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SIS analyses found moderately high internal consistency coefficients among the items contributing to the SL, ST, and CI scales. Negative partial correlation coefficients were obtained between all three pairs of scales, attaining statistical significance in two instances and barely falling short in the case of CI vs. ST. Thus, it appears that SIS scores meaningfully discriminate between gifted students with dissimilar intellectual orientations. Comparisons of the SIS and SPC classifications suggested much agreement, but also suggested that the SPC was less useful in terms of placing too many students in the currently popular "Creative Intellectual" grouping.

Multiple Agreement Analysis (MAA) was the technique of choice for analyzing the groupings of family units on the CRI and the SPQ. A defective computer program, however, resulted in findings which might be argued as attributable to chance, so a supplementary analysis of variance (AOV) was carried out. Both the MAA and AOV analyses disclosed that the SIS-SL, ST, and CI groupings revealed significant differences between the family units on the CRI Achievement Pressure, Manifest Rejection, and Overprotective scales and also on the SPQ Rejection (R) factor. While all three CRI scales yielded differences significant at the .005 level, only one of the two SPQ factors, R, yielded differences significant at the .10 level. The SIS also yielded more definitive groupings of the family units according to the child-rearing measures, than did the SPC.

Of several independent variables investigated, including socioeconomic-status, only child's IQ and parental education level (EL) were statistically related to the SIS groupings. Child's IQ correlated positively with CI score and negatively with SL scores. Parental EL also correlated negatively with child's CI scores of those children in the CI group (N=9); mother's EL also correlated positively with the ST scores of the children in the ST group (N=19), but father's EL correlated negatively with children's ST scores (N=18).

The highly significant linkages observed between familial chile rearing beliefs and the self-identity of those ninth grade gifted children, suggests that it will be fruitful to examine these relationships more definitively. Such clear results among a sample based upon children with a very limited IQ range suggests that more dramatic findings may obtain when these instruments are used with a more representative population.

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CHILD REARING ATTITUDES OF PARENTS AND
CHILDREN AMONG THREE GROUPINGS
OF GIFTED CHILDREN

By

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CHAPTER I

INTRODUCTION

Some researchers charge that the concept of giftedness as measured by IQ tests is misused (Liverant, 1960). There appear to be many types of abilities needed for various types of problems, and IQ represents the measurement of only one of these areas. Guilford (1956b) in a factor analysis of many different types of intellectual tests found 40 separate factors, but no first or second order factor that could have been called global intelligence. Therefore, a differentiation among gifted persons at many levels of ability and personality must be made. The focus of much of the research has now been shifted from persons with gifted IQ scores to those persons who produce creatively in various areas of endeavor. Several studies have produced impressive evidence that creativity and IQ are only minimally related (Getzels and Jackson, 1962; Taylor, 1964). On the other hand it should not be forgotten that there may be other facets of gifted people equally as important as creativity, e.g., leadership.

Elizabeth Drews has been one of those investigators whose interest has been captured by the problem of the intellectually superior child. She believes that IQ tests do not

measure many of the dimensions which are intrinsic in the personality of the gifted (Drews, 1961). Drews asserted "Gifted Students have a greater range of interest, more depth of response, and even more internal contradictions and inconsistencies than other students" (1961, p. 48). In an attempt to depict some basic categorization among high IQ adolescents, Drews pragmatically developed 3 differing descriptions of the gifted as she believed they exist. These types were "The Studious" (ST), "The Social Leaders" (SLs), and "The Creative Intellectuals" (CIs).¹

Drews Student Profile Check (SPC) devised to separate the three aforementioned categories has been subjected by her to several attempts at validation. In one attempt at validation, Drews compared all subjects from samples of 10th, 11th, and 12th graders on Grade Point Average, critical thinking, dogmatism, rigidity, an item analysis of the scales on the Omnibus Personality Inventory, and on the Allport-Vernon-Lindzey study of values (Drews, 1961). The criteria for subjects on the above studies were an IQ of 120 or above on the California Mental Maturity Scale and superior reading ability on the California Reading Test, Advanced Level. However, Drews noted that some students below 120 IQ were used who had reading scores 2 years above their grade placement (Drews, 1961).

Based on the SPC and the findings of the other instruments used, Drews designed a 60 question, many parted Student

Interest Survey (SIS). After other unpublished studies had been conducted using the SPC and the SIS, a Revised SPC and a Revised 39 question multiple parted Student Interest Survey (SIS-V) were designed. This was done by using only those sentences which one group checked significantly more often ($p < .05$) than the other 2 groups on the SIS. The questions on the SIS and the sentences in the SPC deal with many areas of a teenager's life including his extracurricular activities, hobbies, social interests, future plans, character traits, attitudes, and all aspects of school life. The SPC yielded test-retest reliability estimates of $SL=.81$, $ST=.83$, $C=.91$ using tetrachoric r with an N of 106 in 1961 and 1962 (Drews, 1962). In 1962 and 1963 after correction for attenuation with the Spearman-Brown prophecy formula, the reliabilities were: $SL=.56$, $ST=.240$, $C=.40$ (Drews, 1962). Drews obtained information on the relative affect of the independent variables of socio-economic status, education and occupation of fathers and mothers, and position and number of children in the family.

Drews SPC and SIS seek to measure 3 different ability and attitudinal groupings found among the gifted using biographical items and self ratings. This type of scale has been found to be an efficient and accurate way of identifying creative people. Taylor (1964) stated that simple check lists

of background, preferred activities, experiences, goals, and kinds of desired attainments have produced validity (concurrent) even in cross validation from .30 to .55. Holland (1961) in a study using many varied measures to identify creative adolescents found that a list of hobbies and activities assumed to demand original behavior was the best single measure of creative performance ($r = .23$ to $.37$). Smith (1961) found that personal history questions correlated .52 with creative production of engineers (concurrent validity).

Two difficulties which every experimenter must face in this area are: (1) The complete absence of studies giving the predictive validity of various measures used to identify creativity. (2) Every test or scale devised to measure something must be related in some way to other scales that purport to measure the same or similar things.

Relationships between one scale and another like it are indicated in various ways, the relationships indicated here will be between findings of other studies ostensibly similar to the content of Drews' scales. Getzels and Jackson (1962) found creatives were not highly success oriented, their fantasies contained more wit and violence than a matched group of high IQ children and they had more diffuse and a greater number of goals in life. Holland (1961) found boys rated as creatives correlated from .37 to .15 with breadth of

interests, self ratings of originality and independence, and self ratings of complexity. Girls rated as creative correlated .43 to .16 with breadth of interests, complexity, self ratings of originality, sense of destiny, and self evaluation.

MacKinnon (1962) found that creatives had good opinions of themselves, were independent, individualistic, and enthusiastic. The creatives had many feminine interests, preferred being aware of things by intuition rather than by sense of perception, and were more concerned with meanings and implications. Taylor (1962) described creatives as having the capacity to be puzzled, the ability to sense ambiguities, broadly diffused attention, the ability to toy with ideas, and a need for variety.

Haggard (1957) found high achievers or studious 7th graders to be antagonistic to adults, low in originality, channelizing anxiety into intellectual activities, persistent and competitive. He also found that the high achievers were social leaders. Marks (1957) pointed out that high school girl leaders were significantly higher in science interests, athletic leadership, attractiveness, popularity, prestige, prominence and style setting. Boy leaders were significantly higher in social interests, acceptability, athletic leadership, popularity and prominence. Jarecky (1959) described socially gifted adolescents as policy makers, non defensive, stimulating production in others, gay, charming, and they were accepted by almost everyone they knew. He also found

that IQ and social giftedness correlated nearly zero. Getzels and Jackson's (1962) moral adolescents had higher achievement scores than their highly adjusted group. The adjusted group was more satisfied with school and people in it than the moral group. The moral group was sensitive, felt rejected, had superficial values, saw learning as personal fulfillment, and were annoyed with teachers who were too easy. The adjusted adolescents were active and outgoing, accepted people as they found them, and really enjoyed people.

Instead of using a criteria of creativity the present research used parent raising attitudes as a type of construct validity (Cronbach and Meehl, 1955) of the SIS and the SPC. Sears, Maccoby and Levin (1952) stated that even a small correlation between child personality and child raising attitudes is good evidence for a true relationship because of the plethora of other conditions existing that also shape child personality.

There are a few studies which also give some specific results concerning parental attitudes and the development of creativity, or leadership, or studiousness. Taylor (1964) reported that parental attitudes are a poor predictor of creativity. Getzels and Jackson (1962) insisted that mothers of high IQ children as opposed to mothers of creative children showed greater conformity to conventional standards, greater child centeredness, greater pressure on the child to do well

scholastically, were more insecure, and were less accepting of children. MacKinnon (1962) asserted that parents of creative children had great respect for their children and confidence in their ability to do what was appropriate. There was a lack of closeness with one of both parents, discipline was consistent and predictable, personal ethical codes were stressed rather than formal religious ties, and there was a lack of strong pressure towards a particular career. Barr (1957) discovered that high school leaders were given many work assignments in and out of home, shared in family planning and discussion, attended church regularly with parents, and didn't prefer quiet sedentary activities. Davis (1947) in talking about middle class socialization sounded as if he might be describing parents of studious children. He stated that middle class society stressed care and pride in property, stressed careful child training with emphasis upon renunciation and sacrifice for future gains, long and arduous education, and has placed marked emphasis on attainments through institutionalized procedures.

Statement of Problem and Procedure

If child rearing attitudes are of importance in the child's development of creative, studious, or leadership attitudes, then each grouping of children and their parents have separate patterns of child rearing attitudes.

In order to find if attitudinal differences do exist among the groupings, a scoring system for the SIS has been developed. This allowed an examination of the usefulness and adequacy of each of the three scales. There was also some scrutiny of the evidence as to which of the two interest surveys was most valid.

Since many other variables might have had an effect on scale choice such elements as child's IQ, parents educational level (EL), socioeconomic status (SES), ages of parents and children, number of children in the family, the position of the child in the family, and the sex ratio were investigated.

It was also possible to compare the results of the two different child rearing attitudinal scales used. This comparison gave some idea as to what type of scale is more likely to be useful when dealing with the types of groupings mentioned above.

CHAPTER II

METHOD

Subjects

Eighty-one ninth grade Caucasian boys and girls with an IQ of 115 or above on the Otis Quick Scoring Mental Ability Test, New Edition, Beta Form (Otis) were selected by the school psychologist at Wilson Junior High School, Berks County, Pennsylvania. This IQ level was chosen as the dividing line between gifted and non-gifted "intelligence." All of the students who met this criterion IQ were chosen from a ninth grade population of 325. After being contacted by a letter from the school psychologist, sixty-one father-mother-child family units were eventually able to be utilized which constituted 75% of the family units contacted.²

Since this was to be an exploratory study there were few restrictions placed on the use of subjects for the study. The only requirement for a parent to be used was that he or she had to fill out the majority of the questions on one of the two child rearing attitudinal scales. The requirements for the children were the same on the attitudinal scales, but they also had to fill out the SIS and SPC with relative completeness. There were three fathers missing

completely: one being deceased, one separated from his family, and one divorced from the wife. There were seven families which had divorced, separated, and/or widowed parents. In four of these there had been remarriages. The total sample was comprised of 37 girls and 24 boys, and their 61 mothers and 58 fathers.

The criterion IQ was decided upon to approximate as nearly as possible Drews' samples as to intelligence level. All but two of the students participating in the study were tested in the Spring of 1962 when they were in the 8th grade. The Otis correlates highly with other group and individual intelligence tests such as the ACE, $r = .85$ (North, 1958), The Stanford-Binet, $r = .60$ (Roberts, 1961). The Otis, Beta form, has a split-half reliability of .93 (North, 1956). The reason for choosing an IQ of 115 rather than 120 which was Drews' criterion IQ can be explained by the characteristics of the Otis. As several studies have found (Roberts, 1961 and North, 1958), the Otis tends to underestimate IQ, especially approaching its ceiling, by an average of from 6 to 15 points. In almost no cases does it overestimate intelligence. Therefore, those 19 cases below an IQ of 119 on the Otis probably exceed an IQ of 119 on most other tests. The two cases not tested by the Otis had received the California Test of Mental Maturity, 1957s-form (CTMM) at other schools in the eighth grade. The CTMM correlates highly with the WISC (Altus, 1955), and the Stanford-Binet (Sheldon and Manolakes, 1954).

These students were all well above their grade level in reading achievement, averaging better than an eleventh grade reading level. Their parents were above the national average in socio-economic status (SES); SES = 3.27 compared to a 5.21 national average using U. S. census data of ten occupation levels as an index of SES. Lawson and Boeck (1960) said that the father's occupational status is as good an index of social class as any combination of other measures. In this method the highest rating was 0 (professional and technical) and the lowest was 9 (nonfarm laborer) (U. S. Bureau of Census Abstract, 1963). Educational Level (EL) for both mothers and fathers averaged better than a high school education, whereas the national averages for white adults was only a tenth grade education. However, these parents were at about the median of parents of ninth graders at Wilson Jr. High School in SES and EL. The families were larger than the average U. S. family (4.56 members in the groups to 3.65 members for the national average) (U. S. Bureau of the Census, 1950). The divorce rates for both mothers and fathers were slightly higher than the national average; whereas, the separation and widowed rates were somewhat lower. Comparing the groups, it was found that 15.2% of the 33-SLs came from broken homes, 10.5% of the 19-ST came from broken homes and 0% of the 9-CIs came from broken homes. These family units were exceptional also in the per cent participating in the study voluntarily through

the mails. A comparison would be a recent study done by Hurley (1964) in which 20% of those contacted took part as compared to 75% in this study; therefore, not quite as much of a problem was presented in the present study as to the structure of those who did not take part in the study.

By definition, the children in these family units were exceptional in IQ. Table 1 indicates the differences in IQ among the means of the three groupings, the means of boys and girls over all groupings, and the means of boys and girls intra-grouping. In all these comparisons there were only two significant differences. The CIs had significantly higher mean IQs than SLs and ST.

On the other hand, Table 1 also shows that the variances between SLs and CIs were quite different. An F max. test using these two variances showed that they were approaching heterogeneity of variance ($F \text{ max.} = 2.22; p. > .05$). An examination of the variances showed that the variance of CIs was much larger than those of the other two groupings. This could, however, have been the result of the one extreme score in this grouping coupled with the small sample size. Inspection of the variances for boys and girls, and boys and girls within groups, revealed that heterogeneity of variance existed between boys and girls over all groupings, and between ST boys and girls, and between CI boys and girls. The boys had significantly higher variances in each case, but the same caution applied, namely that there were one or two extreme

TABLE 1.--Comparisons Among the Mean IQ of the Three Groups, the Mean IQ of Boys and Girls Over All Groups, and Mean IQ of Boys and Girls Intra Group. Variances and N's Given in Each Case.

		\bar{x}	s^2	N	t-test values		
					SL-ST	SL-CI	ST-CI
Groups	SL	120.33	22.94	33	1.82*	2.95***	1.34
	ST	122.95	31.06	19			
	CI	126.22	51.00	9			
					B-G		
Sex	Boys	122.42	49.83	24			
	Girls	121.95	22.11	37	.29		
					SL	ST	CI
Sex With- in Group	SL Boys	119.36	19.60	11	B-G	B-G	B-G
	SL Girls	121.14	24.14	22	1.00	.26	.69
	ST Boys	123.38	48.71	8			
	ST Girls	122.64	21.80	11			
	CI Boys	127.60	90.00	5			
	CI Girls	124.50	9.33	4			

* p < .10 by the two-tailed test.

*** p < .01 by the two-tailed test.

NOTE: For t tests with heterogeneity of variance, Welch's Correction for df should be applied; however, the t values where this applied did not approach statistical significance, so Welch's correction was not used.

scores coupled with very small sample sizes. However, it does appear that gifted boys showed significantly greater variance in IQ scores than gifted girls.

As EL and SES have been found to be important variables in attitudes concerning child raising (Miller and Swanson, 1960), IQ (Kagan and Freeman, 1963; Burchinal, 1959; Haller and Thomas, 1962), and Creativity studies (Reid, 1959), it was necessary to find the influence of those variables in the present study. Table 2 discloses comparisons among all the groups on fathers' education, mothers' education, fathers' occupation (SES), and mothers' occupation. Appendices A-1 and A-2 give the categories of EL and SES used in this study along with the score for each category and the numbers of each criterion grouping in every category. Only in fathers' education was there a significant difference with the CIs' fathers having significantly more education than the SLs' fathers and ST' fathers. The groups were also compared on mothers' occupation which was divided into housewife, part-time working, and full-time working. A Chi-Square test of the frequencies found no significant differences.

Further comparisons were made between the ages of fathers and mothers intra-and inter-grouping, of children's ages among the groupings, of the sex ratio in each grouping, of the position of the child in the family (only, youngest, middle, and oldest) among the groupings, and of the number

Ca

—

Ca

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Pa

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Mo

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SES

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Mo

—

Mo

TABLE 2.--Comparisons of the Three Groups on Fathers' EL and SES, Mothers' EL, and Mothers' Occupations.

Category	Group	\bar{X}	s^2	N	t-test values		
					SL-ST	SL-CI	ST-CI
Father EL	SL	4.53	1.59	53	.83	2.08**	2.29**
	ST	4.22	2.22	18			
	CI	5.55	2.00	9			
Mother EL	SL	4.36	1.25	33	.03	.54	.49
	ST	4.37	1.39	19			
	CI	4.11	2.50	9			
SES	SL	3.39	7.69	33	.17	.50	.37
	ST	3.22	4.24	18			
	CI	2.89	5.50	9			
Mother Occ.	SL	5.73	5.78	33	.85	.55	1.00
	ST	5.11	8.56	19			
	CI	6.22	5.50	9			

** $p < .05$ using the two-tailed test.

of children in each family among the groupings. No significant differences were found in any of the comparisons.

Procedure for Testing

The letter sent to the 81 families whose children met the criterion IQ had an attachment to be filled out and turned into the school psychologist, if the student and his or her mother and father wished to volunteer to take part in the study. The full text of the letter is given in Appendix B-1. Another letter was then sent to those 68 families who had volunteered for the project; along with the letter was sent one copy of the Stanford Parent Questionnaire, M. S. U. form (SPQ), and the Child Relations Inventory (CRI), for each parent. Appendix B-2 illustrates the exact details of this letter. The parents were asked to have their questionnaires completed by the time the children were to be tested. Only seven fathers and six mothers returned their questionnaires after the children had been tested. Both fathers' and mothers' child rearing attitudes were used in the research since several studies have found that fathers' attitudes were also necessary to account for child personality (Eron, Banta, Walder, Laulicht, 1961; and Hoffman, 1961).

Appendix C shows the complete instructions to the children on the day of testing. To avoid any fatigue and order effects on any one or more questionnaire, the questionnaires were handed out in groups of four with sex also considered. Each boy and each girl in one of the same sex groups

of four were given a different questionnaire. The first person in each group received the SPC, the second person received the SIS, the third person was given the CRI, and the fourth person was handed the SPQ. The instructions for filling out the child raising attitude inventories appear to the writer to have elicited more nearly the child's attitudes rather than some mixture of parental attitudes, social mores, and their own ideas. This confusion would apparently have been elicited if the instructions were that the children should answer as they think their parents would. The first person finished took 1 1/2 hours and the last person finished took 2 3/4 hours. Those children who were not present on the day for group testing were sent all four questionnaires with copies of the above instructions. They each were instructed as to the order in which the questionnaires were to be completed. All questionnaires were returned within 1 month of the group testing. The child rearing attitudes of the children have been measured as an aid in differentiating the groupings, to see how closely they approximate their parents' attitudes, and to see if there are differences among the groupings in their relationships to their parents' attitudes.

