

THE UNIVERSITY OF OKLAHOMA  
GRADUATE COLLEGE

RELATIVE EGO-INVOLVEMENTS OF CHILDREN AND ADOLESCENTS  
MEASURED BY ESTIMATES OF PERFORMANCE

A DISSERTATION  
SUBMITTED TO THE GRADUATE FACULTY  
in partial fulfillment of the requirements for the  
degree of  
DOCTOR OF PHILOSOPHY

BY  
WILLIAM M. PRADO  
Norman, Oklahoma

1958

RELATIVE EGO-INVOLVEMENTS OF CHILDREN AND ADOLESCENTS  
MEASURED BY ESTIMATES OF PERFORMANCE

APPROVED BY

*Muzaffer Sherif*

*P. T. Tesh*

*E. P. Glaser*

*W. B. Lemmon*

DISSERTATION COMMITTEE

## ACKNOWLEDGMENTS

This dissertation is submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in psychology at the University of Oklahoma.

I wish to thank the principals, teachers, students, and parents who cooperated in this study.

To Dr. M. Sherif, who directed this study, I am grateful for his guidance and assistance regarding theoretical and practical matters.

I also want to express my appreciation to Dr. A. F. Glixman, Dr. W. B. Lemmon, and Dr. P. T. Teska for their helpful suggestions throughout all phases of the dissertation.

To my wife, Elizabeth, I am grateful for her assistance and untiring efforts in the preparation of the dissertation.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	iii
LIST OF TABLES . . . . .	vi
LIST OF ILLUSTRATIONS . . . . .	vii
 Chapter	
I. INTRODUCTION . . . . .	1
A Characterization of Ego-Involvements Relative Ego-Involvements of Children Ego-ideal Moral standards Ethnic concepts Relative Ego-Involvements of Adolescents Parent-peer group influences Religious attitudes Attitudes toward femininism Dating behavior Ego-Involvements and Reference Groups Ego-Involvements Studied Through Estimates of Performance Methodological approach Research studies	
II. PROBLEM . . . . .	21
III. METHOD . . . . .	23
Subjects Apparatus Procedure	
IV. RESULTS . . . . .	31
Hypothesis 1 Hypothesis 2 Hypothesis 3 Enumerative support	

## RESULTS (continued)

Additional Considerations	
Selection of father	
Selection of friend	
Associations with Friends	
V. DISCUSSION . . . . .	44
Child Cases of Special Interest	
Adolescent Cases of Special Interest	
Suggestions for Research	
VI. SUMMARY . . . . .	58
REFERENCES . . . . .	62
APPENDICES . . . . .	66
A. Sociometric Questionnaire for Selecting Best Friend . . . . .	67
B. Questionnaire for Selecting Valued Father . . .	68
C. Check List for Child-Friend and Adolescent- Friend Associations . . . . .	69

# LIST OF TABLES

Table		Page
1.	Children's Estimates of Fathers' and Friends' Performances . . . . .	32
2.	Adolescents' Estimates of Fathers' and Friends' Performances . . . . .	33
3.	Number of Children and Adolescents Estimating Fathers' Performances to Exceed or not Exceed Friends' Performances . . . . .	36
4.	Selections of Fathers by Children and Adolescents . . . . .	39
5.	Consistency Ratings of Friends by Children and Adolescents . . . . .	41
6.	Task Situation, Questionnaire, and Check List Data for the Child Units . . . . .	70
7.	Task Situation, Questionnaire, and Check List Data for the Adolescent Units . . . . .	71

## LIST OF ILLUSTRATIONS

Figure	Page
1. Physical Arrangement for Dartboard Task, Top View . . . . .	26
2. Distribution of Child-Friend and Adolescent- Friend Associations . . . . .	42

RELATIVE EGO-INVOLVEMENTS OF CHILDREN AND ADOLESCENTS  
MEASURED BY ESTIMATES OF PERFORMANCE

CHAPTER I

INTRODUCTION

The general findings of developmental psychology indicate that, on the whole, children have relatively stronger ego-involvements with their parents than with their age mates, whereas adolescents have relatively stronger ego-involvements with their age mates than with their parents. Several studies of recent years have indicated that estimates of performance in an unstructured task situation were influenced by the relative ego-involvements between individuals. In view of these two sets of findings, it was the purpose of this study to compare the relative ego-involvements of children and adolescents with their parents and friends by using estimates of performance in an unstructured task situation as a measure of ego-involvement.

A Characterization of Ego-Involvements

The term ego-involvements can best be understood by its relationship to the term ego, described by Sherif and Sherif (37).



Ego or self is a developmental formation (a "subsystem") in the psychological make-up of the individual consisting of interrelated attitudes which are acquired in relation to his own body, to objects, family, persons, groups, social values, and institutions and which define and regulate his relatedness to them in concrete situations (37, p. 581).

Ego-involved activity (i.e., activity in which ego-attitudes participate) is goal directed. Like any other motive, an ego-attitude implies specific expectations toward a certain goal, ideal, or value. Whether the individual is explicitly aware of the fact or not, ego-involved activity produces differential effects on his experience and behavior. When he is ego-involved, his reactions are no longer neutral; they are not haphazardly distributed around an indifference point. His reactions in perceiving, judging, remembering are heavily loaded by the goal-directed nature of the involvement (37, p. 583).

An individual's ego-involvement with other people is influenced by his own ego-attitudes, which may represent varying degrees of positive and negative relationships. When an individual's ego-attitudes toward particular members of his environment are more intense, his behavior toward them generally is more consistent. The increase in consistency of behavior under conditions of greater ego-involvement has been indicated by the studies of Higham (19), Holt (21), and Klein and Schoenfeld (28). Differences in the degree of ego-involvement with particular individuals, on the whole, lead to differential behavior in regard to them. One particular illustration of this differential degree of ego-involvement was indicated by the relative ego-involvements of children and adolescents with their parents and with their friends.

### Relative Ego-Involvements of Children

Ego-attitudes are formed early in life as a result of interacting with others. The family, as a primary group, serves as an important agent in transmitting to the child attitudes which not only influence his immediate behavior, self-identity, and role relations but also these aspects at a future time. The attitudes and behaviors of the parents have been given a prominent position in Freudian theory (9, 10) to account for the development of the child's ego, ego-ideal, superego, and sexual role identification.

Among non-Freudians, Sullivan's (39) formulations of the self-system (consisting of good-me, bad-me, and not-me) have emphasized the subtleties of parent-child interaction and the accompanying anxiety to show that the child's self-system is critically dependent upon parental attitudes and behavior.

Several studies were reported which substantiated the parental influence upon the child's choice of ego-ideals, his moral standards, and his ethnic concepts.

Ego-ideal. Goddard's (12) investigation included 841 boys and 749 girls from a Prussian school, who came from a low socio-economic group and ranged in age from seven to fourteen. The subjects were asked to write a composition concerning the person they would most like to resemble. Goddard found that at age seven 58% of the boys and 29% of the girls selected their parents as ideals. At this age the parents,

as a particular category, were chosen more often than any of the other categories, such as relatives, acquaintances, public figures, fictional characters, and religious persons. The category of acquaintances (which would include age mates, teachers, etc.) was selected by 6% of the boys and 18% of the girls.

Similar results were obtained by Hill's (20) study of 1431 boys and girls, ages seven through fifteen, from Tennessee. At age seven 33% of the boys and 28% of the girls selected their parents as ideals to resemble. The boys selected their parents as ego-ideals more often than any other category of individuals. The seven year old girls chose their parents more than any other category, except the category of "other acquaintance."

Winker (42) administered the Wishes and Fears Inventory to boys and girls of three age levels from seven to sixteen. With regard to one dimension of the inventory, that of positive identification, Winker found that the seven and eight year old subjects desired most to be like adults in the family. Each of the categories represented received the following percentage of responses: adults in the family (37.5%), societal roles (27.5%), unrealistic roles (17.5%), movie and radio persons (7.5%), and age mates (7.5%).

Havighurst, Robinson, and Dorr (18) investigated the development of the ideal self in childhood and adolescence by analyzing the essay responses of boys and girls of lower and

middle socio-economic groups. The following results were obtained:

This study shows a developmental trend in the ideal self of the following nature. The ideal self commences in childhood as an identification with a parental figure, moves through middle childhood and early adolescence through a stage of romanticism and glamour, and culminates in late adolescence as a composite of desirable characteristics which may be symbolized by an attractive, visible young adult, or may be simply an imaginary figure (18, p. 256).

A review of the studies concerning the selection of ego-ideals revealed two general trends. The first trend indicated that the parents, more than any other individuals, were chosen as ideal figures by younger children. The generality of this trend requires some qualification since the results of Barnes' (3) sample of London children and Chambers' (5) sample of Pennsylvania children revealed that the parents were not chosen by many children as ego-ideals. The second general trend indicated that as the age of the children increased the selection of parents as ego-ideals steadily decreased and the selection of historical, public, and contemporary figures increased as ideal choices. This shift in ego-ideal suggested that children were influenced more and more by individuals outside the family as they progressed in age.

Moral standards. The process by which children internalize parental moral standards was studied extensively by Piaget (32). He observed boys, ages four to fourteen, as they played the game of marbles. The process by which the rules of

the game evolved led him to conceptualize the development of the moral judgment of the child. At first the child played according to his own motor habits and autistic fantasies. As he progressed into the egocentric stage he played by himself and used external rules. During the cooperative stage he played with others and there was some concern with codifying rules, even though the rules were not yet definite. During the last stage, the children interacted with one another and a set of codified rules evolved with the consensual agreement of the participants. The rules were accepted by them as their own.

Piaget conceptualized that the development of the rules of the game served as an analogy to the child's acceptance of the moral standards of his parents and society. At first the parental standards are non-existent to the child. Later the child becomes cognizant of the parental standards but they are external to him. In time the child interacts more with his parents and through cooperative interaction eventually internalizes their standards as his own.

