<td>249.88</td>
<td>2.71</td>
</tr>
<tr>
<td>Sex (C)</td>
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<td>.01</td>
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<td>.24</td>
</tr>
<tr>
<td>A X C</td>
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<td>191.14</td>
<td>2.07</td>
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<tr>
<td>B X C</td>
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<td>.73</td>
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<td>A X B X C</td>
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<td>2.13</td>
</tr>
<tr>
<td>Error</td>
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*p < .05

**p < .01
## APPENDIX K

### TABLE 19

**MEAN FRIENDSHIP EXPECTATION SCORES OF HIGHLY ACCEPTED, AGGRESSIVE, AND WITHDRAWN SOCIOMETRIC TYPES BY SEX**

<table>
<thead>
<tr>
<th>Sociometric Type</th>
<th>Conventional Morality</th>
<th>Mutual Activities</th>
<th>Empathic Understanding</th>
<th>Loyalty and Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Highly Accepted</td>
<td>51.33</td>
<td>50.27</td>
<td>55.51</td>
<td>46.19</td>
</tr>
<tr>
<td>Aggressive</td>
<td>50.44</td>
<td>52.55</td>
<td>48.22</td>
<td>49.53</td>
</tr>
<tr>
<td>Withdrawn</td>
<td>46.96</td>
<td>51.66</td>
<td>53.23</td>
<td>49.42</td>
</tr>
</tbody>
</table>


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