SIS and SPC

Both the SIS and the SPC were administered to the ninth graders involved in the study with the belief that the SIS would prove to be the better instrument in

classifying the groups. Since the SIS had never been used to discriminate among the groups a valid and reliable technique for this purpose had to be evolved. The reasons for the SIS's use were the poor consistency of test-retest reliability coefficients with the SPC (Drews, 1962, and 1963) along with the experimenter's believe that such an overly simplified technique as the SPC could lead to grave errors in classification.

The division into the three criterion groups was easily accomplished with the SPC. The number of checks in each category was the number of people in that category. However, the grouping with the SIS was more complicated. Since there were disparate number of questions for each category (SL-24, ST-18, CI-31) some new means of comparing scales by weighting total scores was needed. The simplest method was utilized in which each scale was weighted inversely to its number of questions (SL= .32, ST= .43, CI= .25). There may be more accurate ways of separating the groups, e.g., some method of multiple regression, but the method used in this study does appear to be the most efficient in terms of accuracy versus time spent. After the weights for each person's score on each scale were obtained, the person was assigned to the group on which he obtained the highest weighted score whether it was by one weighted point or more. There was only one tie between an SL and an ST score which was decided arbitrarily in favor of the SL scale since that had

the highest raw score. The SIS separated the groups with 33 SLs, 19 ST, and 9 CIs, the SPC give 18 SLs, 24 ST, and 19 CIs.

Neither method of grouping gifted students closely approximated Drews' findings. Drews found 10 to 24% SL whereas the SIS separated 54% SL and the SPC yielded 30% SL. Drews found 54 to 63% ST, where the SIS and the SPC showed 31% and 40% respectively. Drews found 18 to 24% C, but the SIS and the SPC gave 15% and 30% respectively. Appendix D-1 gives a complete copy of the SIS and Appendix D-2 shows the SPC.

Child Relations Inventory

The Child Relations Inventory (CRI) is a scale of 55 items following the general format of the Shoben Scale (Hurley, 1962). It uses rather general items pertaining to child rearing practices. The first thirty items are a scale called the Manifest Rejection (MR) index which measures the likelihood of parents endorsing a "tough" disciplinary policy toward their children. Items 30 to 40 and 51 to 55 are labeled Achievement Pressure (AP) questions which show the parents' tendency to use force of various kinds to elicit middle class achievement behavior. Items 41 to 50 constitute the Overprotection (OP) scale. These items measure the tendency for parents to resist cutting the "cord" between them and their children. This test is more or less

rationally based rather than making use of some statistical outcome such as factor analysis as a basis for its composition. The (MR) index utilized a variation of the "reversed subscales" procedure shown effective in restraining the influence of the acquiescence (Zuckerman, 1959) and social desirability (Taylor, 1962) response sets. The AP and the OP scales did not use the "reversed subscales" procedure. All questions except one must be agreed with to score high on AP. All OP questions must be disagreed with to score high on OP. A minimum of instructions are given. The subjects are told there are no right or wrong answers and that they should circle the answer which best represents their own view and opinion. Mothers, fathers, boys and girls answered this questionnaire. The choice of answers were modified from Hurley's original form to accommodate the use of a computer. The category, neither agrees nor disagrees, was dropped leaving strongly agree (SA), agree (A), disagree (D), and strongly disagree (SD). The rationale for this type of questionnaire is given by Shoben (1949). Appendix E contains a complete copy of the test.

Hurley (1962) found a highly inverse relationship between AP scores of the parents of college students and grades. Hurley (1964) found that IQ scores of teenage children were inversely related to the rejection scores of their parents. These two studies partially validate the MR and AP scales of the CRI.

Stanford Parent Questionnaire

The Stanford Parent Questionnaire (Form M. S. U.) (SPQ) was developed by Winder and Rau (1962). It is a scale with a form of 302 items for mothers and one of 315 items for fathers. It attempts to use items concerned with relatively specific situations, actions, feelings, and attitudes; and to organize such items into scales according to existing information on the dimensions of child rearing practices and attitudes. The choice of variables was partly based on previous studies of parental antecedents of various child behaviors. Thus Winder and Rau believe that findings of predicted relationships between the SPQ and aspects of child behavior would be the primary basis in which to evaluate the meaningfulness and validity of the scales. The selection of items for retention in this revised version of the original scale was based purely on their internal consistency with the scale to which they were originally assigned. Every item included correlated at least .30 with its total score from an administration to a sample of 108 fathers and 118 mothers of preadolescent boys.

It was suggested by the developers of this scale that possibly different scales for each age group, sex, and subculture might have to be developed. In this study adolescent boys and their fathers were administered the SPQ (fathers form) and adolescent girls and their mothers were administered the SPQ (mothers form). Since the scales were developed

for preadolescent boys there might have been some error introduced in its use with adolescent boys and girls. However, the questionnaire seemed to lend itself well enough to extension with the groups mentioned so that little is lost and possibly much is gained by its use.

Six main scales were developed and each of these main scales was broken into from 3 to 7 subscales. The six main scales are ambivalence, strictness, aggression and punitiveness, parental adjustment, models, and mastery. In the order given above the reliabilities using the Kuder-Richardson internal consistency formula are: mother (M)= .63 and father (F)= .67, M= .86 and F= .89, M= .73 and F= .70, M= .69 and F= .72, M= .48 and F= .61, M= .87 and F= .85. Since these questionnaires were to be answered by adolescents it was thought better to drop 15 questions from the mothers form and 17 questions from the fathers form pertaining to sexual matters. This left 298 questions on the fathers form of the SPQ and 287 questions on the mothers form of the SPQ. All of the questions cut out were in the subscale "sex anxiety" except for one each on the fathers and mothers forms which were in the "punitiveness and physical punishment" subscale. One other question from the mothers forms was in the "self-esteem" subscale and two questions from the fathers forms were in the "positive father-mother relation" subscale. The questions on the test were concerned only with boys, but there were boys and girls in the sample; therefore, the words

her, she, or daughter were inserted within parentheses after each masculine counterpart of those words. The different questions of the subscales are generally fairly well scattered throughout the entire test.

The subject is asked to indicate by a check mark the extent to which each item is characteristic of his own attitudes and behavior by selecting one of four alternatives—strongly agree (SA), agree (A), disagree (D), and strongly disagree (SD). The subjects are asked to mark every statement even though some might not appear to pertain to them. The person is asked to respond with a particular child in mind. Each individual is asked not to think too long about any one question. A copy of both the mothers and fathers questionnaire is in Appendix F-1 and F-2.

Rau, in two unpublished papers has carried out factor analyses of the father and mother questionnaires using the Kaiser-Varimax rotation. The two main factors used in the present study for both fathers and mothers were positive demands for self sufficiency (SS) and acceptance-rejection (R). Only those subscales which loaded .60 or higher on the factors were used. The subscales used in mothers' positive demands for self-sufficiency were: rewarding independence, achievement standards, reasoning, consistency, contingent reward, and democracy. The subscales used in mothers' and fathers' acceptance-rejection were rejection, self-esteem, and inconsistency. The subscales used in

fathers' positive demands for self-sufficiency were the same as the mothers' except inconsistency was substituted for affection demonstrated. These particular factors were chosen because they appeared to be somewhat like Hurley's (CRI) AP and MR scales.

Winder and Rau (1962) predicted aggression and made associations with types of aggression and parental attitudes using the SPQ with parents of preadolescent boys.

Statistical Analyses

Two separate statistical methods were used to analyze the results in this study. It had been hoped that the major method of analysis would be a pattern analytic method-Multiple Agreement Analysis (MAA). MAA should have grouped those people together who had identical responses on one or more questions in the CRI and SPQ. In this way the three classifications obtained by use of the SIS could have been independently validated. If the SIS was a valid instrument, a statistically significant number of people in each category should have been grouped together as opposed to groupings consisting of mixed categories when the Chi-Square technique was applied. For a further rationale of MAA and pattern analytic techniques see Appendix G-1.

Since the SPQ has a form for mothers and another for fathers it was necessary to analyze boys and fathers separately from girls and mothers when the SPQ and CRI responses were

analyzed together. When the CRI responses were considered alone, mothers, fathers, boys and girls could be analyzed together. This permitted three separate, though not mutually exclusive, analyses of the data.

Unfortunately a faulty computer program produced only small subject classes who agreed on large numbers of items rather than large subject classes who agreed on a relatively few items. The subject classes were, therefore, too small since it had been hoped that most of the persons who fell into each one of the three groupings (SL, ST, CI) would agree with each other on at least a few questions. In fact most of the results were in the form of pairs of persons who agreed on large numbers of items. To take advantage of this, the number of pairs of SLs, ST, and CIs as well as cross pairings were counted, with parents of the children in any one grouping simply being counted as part of that grouping. Chi-Squares were computed in order to find if persons in the same grouping agreed significantly more often than those of cross groupings. A rationale for this is given by McQuitty (1957a) who stated that the smaller a grouping the more valid it was found to be, although it was not as reliable as the larger classes. Appendix G-2 gives a fuller discussion of the method used to handle MAA results.

On the other hand counting agreement pairs leaves room for criticism on a statistical basis since only .01 to .03 of the possible pairs occurred. Therefore, the argument

could be raised that any combination of paired agreements could occur by chance alone. The counter argument to this would be that it is not just pairs of persons agreeing on one item that are counted, but pairs of persons agreeing on many items with the smallest number of items used being statistically significant. (See Appendix G-2)

However, a supplementary analysis was thought to be adviseable for the reasons given above. A group within treatments analysis of variance was utilized, of which the simplified form is given by Lindquist (1956). The CRI and SPQ scales were used as the criterion variables. The main point of interest in these analyses was the overall significant differences among the groups on each of the criterion variables. With this design some further results were also compared, i.e., sex differences, differences among fathers, mothers, boys, and girls, and the observation as to which criterion variables appeared to be the most valuable for this research.

The .10 level of statistical confidence was chosen for all analyses since it was believed that any differences achieving or bettering this probability level would reflect findings which were meaningful in view of both the limitations of the measuring devices and the relatively small subgroups utilized.

CHAPTER III

RESULTS

Reliability and Correlation of the Three Groupings

It would seem that each of the scales did possess sufficient homogeneity, as measured by the Kuder-Richardson internal consistency formula, to be useful for the purposes of this study (SL= .77, N= 24; ST= .56, N= 18; CI= .69, N= 31).

Pearson product-moment correlations among the three sets of RSIS scales are shown in Table 3. Since the questions for all three scales were answered as though they comprised one scale it was decided to partial out the affect of each scale on the relationship between the other two. Table 3 also presents these partial correlations. The highly significant and negative relationships between SL and CI, and SL and ST would apparently indicate that these scales were approaching the opposite ends of two independent continua. The scales ST and CI were not significantly correlated and apparently reflect attitudes which are not appreciably related.

TABLE 3.--Pearson Product-Moment Correlations of the Three RSIS Scales and Partial Correlations Holding Out Each Scales Effects on the Other Two. (N=61).

Groupings	Pearson Product-Moment Correlation	Partial Correlation
	<u>r</u>	<u>r</u>
SL vs ST	-.32**	-.38***
SL vs CI	-.53***	-.55***
ST vs CI	.00	-.21

** p<.05 using the two-tailed test.

*** p<.01 using the two-tailed test.

Child Rearing Attitudes

1. MAA Findings.--Table 4 shows the results of the Chi-Square tests using the frequencies of intra-and inter-group (SL-SL, ST-ST, CI-CI,SL-ST, SL-CI,ST-C) agreement by the three sets of MAA results separated by the SIS.³ The frequencies for the three sets of SIS groupings were all significant at better than the .001 level. This would indicate that the three sets of intra-group agreements and inter-group agreements occurred significantly more often and less often, respectively, than could be accounted for by chance. (Appendices H-1 to H-6 report the number of pairs of agreements by fathers and sons on the SPQ and CRI, by mothers and daughters on the SPQ and CRI, and by parents and children on the CRI.)

A more detailed analyses of the SIS intra-group agreements (SL-SL, ST-ST, CI-CI) which were of main interest, was given in terms of binomial probabilities and showed that only one out of nine intra-group agreements in the RSIS sets was non-significant and this would have been significant if only one more pair of CI-CI had been found in the mother-daughter set.⁴ The findings support the belief that the separate RSIS groupings do have different child rearing attitudes.

2. Analysis of Variance Findings.--Table 5 presents the results of an analysis of variance which indicated differences across the groupings (including parents and

TABLE 4.--Number of Paired Agreements by Fathers and Sons; Mothers and Daughters; Mothers, Fathers, Sons, and Daughters on the SPQ and CRI as Separated by the SIS and SPC.

SPQ and CRI		CRI	
SIS			
Agreements	Fathers & Sons X	Mothers & Daughters X	Mothers, Fathers, Sons and Daughters X
SL-SL	25	49	91
ST-ST	12	15	28
CI-CI	5	3	9

SL-ST	30	28	85
ST-CI	8	10	26
SL-CI	22	15	3
χ^2	42.88	75.09	108.59
p	.001	.001	.001

SPC			
SL-SL	8	24	23
ST-ST	17	16	36
CI-CI	19	11	30

SL-ST	15	23	59
ST-CI	23	24	66
SL-CI	20	22	59
χ^2	35.09	57.11	29.13
p	.001	.001	.001

NOTE: The agreements do not indicate agreements within the same family since this occurred only in a few cases.

TABLE 6.--Analysis of Variance of Child Bearing Attitudes of Mothers, Fathers, Sons, and Daughters as Grouped by RSIS and RPSIS on the Scales of the ORI.

Source of Variation	Degrees of Freedom				Mean Square				F		
	MR	AF	OP	AI (RSIS)	MR	AF	OF	AI (RPSIS)	MR	AI	OF (RPSIS)
Groupings (G)	2	2	2	6	713.89	371.67	123.13	333.79	6.69 ^d	5.69 ^d	6.17 ^d
Family Units Within Groups (FU _{WG})	2	3	3	3	153.23	55.98	33.86	113.38	1.52	.81	1.21
Family members wFU _{WG} (FM _W FU _{WG})	12	12	12	12	93.45	134.60	13.45	122.11	.73	2.65 ^b	.67
Ss _{FM_WFU_{WG}}	119	117	157	117	113.94	65.25	20.23	64.87			
TOTAL	176	174	174	173							
FM _W Groups (FM _W G)	6	6	6	6	136.64	247.94	84.69	141.39	1.15	3.3 ^e	1.17

aa = p<.10; a = p<.05; b = p<.01; c = p<.01; d = p<.005; e = p<.01

NOTE: The family units are separated into FU of boys and FU of girls. FM_WG is a separate analysis of variance with boys and girls families not considered separately.

children within each grouping) of the SIS significant at the .005 level on the MR, AP, and OP scales of the CRI. Individual comparisons among the means of the SIS groupings, as described in Table 6, show that SLs had significantly higher manifest rejection scores (MR) than ST, that ST had significantly higher overprotection (OP) scores than SLs, and that SLs and ST had significantly higher achievement pressure (AP) scores than CIs.

Appendices I-1 and I-2 give the entire analysis of variance with all the sub-classifications entered, as well as the means of all types of family members on each of the CRI scales. Significant differences were noted on the AP (SIS) scale across family members within groupings (SL fathers, SL mothers, SL daughters, SL sons; etc.), and across family members within family units within groupings (SL fathers, SL mothers, SL sons; etc.). A further breakdown showed significant differences across fathers, mothers, and daughters within the SL and ST groupings on the AP scale. Finally, individual comparisons of these last results showed that SL daughters were significantly higher in AP scores than their mothers at the .05 level. In the ST grouping both fathers and daughters were significantly higher in their AP scores than mothers at the .01 level. There were no significant differences among fathers, mothers, and daughters on the CI groupings.

TABLE 6.--Mean Scores of All SIS and SPC Groupings on CRI Scales.

		MR	AP	OP
		\bar{X}	\bar{X}	\bar{X}
SIS Grouping	SL	58.30	33.76	16.70
	ST	64.74	32.59	19.40
	CI	60	27.81	17.67
SPC Grouping	SL		34.90	
	ST		30.91	
	CI		32.13	

Table 7 reviews the analysis of variance of all subjects' child rearing attitudes on the SPQ with SIS groupings. Since only females filled out the SPQ, mothers form, and males the SPQ, fathers form, all mothers in the same grouping, whether mothers of boys or girls, were analyzed together, just as all

TABLE 7. Analysis of Variance of Child Rearing Attitudes of Mothers and Daughters, fathers and sons as grouped by the SLS on two main factors of the SPQ.

Source of Variation	Degrees of freedom						Mean Square			F		
	M & D		F & S		M & D		F & S		M & D		F & S	
	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R
Groupings (G)	2	2	2	2	11.76	424.63	142.52	554.17	.05 ^d	2.76 ^a	.38	3.02 ^a
Family members within G (FM _w G)	6	6	6	6	232.02	285.70	173.88	373.82	.88	1.95 ^a	.46	2.04
Ss _w FW _w G	88	88	73	73	254.19	146.43	378.00	183.58				
TOTAL	96	96	81	81								

a = $p < .10$; b = $p < .05$; c = $p < .025$; d = $p > .05$.

NOTE: Since only women could complete one form of the SPQ and men the other, family units are broken up, i.e., mothers and girls SL are analyzed with mothers of boy SL.

fathers in the same grouping were analyzed together. By inspection of the means this breaking up of family units did not appear to have changed the results appreciably as Appendix J-2 illustrates. Depicted in Table 7, the rejection (R) factor for mothers and daughters, and fathers and sons when compared across groupings was significant at the .10 level. There were some significant differences across family members within the groupings, but they did not appear to add much information of use. Individual comparisons of the means, as shown in Table 8, of the groupings showed that SLs were significantly higher than CIs for fathers and sons, and for mothers and daughters at the .05 level.

Appendices J-1 and J-2 give the complete analysis of variance with all the sub-classes, as well as, the means of all groups of family members on each of the SPQ factors.

SIS Versus SPC Groupings

Evidence for the belief that the SIS and the SPC are independent instruments which at least separate the groups quite differently was supported by inspection of the frequencies in the various categories as separated by the SIS and SPC and shown in Table 9.

Evidence that the SIS produces more valid groupings than the SPC may be found in the MAA results. The

TABLE 8.--Mean Scores of All SIS Groupings on SPQ Factors.

		SS		R	
		Male	Female	Male	Female
		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
RSIS Groups	SL	148.10	124.93	57.33	62.44
	ST	152.31	124.43	54.38	58.03
	CI	149.79	123.42	47.07	54.67

TABLE 9.---Comparison of SIS and SPC Groupings.

Inventory	Grouping	S I S			Total
		SL-SIS	ST-SIS	CI-SIS	
SPC	SL-SPC	15	3	0	18
	ST-SPC	8	12	4	24
	CI-SPC	10	4	5	19
TOTAL		33	19	9	61

Chi-Square values of the three sets of SIS and SPC groupings were all significant at better than the .001 level as Table 4 shows. However, none of the corresponding SPC values reached as high a level of confidence as the SIS values (SIS values--42.88, 75.09, 108.59; SPC values--35.09, 57.11, 29.13). Comparing the binomial approximations to the normal curve, there were two non-significant intra-group agreements on the SPC out of nine but only one out of nine for the SIS. Totaling non-significant intra- and inter-group agreements, there were four non significant binomials out of 18 on the SIS, but seven out of 18 on the SPC. Also, examining the levels of significance of the binomials, six SIS intra-group agreements and five SIS inter-group agreements that were significant at better than the .01 level were found. Whereas, there were only five SPC intra-group agreements and one SPC inter-group agreement that were significant at better than the .01 level.

The analysis of variance findings add to the evidence given above. The AP scale was the only CRI scale analyzed for the SPC groupings with the analysis of variance as Table 5 portrays. Significant differences across groupings at the .05 level were found. The results from the analysis of variance were much the same as those found using MAA in which groupings were significantly different but not nearly as great as the SIS groupings which were significant at the

.005 level. Individual comparisons of the mean scores of the SPC groupings on the AP scale as given in Table 6 indicated that SLs were significantly higher than the ST at the .05 level with the CIs' mean falling between SL and ST. With the SIS groupings on the AP scale, SLs and ST were both significantly higher than CIs by nearly the same amount.