The influence of different individuals upon the moral standards of the child was indicated by Hartshorne, May and Shuttleworth (15). They found that children resembled their parents in moral standards more closely than anyone else with whom they were associated. The Moral Knowledge Test was used and the following correlation coefficients were obtained: children with parents .545, children with friends .353, chil-

dren with club leaders .137, children with school teachers .060, and children with Sunday school teachers .002.

Ethnic concepts. Hartley, Rosenbaum, and Schwartz (14) conducted a study about children's use of ethnic frames of reference. The sample consisted of 86 boys and girls between the ages of three and one-half and ten and one-half who were from an upper-lower class New York City community. The investigators used information forms while interviewing the children. One of the results obtained was as follows:

The reference frames employed in describing "Daddy" and "Mommy" are similar to those described above, with ethnic responses increasing, and name responses decreasing, with age. It is noteworthy, however, that ethnic self-recognition seems to occur in children somewhat earlier and somewhat more often than does ethnic recognition of others. In this regard, the reference frames utilized by children in describing their parents closely approximate those used in conceptualizing themselves (14, p. 374).

The significant aspect of this study, for the current discussion, was that the young child's reference frames for describing his parents were similar to those used in his self-description.

The foregoing presentation indicated that, in general, the parents were important to the child's ego development and sexual identification, parents were regarded as ego-ideals by young children, children showed a strong resemblance to their parents in moral standards, and children's ethnic reference frames for describing their parents and themselves were similar. These findings suggest that parents are relatively more significant individuals to younger children than are friends,

relatives, teachers, public and historical figures. As the individual approaches and enters adolescence his ego-involvement with his parents diminishes and other individuals assume a relatively more significant role.

#### Relative Ego-Involvements of Adolescents

During the period of adolescence individuals generally experience concern about their bodily changes, their sexual impulses, their popularity with their age mates, and their emancipation from parental control. In the process of adopting new attitudes and modifying others the adolescent goes through a period of more or less turmoil. Common motivational conditions of insecurity and turmoil stimulate adolescents to interact intensively with one another, and a group structure gradually emerges. This group structure has been given various names, such as peer group, youth culture, and adolescent clique or gang. The identification of adolescents with their peer group is a significant characteristic of adolescence and was mentioned by Ausubel (2), Blos (4), Cole (6), Garrison (11), Goodenough (13), Horrocks (23), Hurlock (24), Jersild (25), Jones (26), Josselyn (27), and Landis (29).

The peer group serves some critical functions for the adolescent because it provides some anchorage during a period of transition; it supports his emancipatory strivings; it offers him a sense of belonging, acceptance, and status; it provides him with outlets for socialization; and it assists him to re-define himself as a person in his own right (2, 4,

24, 25). In many instances the values of the peer group serve as a guide for the adolescent's attitudes and behavior.

Several studies were reported in the literature which offered further substantiation of the peer group's influence. Most of these studies showed that the peer group exerted more influence upon the adolescent's attitudes and behavior than did the parents.

Parent-peer group influences. Bloss' (4) coverage of the adolescent period described the shift in relative importance of the family and peer group from childhood to adolescence.

The social behavior of the child toward his contemporaries undergoes profound changes during adolescence. Whereas in the period preceding adolescence the family and the school are the most important agencies affecting the child's behavior and representing guiding principles in his life, this more or less unrivaled role is slowly transferred to the group of peers of which he is a member. Group opinion serves, then, as a selective influence for desirable and undesirable behavior, and the approval or disapproval of peers becomes progressively the most influential force in motivating adolescent conduct (4, pp. 248-249).

In a similar fashion, the observations of Seidler and Ravity (35), concerning their own membership in an adolescent group, indicated that their peer group displaced the family as a primary group during adolescence. This group consisted of 10 Jewish boys from Chicago who attended high school together. The members interacted with each other during most of their daily activities. The strong feeling of group solidarity sometimes irritated the parents because the adolescents



spent little time with them and considered group activities and values more important than family matters.

Though the families must be held primarily accountable for the characteristics of their sons, paradoxically, once the group originated and developed, it reduced family influence.... The families recognized the effect of the group on the lives of their sons. Several parents occasionally blamed the group for their sons' objectionable behavior the immediate affect of which, of course, was that "the boys" defended their friends (35, p. 13).

Although the parents strongly favored Zionism, dating and marrying Jewish girls, the adolescents were more committed to their clique values; they exhibited either hostile or indifferent attitudes toward Zionism and dated non-Jewish girls as often as Jewish girls, and some of the members married non-Jewish girls. Despite marriage in later years, the group members continued to maintain close ties among themselves, although this relationship was less intense because of new marital responsibilities.

Religious attitudes. In some instances the religious attitudes of the family may not be entirely accepted by adolescents because of different values stressed by the adolescent's age mates. Rosen's (34) investigation was concerned with whether or not 50 Jewish adolescents and their parents favored the practice of using only Kosher meat. When the parental and peer group attitude conflicted 74% of the adolescents agreed with their peer group and 26% agreed with their parents. Apparently the peer group exerted a relatively stronger influence than did the parents. Furthermore, the

peer groups tendency to elicit more conformity to its values was suggested by another finding. When the parents were regarded as a reference group, 19% of the adolescents indicated an attitude differing from the parents'. When the peer group was regarded as a reference group, only 7% of the adolescents indicated an attitude differing from the peer group's.

Attitudes toward femininism. Neiman's (31) findings indicated that the peer group had an influence upon the shift of adolescent attitudes toward the feminine role. The adolescents consisted of 322 urban boys and girls from lower socio-economic families and represented three age groups--pre-adolescent (ages 11 to 13), adolescent (ages 15 to 18), and post-adolescent (ages 20 to 23). Each subject answered a questionnaire about femininism in terms of his own attitudes, how he thought his peers would answer, and how he thought his parents would answer the items. The results indicated a shift away from attitudes attributed to the parents as early as ages 11 to 13. The influence of the peer-group was felt to some extent in the pre-adolescent period, as well as during the adolescent period when it was the strongest.

Dating behavior. The mutual attraction between adolescents is likely to encourage dating behavior; however, Crist's (7) findings suggested that adolescents started the practice of dating because of group expectations rather than solely as a matter of personal preference. Crist's sample consisted of 120 high school students. His data were collected

by individual interviews and four person discussion groups of two boys and two girls. The topic of dating was discussed and recorded. His data indicated that dating behavior was strongly influenced by group patterns in the following way:

These group patterns, constituting behavior systems, were found to be a potent influence in organizing the feelings, thoughts, and interpersonal relationships of the adolescent. This influence of the behavior system upon the personal behavior of the adolescent was illustrated by such data as the following: it was found that dating in the early stages was engaged in primarily because the group expected it, not because of any particular interest in the girl or boy or in the dating as such; that the desire to go steady or with a particular person was often created because of group pressure or for social approval; in spite of differences in physical maturation the behavior pattern indicated that most (87.9 per cent) lower level students [9th grade] dated their classmates... (7, p. 25).

Crist did mention, however, that the family had an influence upon the dating behavior, but this was in regard to the younger age groups, the girls, and farm students. As the adolescent became older the family exerted less influence due to peer group influences.

The family influence gave way to the primary groups of the peer culture. The latter groups became a very potent influence in determining attitudes, values, and practices. Acceptance of roles approved by age-mates was paramount to successful participation in the dating behavior system. For example, students who disapproved of dancing, card playing, kissing, holding hands, or moderate necking were considered as outside of the peer culture (7, pp. 24-25).

The preceding studies suggested that adolescents, on the whole, are influenced a great deal by their peer group. However, a few studies were reported in the literature which

questioned the generality of peer group influence. Elkin and Westley (8), for example, studied Canadian upper-middle class adolescents and their parents by interviewing them. Their findings suggested that there were few parent-adolescent conflicts in norms, that peer values existed but were not all important for the adolescent, that parents and adolescents maintained good relationships with one another, and that the adolescents regarded parental values more highly than youth culture values. Elkin and Westley concluded that the peer group influence may be most prevalent among adolescents from metropolitan or urban areas and from lower socio-economic groups.

In another investigation, Tryon (40) sought to determine in whom the adolescents confided when they were worried. Boys and girls were selected from the sixth through twelfth grades. At all grade levels the results indicated that the subjects confided more in their parents, when they were worried, than in their friends. It was noted, however, that confiding in parents steadily decreased as the subjects progressed from grade six to grade twelve but that confiding in friends steadily increased during this grade span. These results suggested that the adolescent friend was steadily increasing his influence as a confidant even though the parental influence remained stronger at all age levels.

A summary of the foregoing studies of adolescents suggests that the peer group tends to displace the family as a

primary group and influences their religious attitudes, attitudes toward femininism, dating behavior, and choice of confidant. His greater ego-involvement with his age mates provides him with a number of satisfactions, such as a sense of belonging and acceptance, socialization outlets, and support for his emancipatory strivings. It would be erroneous to claim that age mate attachment is the only way adolescents respond to the transition from childhood to adulthood. There are other possible solutions, such as forming strong attachments to parents, teachers, glamorous and contemporary figures, etc. However, one of the most characteristic responses to the transitional period of adolescence seems to be through peer group affiliations.

#### Ego-Involvements and Reference Groups

The relative ego-involvements of children and adolescents can be related theoretically to the concept of reference group since this concept was developed in terms of ego-involvements (or identifications) of individuals. The concept of reference group is defined by Sherif and Sherif (37) in the following manner:

Reference groups are those groups to which the individual relates himself as a part or to which he aspires to relate himself psychologically. In everyday language, reference groups are those groups with which he identifies or aspires to identify himself (37, p. 175).