Independent Variables

Since the CIs' mean IQ was significantly higher than the SLs' mean IQ as Table 1 points out, this variable and its affect on group preference were investigated further. A Pearson product-moment correlation was computed between IQ and every person's score on each scale. Table 10 reveals that generally the higher a gifted student's IQ, the lower was his score on the SL scale. However, the higher a gifted student's IQ, the higher was his CI scale score. Thirdly, there was no relationship between ST scale score and IQ. In the gifted population it would seem that those students with the highest IQ would tend to be CI and those with the lowest IQ would lean toward the SL grouping. Nevertheless, much of the variance is still left unaccounted.

The educational level (EL) of CI fathers was significantly higher than the EL of SL and CI fathers, as Table 2 demonstrates. Therefore, EL of fathers and mothers was correlated with each person's highest scale score (the score which entered him into one of the three groups).

TABLE 10.--Pearson Product-Moment Correlations Between IQ and Scores on Each Scale for Every Person. (N's given in parenthesis)

SL vs IQ	ST vs IQ	CI vs IQ
-.38***	-.03	.30**
(61)	(61)	(61)

**Using a two-tailed test, $p < .05$.

***Using a two-tailed test, $p < .01$.

The results as displayed in Table 11-A show that EL of ST fathers and EL of CI parents was significantly and negatively correlated with ST and CI scores; EL of ST mothers was significantly and positively correlated with ST scale scores. To follow this further, EL of fathers and mothers and correlated with socioeconomic status (SES) and both were significantly related at the .01 level as Table 11-B illustrates. Then SES was correlated with each person's highest scale score and no significant relationships were found. Finally SES and EL of fathers and mothers was correlated with IQ, but as Table 11-C demonstrates the relationships were not significantly different from 0. The inference follows from these results that SES does not have much of an affect on grouping (SL, ST, CI) or on IQ. The same could be said for EL and IQ; however, EL of parents and grouping scores appear to have some interesting possibilities for further study.

TABLE 11-A.--Pearson Product-Moment Correlation Between EL
of Parents and Child's Highest Scale Score.
(N's in parenthesis)

		EL (fathers)		EL (mothers)	
Child's	SL	.21	(33)	.19	(33)
Highest	ST	-.49**	(18)	.44*	(19)
Scale Score	CI	-.60*	(9)	-.65*	(9)

*p .10 using the two-tailed test.

**p .05 using the two tailed test.

TABLE 11-B.--Pearson Product-Moment Correlation Between SES
and Child's Highest Scale Score, and SES and EL of Parents.
(N's in Parenthesis)

		SES	SES vs EL (fathers)	SES vs EL (mothers)
Child's	SL	.02 (33)		
Highest	ST	.14 (18)	.66*** (60)	.40*** (61)
Scale Score	CI	-.33 (9)		

***p<.01 using the two-tailed test.

TABLE 11-C.--Pearson Product-Moment Correlation Between IQ
and SES, and IQ and EL of parents. (N's in parenthesis).

IQ vs EL (father)		IQ vs EL (mothers)		IQ vs SES	
-.20 (60)		.11 (61)		-.01 (61)	

CHAPTER IV

DISCUSSION

Validity of the Scales

The present study would appear to give impetus to the idea that Drews' three scales give some useful information about gifted ninth grade students. The partial correlations between the scales indicated that two independent continua were formed ($r_{SL-CI \cdot ST} = -.55$; $r_{STSL \cdot CI} = -.38$), and that two of the scales were not related ($r_{ST-CI \cdot SL} = -.21$). From these partial correlations it would seem that generally an attitude tapped by the SIS and agreed with by a CI or a ST would be disagreed with by a SL and vice versa. Even the ST and CI scales might form a continuum if their sample size were larger since the correlation is approaching significance in that direction. These findings uphold Drews' (1961) contentions that gifted students can be meaningfully separated into three groupings with differential attitudes and behaviors. Drews' method of selecting questions by using only those agreed with by one grouping significantly more often than the other two groups ($p < .05$) would presuppose continua of attitudes. However, the results of the correlations shown above were the first evidence that continua of attitudes such as those inferred would be found by the use of the SIS.

The effect of the SL scale on the ST-CI correlation could be explained as the tendency for both ST and CI students to agree on certain questions on the SL scale with which most ninth grade children agree. If they did not agree on those questions they would probably be similar to Drews' group "the rebels" whose representation is undoubtedly small in this sample as it was in hers (Drews, 1961).

As mentioned earlier a problem almost inherent in this type of research is the question as to the similarity of the groupings used by various investigators. Neither very high correlation coefficients among scales nor factor analyses of the questions in the scales solve this problem sufficiently well. Both of these statistical methods used alone might miss the attitudes of central importance to the behavior in question. Therefore, instead of finding how much similar tests are related or finding common factor in lists of questions, this study has related two independent attitude systems (child rearing attitudes and grouping attitudes). The writer believes that the highly favorable results from such diverse techniques and criteria support this linkage, thereby partially validating the child rearing attitudinal scales with significant findings and the SIS. These findings do not take the place of other types of validity, but simply supplement them. These present results should only be one link in the chain relating the fore-mentioned attitudes to behavior. This would appear to be similar to what Cronbach and Meehl (1955, p. 294) had in mind

when they stated, "The system (of construct validity) involves propositions relating test to construct, construct to other construct, and finally relating some of these constructs to observables."

Child Rearing Attitudes

The results present powerful support for the general contention that each SIS grouping of children and their parents have separate patterns of child rearing attitudes. These findings are upheld across two statistical techniques (MAA and analysis of variance) and across multiple criteria (CRI-AP, MR, and OP scales and SPQ-R factor). However, this type of correlational study does not lend itself well to the proving of causality. There are at least four possibilities that could be adduced for the results found.

1. Identifiable patterns of child rearing attitudes cause the three types of attitudes in high IQ children described in this study (SL, ST, CI).

2. The attitudes displayed by the three types of children produce differential patterns of child rearing attitudes in the parents.

3. Some interaction of parent's child rearing attitudes and the child's early behavior and attitudes occur causing the later attitudes to crystallize in the form identified.

4. Variables such as IQ and parents' EL along with others not discovered factors are of main importance in forming the SL, ST, and CI constellations.

The present study does not directly support anyone of these possibilities. It seems likely that some combination of possibilities "3" and "4" are of chief importance with parents' child rearing attitudes acting as an organizer for many other variables. The "interaction possibility" is indirectly supported by the high significance level reached in the analysis of variance with the CRI scales when both parents' and children's attitudes were utilized in this study; when analyzed separately the family member groupings generally did not reach significance. Another link to the above evidence is the importance attributed to each family member in the current research in family therapy.

That parents' child rearing attitudes do act as organizers of many other traits seems undeniable in the light of the many studies which have found this to be true. Baldwin, et al. (1945), Shoben (1949), and Miller and Swanson (1960) appear to give child rearing attitudes this importance in their studies. Although Taylor (1964) found that child rearing attitudes were only minimally related to creativity, other investigators believe it is of major importance (Getzels and Jackson, 1962). The present study would, at the least, indicate that child rearing attitudes are a necessary element in high IQ adolescents' intellectual interests.

The first two "possibilities" seem to the writer to be overly simplified in the light of past research in this area. They imply a one to one cause and effect relationship which is nearly impossible to find when dealing with human personality. The last "possibility" will be discussed in a subsequent section of this paper.

One main caution in the interpretation of the results is a point that was mentioned earlier to support the "interaction possibility," i.e., the fact that the significant MAA results and analysis of variance findings all encompass more than one type of subject within a grouping e.g., SL-fathers, boys, mothers and girls. It appears that the more types of subjects added to a grouping, the more significant becomes the differences among groupings. Therefore, it could be that the significance level is simply a function of the number of types added to the groupings. This argument's affect can be mitigated by pointing to the SPC results using MAA in which the greater the number of types and the larger the sample size, the smaller was the significance level. It has also been shown that the SIS does form significantly different groupings from the SPC.

As the groupings were broken down into smaller and smaller samples for the purpose of simplified analyses, the loss of subjects in a sample precluded the finding of significant differences. Also, the compounding of subject types make it impossible to draw clear and accurate conclusions

with the larger samples. The two isolated instances where individual comparisons of the simplest types are significant are simply that, isolated instances. To attempt to explain why SL girls show significantly more achievement pressure on the CRI than their mothers or why ST fathers and girls show significantly more achievement pressure than the ST mothers is seemingly beyond the results of this study. What the simpler analyses do, seemingly, is to give hints for future hypotheses to be tested, which is no mean task.

CRI and SPQ

The results pointed out large differences between the two child rearing attitudinal scales (CRI and SPQ). The SIS groupings were significantly different in the analysis of variance on the three CRI scales at the .005 level. But the same SIS groupings were significantly different in the analysis of variance on only one of the two SPQ factors at the .10 level which were selected because of their apparent similarity to two of the CRI scales. Even individual comparisons among the groupings for the CRI-MR scale and the SPQ-R factor exhibited a divergence since SLs were significantly higher than CIs on the R factor but on the MR scale ST were significantly higher than SLs.

The discrepancy between the findings of the SPQ and the CRI is probably due to the fact that they measure somewhat different attitudes. The results of this study do not

cast doubt on the validity of the SPQ, but as discussed before they do add to the validation of the CRI. The discrepancy could be accounted for by the fact that the SPQ was devised for parents of much younger children and may not have been suited to the present task. Another possibility is that the pragmatically developed CRI scales include more than one category of child rearing attitudes, whereas each of the SPQ factors contains one and only one category. Therefore, if many types of child rearing attitudes went into the relationship with the children's intellectual attitudes, the CRI would be more likely to pick up any relationship that existed. The author tends to believe the last explanation is nearer the truth and might show one danger of using linear factors as discussed by McQuitty (1957 b). However, specific research of this matter is needed to clarify the issue.

Independent Variables

The results revealed that of all the independent variables matched and correlated with scale scores, only IQ and EL had an affect on scale choice. Those gifted students with the highest IQs tended to be CIs and those gifted students with the lowest IQs were more likely to be SLs. These results do not agree with the findings of MacKinnon (1962) and Jarecky (1959) who found no significant correlation between IQ and the groups they identified as creative and social leaders respectively. However, they do

agree with Torrance's (1962) findings of a .40 correlation between creatives and IQ. These relationships could be an artifact of one or two extreme scores in the CI grouping which combined with the small sample size increase the mean IQ of the group significantly. But it is the manner in which these variables express their affect that is the crucial point. Do they express themselves directly on a student's attitudes? This is possible since a student with a 15 or 20 point higher IQ than another student is likely to find he is capable of greater intellectual achievement than the lower IQ student, therefore his interests will probably be different. However, the mass of research in the last 20 years has stressed the affect that situational variables can have on IQ (Liverant, 1960). Hurley (1963) and Kagan and Freeman (1963) have shown the affect of child rearing attitudes in raising and lowering IQ scores. Since the mean IQ of the highest (CI) and lowest (SL) groupings in this study were only six points apart and since the Otis has a standard error of measurement of at least four points, it seems likely that the affect of IQ on grouping attitudes was more indirectly expressed. Parents' attitudes could account then for the significant difference in both IQ and intellectual attitudes in a more parsimonious manner.

It was also found that the higher a Creative's CI score was, the lower was his parents' EL. Also, the higher a studious' ST score, the lower was his father's EL and the

higher was his mother's EL. If EL has any affect on intellectual attitudes it would have to be expressed through other situational and attitudinal factors. Since IQ and EL and SES showed no significant relationship in this study it is certainly not IQ which has an affect on EL and SES, at least not on the subjects in this research.

SIS Versus SPC Groupings

The evidence for the greater validity of the RSIS over the SPC supports the investigator's prior belief. Again, the evidence is not strong enough to invalidate the SPC, but it should force anyone using either of the two scales to generalize with great caution about what the scales measure. Further predictive, content, and concurrent validity studies on these two scales would be of the utmost importance. Prior research as indicated earlier in this paper in the identification of creative groups would support the use of the SIS over the SPC. Taylor (1964), Holland (1961), and Smith (1961) found that lists of background, preferred activities, experiences, and goals have identified creative groups with high validity. Of course, the further question needs to be asked, as to how well these types of lists identify studious and social leader adolescents. The present study indicates that the SIS identifies the three types of adolescents. How important the SIS groupings are to the behavior systems of high IQ adolescents must be answered by future research.

Exactly what the difference is in the attitudes expressed by the two scales is difficult to explain from the results of this study. Table 10 gives some hints as to what these differences might be. From Table 10 it can be observed that 55% shifted to SL, 37% shifted to ST, and 49% shifted to CI--going from the SPC to the SIS, if the SIS is considered the standard. It can also be seen that 74% shifted from CI, 50% from ST, and 17% from SL--going again from the SPC to the SIS. This would indicate that most of the changes were to SL and away from CI. It would appear that many students whose interests lie more in the social realm did not want to admit this or did not recognize it. One suggestion to explain this shift would be that the current social climate is one that favors studious and creative people and the social leaders would probably be quick to recognize this and attempt to make themselves look like those people most revered. The other changes could be explained as persons who feel they have traits in at least two of the three groups and just chose one over the other for various reasons. However, in choosing just one out of three paragraphs, as in the SPC which fits anyone person best there could be a myriad of intrinsic and extrinsic reasons other than the one stated on the inventory for one choice or the other. The open ended inventory gives the student many chances to "pigeonhole" himself without putting him so much on the spot.

Drews Sample as Compared to the Present Sample.--It was noticed that Drews' percentages in each of the groupings differed from the present grouping percentages. It might, therefore, be instructive to compare Drews' sample (1961) with the present sample across several variables. The base IQ in this study was 115 on the Otis, Drews' base IQ was 120 on the CTMM. Drews' students were from a medium sized city in the midwest, the present subjects were from a suburban area in the east. The parents of Drews' students were at about the national mean on SES, the parents in the present research were in the upper quarter of SES. Each of the students in Drews' sample read at two years above their grade level, whereas the present sample only averaged two years above grade level. The parents of the students in the present sample averaged better than a high school education, but Drews' parents averaged about an eleventh or twelfth grade education. There would appear to be so many differences in sample composition that any direct comparisons or generalizing from one sample to the other would probably be erroneous.

Descriptive Summary of Differences Between the SIS Groupings.--From this research SIS-SLs' could be described as having an average IQ of 120. The magnitude of attitudes and beliefs called SL in this research decreased with increased IQ. SL fathers and mothers averaged slightly better than a high school education while nearly half of

them had at least some college education. Half of the 31 fathers were white collar workers, managers, or professionals. Nearly half of the 33 mothers worked at part-time or full-time jobs. The magnitude of SL attitudes was highest with those who had parents with the highest EL. Fifteen per cent of the 33 SL families had been broken by divorce, separation, or death. More SLs agreed on child rearing attitudes than either of the other two groups, but there was a smaller percentage of agreement within family units than in the other two groupings. SLs (parents and children) were more accepting than ST (parents and children) and not as overprotective as ST, but they showed more achievement pressure than CIs (parents and children). SL girls were higher in achievement pressure than their mothers.

The SIS-ST grouping had an average IQ of 123 with no difference between boys and girls. ST fathers and mothers averaged slightly better than a high school education and less than half of them had any education beyond high school. Exactly half of the 18 fathers were white collar workers, managers, or professionals. About one-third of the 19 mothers had part-time or full-time jobs. About 10 per cent came from broken homes. ST fathers and children and mothers were more rejecting than SLs but at the same time also tended to be more overprotective. Fathers of ST children pressed strongly for achievement whereas mothers did not. The girls

were especially high in their need to achieve in the academic realm as compared to their mothers. The magnitude of ST attitudes increased directly with EL of ST mothers and decreased with higher EL of ST fathers.

Lastly, the RSIS-CI grouping had an average IQ of 126 with no difference between boys and girls. CI fathers averaged quite a bit above a high school education and nearly 80% of them had some college education or better. Their mothers, however, averaged just slightly better than a high school education and two out of nine had no more than an eighth grade education while five out of nine had at least some college. Nearly 80% of the 9-CI fathers were white collar workers, managers, or professionals and nearly 90% of the CI-mothers were housewives. All of the CI families were intact units. Between 33% and 44% of the agreements by CIs on child raising attitudes occurred within the same family unit which was greater than either of the other two groupings. The CI grouping exhibited less achievement pressure than either the ST or SL groupings.

Further Research.--Some further research has already been discussed, but there are a wealth of questions raised by this study. For example, a larger sample using the SIS could use just the extreme scores on each scale and possibly highly negative and significant correlations would be found among all the scales. A larger sample might also find sex differences in SIS attitudes and in child rearing attitudes.

The method of MAA seems to have great potential if used in its entirety for purposes such as content analysis of the RSIS, as well as, for purposes similar to that attempted in this study. The question needs to be answered as to whether acceptance-rejection and achievement pressure are important in forming intellectual groupings of high IQ children. A cogent but quite complex problem is the cause of the discrepancy between the SPQ and the CRI in the results of the present study. One way to do this might be to use the same scale separated into subscales by factor analyses and pragmatic methods and compare results on the same sample. Tightly controlled studies need to be carried out concerning the affects of several independent variables on high IQ children's grouping attitudes. Research should be carried out which compares the SIS and SPC groupings with behaviors under certain controlled conditions of the two groups.

CHAPTER V

SUMMARY

The two functions of this investigation were to determine the relative merits of two techniques for classifying intellectually gifted students into Social Leader (SL), Studious (ST), and Creative Intellectual (CI) groupings and then to ascertain if the family units of the children in these groupings clustered together in terms of beliefs about child-rearing practices. The classification techniques have been used in prior studies by Drews and consist of the Student Interest Survey-V (SIS) and The Student Profile Check (SPC). The child-rearing measures used have both proven useful in other research. They were the Child Relations Inventory (CRI) and The Stanford Parent Questionnaire (SPQ).

On the basis of Otis IQ scores of 115 or over, twenty-five per cent of a ninth grade class ($N = 325$) at a large, upper middle-class, suburban high school were selected as potential subjects. The Drews measures, the CRI, and the SPQ were administered to these students in a group at school while the latter two instruments were sent to their parents to be returned by mail. Seventy-five per cent of these families cooperated, yielding data from 61 child-mother-father units.

SIS analyses found moderately high internal consistency coefficients among the items contributing to the SL, ST, and CI scales. Negative partial correlation coefficients were obtained between all three pairs of scales, attaining statistical significance in two instances and barely falling short in the case of CI vs. ST. Thus, it appears that SIS scores meaningfully discriminate between gifted students with dissimilar intellectual orientations. Comparisons of the SIS and SPC classifications suggested much agreement, but also suggested that the SPC was less useful in terms of placing too many students in the currently popular "Creative Intellectual" grouping.

Multiple Agreement Analysis (MAA) was the technique of choice for analyzing the groupings of family units on the CRI and the SPQ. A defective computer program, however, resulted in findings which might be argued as attributable to chance, so a supplementary analysis of variance (AOV) was carried out. Both the MAA and AOV analyses disclosed that the SIS-SL, ST, and CI groupings revealed significant differences between the family units on the CRI Achievement Pressure, Manifest Rejection, and Overprotective scales and also on the SPQ Rejection (R) factor. While all three CRI scales yielded differences significant at the .005 level, only one of the two SPQ factors, R, yielded differences significant at the .10 level. The SIS also yielded more definitive groupings of the family units according to the child-rearing measures, than did the SPC.