One of the cardinal points emphasized repeatedly throughout this book has been the effect of reference groups in the formation and change of the individual's

directive attitudes. His directive attitudes derived from reference groups pertain to his central concerns: to having some place in the scheme of human relations, being accepted, being somebody who counts, setting goals for achievement. Expressing the same idea in more technical language, reference groups provide the main anchorings in the formation and change of ego-attitudes, in the erection of future goals. When these anchorings come in as factors in given situations, we say the individual is ego-involved (37, p. 628).

Whenever an individual is ego-involved (or identified) with a particular reference group, the values of this group serve to define and regulate his experience and behavior in many social situations. With strong ego-involvement there is generally greater consistency in behavior with regard to reference group members. That is, individuals are more likely to be influenced by reference group members than non-reference group members. When the individual interacts with several reference group members his behavior, on the whole, is more likely to be influenced by the member(s) with whom he is more closely ego-involved (or identified).

In general, most individuals have multiple reference groups, such as family, friendship, church, political, and occupational groups. The family and the peer group are two particular groups of interest to the current study. A review of several studies indicated that during childhood the child's ego-involvement with his parents is stronger than with his age mates, whereas, during adolescence the ego-involvement with age mates is relatively stronger than with parents. This differential ego-involvement suggests that the family serves

as the most important reference group during childhood, whereas, the peer group serves as the most important reference group during adolescence.

There are several ways in which the ego-involvements of individuals may be measured, such as through attitude questionnaires, projective tests, and behavioral observations. In recent years a number of studies have been reported which indicated the feasibility of using estimates of performance as an indirect measure of the relative ego-involvements between individuals.

#### Ego-Involvements Studied Through Estimates of Performance

The investigations to be discussed (16, 17, 36, 38) used a task which involved unstructured stimulus conditions in order to facilitate the effects of ego-involvements upon estimates of performance. The use of unstructured stimulus conditions exemplifies a particular methodological approach for studying ego-involvements.

Methodological approach. In all situations there are both external and internal factors operating to influence the individual's psychological functioning (perception, remembering, judgment, etc.). The frame of reference scheme (37) indicates that when the external (or stimulus) situation is highly structured for the individual the psychological outcome (in this case, estimates of performance) is influenced a great deal by the attributes of the stimulus. However, when

the stimulus situation is less structured, the individual's psychological structuring is more influenced by internal factors (in this case, ego-involvements). The reduction of stimulus structure to study internal factors has been recognized by clinical psychologists (1) with regard to projective tests and by experimental psychologists (33) interested in perception and its relationship to need.

Research studies. The reduction of stimulus structure, in keeping with the methodological approach, was obtained in the following studies by having the subjects throw darts (16, 17, 36) or handballs (38) at a specially constructed target in which the concentric circles were not visible to them.

An exploratory report by Carolyn Sherif (36) used parent-child and husband-wife pairs in which one subject of a pair estimated his future performance while the other member of the pair estimated his partner's future performance.

In this situation, the subjects tended to be as ego-involved with their partner's (parent, child, husband or wife) performance as with their own. In some cases, more ego-involvement was shown with the partner's performance. As a result, the judgments of their own and the partner's future performance tended, on the average, to resemble each other in many respects, such as accuracy, "rigidity" (or tendency to hold the level of judgments or goals constant), and the tendency toward shifts in judgments as performance improved or deteriorated. The spontaneous remarks and reactions of the partners in this study substantiated the results in a crucial way... In various degrees, the husbands tended to be protective of their wives, encouraging them and comforting them.... The wives, in various degrees, tended to maintain an admiring role in relation to their husbands' performance (36, pp. 290-291).



Data concerning the nature of the relationship and the degree of identification and of motivational attachment between subjects who were partners in this experiment would have been interesting and would help to clarify the differential results obtained from pair to pair (36, p. 291).

The observations suggested that the personal involvement between pairs of subjects influenced their estimates of each other's performance, though the nature and extent of the ego-involvement was not explored further.

A later study by Harvey and Sherif (17) considered the nature and degree of the relationship between pairs of individuals. Several groups of subject pairs were selected--college sweethearts, high school couples "going steady," high school friends, and mutually unfriendly high school students. The results obtained indicated that overestimation of future performance occurred more often in the pairs of sweethearts and steady couples than in the pairs of mutually unfriendly high school students. The estimates of future performance by the pairs of high school friends occupied an intermediate position between the positively and negatively related pairs of subjects. The findings indicated that the estimates of performance closely followed the highly positive, positive and negative relationships between participants.

Similar results were obtained with regard to status and role relations existing in small informal groups. Harvey (16) used 10 adolescent cliques, each clique consisting of

three individuals--a leader, a middle status member, and a low status member. The status position of each member in the group was determined on the basis of agreement from teachers' ratings, personal observations and a sociometric questionnaire. Harvey's results indicated that the performance of high status members tended to be overrated by the other group members. The performance of low status members tended to be less overrated, even to the extent of being underestimated by higher standing members. These findings suggested that estimates of performance were influenced by the status standing of particular members within the group.

Harvey's (16) results were later confirmed by Sherif, White and Harvey (38) who used the naturalistic setting of a summer camp to produce experimentally two small groups. The two groups evolved from the interaction of 12 year old boys participating in camp activities. The task was introduced as part of a camp tournament in order to elicit ego-involvement. The investigators found a significantly positive relationship for each group between in-group status and the extent of over-estimation of performance. "The performance of members of high status was overestimated; the performance of members of low status was underestimated, the extent of over-or under-estimation being positively related to status rankings" (38, p. 379).

The foregoing studies indicated that estimates of performance in an unstructured situation were influenced by the

ego-involvements between individuals (36), both positive and negative (17), and highly positive and less positive (16, 38). A general finding was that individuals overestimated the performance of highly esteemed subjects more than they overestimated the performance of less positively esteemed subjects. These findings pointed to the feasibility of measuring the relative ego-involvements of children and adolescents with their parents and with their age mates through the use of estimates of performance in an unstructured task situation.

## CHAPTER II

### PROBLEM

The findings of developmental psychology indicate that children, on the whole, have relatively stronger ego-involvements with their parents than with their age mates, whereas adolescents generally have stronger ego-involvements with their age mates than with their parents. This relative ego-involvement was related theoretically to the concept of reference group identification in which the family was assumed to be the most significant reference group during childhood, whereas the peer group was assumed to represent a relatively more significant reference group during adolescence.

Several studies were reviewed which showed that the relative ego-involvements of individuals were indicated by their estimates of performance in a task situation. The general methodological approach underlying these investigations was to reduce the stimulus structure of the task situation in order to permit internal factors (in this case, ego-involvements) to exert a more influential effect upon the individual's psychological functioning (in this case, estimates of performance). Using unstructured stimulus conditions

it was found that individuals overestimated the performance of highly valued subjects more than they overestimated the performance of less valued subjects.

In view of the foregoing summary statements of the findings of developmental psychology and the studies relating ego-involvement to estimates of performance, the following hypotheses may be stated concerning the relative ego-involvements of children and adolescents:

1. Children's estimates of their fathers' and friends' performances are different from adolescents' estimates of their fathers' and friends' performances.
2. Children estimate their fathers' performances to exceed those of their friends.
3. Adolescents estimate their friends' performances to exceed those of their fathers.

## CHAPTER III

### METHOD

#### Subjects

In order to test the hypotheses of this study it was necessary to select two groups of subjects. One group consisted of children, their best friends, and the valued fathers of the children. The second group consisted of adolescents, their best friends, and the valued fathers of the adolescents.

Male subjects were chosen in order to hold constant the factor of sex. Children were selected between the ages of eight and eleven, inclusively. There were two reasons for using this age range. Pretesting had indicated that some of the children under eight years of age had difficulty performing in the task used. For example, some of them needed to exert much effort to throw the dart over the screen and their muscular coordination was erratic for this task. The second reason for using the age range mentioned, particularly the upper limit, was to minimize selecting children who were involved in the changes of puberty.

Adolescents were selected between the ages of 14 and 17, inclusively. Teenagers below the age of 14 were not chosen

since some of them may not yet have reached puberty. The age range of 14 to 17 was used since it is generally one where peer group influence is felt by adolescents. After the age of 17 the peer group influence starts to diminish, adolescents graduate from high school, they obtain jobs, and they begin to assume adult roles.

The children and adolescents selected their best friends by answering a number of items on a sociometric questionnaire (Appendix A). The first item on this questionnaire asked the children and adolescents to list the names of four or five of their special friends. The instructions were to use these names to answer the remaining items. The responses to the remaining items were used to select the best friend. A best friend was considered as one whose name appeared as the respondent's best friend (item 3), as the respondent's first choice to accompany him on a vacation trip (item 5), the person whose ideas were followed the most or second most by the group of special friends (item 2), and the person whom the respondent felt would be elected to the office of president or vice-president if the group of special friends formed a club (item 4). These particular items were used so that the respondent's best friend would be a person chosen on the basis of a consistently positive personal association (items 3 and 5) and a person with consistent status (items 2 and 4). This selection procedure was used in order to obtain friends with whom there was a strong positive ego-involvement.

The children and adolescents selected their valued fathers by answering another questionnaire (Appendix B). This questionnaire contained twelve items, some of which read, "Who trusts you more?," "Who helps you more?," "Who seems easier to please?," etc. The children and adolescents were asked to choose either mother or father for each item. A father was considered to be a valued parent if he was selected on eight or more items out of the twelve offered. This selection procedure was used in order to obtain fathers with whom there was a strong positive ego-involvement.

These criteria for selecting children, adolescents, best friends, and valued fathers were used to arrange the experimental sample of this study. The sample consisted of 25 child units and 25 adolescent units. Each unit consisted of a child (or adolescent), his best friend, and the child's (or adolescent's) valued father. In all, 150 individuals participated in this study.