Of several independent variables investigated, including socioeconomic-status, only child's IQ and parental education level (EL) were statistically related to the SIS groupings. Child's IQ correlated positively with CI score and negatively with SL scores. Parental EL also correlated negatively with child's CI scores of those children in the CI group ($N=9$); mother's EL also correlated positively with the ST scores of the children in the ST group ($N=19$), but father's EL correlated negatively with children's ST scores ($N=18$).

The highly significant linkages observed between familial child rearing beliefs and the self-identity of those ninth grade gifted children, suggests that it will be fruitful to examine these relationships more definitively. Such clear results among a sample based upon children with a very limited IQ range suggests that more dramatic findings may obtain when these instruments are used with a more representative population.

FOOTNOTES

1. A fourth type, the rebel, was dropped after the first study to validate the groupings found only two students out of 130 who fit into this typing.
2. After the letter had been sent out requesting the participation of the mother-father-child family unit, 68 units agreed to take part. This return constituted about 21% of the total school population and 84% of the families contacted. The family units utilized constituted 19% of the total ninth grade population. Of those family units not utilized, six children did not appear at the time for them to be tested. Six other children were not present on the day of testing, but their parents contacted the experimenter and they and their parents completed the questionnaires sent to them through the mail.
3. The expected value of each category was computed by dividing the total possible number of pairs in each set into the total possible number of pairings for each category (SL-SL, ST-ST, etc.).

$$\frac{\frac{n(n-1)}{2}}{\frac{m(m-1)}{2}}$$

4. The results of several of the binomials inferred from Table 4 must be viewed with caution since their skew is so extreme that they probably do not approximate closely the normal curve.

REFERENCES

- Altus, Grace T. Relationship between verbal and non verbal parts of CTMM and WISC. J. consult. Psychol., 1955, 19, 143-144.
- Baldwin, A. L., Kalhorn, Joan, and Breese, Fay H. Patterns of parent behavior. Psychol. Monogr., 1945, 58, No. 3 (Whole No. 268).
- Barr, J. A. Home conditions and influences associated with development of high school leaders. Educ. Admin. Super., 1957, 43, 271-279.
- Burchinal, L. G. Social status, measured intelligence, achievement and personality adjustment of rural Iowa girls. Sociom., 1959, 22, 75-80.
- Cronbach, L. J., and Meehl, P. E. Construct validity in Psychological tests. Psychol. Bull., 1955, 52, 281-302.
- Davis, A. Socialization and adolescent personality. In T.M. Newcomb and L. Hartly (ed.), Readings in Social Psychology. New York: Henry Holt and Co., 1947. Pp. 85-95.
- Drews, Elizabeth M., and Teahan, J. E. Parental attitudes and academic achievement. J. clin. Psychol., 1957, 13, 328-332.
- Drews, Elizabeth M. A critical evaluation of approaches to the identification of gifted students. In A. Traxler (Ed.), Measurement and Research in Today's Schools. Washington, D. C.: American Council on Education, 1961, Pp. 47-51.
- Drews, Elizabeth M. Personal communication, 1962.
- Drews, Elizabeth M. Personal communication, 1963.
- Eron, L. D., Banta, T. J., Walder, L. O., and Laulicht, J. H. Comparison of data obtained from the mothers and fathers on child rearing practices and their relation to child aggression. Child Development, 1961, 32, 452-472.
- Getzels, J. W., and Jackson, P. W. Creativity and Intelligence. New York: John Wiley and Sons, 1962.

- Guilford, J. P. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill, 1956. (a)
- Guilford, J. P. The structure of intellect. Psychol. Bull. 1956, 53, 267-293. (b)
- Haggard, E. A. Socialization, personality, and academic achievement in gifted children. School Rev., 1957, 65, 388.
- Haller, A. O., and Thomas, S. Personality correlates of the socioeconomic status of adolescent males. Sociom., 1962, 25, 398-404.
- Hemmingway, P. W. Multiple agreement analysis. Unpublished manuscript, 1961.
- Hoffman, Lois W. The father's role in the family and the child's peer group adjustment. Merr. Pal. Q., 1961, 7, 96-106.
- Holland, J. L. Creative and academic performance among talented adolescents. J. ed. Psychol., 1961, 52, 136-147.
- Hurley, J. R. Achievement pressure: An attitudinal correlate of college course grades. Psychol. Rep., 1962, 10, 695-702.
- Hurley, J. R. Parental acceptance-rejection and children's intelligence. Extended version of paper read at Am. Psychol. Assoc., Philadelphia, 1963.
- Jarecky, R. R. Identification of the socially gifted. Excep. Child., 1958-59, 25, 415-419.
- Kagan, J. and Freeman, Marion. Relation of childhood intelligence, maternal behaviors, and social class to behavior during adolescence. Child Developm., 1963, 34, 899-911.
- Lawson, E. D., and Boek, W. E. Correlations of indexes of families socioeconomic status. Soc. Forc., 1960, 39, 149-152.
- Lindquist, E. F. Design and Analysis of Experiments in Psychology and Education. Boston: Houghton Mifflin, 1956.
- Liverant, S. Intelligence: A concept in need of reexamination. J. consult. Psychol., 1960, 24, 101-110.

- MacKinnon, D. W. The nature and nature of creative talent. Amer. Psychologist, 1962, 17, 484-495.
- McQuitty, L. L. Elementary linkage analysis for isolating orthogonal and oblique and typal relevencies. Educ. psychol. Measurement, 1957, 17, 207-299. (a)
- McQuitty, L. L. A pattern analysis of descriptions of best and poorest mechanics compared with factor analytic results. Psychol. Monogr., 1957, 71 (Whole No. 446). (b)
- Marks, J. B. Interests and leadership among adolescents, J. genet. Psychol., 1957, 91, 163-172.
- Miller, D. and Swanson, G. Inner Conflict and Defense. New York: Henry Holt and Co., 1960.
- North, R. A preliminary report on the reliability of the Lorge-Thorndike Intelligence Test, Level 4, Verbal battery and correlation with IQ's on the Otis Quick Scoring Mental Ability Tests, Ed. rec. Bull., 1956, 69, 71-72.
- North R. Interpretation of Otis Quick Scoring Mental Ability Test IQ's in relation to Kuhlmann Anderson IQ's, ACE scores and individual school norms. Ed. rec. Bull., 1958, 71, 47-54.
- Piers, Ellen V., Daniels, Jackqueline, and Quackenbush, J. The identification of creativity in adolescents, J. ed. Psychol., 1960, 51, 346-351.
- Rau, Lucy. Factor analysis of SPQ. Unpublished manuscript, 1964.
- Reid, J. B., King, F. J., and Wickwire, Pat. Cognitive and other personality characteristics of creative children, Psychol. Rep., 1959, 5, 729-737.
- Roberts, Helen E. Comparison of Otis and SB IQ's. California J. ed. Res., 1961, 62, 8-15.
- Sears, R. R., Maccoby, E. E., and Levin, H. Patterns of Child Rearing. Evanston, Ill.: Row, Peterson, 1957.
- Sheldon, W. D. and Manolakes, G. A comparison of the SB revised Form L and the CTMM (S form). J. ed. Psychol., 1954, 45, 499-504.

- Shoben, E. J. The assessment of parental attitudes in relation to child adjustment. Genet. psychol. Monogr., 1949, 39, 101-148.
- Smith, W. J., Albright, L. E., and Glennon, J. R. The prediction of research competence and creativity from personal history. J. app. Psychol., 1961, 45, 59-62.
- Taylor, C. W. A Tentative Description of the Creative Individual, in S. J. Parnes and H. F. Harding (ed.). A Source Book for Creative Thinking. New York: Charles Scribner's Sons, 1962. Pp. 169-184.
- Taylor, C. W. (ed.). Creativity: Progress and Potential. New York: McGraw-Hill, 1964.
- Torrance, E. P. Guiding Creative Talent. Englewood Cliffs, N. J.: Prentice-Hall, 1962.
- U. S. Bureau of the Census. Statistical Abstract of the U. S. 1963. (Eighty-fourth Edition) Washington, D. C.: 1963.
- Warren, J. R., and Heist, R. A. Personality attributes of gifted college students, Science, 1960, 132, 330-337.
- Winder, C. L., and Rau, Lucy. Parental attitudes associated with social deviance in preadolescent boys. J. abnorm. soc. Psychol., 1962, 64, 418-424.
- Zuckerman, M. Reversed scales to control acquiescence response set in the parental attitude research instrument. Child Development, 1959, 30, 523-532.

APPENDICES

APPENDIX A

APPENDIX A-1.--Categories of occupation used, scores for each category and number of each criterion grouping in each category.

Category	Score	Father Occ.			Mother Occ.		
		SL	ST	CI	SL	ST	CI
Professional-technical	0	8	4	3	4	4	1
Farmers-farm managers	1	0	1	0	0	0	0
Managers, officials, and proprietors	2	7	3	2	0	0	0
Clerical and kindred workers	3	3	1	0	1	1	0
Sales workers	4	3	1	2	2	1	0
Craftsmen and foremen	5	6	7	1	1	0	0
Operators	6	1	1	0	2	1	0
Private household workers	7	2	0	0	23	12	8
Service workers	7						
Farm laborers	8	0	0	0	0	0	0
Laborers	9	3	0	k	0	0	0
		33	18	9	33	19	9
SUM		112	58	26	189	97	56
MEAN		3.39	3.22	2.89	5.73	5.11	6.22

APPENDIX A-2.--Categories of EL used, scores for each category, and numbers of each criterion grouping in each category.

Amount of Education	Score	Mother Education			Father Education		
		SL	ST	CI	SL	ST	CI
Less than 7 grades	1	0	0	1	0	0	0
7th to 8th grade	2	2	2	1	2	3	0
9th to 10 grade	3	3	0	0	2	3	1
11th to 12th grade	4	14	9	2	13	4	1
Some college or business school	5	9	5	4	10	4	1
College	6	5	3	1	4	3	4
Graduate training	7	0	0	0	2	1	2
		33	19	9	33	18	9
SUM		144	83	37	152	76	50
MEAN		4.36	4.37	4.11	4.55	4.22	5.55

APPENDIX B

APPENDIX B-1

WILSON JUNIOR--SENIOR HIGH SCHOOL
May 13, 1963

Dear Parent:

Mr. Robert Nagle, presently at Wernersville State Hospital, is conducting a study in connection with Michigan State University concerning students who are doing or are capable of doing superior academic work. Superiority is determined by examining standardized test results and school marks.

As you are already well aware, one of the main factors in the development of the superior student is his or her parents' child raising attitudes and practices. Instead of focusing on the practices and attitudes which produce inferior students and mentally ill children, they believe that it is more important to study that which is instrumental in producing the superior student and the mentally healthy.

You are being invited to become a part of this study. Participation of course is entirely voluntary.

If you decide to participate, you will be given a questionnaire to complete regarding your child raising attitudes. This questionnaire may be filled in at home and returned to the school upon its completion. We will see that the forms are forwarded to Mr. Nagle.

Your son or daughter will also be asked to complete a questionnaire similar in type to the one you will complete. He or she will do this along with the other students in the study at some time or place to be announced later. The reason for this second questionnaire is to find if he or she is developing attitudes similar to yours in order to observe if those attitudes which have produced a talented student will be perpetuated. Every person in this study will be completely anonymous since they are interested only in group data and not in individual questionnaires.

I ask that you consider this very carefully. In the event that you decide to participate, and I hope that you do, complete the information at the bottom and return it to either Mr. Huffert or me.

Thank you very much.

Cordially yours,

NAME
ADDRESS
TELEPHONE
NAME OF SON OR DAUGHTER

Carl L. Derr
School Psychologist

APPENDIX B-2

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC WELFARE
WERNERSVILLE STATE HOSPITAL

Wernersville, Pennsylvania

Mark G. Risser, M.D.
Superintendent

May 29, 1963

Dear Parents:

Since you have communicated an interest in taking part in the research carried on by Mr. Robert Nagle in conjunction with Michigan State University, this letter will inform you of the part you can play in this study.

First, we hope that it will be possible for you to have your child present on Monday, June 10, 1963 at 1:00 P.M. in the Wilson High School cafeteria. If for any reason it should be impossible for your child to attend at that time, would you send a note to Mr. Derr or call him at Wilson High School as soon as you are sure your child will be unable to attend on the above date. Then we will set up an alternate time for him or her to take part. The testing will take approximately three hours.

Second, it is imperative that your child does not see the forms you fill out since the students will be completing very similar questionnaires. If at all possible, we hope you will be able to finish your questionnaires and mail them to us in the enclosed envelope on or before June 10th, instead of sending them to Mr. Derr as our first letter asked you to do.

Third, will both the husband and the wife fill out one of each type of form enclosed in this envelope. Will you also please fill out these forms independently of one another. It is very important that your answers be absolutely your own. We repeat that no questionnaire will be considered individually, but only group data is of interest.

Just fill out each form according to the instructions printed at the beginning of the questionnaires. Would you please begin with "The Child Relations Inventory" and then after you have finished that fill out "The Stanford Parent Questionnaire."

We would like to thank you and your child for your very important cooperation in this research study.

Sincerely yours,

Robert M. Nagle
Clinical Psychologist

APPENDIX C

INSTRUCTIONS TO CHILDREN

The instructions to the 55 children who appeared on the agreed upon day at Wilson Jr. High School were:

"This is part of a larger study in which you are now participating and it is hoped that you will do your best to insure accurate results. Take your time and read all instructions and questions thoroughly. There will be four questionnaires to fill out before you are finished. Two of the questionnaires deal with your interests and attitudes and the other two deal with child raising practices. Place your name on each one of the questionnaires even where it is not asked for in the questionnaire. Simply follow the printed instructions on the interest surveys. On the child raising scales we want you to imagine that you are the parent of a person the same age and sex as yourself and then answer each question with this idea in mind. When you're finished with one questionnaire check through it to see that you have answered all the questions you can and then bring it up and place it on the pile with the others like it and pick up your next questionnaire from me. When you are finished with all four questionnaires you may leave. Work alone and don't ask anyone for help on any of the questions. Are there any questions? (Minute pause) There are some special instructions which you should be careful

to follow. On the Stanford Parent (held up) Questionnaire make sure that boys answer the father's form and that girls answer the mother's form. On the Child Relations Inventory (held up) don't put any answers in the N category which has a line through it. Now line up with the boys in one line and the girls in another and when you get your questionnaire and pencil take it to your seat and begin immediately."

APPENDIX D

APPENDIX D-1

STUDENT INTEREST SURVEY V

Your responses on this survey are confidential.
Answer quickly, accurately, and honestly!

1. Name _____ Address _____
2. Birth date _____ Present Age _____ Home Phone No. _____
3. Sex: M ___ F ___ School _____ Grade _____
4. Home Room Teacher _____ Counselor _____
5. Father: Name _____ Living _____ Where Born _____
6. How much formal education did your father have? (Check one)
 - a. ___ less than 7th grade
 - b. ___ through grades 7 or 8
 - c. ___ through grades 9 or 10
 - d. ___ through grades 11 or 12
 - e. ___ some college, business, or technical training
 - f. ___ finished college
 - g. ___ attended graduate or professional school after college
 - h. ___ received an advanced degreeWhat degree? _____
7. Father's occupation: What does he do? _____
With what company or organization? _____
8. Mother: Name _____ Living _____ Where Born _____
9. How much formal education did your mother have? (Check one)
 - a. ___ less than 7th grade
 - b. ___ through grades 7 or 8
 - c. ___ through grades 9 or 10
 - d. ___ through grades 11 or 12
 - e. ___ some college, business, or technical training
 - f. ___ finished college
 - g. ___ attended graduate or professional school after college
 - h. ___ received an advanced degreeWhat degree? _____
10. Mother's occupation: (Check one)
 - a. ___ Housewife
 - b. ___ Works part-time (___ days a week)
 - c. ___ Works full timeIf Mother works what does she do? _____
With what company or organization? _____
11. In your family are you (Check one)
 - a. ___ an only child
 - b. ___ oldest child
 - c. ___ the youngest child
 - d. ___ between the oldest and youngest

12. Number of children in your family (including yourself) _____
13. How do you spend your leisure time away from school? (Check your interests in the space at the left, double check the one you enjoy the most. Comment if you wish.)
- a.____ team sports
 - b.____ individual sports
 - c.____ science and nature activities and projects
 - d.____ reading
 - e.____ hobbies
 - f.____ art (drawing, painting, etc.)
 - g.____ art appreciation (visiting museums, collecting prints, etc.)
 - h.____ being with friends (riding around, going downtown)
 - i.____ popular music (top hits)
 - j.____ good jazz and authentic folk music
 - k.____ classical music
 - l.____ being with the opposite sex (dating, dancing, parties)
 - m.____ dance as art form (read about, attend performances, participate)
 - n.____ clubs
 - o.____ discussions (ideas, theories, books)
 - p.____ being alone (writing, thinking, dreaming)
 - q.____ other _____
(Specify)

14. What are your extra-curricular activities? (These activities can be either individual or group activities.) Check () activities in which you participate, double check () the one you enjoy most.
- | | |
|-------------------------------|-----------------------------------|
| a.____ sports or cheerleading | e.____ student government |
| b.____ music | f.____ newspaper or other writing |
| c.____ science | g.____ dramatics |
| d.____ art | h.____ other _____ |

(specify)

15. What has influenced you most in participating in extra-curricular activities? (Check one)
- a. ☐ Having a chance to do things I usually wouldn't do
 - b. ☐ Being able to do things with my friends
 - c. ☐ Participating now will improve my chances for getting a job or entering college later

16. How do you feel about the activities in which you have participated? (Check one)

- a. ☐ The activities give me an opportunity for intellectual and aesthetic experiences.
- b. ☐ The activities are a lot of fun.
- c. ☐ The activities provide me with new skills and information.

17. The way you spend your time (REAL) may or may not be the way you would like to spend your time (IDEAL). Please check one in each column.

During the school year, outside of class-

I spend a lot of time
(REAL)

I would like to spend my time
(IDEAL)

- a. ☐ Doing home work and studying--getting things done ☐
- b. ☐ Idea tracking--reading, thinking, discussing..... ☐
- c. ☐ Being with the right crowd--really being in..... ☐

18. List offices you hold now or have held this school year. These may be in or out of school, including athletic or church organizations.

<u>Office (president, secretary, etc.)</u>	<u>Club or Organization</u>
--	-----------------------------

_____	_____
_____	_____
_____	_____

19. School subject liked MOST. School subject liked LEAST.

_____	_____
-------	-------

20. Is school work (classes, assignments, tests) interesting to you?

Yes ☐ No ☐ Comment if you wish. _____

21. If you had an extra hour at school, how would you like to use it?

- a. ☐ seminars, freely discussing ideas
- b. ☐ activities and athletics
- c. ☐ getting some of my homework done, and my reports in good form

22. I like a teacher who: (Choose 3. List in order; first choice would be 1, last 3)

- a. ___ keeps homework easy--we study, but it's not everything
- b. ___ knows how important grades are
- c. ___ encourages creative research and individual projects
- d. ___ appreciates conscientious effort and willingness to follow directions
- e. ___ knows broader implications of subject, and presents unsolved problems
- f. ___ is always attractive and well-dressed
- g. ___ encourages philosophical and ethical discussions
- h. ___ jokes a lot and kids around--a real smoothie
- i. ___ presents the subject matter within definite limits and gives specific assignments

23. In comparison to your classmates, do you consider your ability to be:

- a. ___ below average
- b. ___ average
- c. ___ above average

24. I would want my ideal school to have: (choose 3, list in order)

- a. ___ a planned course of study
- b. ___ the best library in town
- c. ___ a winning team
- d. ___ groups that discuss philosophical and ethical problems
- e. ___ good facilities for sports and social functions
- f. ___ an honor roll for good students
- g. ___ not filled with know-it-alls who study all the time and butter up the teacher
- h. ___ supervised study periods
- i. ___ free scheduling to allow for individual interests

25. How much longer do you plan to go to school? (Check one in each column)

	REAL	IDEAL
	(this is what will probably happen)	(would like very much)
a. Graduate from high school	___	___
b. Some college or special school	___	___
c. Finish four years of college	___	___
d. Graduate work (specify degree)_____	___	___

26. Who has been most influential in your decision about attending college? (Check those that apply; double check the one most important.)

- a. ___ father
- b. ___ mother
- c. ___ counselor
- d. ___ teacher
- e. ___ myself
- f. ___ other _____
(specify)

27. If you were also free to do whatever you wanted, how would you choose to earn your living? (IDEAL) _____

28. At the present time what do you expect your occupation to be when you finish your education? (REAL) _____

29. In my future life: (Choose 3 only; list in order of choice 1,2,3)

- a. ☐ I want to have lots of money and be in the country club set.
- b. ☐ I want to be conscientious, persevering, and dependable in my work.
- c. ☐ I want to be creative and original, perhaps discover something new.
- d. ☐ I want to live up to my parents' expectations.
- e. ☐ I want to live my own life and make my own rules.
- f. ☐ I want to be well-liked in both business and social circles.
- g. ☐ I want to be cultured and individualistic, to follow my own interest even at the expense of friends, fame, and fortune.
- h. ☐ I want to be a leader in my community.
- i. ☐ I want to be a respected and hard-working citizen.

30. How would you expect to be remembered at school? (REAL)
How would you like to be remembered at school? (IDEAL)

REAL

IDEAL

- a. ☐Honor Student.....☐
- b. ☐Star Athlete.....☐
- c. ☐Very Popular.....☐
- d. ☐Brilliant, but not a.....☐
grind

31. Time spent on studying school work. (Fill in both blanks. Use Monday through Friday for daily, include weekends for weekly.)

Daily average hours

Weekly average hours

32. Time spent on "general reading," not school studies. (Fill in both blanks Use Monday through Friday for daily, include weekends for weekly.)

Daily average hours

Weekly average hours

33. When it comes to books, I am:

- A. ☐ an avid reader--read lots
- b. ☐ average--read some
- c. ☐ not interested--read rarely

34. Why do you read? Check one.

- a. ☐ It helps me get better grades.
- b. ☐ It gives me insight into the meaning of life and the universe.
- c. ☐ I don't read if I can help it.

35. Do you read a newspaper? _____ name (s)
Regularly _____ Occasionally _____ Rarely _____

36. Which sections?	Regularly	Occasionally	Rarely
a. local news	_____	_____	_____
b. international	_____	_____	_____
c. sports	_____	_____	_____
d. women's	_____	_____	_____
e. editorial	_____	_____	_____
f. comics	_____	_____	_____
g. entertainment(movies, TV, etc.)	_____	_____	_____
h. advertisements and/or want ads.	_____	_____	_____

37. If you were only able to get one section, which section would you choose?

33. Do you read any magazines?

List	Regularly	Occasionally	Rarely

39. If you could get only one magazine, which one would you choose?

APPENDIX D-2

I.____ I am a good student; in fact, I feel I am the studious type. I am a relatively well-organized and hard-working person. I try very hard to get my work in on time and I feel guilty if I don't. Deep down I feel that people who put things off are lazy and disorganized. I never quite measure up to my own standards, although I do study hard. Good grades are important and I always try to do my best. It matters to me what my teachers think because I admire many of them and if they mark me down or criticize me, I get upset. With all my schoolwork, I don't have much time to be frivolous and I can't read for fun as much as I'd like. As soon as I can, I plan to work in the summers and after school since this will help prepare me for the future

II.____ You might say that I lean toward the intellectual type. My interests include almost all areas of knowledge and the frontier or avant-garde material in these areas. I enjoy art and drama and I like to listen to good music. Most of all I like to read and think. Books are my private passion--they've kept me up oftener and later than my dates have. However, studying my textbooks and school assignments often leaves me cold. Sometimes schoolwork seems pointless. To put it bluntly, I hate to memorize a list of facts or follow dull and unimaginative directions cookbook style without any real reason for doing so. In the future, working just for money doesn't have much appeal. Eating simply and wearing the same clothes would be worthwhile if I could, in that way, free myself to be truly creative or to discover something of value.

I.____ To me the most important thing is to have a good personality and be friendly-- I want to be well-liked. Along with this I want to look sharp, have lots of nice clothes, and be well-groomed. Doing things of a social nature--going to parties and dances--are the most important activities for me. Doing well in schoolwork is not nearly as important for the future as a good personality, good looks, and general ability to get along. I like to help run things now and I want to be a leader in community affairs when I'm an adult. I want material success; in fact, I intend to have a beautiful home, good income, and lots of friends. I think it's fine to do things for others, but usually people who are concerned about the unfortunates in the world are radical and over-idealistic.

APPENDIX E

CHILD RELATIONS INVENTORY

The following statements are to be judged by you to indicate how well they agree or disagree with your own opinion. The statements themselves are both agreed and disagreed with by many people, so there are no "right" or "wrong" answers. Please read each statement, then show your opinion by circling the letters which best represent your own view.

Your own sex is: male ____; female ____.

Correction: Do Not Use N Column

	SA	a	N	d	SD
	Strongly Agree	Tend to Agree	Neither Agree Nor Disagree	Tend to Disagree	Strongly Disagree
1. It is hard to make some children really "feel bad."	SA	a	N	d	SD
2. Children do not "act lazy" without some important reason.	SA	a	N	d	SD
3. Children should not be allowed to argue with their parents.	SA	a	N	d	SD
4. It is healthy for children to sometimes express anger toward parents.	SA	a	N	d	SD
5. A wise parent will teach the child just who is boss at an early age.	SA	a	N	d	SD
6. When children get into serious trouble it is really their parents' fault.	SA	a	N	d	SD
7. Young children who refuse to obey should be whipped.	SA	a	N	d	SD
8. Spanking children usually does more harm than good.	SA	a	N	d	SD
9. Most children get more sympathy and kindness than is good for them.	SA	a	N	d	SD
10. Making a child feel loved is the surest way to get good behavior.	SA	a	N	d	SD
11. Most children need some of the natural meanness taken out of them.	SA	a	N	d	SD
12. It is good for children to sometimes "talk-back" to their parents.	SA	a	N	d	SD
13. A great deal of discipline is necessary to train children properly.	SA	a	N	d	SD
14. Giving mischievous children a quick slap is the best way to quickly end trouble.	SA	a	N	d	SD
15. An intelligent child should not be shamed for poor school work.	SA	a	N	d	SD
16. Firm and strong discipline make for a strong character in later life.	SA	a	N	d	SI
17. Most children enjoy helping their parents.	SA	a	N	d	SI
18. Children must be constantly "kept after" if they are to do well later in life.	SA	a	N	d	SI
19. Babies rarely cry "just to get attention."	SA	a	N	d	SD
20. Children should be spanked for temper tantrums.	SA	a	N	d	SI
21. Often it is a mistake to immediately punish a child who has been very bad.	SA	a	N	d	SI
22. A naughty child sometimes needs a slap in the face.	SA	a	N	d	SI
23. It is normal and healthy for children to occasionally disobey parents.	SA	a	N	d	SI
24. Most children need more discipline than they get.	SA	a	N	d	SI
25. Parents should not insist that young children eat unwanted food.	SA	a	N	d	SI

26. When parents speak, children should obey	SA	a	N	d	SD
27. Sneakiness in children is usually caused by poor training methods.	SA	a	N	d	SD
28. Children are happier under strict training than they are under lenient training.	SA	a	N	d	SD
29. Very strict discipline may destroy what might have developed into a fine personality.	SA	a	N	d	SD
30. Most children need more kindness than they usually receive.	SA	a	N	d	SD
31. Children should be neat and orderly at all times.	SA	a	N	d	SD
32. The sooner children are toilet trained, the better	SA	a	N	d	SD
33. Most children should have music or other special lessons.	SA	a	N	d	SD
34. Children tend to neglect their school work if parents do not keep after them.	SA	a	N	d	SD
35. When children do not eat well it helps to tell them how nicely other children eat.	SA	a	N	d	SD
36. Early weaning and toilet-training are important in preparing children for life.	SA	a	N	d	SD
37. For their own sake children should be pressed to excel in school.	SA	a	N	d	SD
38. Children should be trained early to keep their toys in order.	SA	a	N	d	SD
39. The sooner children realize that they must fight their own battles, the better.	SA	a	N	d	SD
40. Almost any child who is not plain lazy can do good school work if he/she tries.	SA	a	N	d	SD
41. Older children are more fun than babies.	SA	a	N	d	SD
42. Children should generally be encouraged to choose their own playmates.	SA	a	N	d	SD
43. Few parents worry about hurting their babies while handling them.	SA	a	N	d	SD
44. Children should be permitted to have secrets from parents.	SA	a	N	d	SD
45. Women who like parties often make good mothers.	SA	a	N	d	SD
46. Children who always obey parents do not grow up to become the most desirable kind of adults.	SA	a	N	d	SD
47. Even the best of parents make many mistakes in dealing with their children.	SA	a	N	d	SD
48. By the age of 7, most children are old enough to spend part of summer away from home at a camp.	SA	a	N	d	SD
49. Young people should choose jobs which they really like regardless of their parents' feelings.	SA	a	N	d	SD
50. Children must learn to do things on their own without always waiting for parents' approval.	SA	a	N	d	SD
51. It is the duty of parents to make certain their children play only with the "right class" of youngsters.	SA	a	N	d	SD
52. Children who do not keep up with their classmates usually need special tutoring more than anything else.	SA	a	N	d	SD
53. It is foolish to push children to stand upon their own feet at the earliest possible age.	SA	a	N	d	SD
54. The sooner that children are weaned from emotional ties to their parents, the better they will handle their own problems.	SA	a	N	d	SD
55. Special after-school activities are of greater character-building value to the child than is ordinary neighborhood play.	SA	a	N	d	SD

APPENDIX F

APPENDIX F-1

MOTHER STANFORD PARENT QUESTIONNAIRE

INSTRUCTIONS: Please give the following information.

Your full name (print): _____

List your children, beginning with the oldest:

	Name	Age
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

School you completed (For example: 8th grade, Graduated from high school, Graduated from college, Completed 1 1/2 years of college, 11th grade and 1 year of mechanics school in the army or navy, Graduated from medical school, etc.):

Marital status (For example: Married, Separated, Divorced, Divorced for the second time, Widow, Widow and now married for the second time, etc.):

Age: _____

NOTICE: As soon as you return this questionnaire, this page will be removed and kept in a separate locked file. Your answers will not be identified with your name. So, you can be very frank on this questionnaire and your answers will be kept completely confidential. Your code number is given below.

CODE NUMBER: _____

When you have given the information requested on this page, go on to the next page. You will find more instructions there.

STANFORD PARENT QUESTIONNAIRE

(Mother's Form M.S.U.)

The following statements have been made by parents about themselves, their children, and their families. Please read each statement and decide how it applies to you.

Look at ~~the~~ next page of this questionnaire for a minute and you will see that there are four columns on the right hand side of the page. On the left side of the page there are statements. You should put one check mark next to each statement. You may put the check mark under SA or A or D or SD. SA means you agree strongly with the statement. A means you agree with the statement more than you disagree with it. D means you disagree with the statement more than you agree with it. SD means that you strongly disagree with the statement.

If you agree strongly with the statement or feel sure that it applies to you, put a check mark in the column marked SA. SA means Strongly Agree.

If you are sure that a statement does not apply to you or you strongly disagree with the statement, put a check mark in the column marked SD. SD means Strongly Disagree.

Use the A (Agree) or D (Disagree) columns for statements you are less sure about or feel less strongly about.

Please mark every statement, even though some may not seem to describe you or your family. For example, there might be a statement about brothers and sisters and you may have only one child. Give the answer according to what you believe you would think or feel or do if the statement did apply, or the situation did come up.

If you have more than one child, please mark the statements as they apply to your son _____.

This questionnaire is for mothers; so if you are a man please ask for a different questionnaire.

Work as quickly as you can. You do not need to think about each statement too carefully -- just give your impression about it. In other words, answer every one, but do not think too long about any one. Start with number 1 and do each one in order. Give your impression of each statement quickly and go on to the next one.

CODE NUMBER: _____

	SA	A	D	SD
1. Holding back some of his privileges is the best way I have of disciplining him.				
2. I would like him to have some interest in art, music, and culture.				
3. We've pointed out to him that there are people who seem friendly but are not and that it's always wise to approach any person you don't know with some reserve.				
4. I don't believe in them standing up for themselves by picking on some other kid.				
5. The most effective punishment seems to be when we really take him in tow and either give him a spanking or a long talking to. Taking away some privilege doesn't work nearly as well.				
6. He knows when he's been spanked -- it's not just a tap on the wrist.				
7. I always try to give the reasons why he should or should not do certain things.				
8. When he gets angry and starts throwing things, we stop it the minute it happens.				
9. We look for as many opportunities, legitimate opportunities, to praise him as we can find.				
10. I think he takes after me.				
11. I turn off the TV in the middle on one of his programs or I tell him to leave the dinner table because he's been misbehaving.				
12. He thinks he knows everything, but he doesn't. He'll stand there and argue that white is black, even when you try to explain things to him.				
13. He's a kid who's hard to please; he's just contrary.				
14. We pretty much allow him to make a lot of noise in the house.				
15. We don't use people as examples for the kids of how or not to behave.				
16. He's often kept in the house and prevented from going out to play by way of punishment.				

	SA	A	D	ST
17. We've told them definitely never to even go to the door unless they were dressed.				
18. I try very hard to be firm about certain things; I really believe in it, but it's been a little bit hard.				
19. He got cut off on Cub Scouts and television for a month there when his school-work went down.				
20. I usually say to him, "If you're going to act like that, son, go on to your room until you've finished pouting and sulking, and then come on out and join us.				
21. He's just like me in temperament.				
22. At times when he is really rambunctious, we tell him that he is just like a little kid we know who is the epitome to us of how a child should not act.				
23. We try to explain why we ask him to do something.				
24. We either play whatever game he wants to play or read if he wants me to read something to him.				
25. We praise him whenever he behaves well.				
26. If he leaves home he is definitely required to let us know where he is and we set a time for him to be back.				
27. When he was younger, we always used to pick him up the second he fell.				
28. Sometimes I think that the big trouble with a lot of children is nobody reasons with them as to why they shouldn't do things or why they should.				
29. I would say that _____ and I aren't as happy with each other as we might be.				
30. _____ maybe thinks I get too upset over things that he might want to do.				
31. I'm sure that _____ tells me whenever there is anything bothering him.				
32. Let's say he does something I didn't want him to do. I tell him I still love him but I have to punish him.				
33. We don't allow him to stay out too long on these chilly afternoons even though most of the other kids stay out later.				

	SA	A	D	SD
34. Frankly, I'm just away from him too much of the time, and this is not good.				
35. Sex is something we don't talk about at all in front of the children.				
36. He knows that I'm going to paddle his fanny if he does something wrong.				
37. He normally appears to be very cautious about being tempted. If it's something that we feel is wrong, why he usually doesn't go along with the show.				
38. He is inclined to be meticulously honest, except as his own feelings about something distort the truth.				
39. The first two years of _____'s life are sort of a blur -- I don't remember very much about them.				
40. Usually when I'm around and he wants attention I'm not so busy but what I can at least answer him. I may not be able to do what he wants but I feel I at least owe him an answer.				
41. From the very beginning we started teaching him to always be dressed.				
42. He's not as aggressive as he might be at times.				
43. I'd like my son to be smarter than me.				
44. He's always fascinated with new experiences.				
45. We show our affection for each other -- we're not reserved about it at all.				
46. Usually I feel that if it's worth a parent giving a direct order to a child the parent should see the child does it right away.				
47. I've told him, "If you think you're right and the other fellow's trying to run over you, son, you slug him. Or if something happens to be yours and somebody tries to take it away from you, you fight for it."				
48. I tell him he has to fight his own battles and not come tattling to me.				
49. He's past the age of spanking.				
50. If there has been a quarrel I tell him if he can't fight his own battles he will have to stay in his own house.				

	SA	A	D	SD
51. I wish I knew how close _____ feels to me.				
52. I think I get talked into things.				
53. It hurts me when he talks back to me.				
54. I really enjoy reading to _____ before he goes to bed.				
55. I don't believe that you should teach a child to fight.				
56. Sometimes he seems to do things just to annoy me and I find this hard to understand.				
57. I would only step in to stop a fight if he started using a stick or some other object to hit another child.				
58. I don't like to see quarreling and fighting in any kid.				
59. I think it is tremendously important for _____ to develop a clear idea of right and wrong.				
60. He did mention some dirty joke he heard from the children. I told him not to play with those children and not to listen to those things.				
61. We've always tried to explain to him why you shouldn't do this or why you should do that.				
62. I feel that he definitely knows the difference between right and wrong. I think a certain amount of explaining about these things does rub off eventually.				
63. Once or twice I took him in, pulled down his pajamas and beat him with my hand.				
64. He knows that we love him.				
65. I feel quite close to him because he'll generally come to me and put his arms around me and things like that.				
66. I'd say that in past years I have showed my affection too much. Now I try not to overdo it.				
67. Sometimes I think I understand _____ pretty well but then there are some things he does that I don't understand at all.				
68. I have never had any arguments with our neighbors.				
69. We have discouraged him from kissing his brother on the mouth.				

	SA	A	D	SD
70. I think I've always hugged and kissed him, and if he climbed up in my lap, I'd hold him for a while.				
71. I hate to see him in a fight. If I see him fighting, I'll stop it.				
72. I certainly wouldn't want him to play with dolls and such.				
73. Every once in a while I take the occasion to tell him I'm proud of his improvement.				
74. A lot of times I take him to a picture show or something on weekends.				
75. I'd like him to stick up for his own rights.				
76. We praise him when we think he would appreciate it and bubble over it -- not just for school work or if his room is kept or his shoes are shined.				
77. They're not allowed to roughhouse or jump on the furniture, but we fight it all the time and the moment my back's turned they do it.				
78. For his own self-protection, he should know how to handle himself.				
79. I'm sort of inept at playing with babies.				
80. Parents should make lots of things available for kids to try out and let the kids try lots of things.				
81. He may be tempted, but he's very cautious and so he doesn't do it.				
82. I think _____ has to stand up for himself.				
83. I set myself up as a model for him to follow in manners and things like that.				
84. It's like when he learned to dress himself, I never did sit down and give him nice little instructions as to how to do it. He just sort of assimilated the process.				
85. It's pretty hard to have a set rule about bedtime, because he has questions to ask, drinks of water to be had, the bathroom to go to and any number of things.				
86. I explain to him that it is not proper to be telling lies.				

	SA	A	D	SD
87. We feel that he should not say something or do something and then tell us an untruth about it.				
88. I try to make a nice impression on everyone I meet.				
89. He has likes and dislikes and we consider them in making the rulew.				
90. It's good for him to have lots of ways of keeping busy on his own...				
91. A child should obey right away.				
92. When he was small, we got a kick out of seeing him running around naked and enjoying himself.				
93. I try to treat people the way I'd want to be treated.				
94. We've been trying to develop suitable chores for each child so that they all contribute a little bit.				
95. I spend probably a half hour a day or more on an average school day helping him work his homework.				
96. A lot of times he'll say he can't do something, it's too hard for him and start asking questions about it. Well, we try to help him come up with the answers and then show him that it isn't very difficult and that he can work these things.				
97. We did explain to him that that was his privates and not to be played with.				
98. I suppose I should give more consideration to his safety when he's out playing but I don't.				
99. He knows why he's been punished. You don't have to smooth things over. If he hadn't done it in the first place, everything would have been all right. I think you should let it go at that.				
100. I'm firm enough that he knows that I mean it when I tell him I don't want him to do something.				
101. I feel it's important for _____ to apologize if he has been angry at another child.				
102. I think a child can be taught never to lie.				
103. Soon as I found out he was picking up cuss words, I would correct them. I would say that this is a word not to use.				