#### Apparatus

The task used in this study was a dart throwing game. The dart throwing in this situation differed from most other dart throwing games in that the participants were unable to view their actual performances because an opaque screen was placed in front of the dartboard. The participants threw darts over the screen in order to hit the dartboard which lay on the floor. The task situation was considered to be unstructured since the subjects had few external cues with which



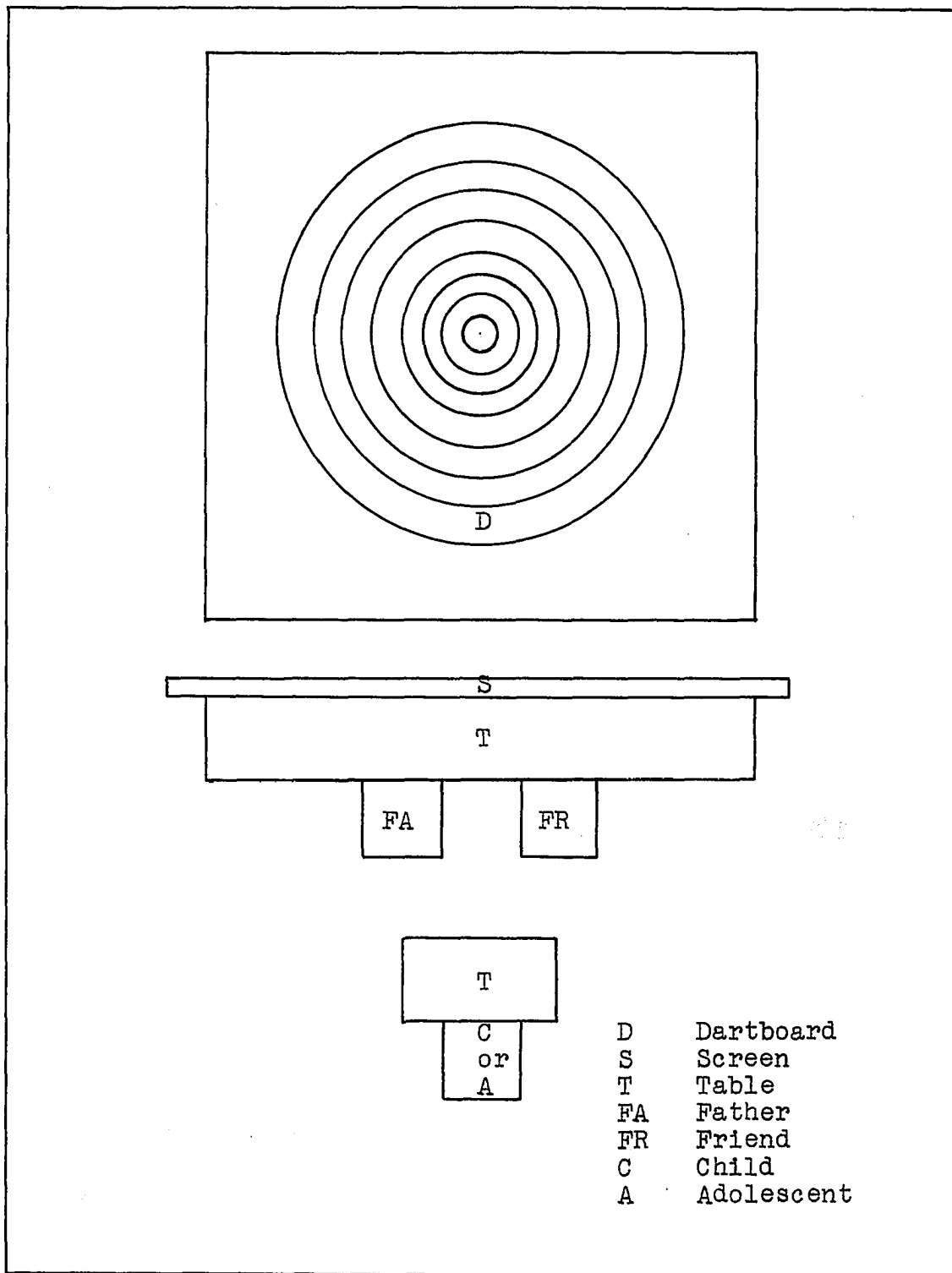


Fig. 1. Physical arrangement for dartboard task, top view.

to appraise the accuracy of their performance. The physical arrangement for the task is represented by Figure 1.

The dartboard used was eight feet long and eight feet wide with 24 concentric circles. Each circle was one and one-half inches wide. The dartboard was 14 inches from an opaque screen which was 100 inches long and 57 1/2 inches high. The center of the dartboard was 63 1/2 inches from the screen. The child (or adolescent) was seated about 100 inches from the screen and in a plane which started at the center of the dartboard and passed through the midline of the screen. Other materials for the task included blank scoring pads, four ballot boxes, and eight feathered darts.

#### Procedure

The questionnaires for selecting best friend and valued father were administered to 388 children and 553 adolescents in the public schools. The purpose for the administration of the questionnaires was explained by the experimenter as a survey for a course he was taking at the university. The object of the survey was to obtain information regarding the relationship between the subjects and their friends, and between the subjects and their parents. A brief conversation with the children and adolescents after the questionnaire administration was found to alleviate anxiety and also served as a means of establishing rapport with those subjects who were contacted later for the dart throwing.

At a later date, particular children and adolescents were selected according to the criteria already mentioned. The children and adolescents were told that the dart throwing task was a continuation of the survey with particular interest in eye-hand coordination. The friend and father were asked to participate, allegedly, to ascertain if any relationship existed in coordination between older and younger persons, and between family and non-family members (the hereditary factor being of interest). This explanation appeared plausible to the subjects and avoided revealing the true nature of the study.

When the participants arrived for the dart throwing task they were shown the target and the scoring system was explained to them. It was pointed out that the dartboard had twenty-four concentric circles. If a dart fell inside of the center circle a score of 24 was obtained. If a dart fell outside all of the circles a score of zero was obtained. Starting with the outermost circle, the scores progressed from 1, 2, 3, 4, 5 and so on up to 24. When the subjects understood the scoring system they were seated according to the seating plan of Figure 1. They were informed again of the purported interest in eye-hand coordination. They were asked to follow the dart with their eyes as it went over the screen in order to obtain some idea where the dart landed on the target. It was also mentioned that several questions would be asked when they had completed the dart throwing. These questions would

pertain to their eye-hand coordination and reactions to the situation.

The participants were provided with blank scoring pads, ballot boxes, pencils, and feathered darts. The father and friend were informed that they would be throwing darts for 31 trials each and that the child (or adolescent) could throw darts later. Father and friend each had one ballot box in which to place their estimates of their own performance. The child (or adolescent) sitting behind them had two ballot boxes, one for his estimates of father and one for his estimates of friend. Each of the ballot boxes had a name card in front of it on which was printed the usual name by which the child (or adolescent) referred to the participants.

Before the dart throwing commenced, the subjects were encouraged to remain silent during the 31 trials in order not to influence each other's estimates. The friend threw a dart and recorded his estimate. The child (or adolescent) recorded his estimate of friend's performance. Then father threw a dart and recorded his estimate. The child (or adolescent) recorded his estimate of father's performance. This concluded one trial and the same procedure was repeated for 30 more trials.

After father and friend had thrown 31 darts each, all of the participants were asked the following questions: "How close do you think you came to figuring out what you actually made?" "Was there any way in which your eyes followed your

hands to tell you where the dart landed on the dartboard?"

"Would you suggest any changes in this set-up to make it run more smoothly?" These questions were asked in order to maintain the alleged intent of the study as being concerned with eye-hand coordination. The information obtained from these questions was not used in any way.

The child (or adolescent) was also asked to describe the different activities, clubs, and associations in which he was participating with his friend. A check list (Appendix C) was used to elicit the data.

## CHAPTER IV

### RESULTS

In order to test the hypotheses of this study the unit of analysis used was the difference score obtained from median estimates of performance. The .05 level of significance was used to accept or reject the hypotheses.

The difference score was obtained in the following manner. After each experimental unit had participated in the dart throwing, it was possible to consider each child's (or adolescent's) 31 estimates of his father's performance and his 31 estimates of his friend's performance. It was found that the frequency distributions of the two groups of estimates were, in general, not normally distributed. In many instances there were several modal points some of which were widely scattered. In view of this, the median estimate of performance was used as the measure of central tendency. Therefore, for each child (or adolescent) a median estimate of father's performance and a median estimate of friend's performance were obtained. A difference score was computed by subtracting the median estimate of friend's performance from the median estimate of father's performance. Table 1 presents the median estimate of father's and friend's per-

Table 1

Children's Estimates of Fathers' and  
Friends' Performances

Child	Median Estimate of Father	Median Estimate of Friend	Difference Score
1	19	12	7
2	20	16	4
3	16	10	6
4	10	7	3
5	12	12	0
6	4	1	3
7	17	9	8
8	18	12	6
9	20	10	10
10	10	17	-7
11	16	10	6
12	12	11	1
13	15	10	5
14	10	8	2
15	10	8	2
16	23	21	2
17	8	11	-3
18	17	8	9
19	9	10	-1
20	13	12	1
21	21	10	11
22	14	18	-4
23	20	10	10
24	18	14	4
25	13	11	2

Table 2

Adolescents' Estimates of Fathers' and  
Friends' Performances

Adolescent	Median Estimate of Father	Median Estimate of Friend	Difference Score
1	14	16	-2
2	12	12	0
3	10	15	-5
4	14	18	-4
5	10	18	-8
6	5	12	-7
7	12	15	-3
8	9	15	-6
9	10	7	3
10	5	15	-10
11	20	17	3
12	9	13	-4
13	13	17	-4
14	18	11	7
15	12	15	-3
16	11	17	-6
17	7	15	-8
18	15	17	-2
19	17	10	7
20	8	14	-6
21	10	11	-1
22	13	9	4
23	9	14	-5
24	10	12	-2
25	13	16	-3



formance and the difference score for each of the 25 child units. Table 2 presents the median estimate of father's and friend's performance and the difference score for each of the 25 adolescent units.