		SA	A	D	SD
104.	I've never stopped him on any TV program he wanted to see.				
105.	Actually, I haven't paid much attention to fighting or name calling.				
106.	I feel he's too inclined to hold things within himself --- it's good to be able to show anger.				
107.	If he gives us his word that he didn't do something, I take his word for it.				
108.	I don't approve of a quick temper. I think a person should try his hardest to be understanding.				
109.	I would say we are pretty good at carrying through, but he gets away with things sometimes.				
110.	We have a very companionable marriage -- We like the same things pretty well.				
111.	He's got to learn that he has to close the door when he goes to the bathroom.				
112.	I think that a boy his age ought to be able to mow the lawn and perform similar chores.				
113.	He's sort of accepted his role as a person in the household; he doesn't seem to want as much attention as when he was smaller.				
114.	If he gets angry at me, I just let him express it as much as he wants to and I explain my position and that's it.				
115.	I want him to do something and I am not ready to go into the reasons why I expect him to do it.				
116.	Sometimes I'm so puzzled by what he does, you know, that I don't do anything too concrete until I think on it a little.				
117.	I think we cooperate on big decisions.				
118.	When boys and girls are somewhat older there are probably some differences in their activities, but they all seem pretty much alike to me now.				
119.	I tell him that if he gets pushed around, he should just turn around and push back.				

	SA	A	D	SD
120. I want him to grow up to be happy. I'd rather not hold him to what I want.				
121. We don't have very strong connections with out neighbors --- there's no real personal relationship.				
122. I try to kiss him and he'll back away from me.				
123. To my way of thinking, he seems to want an extraordinary amount of attention.				
124. I'll say that some of the pretty violent scenes I've had with him were absolutely uncalled for on my part.				
125. I'm not as tolerant as I should be, I feel.				
126. He hasn't been very difficult to bring up.				
127. We don't have and particularly close friends -- we keep pretty much to ourselves.				
128. I think he likes attention and, believe me, it's lavished on him.				
129. I don't get irritated very easily. I learned to control my temper years ago.				
130. I hope he'll be better able to go out and sway people than I can. I hope he'll have more chance than I have.				
131. He constantly tests the rules to see how empty they may be.				
132. We don't plan their evenings, more or less let them do what they want to.				
133. Most of all I want him to do something he really loves doing, and not to study something or go into something for other reasons than that he really likes it.				
134. _____ wasn't very affectionate when he was younger.				
135. As a punishment, he may be deprived of a dessert at the table or of going to the Saturday show.				
136. If he plays with his genitals, we just say, "Don't do that. You might hurt yourself," and drop the subject.				
137. If I've punished him and he goes to his bedroom and cries, I've insisted he stay there if he's going to cry.				

		SA	A	D	SD
138.	I feel he can't be tempted very much if he knows it's something that's not really safe to do.				
139.	We should tell him once and then make darn sure that he does it, instead of repeating ourselves.				
140.	I object very strenuously to gang type activities that may get out of bounds.				
141.	He doesn't have to tell us where he's going even if he's going out of the immediate neighborhood.				
142.	He seems kind of young to try to explain things to him like the consequences of some things he might do.				
143.	I think the thing that works best in trying to get him to behave the way I want him to is to talk to him; I always talk things over with him.				
144.	He can be tempted very easily by other children.				
145.	I fear I don't help him as much as I should				
146.	I generally get along pretty well with people.				
147.	I think he should stand up for himself.				
148.	I'm an independent person -- I know how to make my way in the world.				
149.	Whenever he goes out to play, we want him to watch himself and be very careful.				
150.	We sometimes use some of the neighborhood kids as an example to him. We try to show him how good he could be if he would only do this and such.				
151.	We try very much not to use the other kids as an example for him to follow. We make a point of trying not to do that.				
152.	I think he'd be fairly gullible with other children and go along with them.				
153.	If somebody feels they could pick on you and you're not going to do anything about it, they'll pick on you that much more.				
154.	I told him if anybody starts a fight with him, he should put them in their place.				
155.	I'd like to see him go ahead and get an extensive formal education.				

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part outlines the various methods and tools used to collect and analyze data. It mentions the use of surveys, interviews, and focus groups to gather information from stakeholders. Additionally, it discusses the application of statistical analysis to interpret the collected data.

3. The third part describes the process of identifying trends and patterns in the data. It highlights the need for a systematic approach to data analysis, involving the identification of key variables and the use of appropriate statistical techniques.

4. The fourth part focuses on the communication of findings. It stresses the importance of presenting the results in a clear and concise manner, using visual aids such as charts and graphs to enhance understanding. It also mentions the need to tailor the communication to the specific audience.

5. The fifth part discusses the implications of the findings for the organization. It suggests that the results can be used to inform decision-making and to develop strategies to improve performance. It also mentions the need for ongoing monitoring and evaluation to ensure that the organization remains on track.

6. The sixth part concludes the document by summarizing the key points and reiterating the importance of a data-driven approach. It encourages the organization to continue to invest in data collection and analysis to achieve its goals.

	SA	A	D	SD
156. He wants to try lots of grown-up things and as long as I feel they won't hurt him in any way, I let him go ahead and do it. It's never been a problem.				
157. If _____ deliberately starts quarreling or name-calling, I think I should do something to stop it.				
158. Even if I'm hostile in my mind toward someone, I won't show it.				
159. I'd like him to have a little more drive, spirit, initiative.				
160. All my life, I have loved people.				
161. When he's done something especially nice I always let him know how much I appreciate it.				
162. I'd like him to be masculine in regard to sports and hobbies and reading material and so forth.				
163. If I see he's hitting his brother hard, trying to hurt then I paddle his bottom.				
164. Sometimes I'm at my wits end trying to figure out what to do with that boy.				
165. We've tried to show him that we plan ahead on things like meals and if there are particular things he wants he must ask ahead of time. And so a couple of times when he has asked ahead, we've tried if possible to do it at that time.				
166. I certainly don't want _____ to have the feeling that he had as little to do with what went on in the family as I did when I was growing up.				
167. He's not allowed to cross a busy street without some older person walking with him.				
168. I've pointed out to him that we each have a job to do. His father's job is to go to work and bring home the money, his mother's job is to keep up the house and his job is to keep his room up.				
169. There are some times when it's just not convenient to let him do things and I don't let him, but I like to let him try.				
170. I know that it's only healthy for a boy to fight.				
171. I feel that probably I have been a little bit lacking in that knack of getting down to his level on a lot of things.				

	SA	A	D	SD
172. I often tell him, "Well, Daddy wouldn't do something like that," or "Momma wouldn't do something like that."				
173. I think it's very important for a child to learn to do things for himself within the limits of his capabilities. We try to make it possible for him to do as many things as he can.				
174. We always tell him, "Look, when you get to be old enough to earn your own living, then you can do what you wish. Just now you take your orders from your mom and dad."				
175. We never object to where he's going as long as he lets us know.				
176. I would like him to be sure of himself in strange situations.				
177. The thing that makes me maddest of all is to be treated unfairly or to be unjustly accused.				
178. I feel our best time is when we just sit and talk.				
179. Quite often when we try to do something for him, he doesn't seem to appreciate it and we kind of feel he should.				
180. We're always after him to keep the noise down, to tone it down.				
181. If the weather's good we punish him by keeping him in the house -- that probably bothers him more than anything else.				
182. I feel that probably I have been a little bit lacking in that knack of getting down onto his level on a lot of things.				
183. If he and the other kid are the same size, I let them fight it out.				
184. Usually if someone treats me unfairly, I just feel injured. I like to avoid unpleasantness if possible.				
185. I'm pretty quick-tempered.				
186. If you talk to your children ahead of time and you can anticipate what will happen you can often eliminate lots of problems when they come and tell you what they want to do.				

		SA	A	D	SD
187.	When _____ and I have disagreements we always kiss and make up -- we both feel better if we do this.				
188.	You have to take people as they are -- you have to learn to get along with them.				
189.	When they lie, when it's a proveable lie, I get very angry about it and I've occasionally gone so far as to take a belt to them about this.				
190.	I don't like it when he comes and asks me things while I'm eating, and I get annoyed.				
191.	The kids get to hear words I have no business saying around the house because I get angry.				
192.	We like having friends over to the house to play cards or just to visit.				
193.	When I'm angry about something, I like to get it out in the open and get it over with.				
194.	I don't like to have scenes with people.				
195.	Any time I have ever whipped _____, I've always made it a point to set him down and tell him exactly why. And then I feel that afterwards we probably have been closer than we ever were.				
196.	If we see him playing with his genitals we try to distract him somehow.				
197.	Whenever some neighbor needs help with something, I'll always offer it.				
198.	We think it's important that children learn how to work, learn how to do things, tackle things more than just play.				
199.	We often held up his brother or sister as an example for him.				
200.	He feels by crying, I suppose, he'll get what he wants. We tell him it won't do him much good to cry.				
201.	I think he should have some little chores that he must do so that he learns that there are certain things in life that you have to do.				
202.	I love my son intensely.				

		SA	A	D	SD
203.	Probably we, to a certain extent, live within the family too much. We should be out mixing more, having more friends and the like.				
204.	I would expect him to take on more yardwork as he gets older, but not housework.				
205.	We frequently have to call his attention to the fact that he should not interrupt our conversations and that he should be quiet.				
206.	_____ has lied to me a couple of times and I have really whipped him. I don't think he ever will again.				
207.	I would like to see him more outspoken in school.				
208.	I have never encouraged him to use his fists to defend himself.				
209.	I show my affection very openly no matter where we are.				
210.	I would say that for everything that we have forbidden or scolded him about, he was perfectly aware of the reason.				
211.	We found out that children don't know what you're talking about when you explain things to them. It's wasted talk so we don't do it.				
212.	I don't think boys should do housework type of chores -- I think they should do things like carrying newspapers out or doing something in the yard or running errands.				
213.	I don't think that he should do things like setting the table, hanging curtains or washing dishes, unless he wants to, but this should not be required or encouraged.				
214.	I think that boys should have more manual chores than girls, such as mowing the lawn; I wouldn't expect that of a girl.				
215.	We keep close track of _____, -- we always know where he is.				
216.	I think he should obey but I don't think you should expect a child to do it on a moment's notice. But then, speak to them once, then speak to them a couple or three times in succession, it should register on them.				

	SA	A	D	SD
217. We might encourage him in new activities other than what he wants himself but if we knew he was resisting us, we certainly wouldn't continue to push him.				
218. It's more important for boys than for girls to find out early what they're interested in and follow it through.				
219. Calm, reasoned chastisement is the most effective punishment.				
220. We have to help him finish up a lot of his homework.				
221. We keep awful close track of our kids.				
222. He's supposed to be in bed by a certain time. It's very flexible.				
223. I don't think he should start fights, but if someone else starts one I think he should finish it even if he has to come home with two black eyes.				
224. I don't try to stop _____ from getting into fights; I try to figure out whether he's justified or not.				
225. _____ has been left alone very little. There's always some member of the family in the house.				
226. I feel it's important for _____ to apologize if he has hurt another child.				
227. He had one boy friend that was slightly coarse and we didn't particularly approve of him so we told _____ to try and steer clear of him.				
228. Sometimes you have to come out and lay down the law to him. Talk can only go so far.				
229. We told him that we didn't want him to play with his genitals because it would hurt him later on.				
230. If he started the fight, I'd explain to him what was wrong about what he was doing and tell him to apologize to the boy.				
231. We've trained our children to respect each others' privacy in the bathroom.				
232. He doesn't do too much that we can praise him for.				
233. We punish him by holding back a privilege, something he had his heart set on.				

		SA	A	D	SD
234.	He's got to learn to think before he acts and not just say he's sorry afterward.				
235.	The church plays an important part with us and we generally point out people in the congregation as good examples for _____ to follow.				
236.	If I take him out someplace, say, to a movie -- and he sits quietly during this particular movie, I'll say, "I'm glad you came along with me, we'll have to go again."				
237.	We don't allow any fighting or hurting anybody, things like that. They can't get rowdy.				
238.	I'm a very social, very group-minded person.				
239.	I don't think _____ was born at the best time in our marriage.				
240.	They'll mind us at the time, when we're right there but we don't correct them in such a way that they're afraid to do it next time.				
241.	I can't think of anything I would like him to be I wouldn't expect in a girl.				
242.	We both flare up. He probably learned it from me.				
243.	I think that children, within their own group of friends, have to work out their own differences.				
244.	I hope _____ will have qualities of leadership and initiative.				
245.	We've always warned him about talking to strangers. He knows he's not supposed to let a stranger come up and talk to him.				
246.	I'm not as strict as I should be.				
247.	He's a very cheerful guy, he's an exuberant guy and I tend to be exuberant, too.				
248.	I think that a boy or a girl can have very similar responsibilities. I wouldn't say any longer that it's strictly a woman's work maintaining a home.				
249.	We're trying to bring him up so that he's pretty much responsible to himself.				
250.	I can't figure him out sometimes -- I don't know what makes him tick.				

		SA	A	D	SD
251.	We give him an allowance and he doesn't have to work for it at all but if he wants to earn extra money there are some chores that he can go ahead and do and come and tell me about them.				
252.	Kids should respect authority and when they're told to do something, they should do it and not give you a big argument.				
253.	I get upset when he teases other children.				
254.	I always try to tell him the reasons <u>each</u> time.				
255.	He's supposed to report in just before he goes somewhere.				
256.	If I told him I was going to discipline him, the only things that would keep me from following through would be one of the other children being in bad trouble or something like that.				
257.	I would like for him to go through college and I think he's capable of it, but if he chooses to do something for which he does not have to go to school, I'm certainly not going to put up a fuss about it.				
258.	I don't think there's any too big a difference between boys and girls as far as responsibility in the home goes.				
259.	Mostly I'd like him to grow up to be a person who likes to do what he's doing.				
260.	I'm very easily swayed by him when he comes in to me and apologizes for something he did.				
261.	We feel very strongly against him taking something that belongs to someone else.				
262.	I think it's a good idea for children to have regular jobs around the home because it gives them a sense of belonging and a sense of importance.				
263.	I might give in on some things with the children because I am not at all happy in doing something that someone else doesn't really want to do.				
264.	When I flip my lid, I flip, and I flip whether the children happen to be there or a group of people, and get it off my chest.				
265.	I would like him to be more aggressive in taking care of himself.				

		SA	A	D	SD
266.	I'd like him to obey immediately because usually when I ask him to do something, it's a something that I feel should be done immediately.				
267.	I feel that it's important for a boy to learn to stand up for himself.				
268.	I think you should teach them to be as self-sufficient as possible. I think they need lots of love and care but they should be self-sufficient.				
269.	I think most of his efforts to act grown-up are pretty reasonable and I hope he can do these things.				
270.	You know, you take your annoyances out on the children, unfortunately.				
271.	We've explained about how intercourse will bring about the birth of a child, where the baby is carried, and so forth.				
272.	I ignore a certain amount of name calling and quarreling because I think kids can work their things out for themselves.				
273.	My husband doesn't discuss things -- talk things over -- as much as I would like.				
274.	As far as rules go, I just simply can't be firm enough to please my husband.				
275.	I think _____ feels closer to his father than to me because his father is more lenient with him.				
276.	My husband is indifferent and doesn't show affection, and I sometimes think _____ may turn out to be like him.				
277.	My husband thinks I nag _____ too much because I do keep at him sometimes.				
278.	His father isn't strict with him at all. He tells _____ he knows he didn't mean it, he wouldn't do it again, so he isn't strict with him.				
279.	If my husband had punished unwisely and _____ was in the right then I would tell _____ I thought he was in the right.				
280.	He feels he has to have his own way, and that's like my husband, and I don't feel that's a very good trait.				

	SA	A	D	SD
281. He's smart like his father; he's got a good head on his shoulders.				
282. If my husband's disciplining him, I don't step in, and if I am, he doesn't step in.				
283. I wouldn't like him to pick up my husband's bad habits.				
284. Once he did come home with a dirty word and I knew someday it would come and yet I guess I did get kind of shaky about it.				
285. I think to some extent I don't want him to be quite as easy-going as my husband.				
286. My husband wants everything ship-shape and done right now and he is the biggest procrastinator you ever saw.				
287. I don't think I understand my husband very well; I don't understand what brings on his moods.				
288. His father has always been very good at playing games with him and keeping him amused and doing most anything for him.				
289. My husband ridicules him quite often.				
290. If my husband disciplines him, I never interfere with it, or if I discipline, He never interferes.				
291. I just can't think of anything where I should say he should not be like my husband, because I think he's fine.				
292. My husband has a real, genuine affection and he's a good father.				
293. My husband is too much on the defensive, too meek. He doesn't oppose things he doesn't like.				
294. My husband's a great one for making mountains out of molehills.				
295. I'd like him to be considerate and thoughtful -- sentimental, to a degree, more so than his father is in some respects.				
296. According to what I know about my husband, _____ seems to be very much like he was at that age.				

	SA	A	D	SD
297. Usually, as far as the children are concerned, since my husband isn't there so often, I usually make most of the decisions. Right or wrong, I'm stuck with them.				
298. When my husband's here, he's the boss. I guess it's because I try to get busy with housework and leave them to him when he's here.				
299. I usually do the disciplining. If it's something that happens when my husband's around, then he does it.				
300. I usually discipline -- because I'm there more than his father is.				
301. I usually say, "Well, we'll wait until your Dad comes home and we'll see what he says about it." I leave it up to their father.				
302. Mostly we do things together, but I guess I make more decisions than my husband does.				

APPENDIX F-2

FATHER STANFORD PARENT QUESTIONNAIRE

INSTRUCTIONS: Please give the following information.

Your full name (print): _____

List your children, beginning with the oldest:

	Names	Ages
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

School you completed (For example: 8th grade, Graduated from high school, Graduated from college, Completed 1 1/2 years of college, 11th grade and 1 year of mechanics school in the army or navy, Graduated from medical school, etc.):

Marital status (For example: Married, Separated, Divorced, Divorced for the second time, Widow, Widow and now married for the second time, etc.):

Age: _____

NOTICE: As soon as you return this questionnaire, this page will be removed and kept in a separate locked file. Your answers will not be identified with your name. So, you can be very frank on this questionnaire and your answers will be kept completely confidential. Your code number is given below.

CODE NUMBER: _____

When you have given the information requested on this page, go on to the next page. You will find more instructions there.

STANFORD PARENT QUESTIONNAIRE

(Father's Form M.S.U.)

The following statements have been made by parents about themselves, their children, and their families. Please read each statement and decide how it applies to you.

Look at the next page of this questionnaire for a minute and you will see that there are four columns on the right hand side of the page. On the left side of the page there are statements. You should put one check mark next to each statement. You may put the check mark under SA or A or D or SD. SA means you agree strongly with the statement. A means you agree with the statement more than you disagree with it. D means you disagree with the statement more than you agree with it. SD means that you strongly disagree with the statement.

If you agree strongly with the statements or feel sure that it applies to you, put a check mark in the column marked SA. SA means Strongly Agree.

If you are sure that a statement does not apply to you or you strongly disagree with the statement, put a check mark in the column marked SD. SD means Strongly Disagree.

Use the A (Agree) or D (Disagree) columns for statements you are less sure about or feel less strongly about.

Please mark every statement, even though some may not seem to describe you or your family. For example, there might be a statement about brothers and sisters and you may have only one child. Give the answer according to what you believe you would think or feel or do if the statement did apply, or the situation did come up.

If you have more than one child, please mark the statements as they apply to your son _____.

This questionnaire is for fathers; so if you are a woman please ask for a different questionnaire.

Work as quickly as you can. You do not need to think about each statement too carefully -- just give your impression about it. In other words, answer every one, but do not think too long about any one. Start with number 1 and do each one in order. Give your impression of each statement quickly and go on to the next one.

CODE NUMBER: _____

	SA	A	D	SD
1. Holding back some of his privileges is the best way I have of disciplining him.				
2. I don't believe in them standing up for themselves by picking on some other kid.				
3. The most effective punishment seems to be when we really take him in tow and either give him a spanking or a long talking to. Taking away some privilege doesn't work nearly as well.				
4. He knows when he's been spanked -- it's not just a tap on the wrist.				
5. I always try to give the reasons why he should or should not do certain things.				
6. When he gets angry and starts throwing things, we stop it the minute it happens.				
7. I thought a lot of times that my parents were standing on their rights as adults and that they actually didn't reason or consider a lot of facts. I hope we avoid that with him.				
8. We look for as many opportunities, legitimate opportunities, to praise him as we can find.				
9. I think he takes after me.				
10. I'd hate to have him be like me all the time; I'm no shining example.				
11. It's very important for a boy to think and to learn how to use his brain -- more so than for a girl.				
12. If he's going to act that way, he can't expect me to do things for him, and the next time he wants some money to go to a show or something like that, why we'll remember it.				
13. I hope my son is going to have a social, outgoing personality.				
14. He thinks he knows everything, but he doesn't. He'll stand there and argue that white is black, even when you try to explain things to him.				
15. He's a kid who's hard to please; he's just contrary.				
16. We pretty much allow him to make a lot of noise in the house.				

	SA	A	D	SD
17. We don't use people as examples for the kids of how to behave or not to behave.				
18. He's often kept in the house and prevented from going out to play by way of punishment.				
19. We've told them definitely never to even go to the door unless they were dressed.				
20. I try very hard to be firm about certain things; I really believe in it, but it's been a little bit hard.				
21. He got cut off on Cub Scouts and television for a month there when his school-work went down.				
22. When he was smaller we had the clothes-hooks low so he could hang his things up and his toys were in boxes and drawers that were low so it was easy for him to put things away by himself.				
23. I would hate for him to be effeminate.				
24. He's just like me in temperament.				
25. At times when he is really rambunctious, we tell him that he is just like a little kid we know who is the epitome to us of how a child should not act.				
26. We try to explain why we ask him to do something.				
27. We either play whatever game he wants to play or read if he wants me to read something to him.				
28. We praise him whenever he behaves well.				
29. If he leaves home he is definitely required to let us know where he is and we set a time for him to be back.				
30. I would say that _____ and I aren't as happy with each other as we might be.				
31. I wish he felt as close to me as I do to him.				
32. _____ maybe thinks I get too upset over things that he might want to do.				
33. I'm sure that _____ tells me whenever there is anything bothering him.				
34. We don't allow him to stay out too long on these chilly after-noons even though most of the other kids stay out later.				

	SA	A	D	SD
35. Frankly, I'm just away from him too much of the time, and this is not good.				
36. Sex is something we don't talk about at all in front of the children.				
37. He knows that I'm going to paddle his fanny if he does something wrong.				
38. He normally appears to be very cautious about being tempted. If it's something that we feel is wrong, why he usually doesn't go along with the show.'				
39. He likes for me to be at home as much as possible; not to go out.				
40. Usually when I'm around and he wants attention I'm not so busy but what I can at least answer him. I may not be able to do what he wants but I feel I at least owe him an answer.				
41. From the very beginning we started teaching him to always be dressed.				
42. He's not as aggressive as he might be at times.				
43. He's always fascinated with new experiences.				
44. We show our affection for each other -- we're not reserved about it at all.				
45. Usually I feel that if it's worth a parent giving a direct order to a child the parent should see the child does it right away.				
46. I've told him, "If you think you're right and the other fellow's trying to run over you, son, you slug him. Or if something happens to be yours and somebody tries to take it away from you, you fight for it."				
47. I tell him he has to fight his own battles and not come tattling to me.				
48. He's past the age of spanking.				
49. I wish I knew how close _____ feels to me.				
50. A lot of times he comes and asks me how to do things, or when I'm doing something, he'll always come and want to help.				
51. I think I get talked into things.				

	SA	A	D	SD-
52. It hurts me when he talks back to me.				
53. I don't believe that you should teach a child to fight.				
54. Sometimes he seems to do things just to annoy me and I find this hard to understand.				
55. When He was a baby, I used to walk around the room with him when he was crying.				
56. We're at them continually not to jump on the furniture but they do anyway.				
57. I don't like to see quarreling and fighting in any kid.				
58. I think it is tremendously important for _____ to develop a clear idea of right and wrong.				
59. He did mention some dirty joke he heard from the children. I told him not to play with those children and not to listen to those things.				
60. We've always tried to explain to him why you shouldn't do this or why you should do that.				
61. I feel that he definitely knows the difference between right and wrong. I think a certain amount of explaining about these things does rub off eventually.				
62. I would like for him to care what other people think about him.				
63. Once or twice I took him in, pulled down his pajamas and beat him with my hand.				
64. He knows that we love him.				
65. I feel quite close to him because he'll generally come to me and put his arms around me and things like that.				
66. I'd say that in past years I have showed my affection too much. Now I try not to overdo it.				
67. Sometimes I think I understand _____ pretty well but then there are some things he does that I don't understand at all.				
68. I have never had any arguments with our neighbors.				
69. We have discouraged him from kissing his brother on the mouth.				

	SA	A	D	SD
70. I think I've always hugged and kissed him, and if he climbed up in my lap, I'd hold him for a while.				
71. I hate to see him in a fight. If I see him fighting, I'll stop it.				
72. Every once in a while I take the occasion to tell him I'm proud of his improvement.				
73. I'd like him to stick up for his own rights.				
74. We praise him when we think he would appreciate it and bubble over it -- not just for school work or if his room is kept or his shoes are shined.				
75. They're not allowed to roughhouse or jump on the furniture, but we fight it all the time and the moment my back's turned they do it.				
76. For his own self-protection, he should know how to handle himself.				
77. He may be tempted, but he's very cautious and so he doesn't do it.				
78. I set myself up as a model for him to follow in manners and things like that.				
79. It's like when he learned to dress himself, I never did sit down and give him nice little instructions as to how to do it. He just sort of assimilated the process.				
80. It's pretty hard to have a set rule about bedtime, because he has questions to ask, drinks of water to be had, the bathroom to go to and any number of things.				
81. I give him just so long to eat his dinner and if he doesn't he just goes to bed.				
82. I explain to him that it is not proper to be telling lies.				
83. We feel that he should not say something or do something and then tell us an untruth about it.				
84. He has likes and dislikes and we consider them in making the rules.				
85. The kids pretty much have a free rein in the house as long as they're not doing something that might hurt them.				

	SA	A	D	SD
86. It's good for him to have lots of ways of keeping busy on his own.				
87. A child should obey right away.				
88. When he was small, we got a kick out of seeing him running around naked and enjoying himself.				
89. We try to keep him away from those things that I know would be way out of capability, but he used the jig-saw the electric drill, and the sander with help.				
90. I try to treat people the way I'd want to be treated.				
91. We've been trying to develop suitable chores for each child so that they all contribute a little bit.				
92. I spend probably a half hour a day or more on an average school day helping him work his homework.				
93. A lot of times he'll say he can't do something, it's too hard for him and start asking questions about it. Well, we try to help him come up with the answers and then show him that it isn't very difficult and that he can work these things.				
94. We did explain to him that that was his privates and not to be played with.				
95. I suppose I should give more consideration to his safety when he's out playing but I don't.				
96. We've had some very violent explosions over lying.				
97. He knows why he's been punished. You don't have to smooth things over. If he hadn't done it in the first place, everything would have been all right. I think you should let it go at that.				
98. I'm firm enough that he knows that I mean it when I tell him I don't want him to do something.				
99. I feel it's important for _____ to apologize if he has been angry at another child.				
100. Soon as I found out he was picking up cuss words, I would correct them. I would say that this is a word not to use.				
101. We subscribe to the theory that he should do things because he wants to do them, not because he's been told to do them.				

	SA	A	D	SD
102. I've never stopped him on any TV program he wanted to see.				
103. I ask _____ if he is sure that that is the truth, I kid him to a certain extent on it, it sounds far-fetched, and I try to show him that the story doesn't sound right, that I question is at least -- not that I absolutely disbelieve him.				
104. If he gives us his work that he didn't do something, I take his word for it.				
105. I don't approve of a quick temper. I think a person should try his hardest to be understanding.				
106. We never have any disagreements in front of the kids.				
107. We have a very companionable marriage -- We like the same things pretty well.				
108. He's got to learn that he has to close the door when he goes to the bathroom.				
109. After we've punished him, we usually let him get over it on his own or, after a while, put him to work somewhere, doing something.				
110. I think that a boy his age ought to be able to mow the lawn and perform similar chores.				
111. He's sort of accepted his role as a person in the household; he doesn't seem to want as much attention as when he was smaller.				
112. I want him to do something and I am not ready to go into the reasons why I expect him to do it.				
113. Sometimes I'm so puzzled by what he does, you know, that I don't do anything too concrete until I think on it a little.				
114. I think we cooperate on big decisions.				
115. When he has come into the bedroom while one or the other or both of us were undressed, we've never made an issue about it or told them that they shouldn't or anything like that.				
116. I tell him that if he gets pushed around, he should just turn around and push back.				

	SA	A	D	SD
117. When he asked if he could have some chores to do, we agreed that it would be a good time to start an allowance.				
118. When he wants to start playing with something different I remind him that he can't very well start playing there if the space is covered with other things. Then I usually offer to help him pick thinks up.				
119. I want him to grow up to be happy. I'd rather not hold him to what <u>I</u> want.				
120. We don't have very strong connections with our neighbors -- there's no real personal relationship.				
121. I try to kiss him and he'll back away from me.				
122. To my way of thinking, he seems to want an extraordinary amount of attention.				
123. I'll say that some of the pretty violent scenes I've had with him were absolutely uncalled for on my part.				
124. I'm not as tolerant of him as I should be, I feel.				
125. We don't have any particularly close friends -- we keep pretty much to ourselves.				
126. I think he likes attention and, believe me, it's lavished on him.				
127. I don't get irritated very easily. I learned to control my temper years ago.				
128. I hope he'll be better able to go out and sway people than I can. I hope he'll have more chance than I have.				
129. When he was a baby and he cried, we felt that there was something that demanded attention and attempted to console him.				
130. He constantly tests the rules to see how empty they may be.				
131. We don't plan their evenings, more or less let them do what they want to.				
132. Most of all I want him to do something he really loves doing, and not to study something or go into something for other reasons than that he really likes it.				
133. _____ wasn't very affectionate when he was younger.				

	SA	A	D	SD
134. As a punishment, he may be deprived of a dessert at the table or of going to the Saturday show.				
135. If he plays with his genitals, we just say, "Don't do that. You might hurt yourself," and drop the subject.				
136. We should tell him once and then make darn sure that he does it, instead of repeating ourselves.				
137. I object very strenuously to gang-type activities that may get out of bounds.				
138. He doesn't have to tell us where he's going even if he's going out of the immediate neighborhood.				
139. I think the thing that works best in trying to get him to behave the way I want him to is to talk to him; I always talk things over with him.				
140. He can be tempted very easily by other children.				
141. I like to hear him talk and, in fact, I kind of delight in seeing him arguing or debating a little with his father.				
142. I fear I don't help him as much as I should.				
143. I generally get along pretty well with people.				
144. I think he should stand up for himself.				
145. Whenever he goes out to play, we want him to watch himself and be very careful.				
146. We sometimes use some of the neighborhood kids as an example to him. We try to show him how good he could be if he would only do this and such.				
147. We hold him down on the amount of noise he can make in the house.				
148. We try very much not to use the other kids as an example for him to follow. We make a point of trying not to do that.				
149. We have given him very careful instructions about how to do things. Then we let him be the leader when we are together and he learns the way to do things.				
150. I think he'd be fairly gullible with other children and go along with them.				

	SA	A	D	SD
151. If somebody feels they could pick on you and you're not going to do anything about it, they'll pick on you that much more.				
152. I told him if anybody starts a fight with him, he should put them in their place.				
153. I'd like to see him go ahead and get an extensive formal education.				
154. If _____ deliberately starts quarreling or name-calling, I think I should do something to stop it.				
155. All my life, I have loved people.				
156. When He's done something especially nice I always let him know how much I appreciate it.				
157. I'd like him to be masculine in regard to sports and hobbies and reading material and so forth.				
158. If I see he's hitting his brother hard, trying to hurt, then I paddle his bottom.				
159. Sometimes I'm at my wits end trying to figure out what to do with that boy.				
160. We've tried to show him that we plan ahead on things like meals and if there are particular things he wants he must ask ahead of time. And so a couple times when he has asked ahead, we've tried if possible to do it at that time.				
161. I certainly don't want _____ to have the feeling that he had as little to do with what went on in the family as I did when I was growing up.				
162. I've pointed out to him that we each have a job to do. His father's job is to go to work and bring home the money, his mother's job is to keep up the house and his job is to keep his room up.				
163. There are some times when it's just not convenient to let him do things and I don't let him, but I like to let him try.				
164. I would say he has never acted too grownup; he likes to imitate adult activities but I don't think he would try to use the things that are only for adults and have been strictly forbidden for him.				
165. I know that it's only healthy for a boy to fight.				

		SA	A	D	SD
166.	I feel that probably I have been a little bit lacking in that knack of getting down to his level on a lot of things.				
167.	I often tell him, "Well, Daddy wouldn't do something like that," or "Momma wouldn't do something like that."				
168.	I think it's very important for a child to learn to do things for himself within the limits of his capabilities. We try to make it possible for him to do as many different things as he can.				
169.	If I go away for a week on a trip, he doesn't really miss me too much.				
170.	For instance, he has helped in the backyard planting flowers and such so when he is there with a bunch of kids he kind of makes sure they don't tramp through the flower bed because he feels they are his too.				
171.	We always tell him, "Look, when you get to be old enough to earn your own living, then you can do what you wish. Just now you take your orders from your mom and dad."				
172.	We never object to where he's going as long as he lets us know.				
173.	I would like him to be sure of himself in strange situations.				
174.	The thing that makes me maddest of all is to be treated unfairly or to be unjustly accused.				
175.	I feel our best time is when we just sit and talk.				
176.	Quite often when we try to do something for him, he doesn't seem to appreciate it and we kind of feel he should.				
177.	We're always after him to keep the noise down, to tone it down.				
178.	If the weather's good we punish him by keeping him in the house-that probably bothers him more than anything else.				
179.	Our kids are supposed to behave always.				
180.	I feel that probably I have been a little bit lacking in that knack of getting down onto his level on a lot of things.				

	SA	A	D	SD
181. If he and the other kid are the same size, I let them fight it out.				
182. I'm pretty quick-tempered.				
183. If you talk to your children ahead of time and you can anticipate what will happen you can often eliminate lots of problems when they come and tell you what they want to do.				
184. When _____ and I have disagreements we always kiss and make up -- we both feel better if we do this.				
185. You have to take people as they are -- you have to learn to get along with them.				
186. When they lie, when it's a proveable lie, I get very angry about it and I've occasionally gone so far as to take a belt to them about this.				
187. As far as taking revenge on a person, I don't think it's right under any circumstances.				
188. The kids get to hear words I have no business saying around the house because I get angry.				
189. He's seen the way we react to situations and that's certainly going to make some impression on him. Whether it will turn out that he doesn't want to do it the same way or whether he thinks it's a good way to do it, I think we have a lot of influence on how they grow up.				
190. We like having friends over to the house to play cards or just to visit.				
191. I don't like to have scenes with people.				
192. Any time I have ever whipped _____, I've always made it a point to set him down and tell him exactly why. And then I feel that afterwards we probably have been closer than we ever were.				
193. If we see him playing with his genitals we try to distract him somehow.				
194. Whenever some neighbor needs help with something, I'll always offer it.				
195. We think it's important that children learn how to work, learn how to do things, tackle things more than just play.				

	SA	A	D	SD
196. We often held up his brother or sister as an example for him.				
197. I think he should have some little chores that he must do so that he learns that there are certain things in life that you have to do.				
198. I am constantly warning him of all kinds of dangers, like electricity and knives and streets and everything.				
199. I love my son intensely.				
200. Probably we, to a certain extent, live within the family too much. We should be out mixing more, having more friends and the like.				
201. I don't make it a practice to ignore him or refuse to speak to him if he's been bad.				
202. I take the first opportunity, after I've cooled down and I'm sure that he has cooled down, to re-cement relationships.				
203. _____ has lied to me a couple of times and I have really whipped him. I don't think he ever will again.				
204. I would like to see him more outspoken in school.				
205. I expect that he will occasionally take something that belongs to someone else or tell an untruth, though of course I don't approve of it.				
206. I have never encouraged him to use his fists to defend himself.				
207. I show my affection very openly no matter where we are.				
208. I make him do his homework over when it's sloppy.				
209. Whenever it comes to taking a little vacation or going on a trip, we have a conference with the kids and try to arrive at a joint decision on where to go and what to do.				
210. I would say that for everthing that we have forbidden or scolded him about, he was perfectly aware of the reason.				
211. We found out that children don't know what you're talking about when you explain things to them. It's wasted talk so we don't do it.				

		SA	A	D	SD
212.	I don't think boys should do housework type of chores -- I think they should do things like carrying newspapers out or doing something in the yard or running errands.				
213.	I don't think that he should do things like setting the table, hanging curtains or washing dishes, unless he wants to, but this should not be required or encouraged.				
214.	I think that boys should have more manual chores than girls, such as mowing the lawn; I wouldn't expect that of a girl.				
215.	We keep close track of _____ -- we always know where he is.				
216.	I think he should obey but I don't think you should expect a child to do it on a moment's notice. But then, speak to them once, then speak to them a couple or three times in succession, it should register on them.				
217.	We might encourage him in new activities other than what he wants himself but if we knew he was resisting us, we certainly wouldn't continue to push him.				
218.	Sometimes I am a little bit reticent and I think he probably picks it up from me.				
219.	It's more important for boys than for girls to find out early what they're interested in and follow it through.				
220.	I think that I'm a better qualified judge of human nature than the average person.				
221.	Sometimes I think I may be squelching some of his independence.				
222.	We have to help him finish up a lot of his homework.				
223.	We keep awful close track of our kids.				
224.	He's supposed to be in bed by a certain time. It's very flexible.				
225.	I don't think he should start fights, but if someone else starts one I think he should finish it even if he has to come home with two black eyes.				

	SA	A	D	SD
226. I don't try to stop _____ from getting into fights; I try to figure out whether he's justified or not.				
227. _____ has been left alone very little. There's always some member of the family in the house.				
228. I feel it's important for _____ to apologize if he has hurt another child.				
229. He had one boy friend that was slightly coarse and we didn't particularly approve of him so we told _____ to try and steer clear of him.				
230. Sometimes you have to come out and lay down the law to him. Talk can only go so far.				
231. We told him that we didn't want him to play with his genitals because it would hurt him later on.				
232. If he started the fight, I'd explain to him what was wrong about what he was doing and tell him to apologize to the boy.				
233. We've trained our children to respect each others' privacy in the bathroom.				
234. He doesn't do too much that we can praise him for.				
235. We punish him by holding back a privilege, something he had his heart set on.				
236. He's got to learn to think before he acts and not just say he's sorry afterward.				
237. The church plays an important part with us and we generally point out people in the congregation as good examples for _____ to follow.				
238. He's got an inquisitive nature and I've always liked to learn things.				
239. If I take him out someplace, say to a movie -- and he sits quietly during this particular movie, I'll say, "I'm glad you came along with me, we'll have to go again soon."				
240. We don't allow any fighting or hurting anybody, things like that. They can't get rowdy.				
241. I'm a very social, very group-minded person.				