#### Hypothesis 1

The first hypothesis stated that children's estimates of their fathers' and friends' performances were different from adolescents' estimates of fathers' and friends' performances. This hypothesis was tested by comparing the difference scores of children with the difference scores of adolescents, since the difference scores were computed from estimates of fathers' and friends' performances. An inspection of Tables 1 and 2 indicates that, in general, the children's difference scores were different from the adolescents' difference scores. Twenty out of twenty-five children had positive difference scores and nineteen out of twenty-five adolescents had negative difference scores. The mean difference score of the children was 3.5 and the mean difference score of the adolescents was -2.6. The difference between mean difference scores was 6.1. A t test (30), for uncorrelated data, was used to determine whether or not the difference between mean differences was significant. A t of 4.8 was obtained, P < .001, thus supporting the first hypothesis.

#### Hypothesis 2

The second hypothesis stated that children estimated

their fathers' performances to exceed those of their friends. If the data support this hypothesis, the children's difference scores should be positive. An inspection of Table 1 indicates that twenty out of twenty-five children had positive difference scores. A  $t$  test (30), for correlated data, was used to determine whether or not the mean difference score of 3.5 was significantly greater than zero. A  $t$  of 3.8 was obtained,  $P < .001$ . An analysis of the same data using Wilcoxon's Paired Replicates Test (41), a non-parametric statistical test, indicated a  $T$  of 41.5,  $P < .01$ . Both of these results support the second hypothesis.

### Hypothesis 3

The third hypothesis stated that adolescents estimated their friends' performances to exceed those of their fathers'. If the data support this hypothesis, the adolescent difference scores should be negative. An inspection of Table 2 indicates that nineteen out of twenty-five adolescents had negative difference scores. A  $t$  test (30) and a  $T$  test (41), for correlated data, were used to determine whether or not the mean difference score of -2.6 was significantly less than zero. A  $t$  of 3.2 and a  $T$  of 65.5 were obtained,  $P < .01$ . Both of these results support the third hypothesis.

The two modes of analyses just presented, between age levels and within age levels, support the hypotheses of this study. This means that, on the whole, children and adoles-

cents differed significantly in their estimates of fathers' and friends' performances. Furthermore, children estimated their fathers' performances to exceed significantly those of their friends, whereas adolescents estimated their friends' performances to exceed significantly those of their fathers. These findings were in agreement with the developmental trend that children are relatively more ego-involved with their parents than with their age mates, whereas adolescents are relatively more ego-involved with their age mates than with their parents.

Enumerative support. The results obtained were supported further by considering the number of individuals who contributed to the findings presented. Enumerative data were obtained by counting the number of children and adolescents who estimated fathers' performances to exceed those of friends and the number who did not.

Table 3

Number of Children and Adolescents Estimating  
Fathers' Performances to Exceed or not  
Exceed Friends' Performances

Subject	Father Greater than Friend	Father not Greater than Friend
Children	20	5
Adolescents	6	19

Table 3 indicates that there were 20 children who estimated their fathers' performances to have exceeded those of their friends' and five who did not. On the other hand, there were six adolescents who estimated their fathers' performances to have exceeded those of their friends and 19 who did not. A Chi-square analysis (30), corrected for continuity, indicated a  $\chi^2$  of 13.5,  $P < .001$ . This result means that a significantly large number of children estimated their fathers' performances to exceed those of friends and that a significantly large number of adolescents estimated their friends' performances to exceed those of their fathers. These findings support the developmental trend concerning the relative ego-involvements of children and adolescents.

#### Additional Considerations

No special comparison was made between the actual scores obtained by fathers and friends and the estimates of their performance. There was no basis for considering actual scores since the target was not visible to the participants and they could only guess at their actual performance. An inspection of Table 6 (Appendix), pertaining to the child units, indicated that the fathers actually scored higher than the friends for twelve units, the friends scored higher for twelve units, and both father and friend obtained the same score for one unit. An inspection of Table 7 (Appendix), pertaining to the adolescent units, indicated that the fa-

thers actually scored higher than the friends for fourteen units, the friends scored higher for eight units, and both father and friend obtained the same score for three units. A comparison of actual scores (Tables 6 and 7) with estimates of performance (Tables 1 and 2) indicates that more than three-quarters of the children estimated fathers' performances to exceed those of friends, though fathers' actual scores were superior for only half of the child units. On the other hand, three-quarters of the adolescents estimated their friends' performances to exceed those of fathers', though the friends' actual scores exceeded those of fathers' for only one-third of the adolescent units. In view of these findings it appears that the task used was sufficiently unstructured to allow relative ego-involvements to influence estimates of performance in a selective manner.

In view of the procedures used in this study for selecting valued fathers and best friends there existed the possibility that the differences between children's and adolescents' estimates of their fathers' and friends' performances were due to differences with which they selected their valued fathers and best friends. Therefore, a comparison was made of the number of children and adolescents who selected their fathers and friends in a particular manner.

Selection of fathers. The children and adolescents selected their valued fathers by answering a questionnaire (Appendix B) containing such items as, "Who trusts you more?"

"Who helps you more?" etc. They were asked to choose between their father and their mother on twelve items. A father was considered to be a valued parent if he was selected on eight or more items. The total number of items children and adolescents selected are represented in Tables 6 and 7 (Appendix). Table 4 summarizes the number of children and adolescents who selected father on eight or more items.

Table 4  
Selections of Fathers by Children and Adolescents

No. of Father Items Selected	No. of Children	No. of Adolescents
8	13	12
9	10	10
10	2	2
11	0	0
12	0	1

An inspection of Table 4 reveals such a close similarity between children and adolescents in their selection of fathers that a statistical analysis was not considered necessary. In view of this similarity it is unlikely that the selection of father could account for the children's estimating fathers' performances to exceed those of friends and the adolescents' estimating friends' performances to exceed those of fathers.

Selection of friends. The second factor which was explored was the consistency with which children and adolescents selected best friends on the sociometric questionnaire (Appendix A). The method used to determine the consistency of choice (or consistency rating) is shown by the following example: If a child selected the friend as the person whose ideas were followed the most (item 2), as his best friend (item 3), as the person who would be selected as president if a club were formed (item 4), and as the first choice as a vacation companion (item 5), then this friend received a consistency rating of 1111. The rating of 1111 was given since the friend's name appeared on the child's questionnaire as the first choice on items two through five.

Tables 6 and 7 (Appendix) indicate the consistency ratings for the friends of children and adolescents. Table 5 summarizes the data by indicating the number of children and adolescents who selected friends according to several consistency ratings.

An inspection of Table 5 indicates a close similarity between children and adolescents in their selection of friends so that a statistical analysis was not considered necessary. In view of this similarity there was little reason to believe that the selection of friend could account for the differential estimates of fathers' and friends' performances by the children and adolescents.

Table 5

Consistency Ratings of Friends by  
Children and Adolescents

Consistency Rating of Friend	No. of Children	No. of Adolescents
1111	18	15
1121	2	3
2111	3	1
2121	2	6

Associations with Friends

An interesting finding obtained in this study was that adolescents had more associations with their best friends than did the children with their best friends. The child-friend and adolescent-friend associations were obtained by using a check list (Appendix C). The children and adolescents were asked to describe the different activities, clubs etc., in which they participated with their best friends. The total number of associations was obtained for each child and adolescent and the total scores are represented in Tables 6 and 7 (Appendix). Figure 2 graphically indicates the number of children and adolescents having varying total numbers of friend associations.

A t test, for uncorrelated data, was used to determine whether or not the means of the two distributions were significantly different. A t of 4.4 was obtained, P < .001. This



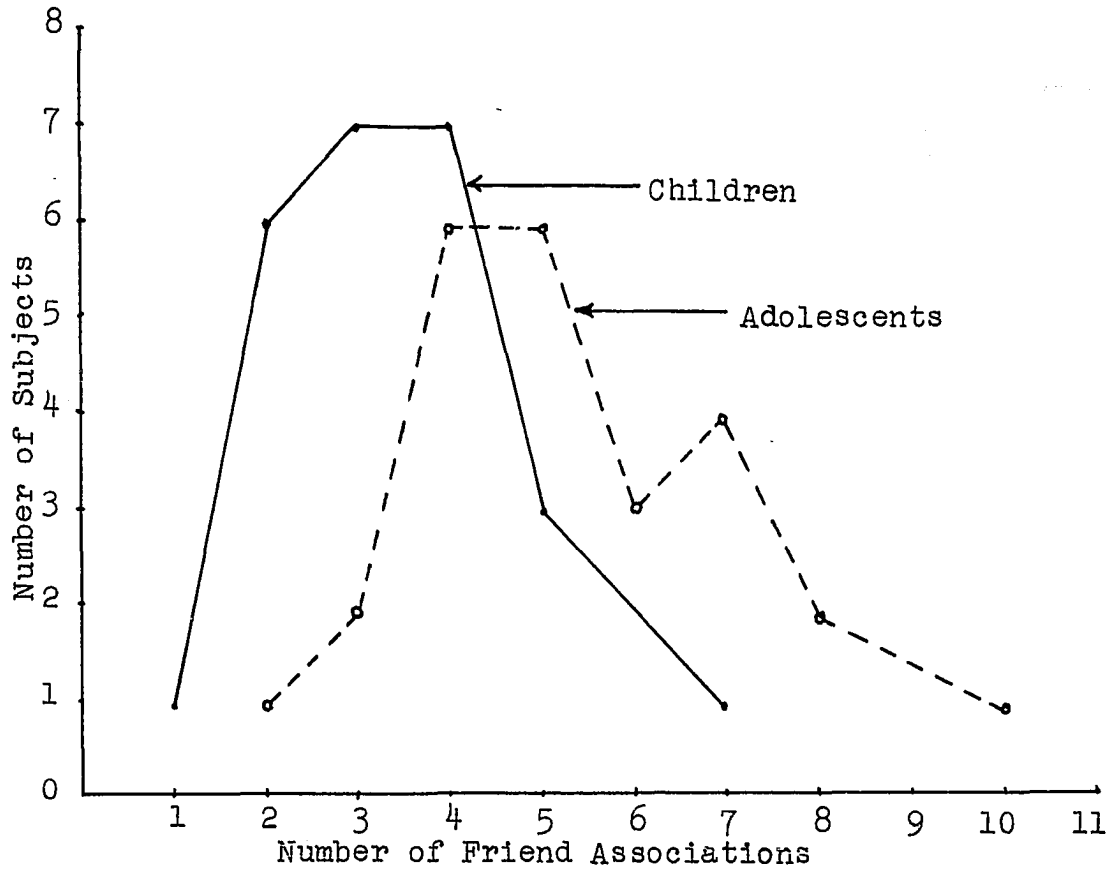


Fig. 2. Distribution of child-friend and adolescent-friend associations.

finding indicates that the adolescents had significantly more associations with their friends than did the children with their friends. A possible explanation of this finding may be that the adolescents were more ego-involved with their friends than were the children with their friends. Such an interpretation is in line with Homans' (22) formulation that one of the effective measures of the attachment of individuals is represented by the relative frequencies of interactions between them in situations where there are free choices for associations.

## CHAPTER V

### DISCUSSION

In this study children estimated fathers' performances to exceed those of friends', and adolescents estimated friends' performances to exceed those of fathers. These results were consistent with the results of other studies concerning the relative ego-involvements of children and adolescents with their parents and friends. The theoretical implications for reference group theory are that children are more ego-involved with their parents because the family constitutes the most important reference group during childhood, whereas adolescents are more ego-involved with their friends because the peer group is the most significant reference group during adolescence. The finding that adolescents had more associations with their friends than did the children with theirs suggests that peer friend attachments are greater during adolescence because the peer group is more important as a reference group.

In general, the estimates of children and adolescents were in the predicted direction. However, there were particular individuals whose estimates were contrary to expectations. Psychologically, individual differences are worth noting because they may contribute to the theoretical under-

standing of some of the factors involved in individual variation. The data obtained regarding particular individuals were of a qualitative nature based upon task and/or interview observations.

#### Child Cases of Special Interest

An inspection of Table 1 indicates that the estimates of children 5, 10, 17, 19, and 22 were not in line with the general trends.

Child 5. The father of this child was an assembly line worker. The family lived in a trailer and moved frequently around the country, depending upon where the best employment could be found. The father alternately worked the afternoon and evening shifts and he spent little time with his children. Most of father's time at home was taken up with sleeping, working on the trailer, watching TV, and associating with his adult friends at the trailer court; consequently, although he wanted to, the child did not spend much time with his father. The child's associations with his friend were more frequent and intense since they were in the same classes at school and played together after school. During the task situation it was observed that the child was more friendly with his friend and inclined not to interact much with his father. It may be concluded that father was less important as a family figure than he could have been, and this may well have accounted for the child's not estimating

his father's performance to exceed that of friend.

Child 10. This child was quiet, expressionless, and devoid of childlike vitality when seen in the school, task, and home situations. During the task he had periodic difficulty placing his estimates in the appropriate ballot box. While the experimenter assisted him, and at other times, father continually turned around to watch his son, apparently showing concern that the child was not able to follow directions easily. Father would have assisted his son except for the experimenter's efforts to keep father solely occupied with his functions in the task situation. When the dart throwing was over, the father attempted to answer questions directed to his son. This was also observed to be true in the home situation. The child reacted to this overprotectiveness by becoming more sullen, withdrawn, and less verbal than usual.

A consideration of this case indicated that there were both "positive" and "negative" features involved in the father-son relationship. On the "positive" side, the child valued his father more than his mother, since he selected father on nine items out of twelve on the mother-father questionnaire. The child had opportunities to interact with his father in the evenings, and they frequently went out together. The child regarded his father as the significant figure in the family but appeared to resent father's overprotectiveness, which may have diminished the strength of their rela-

tionship. The child's resentment of the overprotectiveness was seldom observed in his overt behavior; however, the unstructured nature of the task situation may have allowed this resentment to be expressed by considering father's performance to be poorer.

Child 17. This child came from an economically and emotionally impoverished background. Mother appeared to be a fickle young woman who paid more attention to her appearance than to the facts that the children were hungry and dirty and that the house was in disorder. Father, a garbage truck driver, was a dull-looking, thin, haggard, prematurely old person who was partially lame (left arm and leg), and seemingly fond of intoxicants. The father was more concerned with the children's physical needs than was the mother, though neither parent seemed much concerned about their children's affectional needs. The child was a pleasant, timid lad who stammered badly, especially when talking to adults but less so when talking to his siblings and best friend. At home the child seemed more ego-involved with his father than with his mother since he stayed closer to father, paid more attention to him, and selected father on nine out of twelve items on the mother-father questionnaire. The child's friend, on the other hand, was a husky, well-dressed youngster from a middle-class family. The child-friend associations were largely relegated to the school situation where both youngsters had classes together and belonged to the Citizenship Club.

In conclusion, the child came from an impoverished lower class family, and father was an unkempt, poorly dressed, and partially lame person. The friend, on the other hand, represented a well-dressed, physically fit, middle-class person. Since the study brought father and friend together, the marked contrast between them in personal appearance, physical fitness, and societal status may have made the friend appear more attractive and influenced the child's estimates to favor his friend's performance.

Child 19. The only data available for this case were general observations obtained from the task situation. In this situation the child's interaction with his father conveyed a similar amount of friendliness and warmth as his interaction with his friend. However, when the dart throwing began the child exhibited overactivity, noisiness, and periodic giggling for no apparent reason. In contrast, father and friend were quiet, steady workers. The child's behavior may be attributed either to disinterest in the dart throwing or to undue anxiety about being placed in an unstructured situation where he was expected to estimate the performances of father and friend. The disinterest or anxiety may have interfered with the usual effects of motivational factors upon estimates of performance.

Child 22. The behavior of the participants in the task situation did not reveal any particular characteristics which could account for this child's estimates. However,

several comments of the participants revealed that the child and his friend played on the same baseball and basketball teams and indicated that they had similar interests and contacts with sports activities. On the other hand, father was in the floor contracting business and most of his interests and activities centered around the business. In view of this, the child may have felt that his friend was more adept than his father in activities involving coordination. This consideration may have influenced the child's estimates, since the task was explained as a study of eye-hand coordination.

#### Adolescent Cases of Special Interest

An inspection of Table 2 indicates that the estimates of adolescents 2, 9, 11, 14, 19, and 22 were not in line with the general trends.

Adolescent 2. During the task situation it was noted that this subject had a crew cut and was dressed like his adolescent friend. Their appearance was that of the typical teenager at the local high school. This adolescent, however, was different from most of the teenagers seen for this study in that he was more mature and sedate. His interactions with his friend and father were equally warm during the task. Father was a friendly, hard-working insurance manager who enjoyed having his son's friends come to the house, who apparently could accept disagreements with his son without becoming overly defensive, and who believed that individuals should



assume responsibility early. After starting high school both of his sons accepted part-time jobs in order to contribute to the financial support of the family. The adolescent worked daily after school and on weekends, and this limited his time for peer group activities. Despite his working hours, he had associations with his best friend at church, as a member of the same softball team, in day to day contacts, through house visiting, and as a member of the same social fraternity.

The general impression was that the adolescent had a continuing identification with father. Even though the peer group and best friend exerted an influence upon the adolescent, the father was a more influential figure. The adolescent's somewhat limited time for peer group activities and the good relationship with father were considered the two factors which influenced the adolescent not to estimate friend's performance to exceed father's.

Adolescent 9. The father of this adolescent reported that during his son's childhood he had been rather strict and aloof. In recent years, his relationship with his son had improved, largely through their mutual interests in fishing and camping. The adolescent's association with his friend seemed to be based upon a mutual interest in science as well as a status factor. The status factor was suggested by numerous comments which father and son made indicating that the friend's father was a psychiatrist. During the task

situation it was noted that the friend was a former paraplegic who, though he walked with an awkward gait, had no difficulty throwing darts.

In view of the foregoing, it appeared that the improved father-son relationship served to establish father as an important figure in the family, a position which he did not have as a strict person. This relationship was probably sufficiently strong to override the relatively recent ego-involvement with friend, especially when a status factor was partially the basis for the friendship. The friend's physical limitations may have created a negative set concerning his coordination in the task situation. The combination of these factors may account for father's performance having been rated higher.

Adolescent 14. This adolescent was a passive, mature, intellectual person like his father, who was a mathematician. The friend, on the other hand, sported a crew cut, had an athletic body build, and dressed more like a typical teenager. During the task situation father and son spoke more to each other and to the experimenter than they did to the friend. The friend remained quiet unless spoken to directly. Father and son shared a number of mutual interests. They liked to read, they played musical instruments, they enjoyed golf, they went bowling, and they were interested in mathematics. The adolescent's relationship with his friend consisted of belonging to the Demolay, double dating, visiting

each other, daily contacts, and associating with clique members.

In summary, the adolescent has had a longstanding identification with his father to the extent that he acquired many of the personal characteristics and interests of father. Even though the adolescent formed an attachment with his age mates, particularly his best friend, this attachment has not been in competition with his relationship with father or one characterized by a conflict between peer group and parental values. The stronger ego-involvement was with father and was reflected by the adolescent's estimates in the task situation.