	SA	A	D	SD
242. They'll mind us at the time, when we're right there, but we don't correct them in such a way that they're afraid to do it next time.				
243. Whenever I've given him a spanking, I've always gone in and talked to him afterwards, told him the reason why he had the spanking.				
244. I can't think of anything I would like him to be I wouldn't expect in a girl.				
245. We both flare up. He probably learned it from me.				
246. I think that children, within their own group of friends have to work out their own differences.				
247. I hope _____ will have qualities of leadership and initiative.				
248. I can tell just how he's going to feel about things.				
249. We've always warned him about talking to strangers. He knows he's not supposed to let a stranger come up and talk to him.				
250. I think that a boy or a girl can have very similar responsibilities. I wouldn't say any longer that it's strictly a woman's work maintaining a home.				
251. We're trying to bring him up so that he's pretty much responsible to himself.				
252. I can't figure him out sometimes -- I don't know what makes him tick.				
253. We give him an allowance and he doesn't have to work for it at all but if he wants to earn extra money there are some chores that he can go ahead and do and come and tell me about them.				
254. Kids should respect authority and when they're told to do something, they should do it and not give you a big argument.				
255. I get upset when he teases other children.				
256. I think he's about as adept for his age as any child I have observed, if not more so than many.				
257. I get tired of the whole darned brood, not just _____, but the whole bunch.				
258. He's pretty much a Momma's boy.				

		SA	A	D	SD
259.	He's supposed to report in just before he goes somewhere.				
260.	I may not always go into the explanation at the time, but I have always given him the reason why.				
261.	If I told him I was going to discipline him, the only things that would keep me from following through would be one of the other children being in bad trouble, or something like that.				
262.	Mostly I'd like him to grow up to be a person who likes to do what he's doing.				
263.	I'm very easily swayed by him when he comes in to me and apologizes.				
264.	We feel very strongly against him taking something that belongs to someone else.				
265.	I think it's a good idea for children to have regular jobs around the home because it gives them a sense of belonging and a sense of importance.				
266.	I would like him to be more of an athlete.				
267.	When I flip my lid, I flip, and I flip whether the children happen to be there or a group of people, and get it off my chest.				
268.	I would like him to be more aggressive in taking care of himself.				
269.	I'd like him to obey immediately because usually when I ask him to do something, it's something that I feel should be done immediately.				
270.	I feel that it's important for a boy to learn to stand up for himself.				
271.	I think you should teach them to be as self-sufficient as possible. I think they need lots of love and care but they should be self-sufficient.				
272.	I think most of his efforts to act grown-up are pretty reasonable and I hope he can do these things.				
273.	You know, you take your annoyances out on the children, unfortunately.				
274.	We've explained about how intercourse will bring about the birth of a child, where the baby is carried, and so forth.				

		SA	A	D	SD
275.	When my wife was pregnant with _____, we had a hell of a time -- We really got on one another's nerves.				
276.	I've had a rough schedule for quite a while now, working pretty hard and not having adequate relaxation and not having a chance to get away from the house and the family and all that.				
277.	If my wife and I have a difference of opinion on some matter with regard to raising _____, I'm stumped -- I don't quite know how to settle it.				
278.	I don't think I took as much care of him when he was a baby as a father should.				
279.	I'd say there's a lot of room for improvement when it comes to my wife and I understanding each other.				
280.	I can't understand how my wife can make certain decisions without consulting me.				
281.	I have felt that my wife and I aren't as sexually compatible as I thought we should be.				
282.	I'm more concerned about appearances than my wife is. She doesn't care what people are going to say or think about her.				
283.	As far as getting irritated with my wife is concerned, I'd say it probably happens daily to some degree.				
284.	If I'm irritated at my wife, I can't hit her and I can't yell at her and so I resort to sarcasm.				
285.	My wife and I don't spend much time together -- only when the whole family gets together.				
286.	Things that will bother my wife will not bother me.				
287.	It's been very, very seldom that a fight or an argument between my wife and myself lasted overnight.				
288.	My wife and I have arguments when it comes to _____ and how to handle him.				
289.	If my wife gets irritated with me, I try to kid her out of it.				
290.	If I'm a little lax on some of my duties, my wife gets a little irritated and wants them done right away.				
291.	My wife ridicules _____ quite often.				

		SA	A	P	SD
292.	My wife's probably a little stricter than I am with him.				
293.	I just can't think of anything where I should say he should not be like my wife, because I think she's fine.				
294.	My wife loves the children and she wanted both of them.				
295.	My wife is pretty tied down with housework and various activities and I don't think she has much time for ____, other than taking care of his needs.				
296.	I don't think that my wife and I have ever had a serious argument.				
297.	My wife is too much on the defensive, too meek. She doesn't oppose things she doesn't like.				
298.	My wife's a great one for making mountains out of molehills.				
299.	When he's upset, he'll go to his mother more than he will to me.				
300.	I never took care of him when he was a baby unless his mother wasn't feeling well or she was going out someplace or something like that.				
301.	He feels closer to his mother than he does to me.				
302.	I think he shows me more affection than he shows his mother.				
303.	When there are these father-daughter outings or father-son affairs, I try to make them.				
304.	I rough-house with the children quite a little bit, and we fight, hitting in the body, and so I suppose automatically I have encouraged him to use his fists, at least so he knows how to use them.				
305.	He'll come to his mother more than he will to me when he's upset.				
306.	I try to avoid saying that I'm right because I'm his father.				
307.	He seems pretty much like an individual to me. I can't see too many of my or my wife's characteristics reflected in him.				

		SA	A	D	SD
308.	My mother tells me, "By golly, _____ is just like you were when you were a kid."				
309.	I'd like him to be a little less cautious than my wife.				
310.	Usually I discipline _____ if I'm around.				
311.	I decide this is the way we're going to do something and we do it.				
312.	I make most of the big decisions and my wife makes most of the decisions having to do with the kids.				
313.	My wife does more of the disciplining than I do.				
314.	I would say that my wife makes more of the decisions than I do.				
315.	I never fed him or changed his diapers much when he was a baby -- I don't think that's a father's role.				

APPENDIX G

APPENDIX G-1

RATIONALE OF MAA

The rationale behind pattern analytic techniques and MAA specifically is given by McQuitty.(1957a, 1957b) and Hemmingway (1961). Pattern analytic methods are not restricted to linear relationships and they are able to take in the possibility of a given response having a different meaning in a different context. Both of these traits would appear extremely important in any analysis of the results in this study. McQuitty and Hemmingway believe that types exist and are determinants of differential behavior. This last sentence actually states the major premise of this study. The specific technique, MAA, was chosen for use since it is the only pattern analytic technique with a built-in cutting point for terminating class size. Hemmingway (1961) states that the criterion for terminating any obtained class is : if inclusion of a subject into a class adds information, the class is said to be better defined. If it causes loss of information, the class is less well defined. Information is defined as subjects x items. Multiple classification of subjects is allowed as well as multiple use of responses with the restriction that the same response cannot be used more than once for the same subject. The criterion for inclusion

in any class becomes increasingly stringent. For a subject to become the n th member of a class of size $n-1$ defined by m characteristics he must agree on at least $\frac{n-1}{n}$ of the m responses to qualify for membership.

APPENDIX G-2

EXPLANATION OF PAIRING

The individual scores from the CRI and SPQ were put onto IBM cards and analyzed by the CDC 3600 computer. The program was one improved by Hafterson from Hemmingway's original thesis. The analysis by items produced mostly pairs of agreements by persons instead of the larger person groupings which probably would have been discovered in an analysis by persons. The largest grouping was seven persons, but on the three sets of MAA results there were only twenty-nine agreement groupings out of 495 with more than two persons agreeing.

Appendices H-1, H-2, H-3, H-4, H-5, and H-6 report the number of pairs of agreements by fathers and sons on the SPQ and CRI, by mothers and daughters on the SPQ and CRI, by mothers, fathers, sons, and daughters on the CRI. All combinations of agreements have occurred (fathers with fathers, sons with sons, etc.) and the groupings (SL, ST, and C) have been separated in the first three tables by the RSIS and on the last three tables by the RPSIS. There were 102 agreement pairs for fathers and sons, 120 agreement pairs for mothers and daughters, and 273 agreement pairs for fathers, mothers, sons, and daughters. The lowest number of items agreed on was 32 out of a total of 353 items

(agreement score = $64 - 2 \times 32$), 30 out of a total of 342 items (agreement score = $60 - 2 \times 30$), and 7 out of a total of 55 items (agreement score = $14 - 2 \times 7$) respectively. These cut off agreement scores are significantly greater than chance occurrences at the .05 level using binomial tests of probability. Therefore, each individual paired agreement from the lowest agreement scores (64, 60, and 14) to the highest (496, 549, 115) has agreed on a statistically significant number of items.

APPENDIX H

APPENDIX H-1.--Number of paired agreements by mothers, fathers, sons, and daughters by
SIS groupings on the CRI.

RSIS Grouping	Type of Family Members Agreeing												Total
	Mother Mother	Daughter Daughter	Father Father	Son Son	Mother Daughter	Mother Son	Father Daughter	Father Son	Daughter Son	Daughter Son	Father Mother	Father Mother	
SL-SL	14	7	8	3	14	4	9	5		1	26	91	
ST-ST	10	1	1	0	4	2	0	1		1	8	28	
CI-CI	0	1	1	0	0	1	1	0		0	5	9	
ST-SL	18	5	6	3	9	3	5	5		8	23	85	
ST-CI	0	1	8	1	3	3	1	3		1	5	26	
SL-CI	3	6	3	2	2	0	5	4		1	8	34	
TOTAL	45	21	28	9	32	13	21	18		12	74	273	

APPENDIX H-2.--Number of paired agreements by father and sons
by SIS groupings on the SPQ and CRI.

SIS Groupings	Son-Son	Father-Father	Son-Father	Total
SL-SL	4	15	6	25
ST-ST	2	6	4	12
CI-CI	0	2	3	5
SL-ST	5	18	7	30
ST-CI	2	5	1	8
SL-CI	6	11	5	22
TOTAL	19	57	26	102

APPENDIX H-3.--Number of paired agreements by mothers and
daughters by SIS groupings on the SPQ and CRI.

SIS Groupings	Daughters Daughters	Mothers Mothers	Daughters Mothers	Total
ST-ST	1	7	7	15
CI-CI	1	0	2	3
SL-SL	10	23	16	49
ST-SL	9	9	10	28
CI-SL	0	11	4	15
CI-ST	1	6	3	10
TOTAL	22	56	42	120

APPENDIX H-4.--Number of paired agreements by mothers, fathers, daughters, and sons by
SPC groupings on the CRI.

SPC Groupings	Mother Mother	Daughter Daughter	Father Father	Mother Mother	Son Son	Father Father	Daughter Daughter	Mother Mother	Son Son	Father Father	Daughter Daughter	Son Son	Daughter Daughter	Son Son	Total
SL-SL	3	1	2	5	0	4	2	1	2	3	23				
ST-ST	5	2	5	12	1	5	3	1	1	1	36				
CI-CI	1	4	2	11	3	4	1	3	1	0	30				
SL-ST	16	8	3	9	2	9	6	1	4	2	59				
ST-CI	11	2	8	16	3	5	5	4	8	4	66				
SL-CI	9	4	8	21	0	6	4	3	2	2	59				
TOTAL	45	21	28	74	9	32	21	13	18	12	273				

APPENDIX H-5.--Number of paired agreements by fathers and sons by SPC groupings on the SPQ and CRI.

SOC Groupings	Son-Son	Father-Father	Son-Father	Total
SL-SL	1	4	3	8
ST-ST	6	9	2	11
CI-CI	7	7	5	19
SL-ST	2	8	5	15
ST-CI	3	16	4	23
SL-CI	2	13	5	20
TOTAL	21	57	24	102

APPENDIX H-6.--Number of paired agreements by mothers and daughters by SPC groupings on the CRI and SPQ.

SPC Groupings	Daughters Daughters	Mothers Mothers	Daughters Mothers	Total
ST-ST	6	12	6	24
SL-SL	5	6	5	16
CI-CI	1	6	4	11
ST-SL	6	7	10	23
SL-CI	2	13	9	24
ST-CI	3	11	8	22
TOTAL	23	55	42	120

APPENDIX I

APPENDIX I-1.--Analysis of Variance of Child Rearing Attitudes of Mothers, Fathers, Sons, and Daughters as Grouped by SIS and SPC on the Sub Scales of the CRI.

Source of Variation	Degree of Freedom				Mean Square				F			
	MR	AP	OP	AP (SPC)	MR	AP	OP	AP (SPC)	MR	AP	OP	(SPC)
Groupings (G)	2	2	2	2	718.89	371.67	123.18	238.78	6.05 ^d	5.69 ^d	6.10 ^d	3.18 ^a
Family units within groups (FU _G)	3	3	3	3	153.33	55.58	39.80	142.38	1.79	.85	1.91	2.20 ^{aa}
FU _G _{SL}	1	1	1	1	228.30	131.11	35.82	109.78	2.70	1.91	1.90	2.75
FU _G _{st}	1	1	1	1	16.61	14.84	14.64	71.07	.14	.32	2.53	1.44
FU _G _c	1	1	1	1	146.18	70.40	20.3	130.09	1.44	.30	2.00	2.68
Family members wFU _G (FM _G FU _G)	12	12	12	12	93.48	134.60	13.40	153.16	.74	1.10 ^b	.67	2.26 ^c
FM daughter-FU _G _{SL}	2	2	2	2	37.37	332.34	50.00	223.50	.33	1.13 ^b	1.47	3.90 ^d
FM sons-FU _G _{SL}	2	2	2	2	13.39	14.72	.50	32.87	.11	.17	.09	.36
FM _G -FU _G _{st}	2	2	2	2	62.13	21.47	7.84	124.67	.63	1.10 ^b	.41	2.44 ^a
FM _G -FU _G _{st}	2	2	2	2	19.17	1.73 ^b	11.37	347.00	1.17	1.34	.17	4.64 ^b
FM _G -FU _G _c	2	2	2	2	204.34	39.09	9.75	120.00	1.17	1.77	.77	1.70
FM _G -FU _G _c	2	2	2	2	62.27	172.00	.43	16.50	.74	1.80	.06	.21
S _{SL} FU of G _{SL}	24	24	24	24	111.67	69.30	19.34	61.67				
S _{st} FU of G _{st}	50	50	50	50	115.67	46.83	21.90	52.54				
S _c FU of G _c	20	20	20	20	107.50	54.30	12.35	68.10				
S _{SL} FM _G -FU _G _{SL}	30	30	30	30	111.83	19.10	20.70	57.35				
S _{st} FM _G -FU _G _{SL}	60	60	60	60	112.41	34.19	17.50	92.43				
S _c FM _G -FU _G _{SL}	18	18	18	18	38.10	4.187	10.10	44.83				
S _{SL} FM _G -FU _G _{st}	30	30	30	30	104.70	13.90	19.10	74.10				
S _{st} FM _G -FU _G _{st}	10	10	10	10	105.50	24.01	1.17	14.10				
S _c FM _G -FU _G _{st}	9	9	9	9	114.00	11.07	1.13	74.54				
S _{SL} FM _G FU _G	168	168	168	168	115.00	60.00	20.00	54.00				
TOTAL	176	176	176	176								
FM _G groups (FM _G G)	2	2	2	2	130.04	247.49	23.00	41.00	1.1	1.10 ^b	1.10	3.10 ^d
FM _G _{SL}	2	2	2	2	32.14	245.79	4.01	140.13	1.1	4.10	1.10	1.10
FM _G _{st}	2	2	2	2	137.36	333.80	.00	434.40	1.10	1.10 ^d	1.10	3.10 ^b
FM _G _c	2	2	2	2	233.42	103.33	5.73	24.47	1.1	1.10	.10	1.10
S _{SL} FM _G _{SL}	93	93	93	93	111.67	69.30	19.05	60.67				
S _{st} FM _G _{st}	51	50	50	64	117.88	47.77	21.99	53.66				
S _c FM _G _c	24	23	23	53	104.78	69.08	12.40	64.41				

aa = p<.10; a = p<.05; b = p<.025; c = p<.01; d = p<.005; e = p<.001.

NOTE: The family units are separated into FU of boys and FU of girls; FM_G is a separate analysis of variance with boys and girls families not considered separately.

APPENDIX I-2.--Mean Scores of All SIS and SPC family members on CMI subscales.

		MR \bar{X}		AP \bar{X}		CP \bar{X}	
		Mothers	Children	Fathers	Mothers	Children	Fathers
SIS Groupings	[Daughters	57.95	59.55	57.63	29.68	37.23	41.68
	[SL						
	[Sons	61.82	60.73	59.64	38.82	36.82	74.70
	[Daughters	62.46	66.82	66.27	27.00	35.82	33.18
	[ST						
	[Sons	62.71	69.00	59.00	28.57	36.75	34.00
	[Daughters	65.00	69.50	55.50	26.50	29.75	24.25
SPC Groupings	[CI						
	[Sons	59.40	61.80	54.80	26.40	33.40	26.00
	[Daughters						
	[SL						
	[Sons						
	[Daughters						
	[ST						
SPC Groupings	[Sons						
	[Daughters						
	[CI						
	[Sons						
	[Daughters						
	[CI						
	[Sons						

APPENDIX J

APPENDIX J-1.--Analysis of Variance of Child Rearing Attitudes of Mothers and Daughters, Fathers and Sons as Grouped by the SIS on Two Main Factors of SPQ.

Source of Variation	Degrees of Freedom						Mean Square						F					
	M & D		F & S		M & D		F & S		M & D		F & S		M & D		F & S		M & D	
	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R
	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R	SS	R
Groupings (G)	2	2	2	2	11.76	424.63	142.52	554.17	.05 ^d	2.76 ^a	.38	3.02 ^a						
Family members within G(FM _w G)	6	6	6	6	223.02	285.70	173.88	373.82	.88	1.95 ^a	.46	2.04						
FM _w G-SL	2	2	2	2	86.27	422.09	4.63	614.25	.30	3.15 ^b	.01	5.13 ^c						
FM _w G-ST	2	2	2	2	19.30	346.08	308.35	426.64	.11	1.82	1.23	1.77						
FM _w G-CI	2	2	2	2	563.49	89.23	208.68	80.57	1.92	1.07	.35	.28						
Subjects FM of G-SL _w	52	52	39	39	283.45	134.53	331.13	119.71										
Ss FM of F-ST _w	27	27	23	23	185.61	190.39	251.23	241.43										
Ss _w FM of G-CI	9	9	11	11	294.22	83.36	595.15	289.07										
Ss _w FM _w G	88	88	73	73	254.19	146.43	378.00	183.58										
Total	96	96	81	81														

a = p<.10; b = p<.05; c = p<.025; d = p>.05

NOTE: Since only women could complete one form of the SPQ and men the other, family units are broken up, i.e., mothers and girls SLs are analyzed with mothers of boy SLs.

APPENDIX J-2.--Mean Scores of All SIS Family Members on
SPQ Factors.

		SS			R		
		\bar{X}			\bar{X}		
SIS Groupings	Males	fb	b	fg	fb	b	fg
	SL	148.82	147.55	148.00	61.09	63.73	55.75
	Females	mg	g	mb	mg	g	mb
		123.86	124.23	128.36	59.05	67.23	59.64
	Males	fb	b	bg	fb	b	mb
	ST	146.57	149.75	157.82	52.29	61.88	48.36
	Females	mg	g	mb	mg	g	mb
		124.73	125.45	122.63	54.14	14.45	53.88
	Males	fb	b	mb	fb	b	fg
	CI	143.80	149.60	157.50	46.80	51.00	42.50
	Females	mg	g	mb	mg	g	mb
		124.75	138.00	113.60	52.75	61.33	52.20

NOTE: fb = fathers of boys
mg = mothers of girls
fg = fathers of girls
mb = mothers of boys
b = boys
g = girls