Adolescent 22. The adolescent's associations with his best friend and peer group were of recent origin since the family had lived in the town only eight months. The adolescent mentioned that his friend was liked by peer group members and had status in the group because of his intelligence and resourcefulness. However, there was one trait the friend had which was irritating to some of the group members. At times the friend was more inclined to follow his own wishes than the desires of the group. His egocentricity was sometimes a point of contention between the adolescent and friend. On the other hand, the relationship between the adolescent and his father was a particularly good one. This was the only adolescent who selected his father on 12 out of 12 items on the mother-father questionnaire. Father was a youthful person who had a genuine interest and respect for his son's

attitudes, boy friends, and girl friends. The group members often met at the adolescent's home to play cards, watch TV, have a party, or just to socialize. Father was periodically a participating member in these activities and was regarded as a participant rather than as an adult intruder. The adolescent regarded his father as a confidant, an accepting person, and one who understood the socialization needs of adolescents.

In view of the foregoing, the adolescent had strong positive feelings toward his father. The adolescent's ego-involvement with his friend was a relatively weaker one since the friendship was of short duration and the friend's egocentricity led to periodic fluctuations in their relationship. The relatively stronger ego-involvement with father probably accounts for the adolescent's favoring father's performance.

Adolescent 11. The observations of this adolescent unit in the task situation did not reveal any particular characteristics which could explain the estimates obtained. The only aspect which might shed some light on the results obtained was the fact that the adolescent's father was a basketball coach at the university. It is conceivable that, since the task was explained as a study of eye-hand coordination, the adolescent estimated his father's performance to be superior since he had more athletic experience than the friend. The paucity of data limits any further explanation.

Adolescent 19. The discussion of this case is limited to observations from the task situation. Before and after the task situation the adolescent and his friend stayed close to one another and spoke more to each other than to anyone else. They both had crew cuts and wore Ivy League shirts and trousers. Their interaction and dress appeared typical of adolescents. The father, on the other hand, remained apart from the adolescent, his friend, and the experimenter. On the basis of these impressions it would seem that the adolescent would estimate friend's performance to exceed that of father. The fact that he did not may be attributed to the friend's initial inaccuracy in dart throwing. During throwing trials three, four, and five the friend threw three consecutive darts off the dartboard. His inaccuracy was noticed by the participants since the darts made a peculiar sound as they struck the floor. Even though the friend did not throw any more darts off the board his initial performance could have established a "negative" set with the adolescent that his friend was not a very good dart thrower. This initial set could have prevailed throughout the dart throwing and may have influenced the adolescent to selectively perceive friend's performance to be poorer than father's.

The foregoing discussion presented some explanations of why the estimates obtained from particular children and adolescents deviated from the general trends. These explanations were ad hoc evaluations of a qualitative nature and

should be accepted for their heuristic value. Some of the explanatory factors which were considered important were status, the interpersonal relationship between father and son, attitudes related to the skill of the participants, and situational determinants. A systematic and more detailed exploration of each of these factors would certainly contribute further understanding to individual variation. However, so extensive an exploration of the factors operating in each case would constitute a series of studies in their own right. Factors responsible for individual variation are open for future investigation.

#### Suggestions for Research

The method of studying motivational factors through the use of estimates of performance has been utilized in previous investigations (16, 17, 38). The present study compared the relative ego-involvements of children and adolescents by using estimates of performance as a measure of ego-involvement. The use of such estimates provides an indirect approach in that the individual is less likely to be aware of the nature of the data he supplies the experimenter than he would be in answering direct questionnaires, opinion polls, etc. In view of this, it appears that estimates of performance provide a useful research technique to study other kinds of relative ego-involvements.

The findings of this study are limited to the particu-

lar sample used, a specific task, and a particular type of ego-involvement studied. It would be fruitful to find out the extent to which the conclusions obtained from this investigation may be generalized. Such information would provide additional knowledge regarding two important developmental periods (childhood and adolescence). The following suggestions are offered for future research in which the procedures used in this study may be extended or modified.

Other kinds of unstructured task situations might be used, such as the autokinetic situation, in which subjects estimate the apparent movement of light. Whatever task is selected, it should be suitable to the subjects in terms of age, sex, interest, and ability to perform. Independent measures of the relative ego-involvements of children and adolescents might also be used in order to relate these measures to estimates of performance obtained from the task. Various types of interpersonal relations may be explored by using both parents, by varying the intensity of parental choice (high and low valued parents), by using boys and girls, and by varying the intensity of friend choice (high and low valued friend). Future samples might also use boys and girls of ages eight through twenty, thus affording an extension of the age variable.

It might also be worthwhile to study intensively the factors which are associated with particular children and adolescents whose results are not in line with general trends.

A variety of techniques may be used in this regard, such as attitude questionnaires, projective tests, interviews, and behavioral observations from everyday situations.



## CHAPTER VI

### SUMMARY

The present study was based on two sets of findings. On the one hand, the findings of developmental psychology indicate that children, on the whole, are relatively more ego-involved with their parents than with their friends, whereas adolescents generally are more ego-involved with their friends than with their parents. On the other hand, several studies were reported in the literature which indicated that the relative ego-involvements of individuals were indicated by their estimates of performance in an unstructured task situation. In view of these two sets of findings it was the purpose of this study to compare the relative ego-involvements of children and adolescents with their fathers and friends by using estimates of performance in an unstructured task situation as a measure of ego-involvement.

Twenty-five child and twenty-five adolescent units were selected. Each unit consisted of a child (or adolescent), his father, and the child's (or adolescent's) friend. All of the subjects were males. The children were between the ages of eight and eleven, inclusively, and the adolescents were between the ages of fourteen and seventeen, inclusively. Two questionnaires were administered to children and adolescents, in

the school setting, in order to select individuals whose responses indicated that they valued their father and friend.

When the child and adolescent units were contacted they were informed that the purpose of the study was to investigate whether any relationship existed in eye-hand coordination between older and younger individuals and between family and non-family members (the hereditary factor being of interest). The subjects were told that a dart throwing game would be used to study eye-hand coordination. The task was intentionally made unstructured by placing a screen in front of the target. The target lay on the floor and out of view of the participants so that they could not perceive their actual performance. Father and friend threw darts over the screen while the child (or adolescent) estimated what score he thought they made. After the dart throwing the child (or adolescent) was asked to specify what kinds of associations he had with his friend. A check list was used to elicit this information.

The results of the study indicated that children's estimates of fathers' and friends' performances differed significantly from adolescents' estimates of fathers' and friends' performances. Furthermore, children estimated their fathers' performances to exceed significantly those of friends, whereas adolescents estimated their friends' performances to exceed significantly those of fathers. These findings were in line with the hypotheses and support the developmental

trend that children are relatively more ego-involved with their parents than with their friends, whereas adolescents are relatively more ego-involved with their friends than with their parents.

The children and adolescents were compared in regard to their selection of valued fathers and best friends. Both age groups indicated a close similarity in this regard, suggesting that there was little reason to feel that the selection of fathers and friends could account for the differential estimates of fathers' and friends' performances by the children and adolescents.

A further finding indicated that, according to the check list used, the adolescents had significantly more associations with their friends than the children had with their friends. This finding was interpreted as support of the adolescents' greater ego-involvement with their friends than children with theirs.

A section was devoted to considering briefly some of the factors which may have influenced particular children and adolescents to give estimates of performance which were not in line with the general trends obtained.

In conclusion, the results of this study, using estimates of performance, were in agreement with the general findings of developmental psychology concerning the relative ego-involvements of children and adolescents. Implications for reference group theory were discussed. Suggestions for re-

search were proposed in which the sample and procedures used in this study could be extended to provide additional information concerning the operation of particular variables.

## REFERENCES

1. Abt, L. E. A theory of projective psychology. In L. E. Abt & L. Bellak (Ed.), Projective psychology. New York: Knopf, 1950. Pp. 33-66.
2. Ausubel, D. P. Theory and problems of adolescence and development. New York: Grune-Stratton, 1954.
3. Barnes, E. Children's ideals. Pedag. Sem., 1900, 7, 3-12.
4. Blos, P. The adolescent personality. New York: Appleton-Century, 1941.
5. Chambers, W. G. The evaluation of ideals. Pedag. Sem., 1903, 10, 101-143.
6. Cole, Luella. Psychology of adolescence. (4th ed.) New York: Rinehart, 1954.
7. Crist, J. R. High school dating as a behavior system. Marriage Fam. Living, 1953, 15, 23-28.
8. Elkin, F. & Westley, W. A. The myth of adolescent culture. Amer. sociol. Rev., 1955, 20, 680-684.
9. Freud, S. New introductory lectures on psychoanalysis. New York: Norton, 1933.
10. Freud, S. The ego and the id. (6th ed.) London: Hogarth Press, 1950.
11. Garrison, K. C. Psychology of adolescence. (4th ed.) New York: Prentice-Hall, 1951.
12. Goddard, H. H. The ideals of a group of German children. Pedag. Sem., 1906, 13, 208-220.
13. Goodenough, Florence L. Developmental psychology. (2nd ed.) New York: Appleton-Century, 1945.

14. Hartley, E. L., Rosenbaum, M., & Schwartz, S. Children's use of ethnic frames of reference: an exploratory study of children's conceptualization of multiple ethnic group membership. J. Psychol., 1948, 26, 367-386.
15. Hartshorne, H., May, M. A., & Shuttleworth, S. Studies in the organization of character. New York: Macmillan, 1930.
16. Harvey, O. J. An experimental approach to the study of status relations in informal groups. Amer. sociol. Rev., 1953, 18, 358-367.
17. Harvey, O. J. & Sherif, M. Level of aspiration as a case of judgmental activity in which ego-involvements operate as factors. Sociometry, 1951, 14, 121-147.
18. Havighurst, R. J., Robinson, M. Z., and Dorr, Mildred. The development of the ideal self in childhood and adolescence. J. educ. Res., 1946, 40, 241-257.
19. Higham, T. M. The experimental study of the transmission of rumour. Brit. J. Psychol., 1951, 42, 42-55.
20. Hill, D. S. Comparative study of children's ideals. Pedag. Sem., 1911, 18, 219-231.
21. Holt, R. R. Effects of ego-involvement upon levels of aspiration. Psychiat., 1945, 8, 299-317.
22. Homans, G. C. The human group. New York: Harcourt-Brace, 1950.
23. Horrocks, J. E. The psychology of adolescence. Mass.: Houghton-Mifflin, 1951.
24. Hurlock, Elizabeth B. Adolescent development. New York: McGraw-Hill, 1949.
25. Jersild, A. T. The psychology of adolescence. New York: Macmillan, 1957.
26. Jones, H. E. Development in adolescence. New York: Appleton-Century, 1943.
27. Josselyn, Irene M. The adolescent and his world. New York: Fam. Serv. Ass. Amer., 1952.

28. Klein, G. S. & Schoenfeld, N. The influence of ego-involvement on confidence. J. abnorm. soc. Psychol., 1941, 36, 249-258.
29. Landis, P. H. Adolescence and youth. (2nd ed.) New York: Mc-Graw Hill, 1952.
30. McNemar, Q. Psychological statistics. New York: Wiley, 1949.
31. Neiman, L. J. The influence of peer groups upon attitudes toward the feminine role. Soc. Probl., 1954, 2, 104-111.
32. Piaget, J. The moral judgment of the child. London: Kegan, Paul, Trench, Trubner, 1932.
33. Postman, L. & Geoffrey, L. Perceptual selectivity and ambivalence of stimuli. J. Pers., 1951, 19, 390-405.
34. Rosen, B. C. Conflicting group membership: a study of parent-peer cross pressures. Amer. sociol. Rev., 1955, 20, 155-161.
35. Seidler, M. B. & Ravity, M. J. A Jewish peer group. Amer. J. Sociol., 1955, 61, 11-15.
36. Sherif, Carolyn. Ego-involvement as a factor in judgment. Paper read at Eastern Psychol. Ass., Atlantic City, April, 1947. Cited by M. Sherif, Outline of social psychology. New York: Harper, 1948. Pp. 289-292.
37. Sherif, M. & Sherif, Carolyn. An outline of social psychology. (rev. ed.) New York: Harper, 1956.
38. Sherif, M., White, B. J., & Harvey, O. J. Status in experimentally produced groups. Amer. J. Sociol., 1955, 60, 370-379.
39. Sullivan, H. S. The interpersonal theory of psychiatry. New York: Norton, 1953.
40. Tryon, Caroline M. U. C. inventory I, social and emotional adjustment. Univ. Calif. Press, 1939. Cited by A. T. Jersild, The psychology of adolescence. New York: Macmillan, 1957. P. 263.
41. Wilcoxon, F. Some rapid approximate statistical procedures. New York: Amer. Cyanamid Company, 1949.

42. Winker, J. B. Age trends and sex differences in the wishes, identifications, activities, and fears of children. Child Developm., 1949, 20, 191-200.



## APPENDICES

## Appendix A

## Sociometric Questionnaire for Selecting Best Friend

Your Name \_\_\_\_\_ Age \_\_\_\_\_

Below are some questions which I would like you to answer.  
This is to find out how fellows get along with their friends.

1. Write down the first and last names of 4 or 5 boys who are your special friends, that is, the fellows you pal around with most of the time.

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

2. Of your special group of friends from question 1, which fellow's ideas are followed the most?

the most \_\_\_\_\_  
second most \_\_\_\_\_  
third most \_\_\_\_\_  
the least \_\_\_\_\_

3. Of your special friends from question 1, which boy is your

best friend \_\_\_\_\_ His age \_\_\_\_\_  
Second best friend \_\_\_\_\_  
Third best friend \_\_\_\_\_

4. If your special group of friends from question 1 formed a club, which fellows do you think would get these offices?

President \_\_\_\_\_  
Vice-President \_\_\_\_\_  
Secretary \_\_\_\_\_  
Treasurer \_\_\_\_\_

5. If you were given a free vacation trip, which one of your special friends from question 1 would you ask to come along?

first choice \_\_\_\_\_  
second choice \_\_\_\_\_  
third choice \_\_\_\_\_

## Appendix B

## Questionnaire for Selecting Valued Father

Your name \_\_\_\_\_ Age \_\_\_\_\_

Below are some questions which I would like you to answer. This is to find out how boys are getting along with their family.

In the case of each question please mark under (or underline) only one of the two choices given. In some cases it will be difficult or hard for you to decide which one to pick; however, do your best by picking only one of the two choices.

1. Whom do you like to play with or talk to more?  
Mother      Father
2. Who helps you more?      Mother      Father
3. Who likes you more?      Mother      Father
4. Who trusts you more?      Mother      Father
5. Who likes your friends better?      Mother      Father
6. Whom can you ask a favor of more often? Mother      Father
7. Who seems to understand you better?      Mother      Father
8. Who appears easier to please?      Mother      Father
9. With whom do you like to go different places?  
Mother      Father
10. Who is more interested in what you do? Mother      Father
11. With whom do you like to share things? Mother      Father
12. Who listens to what you have to say? Mother      Father

When you are through look over your paper in order to see if you have answered all of the questions. Thank you for your help and cooperation.

## Appendix C

## Check List for Child-Friend and Adolescent-Friend Associations

The purpose of the check list was to obtain a general idea of the associations between children (or adolescents) and their best friends. The association had to be one in which the child (or adolescent) was currently participating with his friend, unless otherwise indicated. A score of one point was given for each of the following:

1. If both had one or more classes together at school.
2. If both belonged to a club, team, or other student organization at school. One point was given for each organization.
3. If both belonged to a club, team, or other organization outside of school. One point was given for each organization.
4. If they attended the same church.
5. If they attended the same Sunday school group.
6. If they were neighbors.
7. If they "palled around" with each other after school.
8. If they visited each other's house.
9. If they had known each other for the last two years or more.
10. If they were relatives.
11. If they played with each other (for the children).  
If they double dated (for the adolescents).

A total score was obtained by adding the separate points.

Table 6

Task Situation, Questionnaires, and Check List Data for the Child Units

Child	Esti- mate of Father	Esti- mate of Friend	Differ- ence Score	Father's Actual Score	Friend's Actual Score	Child- Friend Assoc's <sup>a</sup>	No. of Father Choices <sup>b</sup>	Friend Rating <sup>c</sup>
1	19	12	7	14	16	7	8	1111
2	20	16	4	21	18	3	9	1111
3	16	10	6	12	13	4	8	2121
4	10	7	3	11	15	2	8	1111
5	12	12	0	18	14	2	8	1121
6	4	1	3	16	0	3	9	1111
7	17	9	8	16	8	4	9	1111
8	18	12	6	10	11	4	8	1111
9	20	10	10	19	14	5	8	1111
10	10	17	-7	13	14	3	9	1111
11	16	10	6	14	13	4	9	1111
12	12	11	1	19	14	4	9	1111
13	15	10	5	15	17	5	10	1111
14	10	8	2	20	16	2	8	1111
15	10	8	2	1	7	3	8	1111
16	23	21	2	18	19	1	8	2111
17	8	11	-3	10	17	2	9	1111
18	17	8	9	11	4	4	9	1111
19	9	10	-1	18	17	2	8	2121
20	13	12	1	16	17	3	8	2111
21	21	10	11	18	18	5	8	1111
22	14	18	-4	11	17	3	10	2111
23	20	10	10	15	11	2	8	1111
24	18	14	4	17	16	3	9	1111
25	13	11	2	11	17	4	9	1121

Note: Median values were used for the estimates and actual scores.

<sup>a</sup>Total scores obtained from the check list.<sup>b</sup>Number of father choices on the mother-father questionnaire.<sup>c</sup>Consistency rating of friend using the best-friend questionnaire.

Table 7

Task Situation, Questionnaires, and Check List Data for the Adolescent Units

Adolescent	Estimate of Father	Estimate of Friend	Difference Score	Father's Actual Score	Friend's Actual Score	Adolescent Friend Assoc's <sup>a</sup>	No. of Father Choices <sup>b</sup>	Friend Rating <sup>c</sup>
1	14	16	-2	16	14	8	8	1111
2	12	12	0	17	19	5	8	2121
3	10	15	-5	19	15	7	8	1121
4	14	18	-4	16	19	4	8	2121
5	10	18	-8	11	18	7	8	1111
6	5	12	-7	13	18	6	9	1111
7	12	15	-3	17	16	7	9	1111
8	9	15	-6	21	18	6	9	1111
9	10	7	3	10	18	4	9	1111
10	5	15	-10	8	8	7	9	1121
11	20	17	3	13	13	6	8	1121
12	9	13	-4	20	17	10	8	2121
13	13	17	-4	19	14	5	9	1111
14	18	11	7	18	7	5	10	2121
15	12	15	-3	18	17	2	9	1111
16	11	17	-6	16	17	4	10	1111
17	7	15	-8	14	14	5	8	1111
18	15	17	-2	17	15	5	8	1111
19	17	10	7	18	9	3	9	2111
20	8	14	-6	17	11	4	8	1111
21	10	11	-1	17	13	5	9	2121
22	13	9	4	16	11	4	12	1111
23	9	14	-5	13	17	4	9	1111
24	10	12	-2	14	18	3	8	2121
25	13	16	-3	17	13	8	8	1111

Note: Median values were used for the estimates and actual scores.

<sup>a</sup>Total scores obtained from the check list.<sup>b</sup>Number of father choices on the mother-father questionnaire.<sup>c</sup>Consistency rating of friend using the best-friend questionnaire.